

MPPSC Pre 2024 Notes

Unit-4

Geography of Madhya Pradesh

SYLLABUS

Geography of Madhya Pradesh

- Forest, Forest Produce, Rivers, Hills and Plateaus.
- Climate - Seasons, Temperature, Rainfall.
- Natural Resources- Soils and Major Mineral resources.
- Major Crops, Water Resources, Irrigation and Irrigation Projects.
- Conventional and Non-Conventional Sources of Energy.
- Major Industries of Madhya Pradesh.
- Population Growth, Distribution and Density, Urbanisation.

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CHAPTER- 1

Forest, Forest Produce, Rivers, Hills and Plateaus.

Forests play a major role in environment protection. They also maintain ecological stability and biological diversity. Madhya Pradesh is endowed with rich and diverse forest resources. They are important for the physical and economic health of state and nation too.

Forests

According to India's state of forest report, 2021 **Madhya Pradesh has the highest forest area in the country** followed by Arunachal Pradesh and Chhattisgarh.

Important data from the state of forest report is given in the table below

Recorded forest area in Madhya Pradesh	94,689 km square, which is 30.72% of the state area
Total forest cover in Madhya Pradesh	77,492 square kilometers, which is 25.14 % of the total state area
Tree cover outside the forest in Madhya Pradesh	8054 square kilometer, Which is 2.6 % of Total forest area
Forest cover of Madhya Pradesh to forest cover of India	10.66%
Increase in forest area (2019-2021)	10 kilometer square
Per capita forest area in Madhya Pradesh	0.12 km square
Carbon stock	588.73 Million ton
Contribution in GDP of state	2.35%

Classification of forest in Madhya Pradesh on the basis of the Forest Canopy Density.

Forest canopy is the continuous cover of the upper branches of trees which is exposed to sunlight and restrict the sunlight from reaching the forest floor.

Class	Area	Percentage of geographical area
Very Dense Forest	6676.02	2.17%
Moderately Dense Forest	34341.40	11.14%

Open Forest	36465.07	11.83%
Shrubs	1.95%	

Districts with Highest Forest cover in Madhya Pradesh in terms of area

Districts	Area in square kilometer
Balaghat	4932
Chhindwara	2458
Betul	3663
Sheopur	3460
Dindori	3031

Districts with Lowest Forest Cover in Madhya Pradesh in terms of area

Districts	Area in square Kilometers
Ujjain	36
Ratlam	59
Shajapur	63
Bhind	106
Rajgarh	172

Districts with highest forest cover in Madhya Pradesh in terms of Percentage of area

Districts	Total forest cover in terms of %
Balaghat	54.4%
Sheopur	52.4%
Umariya	49.6%
Mandala	44.4%
Dindori	40.6%

Districts with lowest forest cover in Madhya Pradesh in terms of Percentage of area

Districts	Total forest cover in percentage
Ujjain	0.59%
Shajapur	1.02%
Ratlam	1.23%
Bhind	2.39%
Rajgarh	2.80%

Classification of Forest

The classification of forests can take place on various grounds. These grounds can be classified as-

1. From Administrative point of view
2. Based on climate.
3. Based on type of forests or trees groups

Classification of forests from administrative point of view

1. Reserved Forest -

- The administration of these forests are carried by strong rules and regulations framed by central government.
- State Government notifies the areas of the reserved forests in its official gazette.
- It is a punishable offence to destroy these kinds of forests. Grazing of animals and wood cutting are strictly prohibited in the reserved forest.
- Their total area in Madhya Pradesh is 61888 sq km. which is 65.36% of total forest cover in Madhya Pradesh

2. Protected Forest -

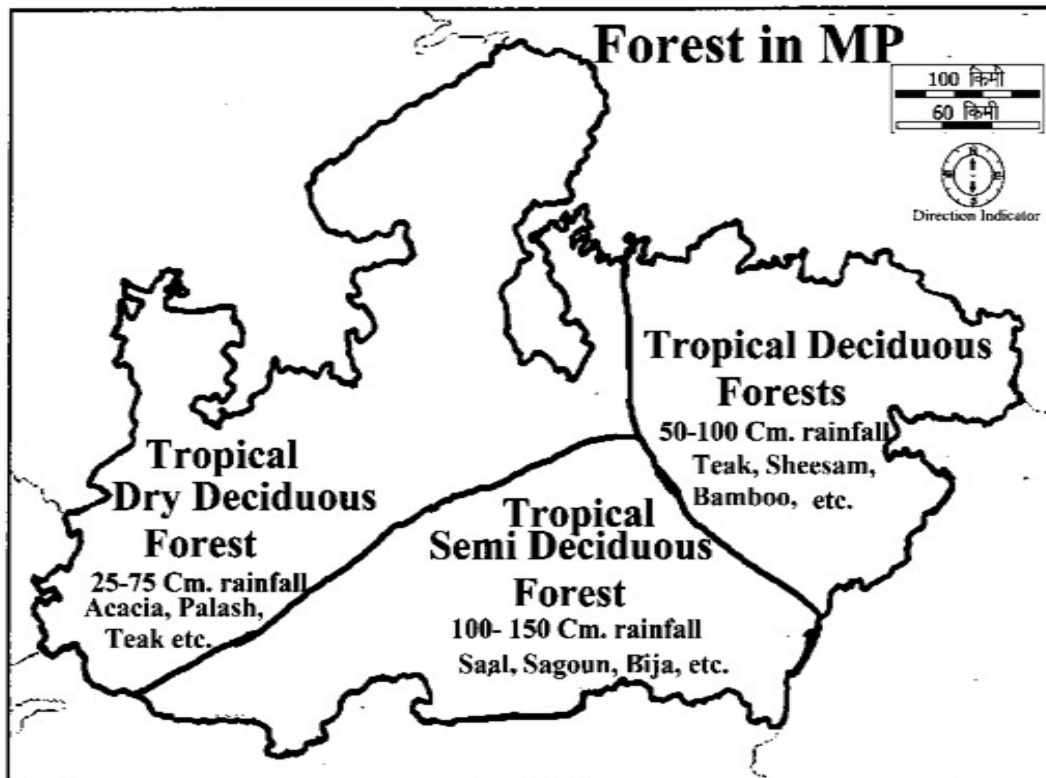
- The administration of these forests is carried out by the central government.
- State Government notifies the areas of the protected forests in the official gazette.
- Activities such as wood cutting and grazing of animals are prohibited in these forests. But they may be allowed for people residing in forests after permission and for others after issuing license.
- Their total area in Madhya Pradesh is 31,095 sq km. which is 32.84% of total forest cover of Madhya Pradesh

3. Unclassified Forest -

- These are the forests which are not classified in any group.
- Animal grazing and wood cutting are allowed in these forests.
- Their total area in Madhya Pradesh is 1704 sq km. which is 1.80% of total forest cover of Madhya Pradesh

Reserved Forest	61,888 sq km	65.36%
Protected Forest	31,095 sq km	32.84%
Unclassified Forest	1,704 sq km	1.80%
Total	94,689 sq km	100%

Classification of forests on the basis of climate



1. Tropical Dry Deciduous Forests

- These forests are also known as thorny forests.
- These forests grow in the areas receiving the rainfall of 25 to 75 cm and are found in Sheopur, Nimar, Ratlam, Mandasaur, Tikamgarh, Datia, Gwalior and Shivpuri districts.
- Major trees found here are Acacia, Albizzia, Anogeissus, Palash, Arabica, Teak, Hurra, Kikar etc.

2. Tropical Deciduous Forests

- Such forests are found in the areas receiving an annual average rainfall of 50 to 100 cm.
- These trees shed their leaves at the onset of dry season. Tropical deciduous forests are found on highest forest area of state. Such forests could be found at Chattarpur, Panna, Chhindwara, Damoh, Seoni, Sagar, Jabalpur, Betul and Hoshangabad districts.
- Major trees found in these forests are Teak, Sheesham, Neem, Ficus Religiosa etc.

3. Tropical Semi Deciduous Forests

- These forests grow in the areas receiving rainfall of around 100 to 150 cm.
- These forests are majorly found in the area of Sidhi, Mandla, Balaghat, Shahdol etc.
- These forests do not shed all the leaves at a time. Major trees found in such forests are Acacia, Arabica, Bija, Tinsa, Sal and Bamboo etc.

Classification on the basis of tree groups**I. Sagon (Teak) :**

- These are tropical semi deciduous forest. Its botanical name is "**Tectonagrandis**".
- They grow in the areas having rainfall of 75 to 125 cm. and under the Black soil.
- It is found in 17.8% of total forest cover of Madhya Pradesh. Sagon forests cover the highest area in Madhya Pradesh.
- It is found in the South – Central region of state which includes - Hoshangabad (Bori valley), Jabalpur, Betul, Sagar, Jhabua, Dhar, Chhindwara, and Mandla.

- It is used in the construction of Building and furniture manufacturing.

II. Saal :

- These are tropical semi deciduous forests. Its botanical name is "**Shorea Robusta**".
- They grow in the area having rainfall above 125 cm. and in the presence of yellow-red soil.
- It is found in eastern Madhya Pradesh. Saal trees forests are highest in India. It is found in 16.54% of total forest area of Madhya Pradesh. Found in Mandla, Balaghat, Sidhi, Singrauli, Umaria, Anuppur, and Shahdol districts.
- It is used in making railway sleepers (Principle industry), vehicle, building, furniture, bridge construction, poles, tent etc.

III. Mixed type forest :

- Under this category tree species like Bamboo, Harra, and Tendu leaves, Palash, Mahua, Beejaetc are found.
- Average rainfall for mixed type forests is 75 cm. These forests are found in Shivpuri, Chhindwara, Betul, Sidhi, Mandala & Jabalpur districts.

Forest Wealth

- **Bamboo:** Bamboo of *Dendrocalamus* species are found in Madhya Pradesh. These are tropical deciduous forests which grow in the areas having rainfall 75cm. Bamboo is used in production of paper, and in Manufacturing of baskets and roofs. Madhya Pradesh stands second (1.3 Hectare) after Arunachal Pradesh in Bamboos production. Balaghat is the largest producer of bamboo in Madhya Pradesh. Besides Balaghat, it is also found in Betul, Jabalpur, Seoni, Mandla, Sagar, and Bhopal.
- **Tendu Leaf (Diospyros Malenoxylan):** It is main minor forest produce of Madhya Pradesh which is used in Bidi making. In the state nearly 260 bidi industries have been set up. Though a big area under the tendu forest separated away to Chattisgarh, yet it is abundantly found in the Northern-Central-East districts of Madhya Pradesh which includes Sagar (highest), Tikamgarh, Chattarpur,

Bhopal, Jabalpur, Rewa, Sidhi, Shahdol. In Madhya Pradesh, tendu leaves are collected on cooperative basis in the state since 1989. Ten lakh tribal workers are employed in tendu leaves collection business. Around 60% of tendu leaves of India are produced in Madhya Pradesh itself.

• **Khair (Senegalia Catechu):** It is an important forest produce which is used in making of Kattha and Paints, Tanning of Leather and as a medicine (for digestion) It is abundantly found in state particularly in Shivpuri, Rewa and Banmore (Morena) and each has one Kathha Manufacturing unit.

• **Harra Tree (Terminalia chebula)**
: There are multiple industries for extraction of Harra in Madhya Pradesh. It is particularly used for tanning of leather. Harra fruit contain 35-40% leather tanning material. It is also used in ink, paint, medicine (Ayurvedic) and food items. It is abundantly found in Chhindwada, Jabalpur, Sheopur, Balaghat, Shehdol, Betul, Panna, Seoni, Mandla, Satna, Hoshangabad etc.

• **Laakh(Sealing Wax):** In Madhya Pradesh Laakh is extracted from the trees of Palash, Ghont, Kusum, berry and plant of Arhar. Around 4000 tonnes laakh is produced from Madhya Pradesh. It is mainly found in Jabalpur, Seoni, Shahdol, Hoshangabad, Bhopal, Indore, Mandla etc. It is used in Bangles, Medicine, toys, Chemicals and cosmetics making. Laakh Manufacturing Government Industry is situated in Umaria.

• **Gum :** It is extracted from trees of Babool, Kullu and salai etc. There are three types of gums-Arobic Gum (From babool tree), Kullu gum (From kullu tree), and Salai gum (From salai tree). It is abundantly found in Jhabua, Dhar, Khandwa, Khargone, Gwalior, Shivpuri, Morena, Betul and Ratlam. It is used in Food items (Babool gum), coffee and pastry production (kullu gum), fragrance, paints and varnish production (Salai gum).

• **Bhilala:** Bhilawa fruit extracted from Bhilala tree have multiple uses like in ink, paint, and medicine. It is mainly found in eastern

districts of Madhya Pradesh Its one of the industry is situated in **Chhindwara**.

Forest Circle

There are total 16 forest circles in Madhya Pradesh namely- Indore, Jabalpur, Ujjain, Khandawa, Gwalior, Chhartapur, Chhindwada, Balaghat, Betul, Bhopal, Rewa, Shahdol, Shivpuri, Sagar, Seoni and Hoshangabad.

Dimensions	Maximum Area Covered by Forest Circle	Minimum Area Covered by Forest Circle
Total forest area	Khandwa	Hoshangawad
Reserved forest area	Khandwa	Chhattarpur
Protected forest area	Chhattarpur	Khandwa
Unclassified forest area	Jabalpur	Hoshangabad

Madhya Pradesh Forest Administration

Forest Circle (16)



Forest Division (63)



Forest Sub division (473)



Range (1871)



Sub Ranger (8286)

Forest Belts in Madhya Pradesh

Madhya Bharat Belt	The Vindhaya Forest Belt	Satpura-Maikal Belt
The belt of highland of Shivpuri which is spread from Morena to Shivpuri	This belt covers the Kaimur ranges which is distributed from the North of Damoh upto the highlands of Sagar	The widest belt of forest spreading from the east to west of the state on the southern side of Narmada river. This belt includes the Satpura-Maikal ranges, hilly areas of highlands of Baghelkhand.

Forest Institutions in Madhya Pradesh

- **Madhya Pradesh State Forest Development Corporation** established on **July 24, 1975** for the improvement of Madhya Pradesh forests and their protection. It is headquartered at **Bhopal**. Following are the **functions and objectives** of this corporation-
 1. Plantation of useful forest produce such as teak bamboo and saal and increase their current productivity.
 2. To arrange resources for Pulp-Paper related industries and planting appropriate forest for such industries.
 3. To produce teak, bamboo and other essential raw materials for wood based industries.
- One of the four regional offices of **Indian Forest Research Institute Dehradun** is at **Jabalpur**.
- **Indian Institute of Forest Management** was established in **Bhopal** in 1982 with the help of Swedish International Development. Here, modern forest technical training is given to Indian forest officers.
- In 1979, **Forest Management Education Centre** (State Forest College) was established

- in **Balaghat** in 1980, the second State forest college was established in **Betul**.
- Tropical forest Institute is in Jabalpur.
- Forest research and Human Resource Development Institute (central government) is in Chhindawara.
- **Forest guard training centres** are at Panchmarhi (Hoshangabad), Tala (Umariya), Shivpuri, Govindgad (Rewa), Amarkantak (Anuppur), Betul, Jhabua and Lakhnadoun (Seoni).
- **Sanjivani Sansthan** (forest medicine plantation)- **Bhopal**.
- **Madhya Pradesh Eco-Tourism Development Corporation** is in **Bhopal** which was founded in 2005.

State Forestry Research Institute (SFRI)

- Mr. J.M. Best was appointed as the first Silviculturist of Central Province and Berar State in 1922.
- This is assumed to be the beginning of forest research in the state.
- It was set up on 27th June, 1963 in Jabalpur, State Forestry Research Institute is assumed to be the first class level institute of India in Forest research.
- It was granted autonomy by State Govt. in 1994.

Institutes of Forest Education/Training in Madhya Pradesh

Institute	Location	Year
Indian Institute of Forest Management	Bhopal	1982
Indian Institute of Forest Research (Regional Center)	Jabalpur	1963
Tropical Forest Research Institute	Jabalpur	1988
Center for Forest Management and Education (Forest Ranger College)	Balaghat	1979
Forest Management Education Center	Betul	1980
Forest Guard Training School (8 Institute)	Panchmarhi (Hoshangabad) Tala (Umariya), Shivpuri, Govindgarh (Rewa) Amarkantak (Anuppur), Betul, Jhabua, Lakhnadoun (Seoni)	
Center for Forestry Research and Human Resource Development	Chhindawara	1995
Sanjeevani Sansthan (Forest Medicine Plantation)	Bhopal	-
Forest Development Cooperation	Bhopal	1975
MP Eco-tourism Development Corporation	Bhopal	2005
MP state Forest Development Agency	-	19 April 2010
MP State Minor Forest Produce (Trading & Development) Cooperative Federation	-	1984
Bio-diversity Training Center	Umariya	-

❖ State Govt. Schemes and Programmes for Forest Conservation**Social Forestry Scheme**

- It was launched in Madhya Pradesh in 1976.
- The objective is to promote private plantations and to promote agriculture forestry.
- Financial help was provided for the tree plantation, horticulture, forestry, etc

Panchvan Yojna

- It was launched in 1976
- Objective of the scheme was afforestation in search districts where the forest area is less than the prescribed 33% of National Forest policy.

Vidya-van Yojana

- The scheme was started in the year 2007-08.
- Objective of the scheme was to make children aware of the environment along with education.

Social Forestry Program

- It was started in the year 1981-82.
- It was for the development of forests in Madhya Pradesh.
- Its objective is to encourage the common citizen to plant the forest and develop pastures.
- Under this 36 social Forestry divisions have been created

Lok Vaniki Scheme

- Lok Vaniki scheme was introduced in Madhya Pradesh in 1999.
- This scheme aims at empowering the farmers to manage their degraded forest land to derive maximum benefit by selling its products, including Timber
- This scheme is implemented to ensure the proper management of forest on private land currently not of agricultural use and does achieve the overall goal of forest conservation and sustainable development.
- Under this scheme forest committees of farmers have been set up in the districts.

Awards for Forest Conservation in Madhya Pradesh

To encourage citizens and organizations to protect and conserve the forest state government has announced various programs.

Basawan Mama Smriti Award

- It was started in 2009.
- It is given in the field of forest conservation and promotion
- It is given in two categories- three awards for the Vindhyan region and three awards for the State level
- Basawan Mama was based in Rewa and he sacrificed his life for forest conservation.

Van Prahari Award

- This award is given to persons or organizations who contribute to the field of stopping illegal forest cutting, preventing forest fires, and protecting wildlife.

OTHER AWARDS

1. Amrita Devi memorial award (Stated from 1994)
2. Indra Priyadarshni Vraksha Mitra Purushkar.
3. Mahavraksha Purushkar (Started from 1995)

Forest Policy - 2005

The first forest policy for Madhya Pradesh was constituted in 1952, but due to changing challenges and situations, the government amended the older one and declared new forest policy on fourth April, 2005. The main goal of forest policy 2005 is to use the environment, financial, social and technological resources of state for conservation of forests, development and preservation for better management of forest.

➤ Objectives of the policy:-

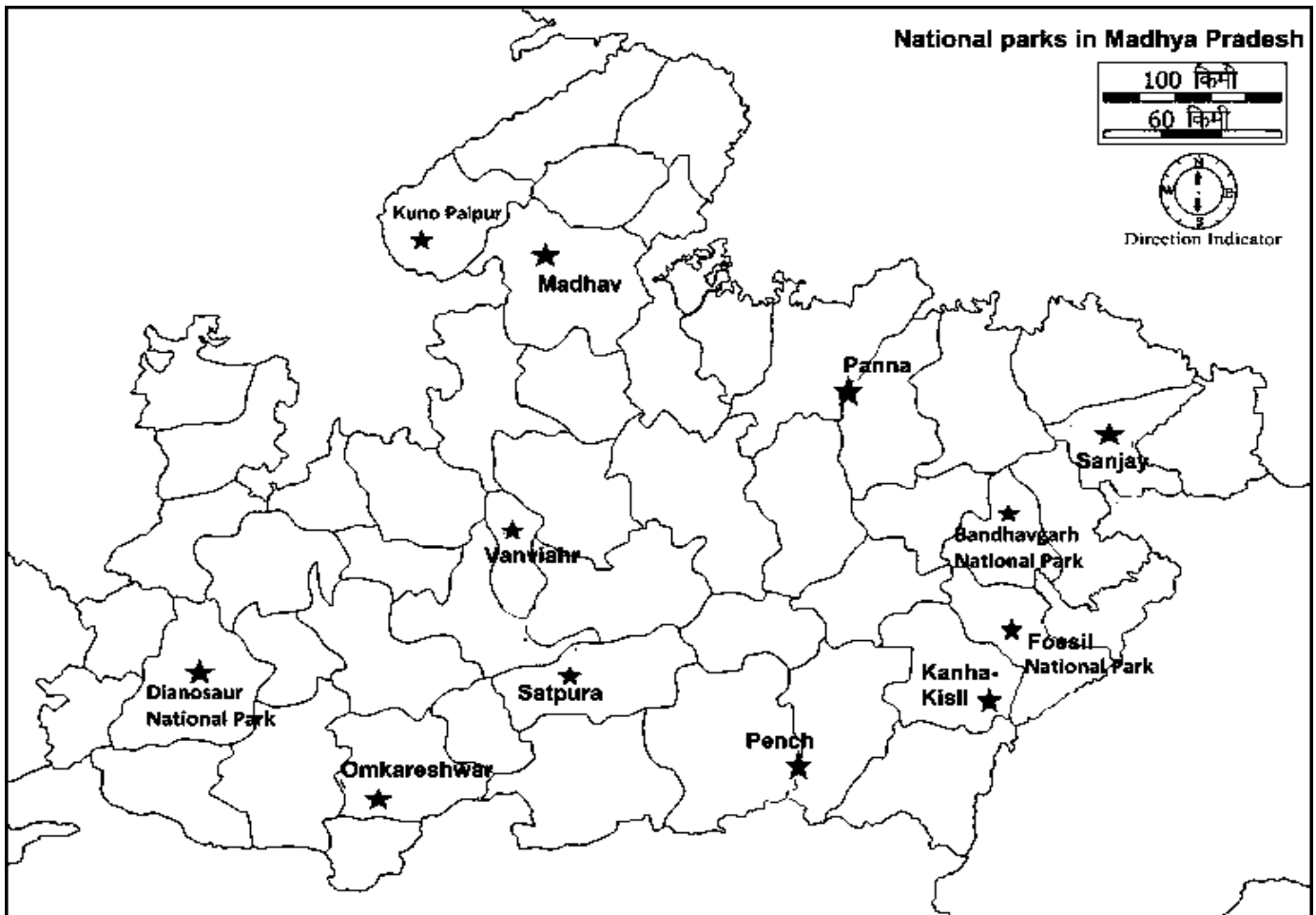
- To expand forest recovered area i.e to make it 1/3rd of geographical area.
- To support and develop the plantation with the help of social programmes.
- To develop forest based industry.
- To recognize forest villages as revenue villages.

Wildlife in Madhya Pradesh

To conserve the wildlife Madhya Pradesh has 12 National parks, 24 wildlife sanctuaries and 3 Biosphere Reserves.

National Parks of Madhya Pradesh

There are highest 11 national parks and 30 sanctuaries in Madhya Pradesh. National parks in Madhya Pradesh are described in brief as follows-



1. Kanha-Kisli National Park

- It is spread over Mandla and Balaghat District.
- It was made safari in 1933, sanctuary in 1952 and national park on June 1st, 1955. This is Madhya Pradesh's first and the biggest national park which was included in Project Tiger Scheme in 1974
- Barasingha of bredary species is conserved here.
- The area of Kanha-Kisli national park is 940sq. km.

- Total area covered under KanhaKisli is 1949 km. in which core zone includes 940 km. & buffer zone includes 1009 km.
- 'Halovalley' and 'Banjarvalley' are situated in Kanha-Kisli National Park.
- It is the only and first national park in India which has an official mascot with the name "Bhoorasingh the Barasingha".

2. Satpura National Park

- It was established in Hoshangabad in 1981.
- Spread over 528.729 Square kilometer area.
- It was included in Project Tiger in 1999-2000.

3. Sanjay National Park

- It is in SidhiShahdol district. Now the maximum part of this national park lies in Chhattisgarh.
- Its area is 466.657 square kilometers.
- It was declared as National Park in 1981.
- It was included in Project Tiger in 2008.

4. Bandhavgarh National Park

- This was set up in Umaria district in 1968.
- Highest density of tigers is found in this national park i.e that is 8 tigers per km.
- It was included in Project Tiger in 1993.
- This is surrounded by 32 hills and spread in 448.842 Sq. Km. area.

5. Panna National Park

- It was developed in 1981 in Panna, Chhatarpur.
- It also has a reptile park where reptile beings are found.
- It was included in Project Tiger in 1994.
- Its area is 542.662 square kilometers.
- the **United Nations Educational, Scientific and Cultural Organization** (UNESCO) has included the Panna Biosphere Reserve (PBR) in its **World Network of Biosphere Reserves** (WNBR).

6. Indira Gandhi Priyadarshni National Park (Pench)

- It was established in 1981.
- It is in Seoni-Chhindwara district.
- It was affirmed a wildlife sanctuary in 1983.
- It was included in Project Tiger in 1992.
- Mogliland has been established here to promote tourism.
- Pench national park has a count of 8 Tigers & 7 Panthers.
- It national park is enriched with Cheetal i.e excess or more commonly spotted Deer.
- It is spread in 293 square kilometer.

7. Madhav National Park

- It was established in Shivpuri in 1958.
- It is spread over 375.230 Sq. Km. area.
- Animals like here are-Leopard, Sambhar, Cheetal etc. are mainly found here.

- NH-3 Agra-Mumbai Highway Passes through this national park.

- There is a huge building named 'George Castle', over the hills of national parks.

8. Van-Vihar National Park

- It was established in Bhopal in 1979 and declared National Park in year 1983.
- It is spread over 4.43 Sq. Km area.
- It has been developed and managed as a Zoological Park in which wild animals are caged in their natural surrounding and therefore known as "Modern Zoo".

9. Fossils National Park

- Geo fossils are kept here.
- It is in Shahpur of Dindori district which was set up in 1968.
- It is state's smallest national park whose area is 0.270 square kilometer.
- It is the first fossils park of Madhya Pradesh.

10. Dianosaur National Park-

- It came into existence on second dec 2010.
- It is situated in Dhar.
- Area - 0.897 Km.
- It is state's only and country's first dianosaur National Park.

11. KunoPalpur National Park-

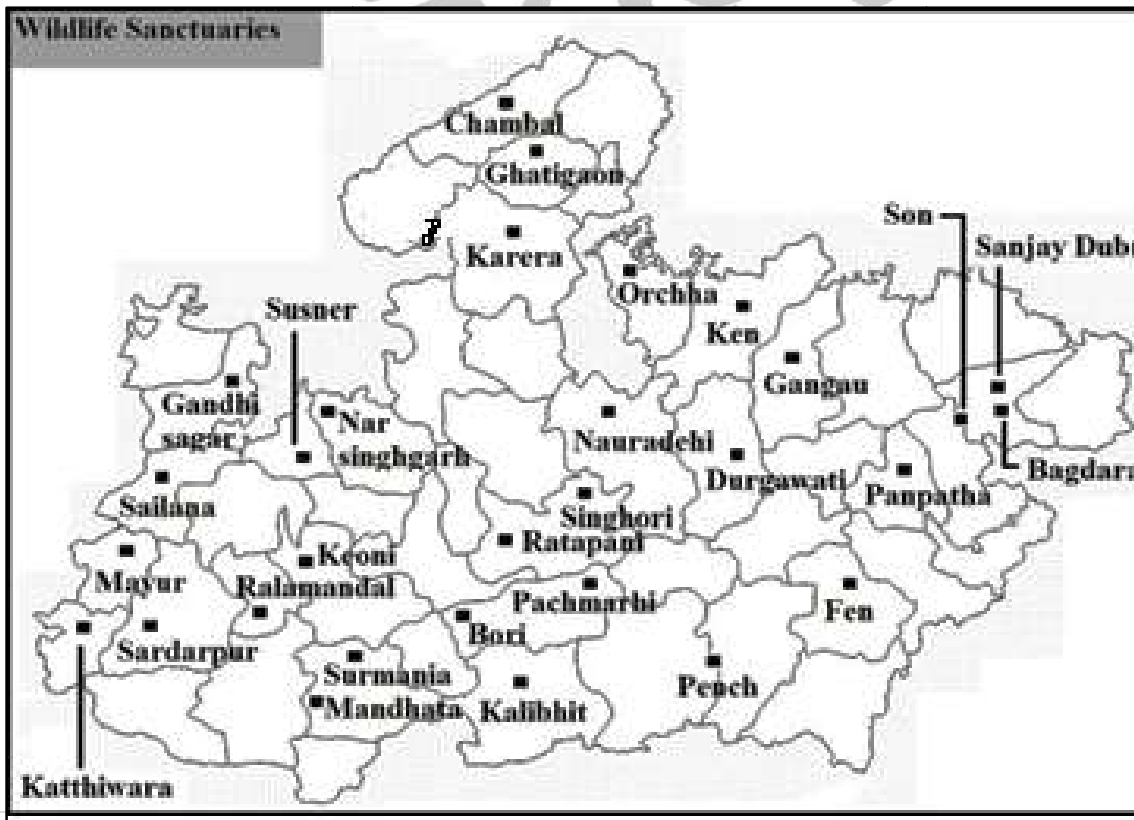
- KunoPalpur wild life sanctuary which was established in 1981 is promoted to national park status in 2018.
- It is located in Sheopur district.
- KunoPalpur is going to be the second home for Asiatic Lions, found only in Gir National Park, Gujarat.

❖Facts:-

- State's only snake park is in Bhopal.
- Park Interpretation scheme has been enacted in Kanha-Kisli National Park with the help of America's national park service.
- Black bug is highest in Pench National Park of Madhya Pradesh.
- There is a proposal to link Kanha-Kisli and Bandhavgarh National Park under "**Jungle Corridor Scheme**".

National Parks at a Glance

National Park	Established in the year	Area (Sq. Km.)	District	Forest Animals
Kanha-Kisli	1955	940	Mandla	Tiger, Leopard, Cheetal, Sambhar, Gaur, Black bug, Bison, Barashinga.
Madhav	1958	375.230	Shivpuri	Leopard. Sambhar, Cheetal. Nilgai(Blue Bul), Chinkdara, Wild Surine. Wandering Birds, Crocodile etc.
Bandhavgarh	1968	448.842	Umaria	Tiger, Leopard, Cheetal, Sambhar, White Tiger etc.
Fossils	1968	0.270	Dindori	Vegetable Fossils
Van Vihar	1979	4.452	Bhopal	All the forest animals found in Madhya Pradesh
Panna	1981	542.662	Panna Chhatarpur	Tiger, leopard, Cheetal, Sambhar, Chinkara, Bear etc.
Pench	1981	292.857	Seoni, Chhindwara	Tiger, Leopard, Cheetal, Sambhar, Gour, Munjak, Hiran.
Sanjay	1981	466.657	Sidhi/Shahdol	Tiger, Leopard, Cheetal, Nilgai(Blue Bul), Chinkara etc.
Satpura	1983	528.729	Hoshangabad	Tiger, Leopard, Cheetal, Gour, Sambhar, Bear, Munjak. Hiranetc
Dynosaur Fossils Park	2010	0.897	Dhar	Dianosaur's fossils.
KunoPalpur	2018	746	Sheopur	Tiger



Wild Life Sanctuaries in Madhya Pradesh

Sanctuary	Location	Sanctuary	Location
1. Chambal alligator	Morena	16. Kaouni	Dewas
2. Sailana wildlife	Ratlam	17. Virangana	Damoh
3. Ralamand	Indore	18. Narsingharh	Rajgarh
4. Nauradehi	Sagar	19. Kattiwara	Alirajpur
5. Bori sanctuary	Hoshangabad	20. Mayur	Jhabua
6. Gandhi sagar	Mandsaur	21. Mandhata	Khandwa
7. Ratapani	Raisen	22. Gangau	Panna
8. Ken	Chhatarpur & Panna	23. Pachmarhi	Hoshangabad
09. Karrera	Shivpuri	24. Pench	Pench
10. Ghatigaun	Gwalior	25. Son Aligators	River son(Sidhi&Sahdol)
11.Sanjay-Dubri	Sidhi	26. Kalibhiti	Betul
12. Phen Sanctuary	Mandala	27. Panpatha wildlife	Sehdol
13. Rani Durgawati	Damoh	28. Sardarpur wildlife	Dhar
14. Bagdara	Sidhi	29. Mini phen	Mandla
15. Singhori	Raisen	30. Cow wildlife	Agarmalwa

❖Important Facts:-

- Area of Madhya Pradesh's largest wildlife sanctuary(in water) i.e, Chambal Aligator sanctuary is 320 sq. km. Preservation and protection of Aligator& Dolphin is provided in this sanctuary.
- Biggest sanctuary of Madhya Pradesh Nauradehi (Sagar). Its area is 1194.67 sq km.
- Smallest sanctuary of Madhya Pradesh is Ralamandal (Indore).
- Sardarpur (Dhar), Sailana (Ratlam) are for preservation of Kharmor birds.
- In Karera (Shivpuri) and Ghatigaon (Gwalior) sanctuaries, Sone bird is preserved here which has become extaict.
- Son aligators sanctuary (Sidhi-Shahdol) is for protection of Crocodiles (Gharial-Gavialisgangeticus).
- State Bird, Asian Paradise Flycatcher (Dudhraj) has been protected at Sardarpur Sanctuary (Dhar).

Project Tiger :-

Project Tiger was launched by Government of India with the support of International Wildlife fund in 1973. Initially it was launched in nine protected areas Across India selected under the scheme KanhaKisliNatiaonl Park was one of them.

At present, Six National Park i.e., KanhaKisli, Pench, Bandhavgarh, Satpura, Sanjay-Dubri and Panna & Rani durgavati Wildlife Sanctuary is included in project Tiger.

Biosphere Reserves

Biosphere Reserves have area of biodiversity where flora and fauna are protected. The Indians government had established 18 Biosphere Reserves in India, which protect larger area of Natural habitat.

Biosphere Reserves of India often included one or more National Parks or Sanctuaries, along with buffer zones that are open to some economic uses. Protection is granted not only to the flora and fauna of the protected regions, but also to the human communities who inhabit these regions & their ways of life. Out of the 18 Biosphere Reserves in India, three are in Madhya Pradesh-

Est. Year	Name	Region	Key Fauna
1999	Pachmari Biosphere Reserve	Hoshangabad	Giant Squirrel, Flying Squirrel etc
2005	Achanakmar Amarkantak Biosphere Reserve	Anuppur district of Madhya Pradesh & Chhatisgarh	Tiger, Panther, Sambar, Monkey, Wild boar etc.
2011	Panna Biosphere Reserve	Panna	Tiger, Chital, Chinkara, Sambar and Sloth bear

Out of these three, Pachmari and Achanakmar-Amarkantak are included in Man and Biosphere programme (MAB) list of UNESCO.

Acts related to forests & wild life protection

1. Wild life protection Act 1972.
2. Forest Conservation Act, 1980.
3. Some provisions under I.P.C., 1860.
4. Some provisions under land revenue code 1856.
5. Indian forest Act. 1927
6. Madhya Pradesh Tendu Patta (Vyapar Viniyaman) Adhiniyam, 1964.
7. Madhya Pradesh Vanopaj (Vyapar Viniyaman) Adhiniyam 1969.
8. Madhya Pradesh Kashtha Chiran Adhiniyam, 1984.

9. Madhya Pradesh wildlife conservation Act 1974.
10. First forest policy of Madhya Pradesh, 1952 and second forest policy of Madhya Pradesh 2005.

Other Facts:-

- Madhya Pradesh is the first state which has nationalised 100% forests in 1970.
- Madhya Pradesh was known as Tiger State. Now this title has been given to Karnataka. **In terms of number of tigers Madhya Pradesh has got third rank** after Uttarakhand and Karnataka.
- Training Facility is available in Kanha Kisli National Park for forest animal preservation.
- Central Forest and Environment Ministry has declared Pachmar country's tenth and Madhya Pradesh's first biosphere reserve area.
- In the state Project Elephant and Project Hugal are also being run.
- After West Bengal, highest number of lions are in Madhya Pradesh.
- In Madhya Pradesh state, still 40 % of the forest animals are out of national parks and sanctuaries.
- Rewa is the state's only district where white Tigers are found.
- In respect of number of national parks and wildlife sanctuaries, state ranks first in the country.
- Smallest bird of India flowerpecker and tallest bird of India Crane are both are found in Madhya Pradesh.

Objective Questions

1. According to forest report 2015 what is the percentage of forest cover in Madhya Pradesh?
(A) 23.25% (B) 25.13%
(C) 27.32% (D) 31.33%
2. Madhya Pradesh Forest Protection Act was passed in which year?
(A) 1956 (B) 1972
(C) 1974 (D) 1982
3. Tropical dry deciduous vegetation is found in which districts?
(A) Hoshangabad, Harda, Betul
(B) Mandla, Balaghat, Chhinwara
(C) Ratlam, Mandsaur, Neemuch

- (D) All of the above
4. State having highest forest cover (area wise) is?
(A) Chhatisgarh
(B) Madhya Pradesh
(C) Arunachal Pradesh
(D) Uttar Pradesh
5. Tropical deciduous forests are found in which districts?
(A) Sagar, Chhinwara, Chhatarpur
(B) Mandla, Balaghat, Sidhi
(C) Sheopur, Shivpuri, Ratlam
(D) Indore, Dewas, Ujjain
6. Which of the following is correct, related to tropical semi-deciduous forest?
1. These forests are found in the rainfall area of 100 to 150 cm.
2. Sal Arabichand Bamboo are the major trees in these forests.
3. These forests come under the Balaghat&Sidhi forest circles.
(A) 1, 2, 3 (B) 1, 2,
(C) 2, 3, (D) 1, 3
7. Dense forest of Sagon is found at?
(A) Panna, Rewas, Sidhi
(B) Shivpuri, Guna, Ashoknagar
(C) Hoshangabad, Jabalpur, Chhindwada
(D) None of the above
8. Which type of forests is come under strict supervision of Government?
(A) Reserved forest (B) Protected forest
(C) Unclassified (D) None
9. The major concentration of which types of trees are found in Madhya Pradesh?
(A) Sal forest (B) Sagon forest
(C) Khair forest (D) Dhawda forest
10. Madhya Pradesh forest Development Corporation was established in which year?
(A) 1972 (B) 1973
(C) 1974 (D) 1975
11. Regional office of Forest Research Institute Dehradun is in?
(A) Balaghat (B) Jabalpur
- (C) Mandla (D) Seoni
12. Forest management and Education centre of the state is situated at?
(A) Balaghat (B) Betul
(C) Both (D) None
13. IIFM (*Indian Institute of Forest Management*) is situated at?
(A) Indore (B) Bhopal
(C) Rewa (D) Satna
14. State forest school of Madhya Pradesh is in?
(A) Datia (B) Seoni
(C) Shivpuri (D) Sheopur
15. The training Academy of forest Rangers & forest conservators are at?
(A) Amarkantak (B) Govind Garh
(C) Lakhnadaun (D) All of the above
16. Forest Guard training school of the state is at?
(A) Betul (B) Rewa
(C) Both (D) None
17. Which state has nationalized its forests completely?
(A) Madhya Pradesh (B) Maharashtra
(C) Gujarat (D) Rajasthan
18. Nationalisation of forest in Madhya Pradesh took place in?
(A) 1965 (B) 1970
(C) 1975 (D) 1980
19. Land of which districts comes under over 50% of forest cover?
(A) Khandwa, Betul, Hoshangabad
(B) Mandla, Sidhi, Shahdol
(C) Chhindwada, Seoni, Harda
(D) Sagar, Vidisha
20. Match the following lists:
List-I(Wildlife Sanctuary) List-II(District)
a. Karera 1. Shivpuri
b. Bagdara 2. Sidhi
c. Bori 3. Hoshangabad
d. Ghatigaon 4. Gwalior
Code:-
a b c d
(A) 2 1 3 4
(B) 1 2 3 4

- (C) 3 1 2 4
(D) 4 2 1 3
21. Bori wildlife sanctuary is located in which among the following districts of Madhya Pradesh?
(A) Hoshangabad (B) Sidhi
(C) Mandla (D) Gwalior
22. The first forest policy of Madhya Pradesh was formed -
(A) 2001 (B) 1952
(C) 2003 (D) 1965
23. Consider the following statements -
1. Gainimainford was the first person to start project tiger in the world.
2. Kailash shankhala was the first person to start project tiger in India
Which of the following statements is/are correct?
(A) Only 1 (B) only 2
(C) Both 1 & 2 (D) Neither 1 nor 2
24. Madhya Pradesh Eco-tourism development Board is situated in which district?
(A) Betul (B) Shahdol
(C) Bhopal (D) Indore
25. Which among the following statements about Pachmari Biosphere Reserve is correct?
1. It was created in year 2000 by the State Government.
2. UNESCO designated a Biosphere reserve in 2009
(A) Only 1 (B) Only 2
(C) Both 1 & 2 (D) neither 1 nor 2

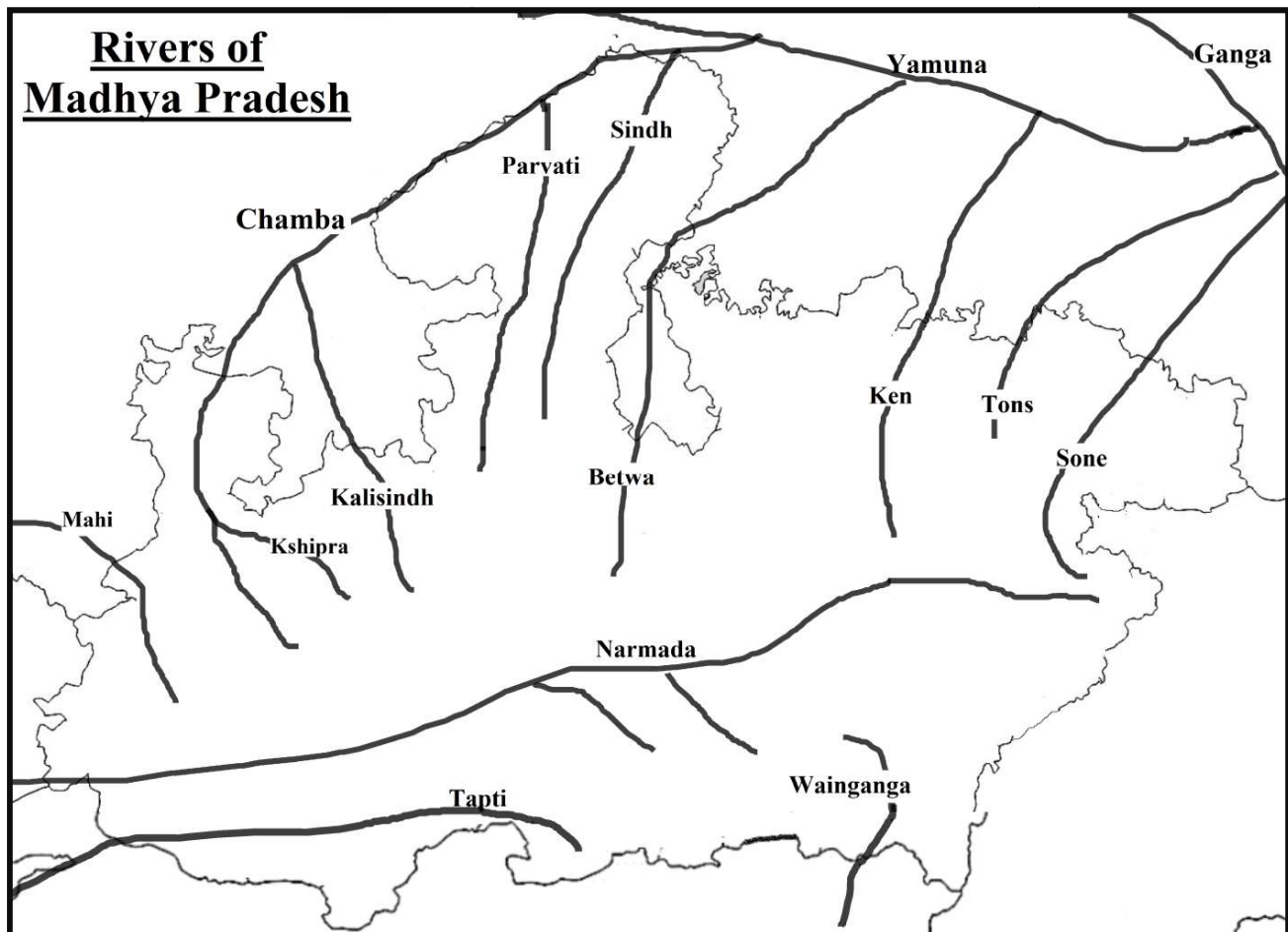
Answer sheet

1	2	3	4	5	6	7	8	9	10
B	C	C	B	A	A	C	A	B	D
11	12	13	14	15	16	17	18	19	20
B	C	B	C	D	C	A	B	A	B
21	22	23	24	25					
A	B	C	C	B					

RIVERS OF MADHYA PRADESH

The state of Madhya Pradesh has an extensive network of rivers having great river basins and watersheds of a number of rivers. Ten major rivers of India originate from the state. Drainage system in Madhya Pradesh includes some major rivers traversing through the state like Narmada river, Tapti river, Chambal river, Betwa river, Kali Sindh river, Son river etc.

The ranges of Vindhya and Satpura play a major role as watershed for rivers. The Chambal, Sindh, Betwa and Ken rivers flow northward and meet Yamuna, whereas the river Sone falls directly into Ganga, Narmada, Tapti and Mahi rivers flow westward and fall into the Arabian Sea, Whereas the wainganga and Pench river meets Godavari in the South.



❖ River Basins in Madhya Pradesh

There are five major river basins in Madhya Pradesh – Ganga basin, Narmada basin, Tapti basin, Godavari basin and Mahi basin.

I. GANGA BASIN -

River Ganga originates from the ranges of Himalayas at Gangotri and meets Bay of Bengal. The basin extends into 11 states viz. Uttarkhand,

Uttar Pradesh, Haryana, Himachal Pradesh, Delhi, Rajasthan, Madhya Pradesh, Jharkhand, West Bengal, Bihar, Chattisgarh.

The Ganga basin can further be classified into three sub-basins as Yamuna, Tons and Sone in Madhya Pradesh.

(i) YAMUNA SUB BASIN- The major rivers of Yamuna sub-basin in Madhya Pradesh are Chambal, Ken, Dhasan, Betwa, Sindh Kunwari, Paisuni and Jamni, details of which are given as below-

❖ **Chambal River –**

- The 965 km. long Chambal is the most important river of western Madhya Pradesh. This river was referred to as **Charmanavati** in ancient Hindu Texts.
- River Chambal is the biggest tributary of Yamuna river rises from the Janapav Mountain in the Vindhya Range, (District Indore, MHOW) and flows north through Ujjain, Ratlam and Mandsaur, before entering Rajasthan.
- It re-enters Madhya Pradesh after meandering through parts of Rajasthan and touches Morena and Bhind, then Chambal River meets Yamuna River near Itawa Uttar Pradesh.
- It also forms the ravines in Morena and Bhind by forming deep pits in alluvial rocks through gully erosion. Its major tributaries are Banas, Parvati, Kali, Shipra and Sindh. Three major dams have been constructed on this river –
 - ✓ Gandhi Sagar Dam – Mandsaur
 - ✓ Jawahar Sagar Dam- Kota
 - ✓ Rana Pratap Sagar –Chittaurgarh
- ❖ **Sindh**
 - River Sindh originates from Sironj tehsil of Vidisha District and meets Chambal River near Etawah.
 - Its total length is 470 km in which 461 km is in Madhya Pradesh Its major tributaries are Mahaur, Parwati, Pahuj and Kunwari.
- ❖ **Kunwari**
 - This river originates from Shivpuri.
 - Kunwari River often spelled as “Kwari river” flows in Bhind, Morena districts of Madhya Pradesh.
 - The river merges into Sindh River in the Etawah district.
- ❖ **Kshipra**
 - Kshipra River is one of the sacred rivers of India. Holy city Ujjain is situated on the bank of this river.
 - The Shipra starts its journey from Kakri Bardi hill near Indore and meets Chambal

River at Madhya Pradesh-Rajasthan boundary in Mandsaur district.

- This river is 195 km. long.
- It is also known as **Ganga of Malwa**. After every 12 year the Simhastha Kumbh Fair takes place on the bank of Shipra River in Ujjain.
- Its major tributaries are Khan and Gambhir.

❖ **Betwa**

- Its ancient name was Vetravati. River Betwa originates from Kumra village of Raisen district and meets Yamuna at Hamirpur in Uttar Pradesh.
- Its total length is 590 km in which 239 km is in Madhya Pradesh. Its major tributaries are Halali, Beena, Dhasan, Ken and Sindh.
- Betwa river is also known as Ganga of Madhya Pradesh (in term of pollution).

❖ **Dhasan**

- The River has been mentioned as Dashama in ancient texts.
- River Dhasan originates from Begumgunj Tehsil of Raisen district of Madhya Pradesh and flow south to North till it joins Betwa near Hamirpur of Uttar Pradesh.
- Total length of the river is 365 km, out of which 240 km. lies in Madhya Pradesh.
- Lehchura Dam is built on this river near Harpalpur of Chhatrapur district.

❖ **Ken**

- Ken River originates near the village of Ahirgawan on the North West slopes of Bhandar range in Katni district and meets Yamuna River near Chillah of Fatehpur district of Uttar Pradesh Its total length is 472 km. out of which 292 km. lies in Madhya Pradesh.
- Ken River forms 150-180 m. deep gorge by cutting Bijawar –Panna hills.
- Raneh fall is located on Ken river near Chhatrapur district. Its major tributaries are

Sonar, Bewa, Katni, Urmī, Patan, Kopra etc.

- ❖ **Paisuni and Baidhan**— These two rivers originate in Satna and Panna districts respectively and meet Yamuna river below Banda District.
- ❖ **Jamni** — Jamni is one of the important tributaries of river Betwa. It originates from Sagar district and meets Betwa river near Orchha. Its total length is 201 km, out of which 29 km. lies in Madhya Pradesh.

(ii) TONS SUB BASIN— Its ancient name was Tamsa district. Tons river rises in a tank at Tamakund in Kaimur range in Satna district. The river meets Ganga in Sirsa after flowing 264 km. Belan is its major tributary.

(iii) SONE SUB BASIN— Its ancient name was Swarna nadi. River Son originates from Maikal ranges near Amarkantak of Anuppur District and meets Ganga river near Patna after flowing 784 km. Its major tributaries are Gopad, Banas, Rihand, Johila etc.

2. NARMADA BASIN -

- It is the longest river of Madhya Pradesh and fifth **largest river of India**. It originates from Amarkantak Plateau of Maikal range in Anuppur district. Its total length is 1312 km. out of which 1077 km. lies in Madhya Pradesh.
- Narmada river has more than 40 tributaries approx. Tawa, Shakkar, Kolar, Barna, Doodhi are some of the major tributaries.
- After flowing in Madhya Pradesh, Maharashtra and Gujarat, it falls into Gulf Of combay in Arabian Sea.
- It is a west flowing river which forms estuary instead of Delta.
- Its ancient names are Rewa, Maikalsuta, Namodos, and Somodevi in ancient times, The Narmada is also referred as the Lifeline of Madhya Pradesh and Gujrat.

3. TAPTI BASIN -

- River Tapti originates from Multai hill of Betul district and falls into Gulf of combay in Arabian Sea. Total length of the river is 724 km out of which 332 km. lies in Madhya Pradesh.
- It also flows in Gujarat and Maharashtra. Purna and Barna are its major tributaries.
- It is also west flowing river along with Narmada and forms estuary instead of Delta, same as Narmada.

4. GODAVARI BASIN -

Total drainage area of Godavari Basin is 23388 sq. km. Major rivers of Godavari basin-

- a) **Wainganga**— It originates from Mundara village of Seoni district situated on Paraswada plateau. After flowing in Madhya Pradesh it joins Wardha River in Maharashtra. Its total length is 570 k.m. The confluence of Wainganga and Wardha river is known as Pranhita. Kanhan river is its major tributary.
- b) **Kanhan**— It originates from Damua town of Chhindwara district. Its total length is 275 k.m. After flowing in Madhya Pradesh it joins Wainganga at the village of Ambora of Nagpur district.
- c) **Pench**- It originates from Junnardeo of Chhindwara district. It separates Pench National Park in two equal parts. It falls into Kanhan River.

5. MAHI BASIN -

- Mahi River originates from Minda village of Dhar district. After flowing 158 k.m in Madhya Pradesh, it flows in Rajasthan and Gujarat.
- It falls into Gulf of combay in Arabian Sea.
- It is one of the West flowing rivers in India along with Tapti & Narmada.
- It cuts Tropic of Cancer twice.

Rivers of Madhya Pradesh at a Glance

S.No.	River	Length	Origin	Termination	Tributaries
1	Narmada	1,312 kms (1,077 kms in MP)	Amarkantak (Anuppur)	Near gulf of combay (Arabian sea)	Left bank- Burhner, Banjar, Tawa, Small Tawa, Kundli, Dev, Doodhi Right Bank – Hiran, Tindoni, Barna
2	Chambal	1040 kms	Janapav Hills near Mhow (Indore)	In Yamuna near Etawah (Uttar Pradesh)	Banas, Parvati, Kali, Shipra and Sindh.
3	Tapti	724 kms (Total)	Multai hills of Betul district	Near gulf of combay (Arabian sea)	Purna and Barna
4	Sone	784 kms	Amarkantak (Anuppur)	Deenapur hills in Bihar (In Ganga river near Patna)	Gopad, Banas, Rihand, Johila
5	Betwa	590 kms	Kumra village (Raisen)	In Yamuna River at Hameerpur	Halali, Beena, Dhasan, Ken and Sindh
6	Tawa	380 kms	Pachmarhi (Mahadeo hills)	In Narmada River	Denva, Malini, Sukhtawa, Kalibheet
7	Shipra	195 kms	Kakari Bardihill (Indore)	In Chambal river	Khan and Gambheer
8	Parvati	150 kms	In Sehore district	In Chambal river	
9	Kali Sindh	150 kms	Bagali village (Dewas)	In Rajasthan in Chambal river	
10	Sindh		Siroj (In Guna river)	In Uttar Pradesh in Chambal river	
11	Ken	472 kms.	Vindhyachal Mountain	In Yamuna river	Sonar, Bewa, Katni, Urmi, Patan, Kopractc,
12	Wainganga	570 kms.	Paraswara Plateau (Seoni)	In Godavri river	Kanhan, PENCH
13	Wardha		Vardhan peak (Betul)	Wainganga river (In Maharashtra)	
14	Shakkar		Amarwara (Chhindwara)	In Narmada river	
15	Chhoti Tawa		In Betul	In Narmada river	
16	Gar		Lakhana (Seoni)	In Narmada river	
17	Kunwari		Shivpuri Plateau	In Sindh river	
18	Dhasan		Raisen	In Betwa river river	Ur and Kethan
19	Tons/Tamasa	264 kms	Kaimur Hills (Satna)	In Ganga river	Belan
20	Mahi	583 kms (total)	Dhar	In Gulf of combay	Ujas

Rivers and their old Tributaries

River	Old Name
Narmada	Rewa, Maikalsuta, Namodos, Somodevi
Sone	Subhagadhi, Swarna Aadi
Ken	Dirnawati, Shuktimati
Chambal	Charmawati
Betwa	Vetrawati
Tons	Tamsa
Wainganga	Bewa, Waiya, Didi

Cities and their Riverbanks

City	River	City	River
Balaghat	Wainganga	Ujjain	Khipra
Barwani	Narmada	Sonekatc h	Kali Sindh
Sanchi	Betwa	Guna	Betwa
Sheopur	Chambal	Ratlam	Chambal
Vidisha	Betwa	Mandla	Narmada
Jabalpur	Narmada	Mow	Chambal
Orchha	Betwa	Hoshangaba	Narmada
Dhar	Narmada	Shajapur	Parvati
Maheshwar	Narmada	Omkareshw ar	Narmada
Rajgarh	Parvati	Multai	Tapti
Burhanpur	Tapti	Dewas	Kali Sindh
Orchha	Betwa	Shivpuri	Sindh

Major Waterfalls

Waterfall	River	Place
Dhuandhar	Narmada	Jabalpur
Dugdhdhara	Narmada	Anuppur
Mandahar	Narmada	Khandwa
Kapildhara	Narmada	Amarkantak
Sahastradhara	Narmada	Maheshwar
Dardi	Narmada	Khandwa
Chachai	Beehad	Rewa
Pandav	Ken	Panna
Chulia	Chambal	Kota (Raj.)
Patalpani	Chambal	Indore
Jhacidaha	Chambal	Indore
Keoti	Mahana	Rewa
Bahuti	Odda	Rewa
Dutches	Narmada	Pachmarhi
Apsara Vihar	Narmada	Pachmarhi
Rajat Pratap	Narmada	Pachmarhi
Purva	Tons	Rewa

Objective Questions

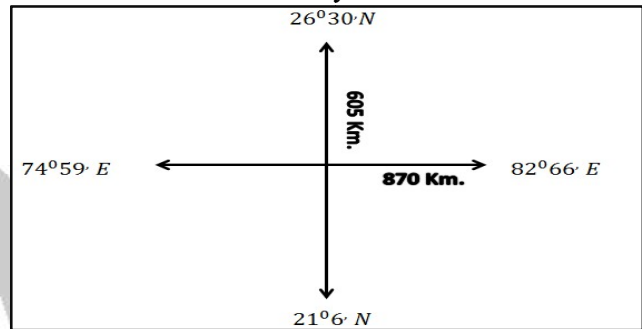
1. Amarkantak is located in :
(A) Chattisgarh (B) Uttar Pradesh
(C) Maharashtra (D) Madhya Pradesh
2. Chachai waterfall is located in :
(A) Jabalpur (B) Rewa
(C) Indore (D) Narsinghpur
3. Vidisha is located at the bank of :
(A) Betwa (B) Shipra
(C) Narmada (D) Chambal
4. Which river doesn't flow in Madhya Pradesh?
(A) Betwa (B) Narmada
(C) Tapti (D) Krishna
5. Which city of Madhya Pradesh lies in the Sindh-Ganga plain.
(A) Gwalior (B) Indore
(C) Bhopal (D) Jabalpur
6. Which is the highest waterfall of Madhya Pradesh?
(A) Kapildhara waterfall
(B) Sahastradhara waterfall
(C) Chachai waterfall
(D) Dhuan-dhar waterfall
7. Which waterfall is located at Bhedaghat
(A) Dhuadhar waterfall
(B) Rahatgarh waterfall
(C) Rajat waterfall
(D) Chachai waterfall
8. Famous Buddhist place Sanchi is at the bank of
(A) Tawa (B) Betwa
(C) Tapti (D) Narmada
9. Which river flows parallel to Narmada
(A) Shipra (B) Chambal
(C) Sone (D) Tapti
10. Match the following
List – I List – II
a. Multai 1. Narmada
b. Amarkantak 2. Tapti
c. Janapava hills 3. Behad
d. Rewa 4. Chambal
Code-
a b c d a b c d
(A) 1 2 3 4 (B) 2 3 4 1
(C) 2 1 4 3 (D) 4 1 2 3
11. Khipra river is the tributry of
(A) Narmada (B) Betwa
(C) Chambal (D) Tapti

12. Kapildhara and Dugdhadhara waterfalls are at:
(A) Narmada (B) Parvati
(C) Tons (D) Shipra
13. Which river passes through Tropic of Cancer twice?
(A) Narmada (B) Mahi
(C) Chambal (D) Shipra
14. Which river originates and ends in Madhya Pradesh only?
(A) Khipra (B) Betwa
(C) Mahanadi (D) Mahi
15. Which among the following rivers flow(s) westward and fall(s) into the Arabian Sea?
(A) Narmada (B) Tapti
(C) Mahi (D) All of these
16. River Banas and Parvati are the tributaries of the river
(A) Sone (B) Tapti
(C) Chambal (D) Narmada
17. Jabalpur district of Madhya Pradesh is situated on the bank of the river.
(A) Narmada (B) Parvati
(C) Betwa (D) Chambal
18. Which among the following rivers is/are the tributary of river Sone?
(A) Johila (B) Rihand
(C) Gopad (D) All of these
19. Mahi basin originated in Dhar district and falls in -
(A) Godavari river (B) Gulf of Khambat
(C) Arabian Sea (D) Bay of Bengal
20. The river Jamni is the tributary of which river?
(A) Shipra (B) Betwa
(C) Tapti (D) Narmada
21. Mahuar, Parvati and Pahuj are the tributaries the river?
(A) Kunwari Sindh (B) Betwa
(C) Jamni (D) Chambal
22. Which river is known as Ganga of Malwa?
(A) Shipra (B) Narmada
(C) Yamuna (D) Chambal
23. Consider the following statements –
(i) Narmada River travels a distance of 1312 km.
(ii) This river also makes the boundary between Maharashtra and Madhya Pradesh.
24. Which of the statements give above is/are correct.
(A) Only (i) (B) Only (ii)
(C) Both (i) and (ii) (D) none of the above
24. In ancient time, the Chambal river was also known as
(A) Vetrawati (B) Charmavati
(C) Kerawati (D) None of these
25. Match the following
- | List I(Waterfall) | List II(River) |
|-------------------|----------------|
| a. Dhuandhar | 1. Ken |
| b. Pandav | 2. Narmada |
| c. Purva | 3. Chambal |
| d. Patalpani | 4. Tons |
- Codes**
a bc dabcd
- (A) 2 1 4 3 (B) 2 1 4 3
(C) 1 2 4 3 (D) 1 2 3 4
26. In ancient times, the Betwa was known as
(A) Kaliasote (B) Dhasan
(C) Kopra (D) Vetrawati
27. Which of the following rivers of Madhya Pradesh flows towards West?
(A) Sone (B) Tapti
(C) Ken (D) Betwa
28. Paisuni and Baidhan are the two rivers that originate in Satna and Panna districts respectively and meet Yamuna in -
(A) Banda (B) Mohania
(C) Maner (D) Mathura
29. The river Tons originates in Satna district of Madhya Pradesh. It is the tributary of which rivers.
(A) Yamuna (B) Ganga
(C) Chambal (D) Narmada
30. Indore, the commercial capital city of Madhya Pradesh is situated on the bank of which river?
(A) Gambhir (B) Khan
(C) Shipra (D) Indravati
31. Rivers-
- | | | |
|-------------|---|-----------|
| (A) Narmada | - | Mandla |
| (B) Betwa | - | Sanchi |
| (C) Tapti | - | Burhanpur |
| (D) Sindh | - | Datia |
- | | A | B | C | D |
|-----|---|---|---|---|
| (A) | 2 | 3 | 4 | 1 |
| (B) | 1 | 2 | 3 | 4 |
| (C) | 4 | 1 | 2 | 3 |

- (D) 3 4 1 2
32. Which one is incorrectly matched?
 (A) Bansagar Dam -Son River
 (B) Madikheda Dam -Sindh River
 (C) Bargi Dam -Johila River
 (D) Indira sagar Dam -Narmada River
33. Statements-
 (i) It is the tributary of Godavari River.
 (ii) It originates from Mahadeo Hills, near Gopalganj village.
 (iii) Beemgarh Dam is the famous mud dam built across on this river
 Above statements are related to which river -
 (A) Narmada River (B) Wainganga River
 (C) Wardha River (D) Dhasan River
34. Match the following -
 (A) Dugdhadhara waterfall 1 Annuppur
 (B) Chachai waterfall 2 Hoshangabad
 (C) Silver falls 3 Rewa
 (D) Pandav waterfalls 4 Jabalpur
 5 Panna
- | | A | B | C | D |
|-----|---|---|---|---|
| (A) | 1 | 3 | 2 | 5 |
| (B) | 1 | 2 | 3 | 4 |
| (C) | 5 | 3 | 2 | 1 |
| (D) | 4 | 2 | 1 | 3 |
35. Which of the following statement/statemetns is/are correct?
 (I) Chambar, son, wainganga are the river which flows in northern direction
 (II) The confluence of Wainganga & Wardha is called "Pranhita"
 (III) Narmada is also known as "Ganga of Madhya pradesh."
 (A) Only - I (B) Only- II
 (C) Only -II-III (D) Only-III

Hills and Plateaus of Madhya Pradesh

Geography of Madhya Pradesh is prevalent with favourable geological settings. Generally, the geography of Madhya Pradesh includes high plateau, low plateau and river valley plains. It is nick named as 'the heart of India' due to its geographical location in India. Geographically, Madhya Pradesh is the second largest state of India after Rajasthan. Madhya Pradesh contitute 9.38% area of total area of country.



The present state of Madhya Pradesh lies between **21°6' N to 26°30' N latitudes and 74° 9' E to 82° 48' E longitudes**. Its total geographical area is 3,08,252 sq km divided among the 52 districts of the state. Its extent from east to west is 870 km and from north to south is 605 km.

Its northern boundary is drawn by the Chambal and southern boundary by Taptirive. eastern and western boundaries are made by hills of Maikal, Kaimur and the state of Gujarat respectively.

The **Tropic of Cancer** divides the state into two equal halves parallel to the river Narmada. It passes through the following **14 districts of the state** - Ratlam, Ujjain, Agarmalwa, Rajgarh, Sehore, Bhopal, Vidisha, Raisen, Sagar, Damoh, Katni, Jabalpur, Umariya, and Shahdol.

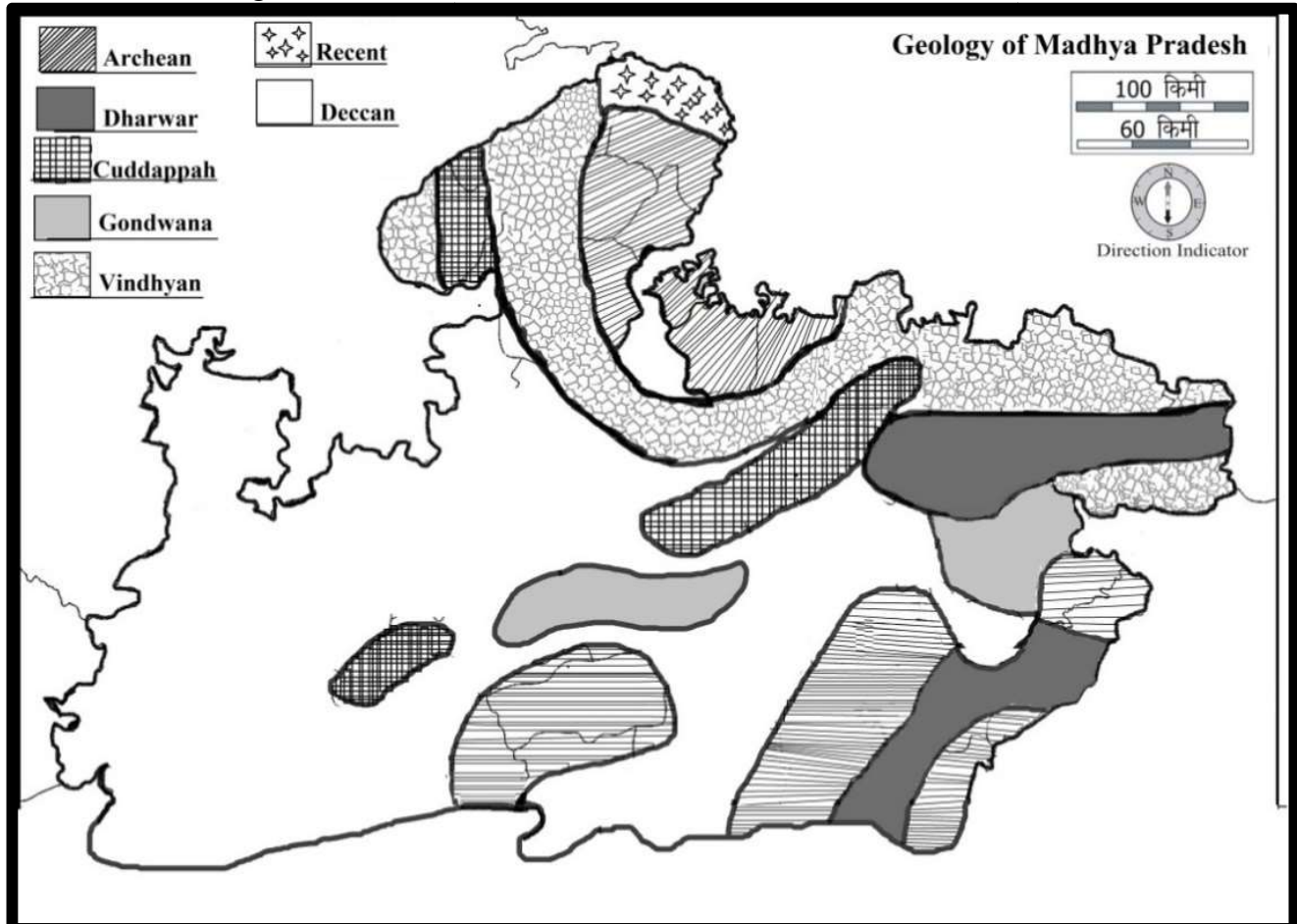
Madhya Pradesh is a landlocked state. Boundary of the state neither touches any maritime border nor any international border. According to physical structure maximum part of Madhya Pradesh belongs to Peninsular India and according to geological point of view, Madhya Pradesh is part of the oldest land '**Gondwana Land**'. Deccan trap rocks lie in the western part of Madhya Pradesh whereas Vindhyan rocks lie in the eastern part of Madhya Pradesh.

Answer sheet

1	2	3	4	5	6	7	8	9	10
D	B	A	D	A	C	A	B	D	C
11	12	13	14	15	16	17	18	19	20
C	A	B	A	D	C	A	D	B	B
21	22	23	24	25	26	27	28	29	30
A	A	A	B	A	D	B	A	B	B
31	32	33	34	35					
B	C	B	A	B					

Geological structure of Madhya Pradesh

Structurally, Madhya Pradesh is a part of continental plateau of India. Because of being a part of the oldest portion of the Earth, Madhya Pradesh has witnessed structural changes in various times. Geological formations of following times are found in the state.



1. Archean System

Rocks of Archean times are the oldest hard rocks over the Earth. These rocks are devoid of any fossils because they belong to the times when there was no life on the Earth. In Madhya Pradesh, such rocks could be found in Bundelkhand. In this region, the evidences of these Archean rocks could be found in the form of pink granite, sill and dike in long, narrow caves of Bundelkhand gneiss, the oldest one.

2. Dharwar System

Rocks belonging to the Dharwar times are majorly the metamorphic rocks formed out by the erosion of Archean rocks. Due to their metamorphism under very high temperature and pressure, even rocks of these times are devoid of any fossils. In Madhya Pradesh, these rocks are mainly found in Jabalpur Balaghat and Chhindwara. Dharwar rocks are highly metalliferous, they are rich in iron ore, manganese, lead, zinc, gold, silver, tungsten, nickel etc.

3. Purana System

In the due course of time, the Dharwar rocks got converted into hills through folding and faulting. The cycle of erosion converted these hills further into plains and eventually these plains again got converted into Purana system of rocks.

In Madhya Pradesh, we do not find very significant patches of Purana system.

4. Cuddapah System

The Cuddapah system derives its name from the Cuddapah district of Andhra Pradesh, these rocks occur around in Chhota Nagpur, south Singhbhum districts of Bihar and Jharkhand, in Gwalior, Panna, Jabalpur and Rewa tracts of Madhya Pradesh. It is an older system of rocks. These regions are rich in Limestone, Sandstone, and Asbestos.

5. Vindhyan System

A rock system of thickness of about 4200 m is found in Vindhyan system of rocks. In Madhya Pradesh, this rock system is extended from Rewa in north-west of Sone river till Rajasthan in west of the Chambal river.

In Madhya Pradesh, this system of rocks is divided into these two categories-

(a) Lower Vindhyan System

Lower Vindhyan group of rocks is extended in north of Narmada from east to west. They could also be found in the valleys of Bheema and Sone. In the Valley of Sone, they could be seen in the form of limestone, shale and sandstone.

(b) Upper Vindhyan System

This group of rocks is extended in the north of Narmada in the form of Kaimur, Rewa and Bhandar series. A small amount of fossils is also found in this system of rocks. The building material and stones used in the historical buildings and monuments of Northern- India are found here in abundance.

6. Aryan System

Aryan era, which comprises the rock system from Upper Carboniferous till the most recent rock systems could be covered. During the Upper Carboniferous period, the Deccan Plateau was affected by several endogenetic forces. But due to the excessive stress, the rocks got fragile and the long and narrow plains got submerged between them. In these small areas, the freshwater lakes formed and in due course of time from the sediments of these banks, the Gondwana rocks got formed. In Madhya Pradesh, we could not find rock of this system.

7. Gondwana System

The Gondwana system derives its name from kingdoms of Gonds, the most primitive people living in Andhra Pradesh. The main areas of

Gondwana rocks in the Peninsula are along the Damodar valley in Jharkhand, along the Mahanadi river valley in Chhattisgarh and Odisha, and southern part of Madhya Pradesh.

Economically, Gondwana rocks are most important in India, they are rich in deposits of coal, gypsum, copper, dolomite, sandstones, slates etc. This system of rocks is mainly found in Satpura and Baghelkhand Plateau region of Madhya Pradesh. Gondwana system of rocks mainly consists of layer rocks.

The Gondwana rocks of Madhya Pradesh are divided into three categories.

(a) Lower Gondwana System

This is also known as Talchir system of rocks and is mainly found in Sone-Mahanadi valley and the Satpura region. Because of an average thickness of 10-122 m, the geologists consider them to be made up of the action of ice and winds both. In the state the Mohpani and Pench valley coal areas are of the lower Gondwana period.

(b) Middle Gondwana System

In Madhya Pradesh, the middle Gondwana rock system is developed in Satpura region and in the surrounding areas like Pachhat, Pachmarhi, Denwa and Bagara. In Sone-Mahanadi area they are known as Parsora and Tiki. In the Pachmarhi region, the big layer sandstone is found which is yellowish red in appearance because of the excess of iron. Clay stone is found in Pachmarhi.

(c) Upper Gondwana System

This system is found in both the regions, Satpura and Baghelkhand. Sandstone and shales are abundant in this rock system. They differ from Gondwana deposits in having coalbeds, vegetational remains and limestone. In Satpura area they are known as Chaugan. They contain layers of limestone, clay, sandstone and conglomerate in abundance.

The Jabalpur series is rich in soft sandstone, white and yellow shale, coal, brown and coal beds and typical animal remains.

8. Cretaceous Rocks System

In Madhya Pradesh, the proof of cretaceous rocks is found in the Narmada valley. In Narmada valley, there are groups of rocks formed by the sediments of the rivers and estuaries, which are also called as Bagh beds, whereas in other regions of Madhya Pradesh, the rocks formed through comparatively newer sediments, are known as

Lameta beds. In such rocks, the mixed limestone rocks, sandstone, grit and clay stones are majorly found along with some fossils.

9. Deccan Trap

In the end of cretaceous, lava covered the north-western part of Deccan plateau. These deposits of thick basalt are termed as Deccan trap and they nearly covered an area about 5,17,800 sq km. This structure is made up of Basalt and polorise rocks, These rocks are very hard & their weatherjng has resulted in formation of Black soil. The rocks of Indore, Bhopal and western Jabalpur divisions are of such origin. The middle trap is found in Malwa and Madhya Bharat area while in Narmada valley lower traps are found.

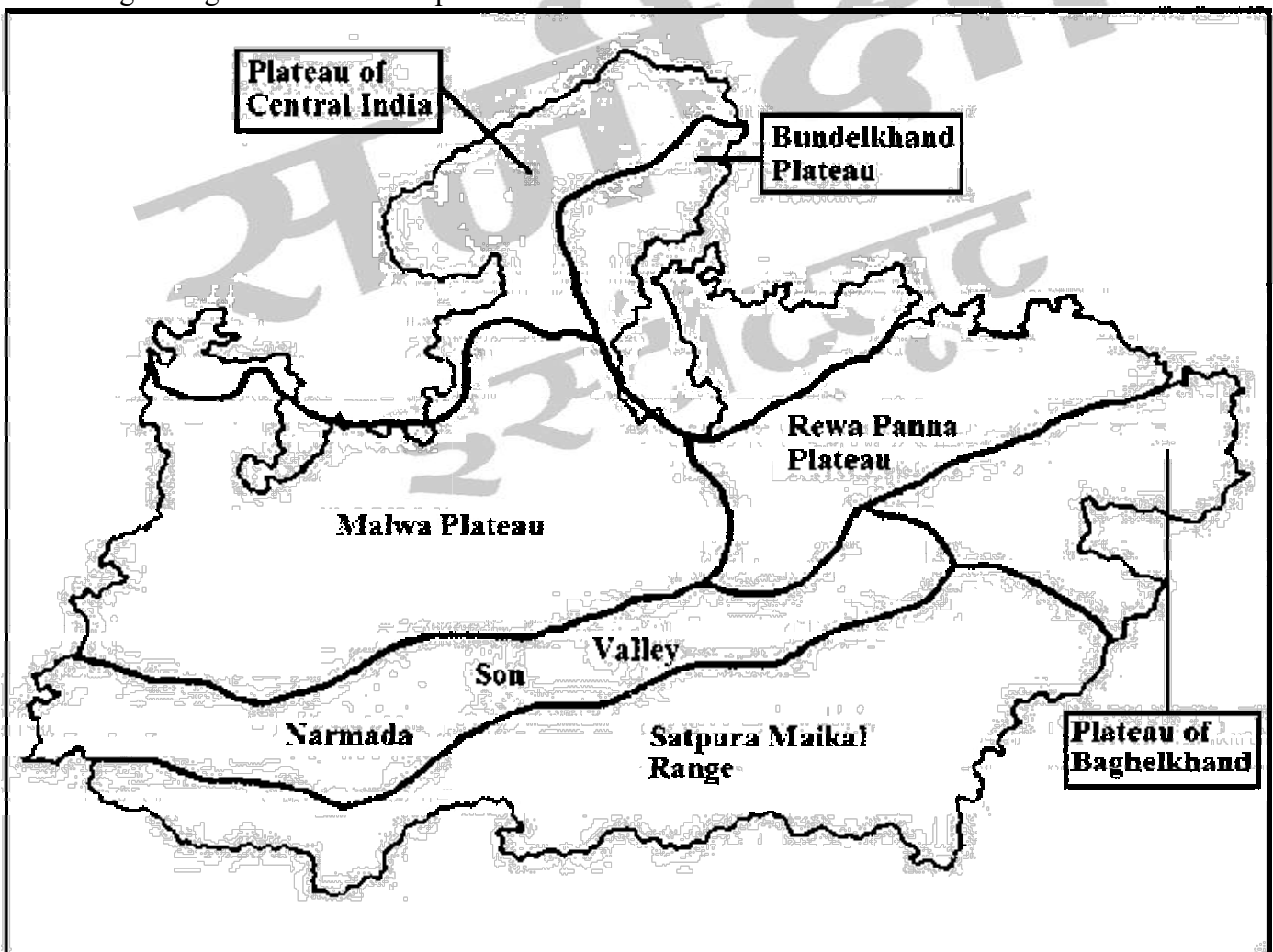
10. Tertiary system

In the tertiary rock system, the Gondwana landmass got fragmented in small parts and thus

submerged under the sea. During this time, only the Deccan Plateau evolved in the present form and the Great Himalayas also evolved from the sediments of Tethys Sea through folding in the form of young fold mountains.

All these endogenetic forces had an effect over the other parts of the India too and in the South and South-East of Madhya Pradesh, the Narmada and – Sone Valley emerged due to the degrading of the landmass. Also, whole of the Northern plateau got raised and gave rise to the slopes and falls on the Northern boundaries of the state. These high falls and low lying slopes resulted in the erosion through rivers which also lead to the formation of river valleys in the plateau region of the state.

Geographical Zone of Madhya Pradesh



Madhya Pradesh is divided into the following geographical zones

- (I) Central High Land
- (II) Satpura – Maikal Range
- (III) Eastern Plateau or Baghelkhand Plateau

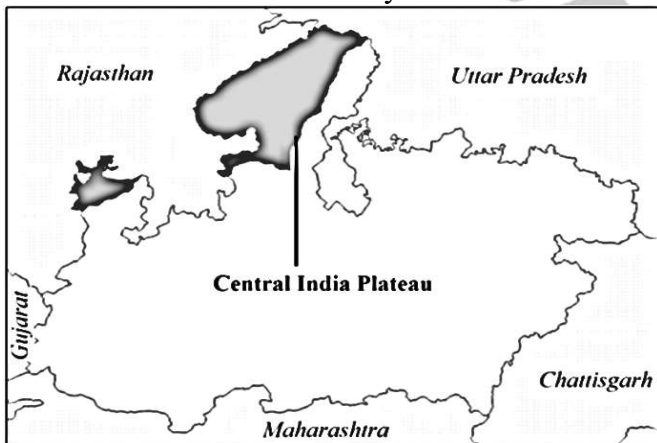
• Central Highlands

Central highlands of Madhya Pradesh is a triangular elevated land from west to east which is surrounded by Narmada-Sone valley in South, Ganga-Yamuna plains in North, Kaimur ranges in East and Aravalli ranges in West. In this region, between the ranges, hills and plateau, the river basins and valleys are found. This region is divided into following sub regions :

- B. Plateau of Central India
- C. Bundelkhand Plateau
- D. Rewa-Panna Plateau or Vindhya Kagari region
- E. Malwa Plateau
- F. Narmada Son Valley

A. Plateau of Central India –

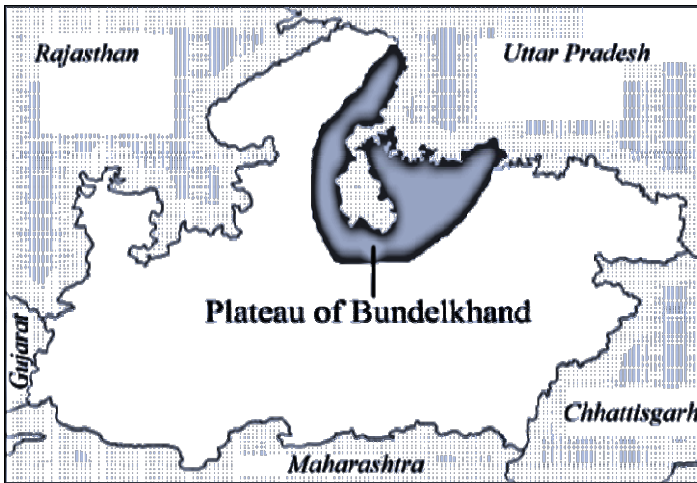
Spread as 'Crown of Madhya Pradesh' and touching the border of Rajasthan and Uttar Pradesh, the Plateau of Central India is located at a height of about 300 meters above sea level on the northwestern border of the state. It is situated in north and north-west of Madhya Pradesh.



- **Situation**-24⁰10' to 26⁰48' North latitude and 24⁰50' to 79⁰18' East longitude.
- Total area of this plateau is 32,896 Sq. Km. which is 10.7% of total area of Madhya Pradesh.
- This region includes Mandsaur, Neemuch, Shivpuri, Sheopur, Gwalior, Guna, Morena and western part of Bhind.

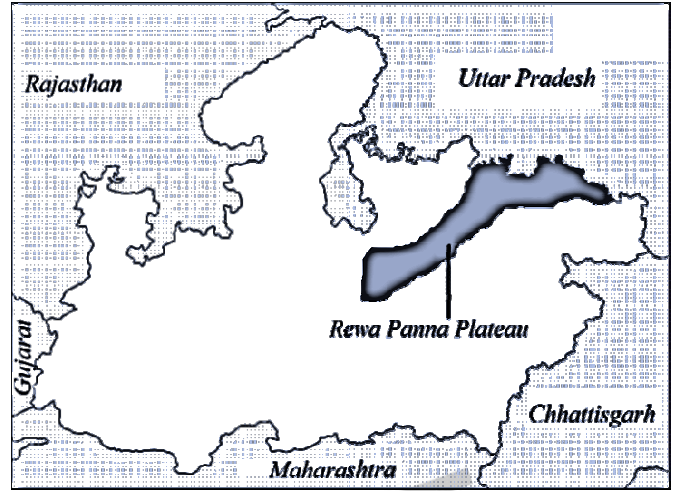
- Most of the part of Central India Plateau is undulant and hilly. The slope of this highland is towards south to south west and from north to north east. The rivers in these regions follow these slopes.
- According to geology the Central highlands are made up of **Cuddappah rock group, Vindhya rock group, Deccan trap** and the new sedimentation.
- The highland has **very less forest** only 20-70% area is covered by forest. The most important forest product is the **Catechu** furthermore fire wood and bamboo are also found.
- It has continental type of climate. The maximum temperature of this region is 40⁰ to 44⁰C and minimum temperature. is 15⁰ to 18⁰C.
- The average rainfall is less than 75 cm.
- Soil of this region is alluvial which is famous for mustard production. Wheat, Barley, Jowar, etc. are also grown here.
- Rivers of this plateau flow towards north and north east direction. Chambal, Sind, Kuwari, Parwati, Betwa are some of the rivers of this plateau.
- This zone is mainly famous for its small industries. Rapid development of industries can be seen in this plateau. Some of the major industries are-
 - Gwalior - Biscuit Factory, ceramic tools
 - Malanpur (Bhind) -Cadbury, bulb factory
 - Banmore (Morena) - J. K. Tyre Industry
 - Kailaras (Morena) - Sugar Mill
 - Shivpuri - Catechu factory
 - Neemuch - Alkaloid factory
- The main tourist spots of this plateau are Gwalior and Shivpuri. Madhav National Park of Shivpuri, Chambal wild life sanctuary of Morena, Fort of Gwalior, and Samadhi of ShankhyaRajeScindia of Shivpuri etc.
- Brijbhasha and Bundeli are famous dialects of this region Sahariya tribe is found in this plateau.

B. Plateau of Bundelkhand



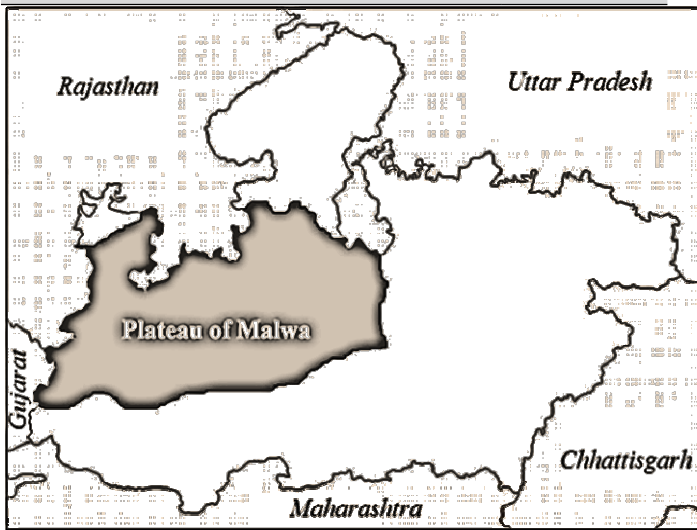
- **Situation** – 24°6' to 26°30' North latitude and 77°51' to 80°20' East Longitude. The total area of this region is 23733 sq. km. or 7.71% of the total area of state.
- Average elevation from sea level is 150 to 450 meters. Siddha Baba is the highest peak of this plateau (1172 meter).
- This region includes Niwari, Tikamgarh, Chhattarpur, Panna, Datia, Pichore and Karera tehsil of Shivpuri, Dabra and Bhandar tehsil of Gwalior district and Lahar tehsil of Bhind district.
- Its climate is of continental type. The maximum temperature of this region is 40° to 41°C while minimum temperature is 9° to 12°C, and average rainfall is 73-103 cm.
- Soil of this plateau is red, black and loamy in which crops like wheat, mustard, sesame seeds and barley is grown.
- Main rivers are Betwa, Ken, Dhasan and Sindh.
- Diamond mines are there in Chhattarpur and Panna. Pratappur (Tikamgarh) is an industrial development centre.
- **Bundeli** is the most common dialect spoken in this area.
- Sonagiri and Pitambarapeeth of Datia, UNESCO World Heritage site Khajuraho of Chhattarpur are some of the famous tourist spots of this plateau.

C. Plateau of Rewa-Panna



- This region is also known as Vindhyan Kagari region. This Kagari region of vindhya is located in the South East of Bundelkhand plateau and North-East of Malwa plateau.
- Its average elevation from sea level is 300 to 600 meters.
- Its geographical extension is 23°6' to 25°12' Northern latitude and 78°4' to 82°18' Eastern longitude. The total area of this plateau is 31954.8 sq. km which is 16.36% of the total area of Madhya Pradesh.
- This region includes Rewa, Satna, Panna, Damoh and Banda and Rehli tehsil of Sagar district. The maximum temperature of this region is 42°C and minimum temperature is 8°C and average rainfall is 125 cm.
- Main Rivers of this plateau are Tons, Sons, Beehad, Dhasan, Ken, Sonar, Bichchia and Mahana.
- This plateau is covered with mixed soil in which crops like wheat, paddy, til are grown.
- Minerals like limestone, gypsum, diamond, corundum are found in this plateau.
- Main industries are cement industry (Satna) and diamond cutting industry (Panna).
- Sharda Temple and AllauddinPeeth of Maihar, Jugal Kishor temple and Pran Nath Temple of Panna Chacchai and Kewati waterfall of Rewa are main tourist places of this region.

D. Plateau of Malwa



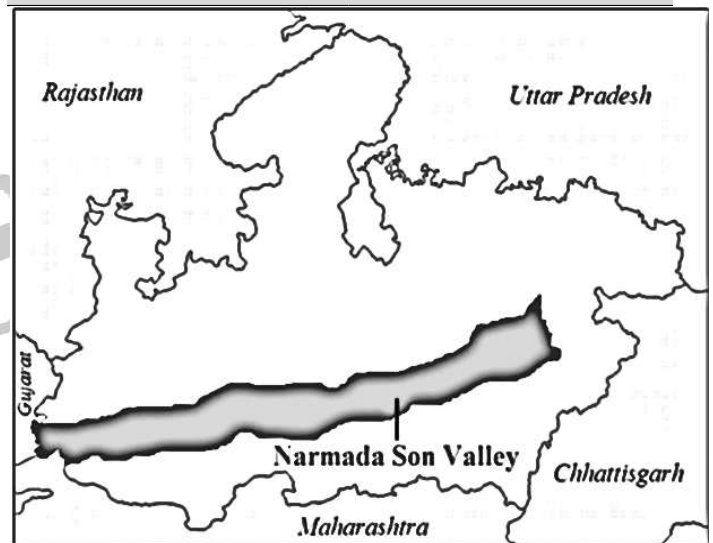
- The central western region of Madhya Pradesh is known as Malwa Plateau.
- Its average elevation from sea level is 300 to 600 meters.
- Its geographical situation is $22^{\circ}17'$ to $25^{\circ}8'$ northern latitude and $74^{\circ}20'$ to $79^{\circ}20'$ eastern longitude. Its area is 88,222 Sq. Km. which is 28.62% of the total area of Madhya Pradesh
- This extended part of Malwa covers 18 districts of the state. It includes Indore, Dhar, Jhabua, Ratlam, Ujjain, Sagar, Dewas, Mandasaur, Neemuch, AgrMalwa, Sehore, Bhopal, Sagar, Guna, Raisen, Rajgarh, Vidisha and Ashoknagar district.
- Climate of this plateau is temperate. Chinese traveller Fa-hien called Malwa's climate as the world's best climate.
- Average temperature during summer season is 40°C and during winter season it is 12.5°C . Average rainfall of Malwa plateau is 75 to 125 cm.
- Major rivers of this plateau are Mahi, Shipra, Kalisindh, Parvati, Gambhir, Chambal etc.
- Due to erosion of Basalt rocks, Black soils are found in this plateau in which crops like soyabean, wheat, potato is grown.
- Highest peak of this plateau is Sigar(881 meter) which is situated near Mhow. and The second highest peak is Janapav (854 m.).

- Although this plateau is devoid of minerals but this plateau is rich in industrial area. Some of the major industrial centres are –

1. Pithampur – Dhar (Detroit of Madhya Pradesh)
2. Mandideep – Raisen
3. Peelukhedhi – Rajgarh
4. Meghnagar – Jhabua
5. Maksi – Shajapur
6. Ganjwasodha, Lateri – Vidisha
7. Agasod - Sagar

- Mahakaleswar (Ujjain), Chamunda Devi temple (Dewas), Mandu (Dhar), Sanchi (Raisen), Bheembetka caves (Raisen), Udaigiri caves (Vidisha) are some of the tourist places of this plateau.
- Bhil and Gond tribal population is mainly fourished in this region.

E. Valley of Narmada-Son

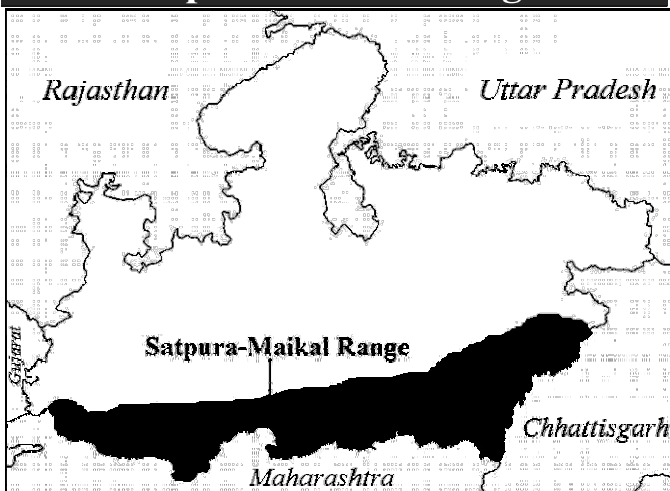


- Stretching from east to west the central part of Madhya Pradesh is called the Narmada- son valley.
- It is the lowest part of the state, its general elevation from sea level is 300m.
- The valley is mostly made up of Deccan trap rock system.
- Its physical expansion is from $22^{\circ}30'$ to $23^{\circ}45'$ north latitude and 74° to $81^{\circ}30'$ eastern longitude.
- The total area of this region is 86000 sq. km which is 26% of total area of Madhya Pradesh.

- It includes Shahdol, Umaria, Anuppur, Mandla, Dindori, Jabalpur, Narsinghpur, Hoshangabad, Harda, Dewas, Barwani, Khargone, Khandwa and Alirajpur.
- Monsoon climate is prevalent average rainfall of this region is 70 to 140 cm and the temperature of this region is maximum 40°C and minimum temperature is 10°C.
- About 25% of the valley is covered with forest and dark black soil is also found.
- Narmada, Son, Tawa, Shakkar, Dudhi, Hathni and Barna are some of the rivers flow in this region.
- This region is rich from agricultural point of view in which Wheat is mainly produced. Rice, Cotton, Groundnut and Soyabean are other main crops.
- Main minerals found in this region are lime stone, sangmarmar, coal, tungusten (agargaon), antimoni etc. cement, rubber, glass & ceramic industries are concentrated in Jabalpur.
- Maneri (Mandla) is an industrial development centre of Madhya Pradesh.
- Narmada-Sone valley's main tourist spots are Chounsath Yogini Temple (Jabalpur), Bhedaghat (Jabalpur), Omkereshwar (Khandwa), Maheshwar (Khargone), Dhuadhaar Waterfall and the marble rocks of Bhedaghat at Jabalpur, Tigamva temple (Jabalpur), Rupnath (Rock edict of Ashok at Jabalpur), Amarkantak etc.

- It covers the area of Madhya Pradesh ranging from south west boundary of Madhya Pradesh up to the Amarkantak in the East.
- The most important and highest mountain range of the state lies between Narmada and Tapti rivers. It spread between 21°30' to 23° northern latitude and 74°30' to 81° eastern longitude.
- Its general elevation from sea level is from 400m to 600m.
- Its total area is 3400sq. km which is 11% of total area of Madhya Pradesh. It includes Balaghat, Chhindwara, Betul, Hoshangabad, Khandwa, Barwani, Burhanpur and Khandwa.
- This region can be further subdivided into three ranges-
 - Rajpipla Range** – It is the western part of Satpura – Maikal range. Its expansion is from Rajpipla Range to Buranpur Pass.
 - Central Range** – It falls in the east of Rajpipla range. It includes different ranges like Gawaligada range, Mahadev range etc.
 - Maikal Range** – It makes the Eastern boundary of this range whose expansion is from Balaghat to Amarkantak.
- Monsoon climate is prevalent. Average temperature during summer season is 40°C & during winter season is 15°C.
- Average rainfall of this region, ranges from 125 to 150 cm, highest rainfall's area Pachmarhi lies in this region.
- Layered Black soil is found in this region.
- Crops like jowar, wheat, cotton, rice are grown.
- Narmada, Tapti, Wainganga, Wardha rivers flow in this region.
- Satpura-Maikal range is rich in minerals and following are chief minerals and their producing areas -

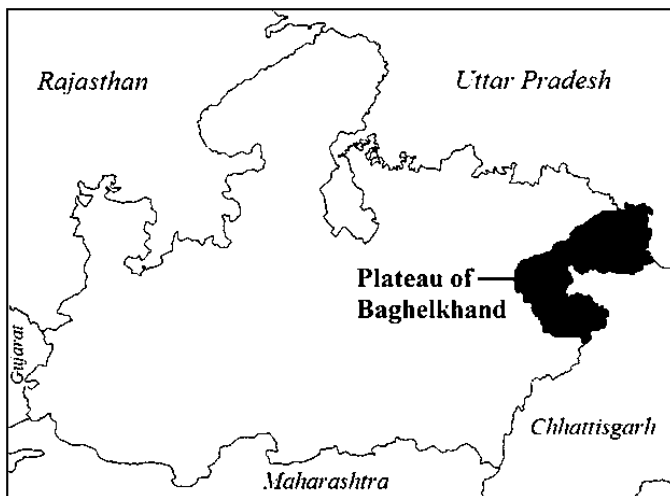
Satpura Maikal Range



Manganese	– Balaghat, Chhindwara
Coal	– Patharkhera of Betul
Copper	– Malajkhand area of Balaghat
Bauxite	– Shahdol, Balaghat, Mandla
Iron	– Balaghat

- National Newsprint and Paper Mill (Nepanagar), Mining industries (Betul and Chhindwara), Cotton Textile Industries are some of the major industries of this region.
- Pachmarhi, Tamiya, Patakot (Chhindwara), Muktagiri (Betul), Bawangaja (Barwani) are some of the tourist spots.
- Gond, Baiga, Bhil, Korku, Bhariya etc. tribal population is found here.

III. Plateau of Baghelkhand



- It is located on the north-east portion of Madhya Pradesh. It is also known as eastern plateau.
- Its physical situation is 23°40' to 24°35' northern latitude and 80°5' to 82°47' eastern longitude. Total area of this region is 21577 sq.km. which is 7% of the total area of Madhya Pradesh.
- Highest peak of Baghelkhand Plateau is at Devgarh.
- It includes Sidhi, Singrauli, Shahdol, Umaria, Anuppur, Katni, Jabalpur & some parts of Mandla.
- Tropic of cancer divides this plateau in two equal parts.
- Sone, Johila, Narmada, Banas, Rihand, Gopad are some of the rivers flow in this plateau.
- Climate of this plateau is monsoon type. Average rainfall varies from 75 to 140

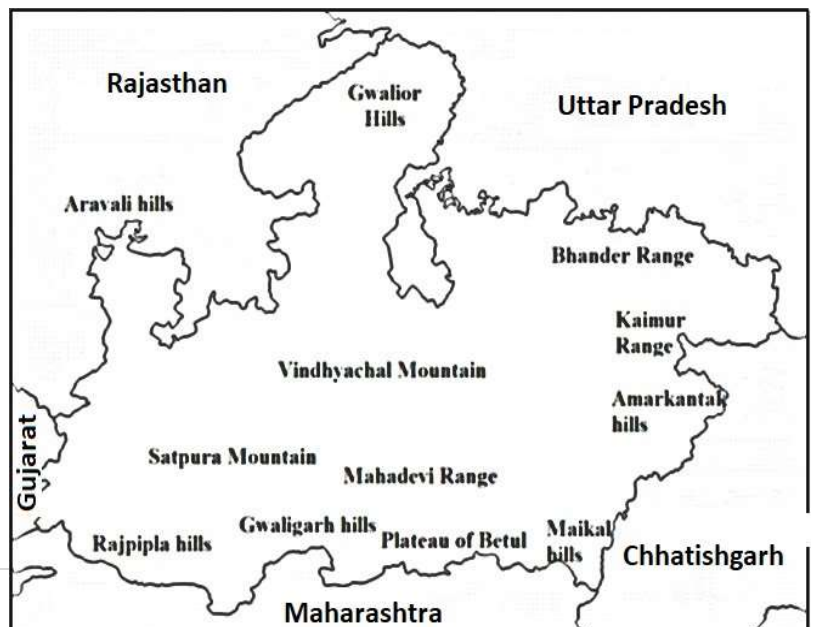
cm. Average temperature during winter season is 15°C & during summer season 38°C.

- It is composed of Gondwana rock group and therefore forms the chief sources of coal in Madhya Pradesh although Vindhyan granite rock groups are also found in this region.
- Red and Yellow soil is found in this plateau. Rice is the main crop. Other crops are are linseed (Alsi), Sorghum (Jowar), Sesame (Til).
- Sealing wax factory (Umaria), Paper Mill (Amlai) are some of the major industries of this plateau.
- Graphite, Corundum, Coal, Quartz are some of the major minerals found in this plateau.
- Coal producing district Singrauli lies in this plateau.
- This plateau leads in cement production and thermal power generation.
- Energy capital of M.P Bedhan (Singrauli) is in this plateau.
- Amarkantak, Bandhavgarh National park (Umaria), Sanjay National park (Sidhi) are some of the tourist spots of this plateau.
- Baiga, Kol, Korba, Virharetc tribal population found here.

Mountain Ranges of Madhya Pradesh

1. Satpura Hills

- Satpura hills are 1,120 kilometers long. It is



wide from Rajpipla hill in the west upto Maikal hills in the east. This mountain is situated west to east in the south of Narmada river.

- Satpura hills are made up of Granite and Basalt rocks.
- Average height of Satpura the is 900 meter and more.
- Its highest peak is Dhoopgarh which is 1,350 meter high. It is situated in Mahadeo range. State's famous hill station Pachmarhi is located near it only.

✦ Divisions of Satpura hills-

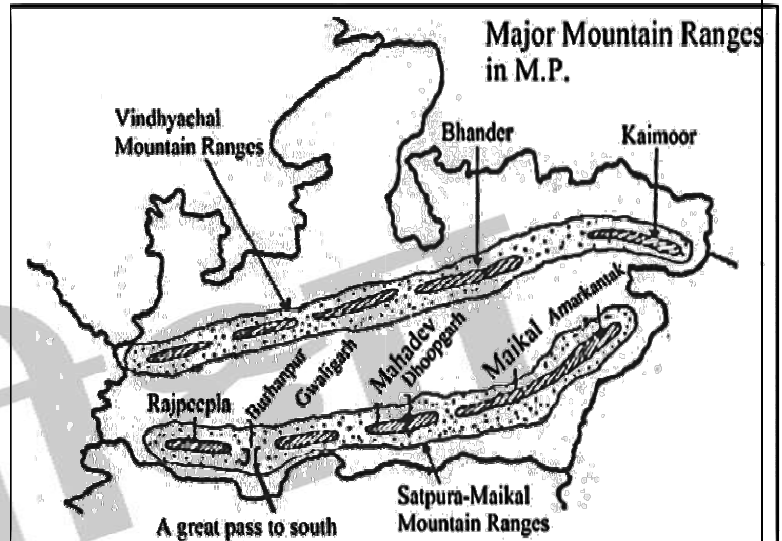
- Mahadeo series:** It is the main part of Satpura. This is the highest mountain of Satpura-Maikal series. Pachmarhi and Dhoopgarh are located in the Mahadeo series. Tawa is the main river originated from the Mahadev series.
- Maikal series** (Crescent shaped mountain) The eastern extension of Satpura is the Maikal mountain. It is shaped like a half moon. Maikal is a volcanic plateau. Its highest peak is Amarkantak (1127 m). Rivers originated from Maikal: Narmada, Son, Johila, and Rihand.
- Rajpipla series** - It is the western extension part of Satpura. Rivers originated from Rajpipla is Tapti and its tributaries. Burhanpur pass (Gateway of South), Akharani, Barwani Bijargarh, and Asirgarh etc. are some significant feature of this series.

2. Vindhyachal Hills

- Vindhyachal hills are from west to east direction in the north of Narmada. Its inclination is towards north.
- Vindhyachal hills are made up of red sandy stone and quartz.
- Vindhyachal hills are one of the world's oldest mountain ranges. It is also called residual mountains.
- Average height of Vindhyachal hills is 457 to 610 meters.
- In the east of Vindhyachal hills, there are Kaimoor and Bhandar mountain ranges.

Chief components of Vindhyachal

- **Bhandar Range:** Vindhyachal begins from Bhandar series in the east.
- **Kaimoor Range:** This is the north part of Bhandar. River Rihand originates from Kaimoor, mainly flowing through Korea district in Chhatisgarh



Objective Questions

- What is the total area of Madhya Pradesh?
(A) 3,08,252 Sq. km (B) 434391 Sq. km
(C) 336391 Sq. km (D) 337194 Sq. km
- Which district has the Biggest area in state?
(A) Bastar (B) Chhindwara
(C) Balaghat (D) Satna
- Tropic of Cancer does not pass through?
(A) Ujjain (B) Jabalpur
(C) Indore (D) Bhopal
- What is the height of highest peak of Madhya Pradesh- Dhoopgarh?
(A) 1050 m (B) 1110 m
(C) 1350 m (D) 1201 m
- Which district has the lowest area in the state?
(A) Datia (B) Ujjain
(C) Niwari (D) Bhopal
- Which is known as Cherapunji of Madhya Pradesh?
(A) Alirajpur (B) Samripat
(C) Amarkantak (D) Jabalpur
- Dhoopgarh the highest peak of the state lies in which range?
(A) Rajpipla range (B) Maikal range

- (C) Mahadev range (D) Kaimur range
- 8- Geographically Madhya Pradesh is divided into how many parts?
(A) 1 (B) 4
(C) 3 (D) 5
- 9- Which of the following is not a district?
(A) Katni (B) Sheopur
(C) Itarsi (D) Sehore
- 10- Which group of districts comes under Bundelkhand region?
(A) Mandsaur, Rajgarh, Shivpuri
(B) Tikamgarh, Damoh, Chhatarpur
(C) Durg, Raipur, Rajnand Gaon
(D) Rewa, Shahdol, Satna
- 11- Which of the following is a new district formed in 2003?
(A) Sidhi (B) Agar Malwa
(C) Barwani (D) Burhanpur
- 12- Which of the following is a new district formed in 2008?
(A) Alirajpur (B) Singrauli
(C) Both (D) None
- 13- Which are the two largest districts on the basis of area in Madhya Pradesh?
(A) Chhindwada, Shivpuri
(B) Chhindwada, Sagar
(C) Sagar, Sidhi
(D) Betul, Sagar
- 14- Which of the pair indicates the two smallest districts of Madhya Pradesh?
(A) Niwari-Sidhi
(B) Niwari-Datia
(C) Niwari-Bhopal
(D) Chhindwada-Niwari
- 15- Which one is the western most district of Madhya Pradesh?
(A) Sidhi (B) Morena
(C) Burhanpur (D) Alirajpur
- 16- Which Geo-graphical area of Madhya Pradesh is considered as part of Ganga Basin?
(A) Malwa (B) Central Highlands
(C) Bundelkhand (D) Baghelkhand
- 17- Dharwar rocks are mainly found in which among the following districts of Madhya Pradesh?
(A) Jabalpur (B) Balaghat
(C) Chhindwara (D) All of these
- 18- Cuddapah system of rocks is found on the North-Western boundaries of Madhya Pradesh in the form of
(A) Shale (B) Jasper
(C) Nickel (D) All of these
- 19- Consider the following statements
(i) The Central Eastern region of Madhya Pradesh is known as Malwa plateau.
(ii) Malwa plateau has Black soil and therefore wheat and cotton are mainly cultivated here.
Which of the statements given above is/are correct?
(A) Only i (B) Only ii
(C) Both i and ii (D) Neither i or ii
- 20- Satpura and Maikal ranges are situated in _____ part of Madhya Pradesh.
(A) Northern (B) Eastern
(C) Western (D) Southern
- 21- Central Indian plateau covers which among the following districts of Madhya Pradesh?
(A) Bhind (B) Morena
(C) Gwalior (D) All of these
- 22- Bundelkhand plateau covers which among the following districts of Madhya Pradesh?
(A) Tikamgarh (B) Datia
(C) Shivpuri (D) All of these
- 23- Which among the following is the major river of Malwa plateau?
(A) Shipra (B) Betwa
(C) Chambal (D) All of these
- 24- Which among the following is the major river of Central Indian plateau?
(A) Chambal (B) Kali sindh
(C) Parvati (D) All of these
- 25- Consider the following statements
(i) Amarkantak mountain is a part of Maikal range.
(ii) Rajpipla range is the Western part of SatpuraMaikal range.
Which of the statement given above is/are Correct?
(A) Only i (B) Only ii

- (C) Both i and ii (D) None of the above
- 26- Which region is also known as VindhyanKagari region?
(A) Rewa-Panna-plateau
(B) Malwa plateau
(C) Bundelkhand plateau
(D) Narmada – Sone valley
- 27- Which among the following districts is/are part of Malwa plateau?
(A) Indore (B) Bhopal
(C) Ujjain (D) All of these
- 28- The average height of Vindhyan Range is
(A) 881 m (B) 1000 m
(C) 1300 m (D) 981 m
- 29- Geologically Madhya Pradesh is a part of?
(A) Gondwanaland
(B) Vindhyan Range
(C) Deccan Trap
(D) None of the above
- 30- The Northern part of Narmada son basin is known as?
(A) Central Highland (B) Kaimur ranges
(C) Satpura Ranges (D) Maikal Ranges
- 31- Which of the following is the correct one?
(A) Satpura Ranges lies in the south of Narmada son Valley
(B) Central Highland is a part of Ganga Basin
(C) Eastern Plateau is a part of Mahanadi & Son Basin
(D) All are correct
- 32- The location of Vindhychal Ranges in Madhya Pradesh is?
(A) Northern (B) Middle
(C) Southern (D) None of these
- 33- Madhya Pradesh Central Highlands is subdivided into how many parts?
(A) 4 (B) 5
(C) 6 (D) 3
- 34- In Madhya Pradesh, Diamond is mainly found in?
(A) Bhandar (B) Kaimur
(C) Sausar (D) Vindhyan-Cuddappah

Answer Sheet									
1	2	3	4	5	6	7	8	9	10
A	B	C	C	C	A	C	C	C	B
11	12	13	14	15	16	17	18	19	20
D	C	B	B	D	B	D	D	B	D
21	22	23	24	25	26	27	28	29	30
D	D	D	A	C	A	D	A	A	A
31	32	33	34						
D	B	B	D						

CHAPTER- 2

Climate - Seasons, Temperature, Rainfall Of Madhya Pradesh

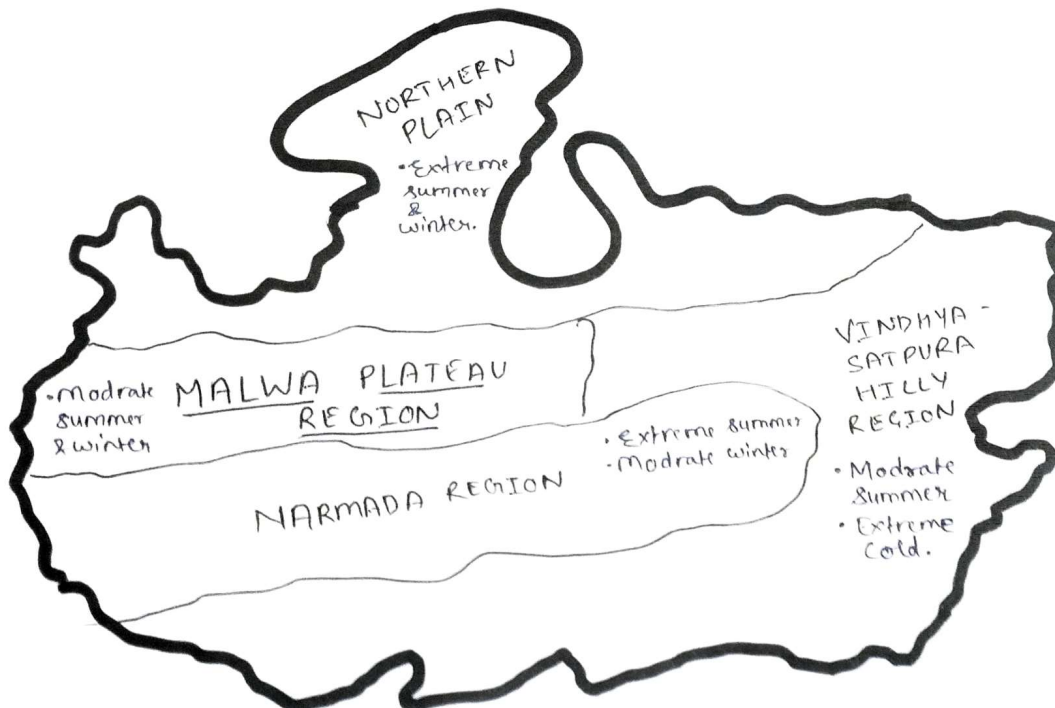
Climate of the state is **sub-tropical monsoon** type but since the Tropic of Cancer passes in between the state and the large geographical area and physical variations, different climatic conditions are found in the different zones of the state.

Koppen- Geiger MP - 3 division

Classification	Climate Code	Area
Humid warm Mediterranean Climate	Cwg	Jabalpur, Gwalior, Singrauli, Katni, Rewa
Tropical Savanna Climate	Aw	Indore, Bhopal, Dewas, Ratlam, Ujjain
Humid Hot Dry Climate	BSh	Burhanpur, Bhind, Morena, Khargone

CLASSIFICATION BASED ON THE VARIATIONS OF CLIMATE

Climate Zone	Summer Season	Winter Season
1. Northern Plains Region	Extreme Hot	Extreme Cold
2. Malwa Plateau Region	Modrate Hot	Modrate Cold
3. Vindhya- Satpura Hilly Region	Modrate Hot	Extreme Cold
4. Narmada Valley Region	Extreme Hot	Modrate Cold



1. NORTHERN PLAINS

- Due to being located away from the sea, the climate of the northern plains is of continental type, due to which summers are hotter and winters are colder.
- The average temperature of the northern plains region remains between 40°C-45°C in summer and 15°C-18°C in winter.
- Shivpuri, Gwalior, Guna, Bhind, Morena are the major cities of this region.

2. MALWA PLATEAU

- Due to the temperate climate in Malwa region, summers are neither too hot nor winters are too cold.
- The average temperature of Malwa region is between 38°C-40°C in summer and 20°C-25°C in winter.
- Chinese traveler Fa Hien has called the climate of Malwa the best climate in the world.
- Indore, Dewas, Ujjain, Sehore, Ratlam etc. are the major cities of this region.
- Malwa is the most developed region of Madhya Pradesh due to ideal climate.

3. VINDHYA SATPURA MOUNTAIN REGION

- In the Vidhya mountain region, summers are generally hot and winters are colder.
- The average temperature of this region ranges between 35-38°C in summer and 15-20°C in winter.

- Pachmarhi and Amarkantak of Madhya Pradesh come under this hilly region.
- 4. NARMADA VALLEY REGION**
- Due to its location near the Tropic of Cancer, the summers in the Narmada Valley region are hot but the winters are generally cool.
 - The average temperature of this region is 38-40°C in summer and 15-20°C in winter.
 - Hoshangabad, Jabalpur, Harda, Narsinghpur, Khandwa are the major cities of which region.

SEASONS OF MADHYA PRADESH

The climate of Madhya Pradesh consists of the three seasons. These are

(i) SUMMER SEASON

Throughout the Indian sub-continent, the summer in general is from March to Mid-June. Similarly in Madhya Pradesh, the temperature progressively rises from March till June. Till May, the temperature crosses the mark of 30°C. During this time, the temperature in Gwalior, Morena, Datiya and Southern Balaghat is around 42.5°C. In this season, the isotherm of 40°C divides the state in two equal halves. Highest temperature can be observed in Ganjbasoda of Ujjain.

The places lying to the East of this are Mandla, Shahdol, Seoni, Chhindwara and Betul and places towards the West are Dewas, Shahapur, Indore, Dhar, Ujjain, Jhabua, Ratlam and Mandsaur. This season is normally dry with very low humidity. The sky is generally clear across the state and sometimes also fADEs sand blowing winds known as Loo locally.

(ii) RAINY SEASON STARTS

The onset of this season depends on the onset of South-West monsoon winds on the West coast of India. Generally, it starts from mid June. This season leads to a sudden fall in the day temperature due to the clouds, humidity and rains.

Till July, the complete Eastern Madhya Pradesh comes under the impAct of these monsoon winds. The hilly and plateau regions receive more rain as compared to the plains.

(iii) WINTER SEASON

In Madhya Pradesh, the winter season is from November to February. From 23rd September, as soon as the Sun starts moving towards South, the average temperature starts falling. During October, the temperature of whole Madhya Pradesh remains in between 20.9^oC to 26.6^oC. During this season, the sky is generally clear. Lowest temperature in Madhya Pradesh can be observed in Shivpuri district.

Colder nights sometimes cause a fog and mist on high plateaus or hilly regions. During December-January, there could be some rain because of the Western disturbances which is locally called as Maawath. These rains sometimes lead to sudden fall in the temperature. As soon as March comes, the temperature again starts rising and in the onset of summer.

RAINFALL DISTRIBUTION

Rainfall in Madhya Pradesh occurs from both the branches of the Southwest Monsoon - the Arabian Sea Branch and the Bay of Bengal branch. Rainfalls in the south eastern part occur from the Bay of Bengal branch, while the western part receives rainfall from the Arabian Sea.

M.P receives rain from mid June to September. Average rainfall in M.P is 112 cm. Highest rainfall is received in Pachmarhi i.e. 212.3cm. whereas Gohad of Bhind district receives least rainfall i.e. 62.4cm.

❖ Areas With Excess Rainfall

The South-Eastern areas of the state receive an excess rainfall i.e. more than 150 cm. Such places in Madhya Pradesh are Pachmarhi, Mahadeo hills, Mandla, Sidhi and Balaghat. The major source of such excess rainfall is the South-Western monsoon originating from the Arabian Sea. The place receiving maximum rainfall in Madhya Pradesh is the Pachmarhi which receives an average annual rainfall of 212.3 cm.

❖ Areas With More Than Average Rainfall

Betul, Chhindwara, Seoni, Narsinghpur districts come under such areas. Because of being on the Eastern side of the state, these places receive more rainfall due to more humidity. The average rainfall in these areas is 125 cm to 150 cm.

❖ Areas With Average Rainfall

These areas include places with 75 to 80 cm rainfall. The North-Eastern places of the state come under this section. Central highlands, plateau of Bundelkhand, Rewa-Panna plateau are the areas which receive lesser rainfall due to lack of humidity and their physical features. Place receiving the least rainfall in the state is Gohad in Bhind district, which receives an average rainfall of 55 cm.

❖ Areas With Minimum Rainfall

The Western areas of the state receive the minimum rainfall i.e. of 50 cm to 75 cm. The main reason behind the minimum rainfall is the absence of humidity. Till the South-Western monsoon reaches here, it either becomes void of moisture or has a very low humidity. Places coming under this zone are Neemuch, Mandsaur, Ratlam, Dhar, Jhabua etc.

❖ Important facts

- Tropic of cancer passes through middle of the state from 14 districts of Madhya Pradesh
- The region of Madhya Pradesh's climate being **Tropical** is the Tropic of Cancer passes through the middle of the state while the rains received through south-west monsoon makes it a **Monsoon** type climate.
- Average temperature of Madhya Pradesh has been recorded as 21^oC.
- Highest temperature of Madhya Pradesh has been recorded at Ganjbasoda (Vidisha) which is 48.7^o C.
- Lowest temperature has been recorded at Shivpuri.

Objective Questions

1. Highest rainfall in Madhya Pradesh is recorded in:
(A) Pachmarhi (B) Bhind
(C) Seoni (D) Sidhi
2. Summers in Madhya Pradesh is also known as:
(A) Siyala (B) Chaumasa
(C) Mavata (D) Unala
3. MP's Meteorological Temperature observatory is situated in
(A) Gwalior (B) Morena
(C) Jhabua (D) Indore
4. Rainfall due to western disturbances in winters is termed as
(A) Chaumasa (B) Unala
(C) Siyala (D) Mavath
5. Maximum rainfall in Madhya Pradesh is due to
(A) South west monsoon
(B) South east monsoon
(C) Western disturbances
(D) None of the above
6. Which time period of the year is known for the second summer season in Madhya Pradesh?
(A) August-September
(B) July-August
(C) September-October
(D) October-November
7. Average rainfall in M.P is
(A) 55 cm (B) 112 cm
(C) 75 cm (D) 125 cm
8. Climate of Madya Pradesh is
(A) Monsoonal
(B) Tropical
(C) Both A and B
(D) None of the above
9. Lowest temperature is recorded in which district.
(A) Gwalior (B) Shivpuri
(C) Morena (D) Bhind
10. Hottest place of Madhya Pradesh is:
(A) Datia (B) Shivpuri
(C) Ganjbasoda (D) Gwalior
11. Major rains take place in Malwa plateau region of Madhya Pradesh It is due to the South-West monsoon of the
(A) Bay of Bengal (B) Arabian Sea
(C) Both 'a' and 'b' (D) None of above
12. Consider the following statements about Northern Plains of Madhya Pradesh
(i) This zone has a continental climate.
(ii) The average temperature for summers is 40°C to 45°C and for winters it is 15°C to 18°C .
Which of the statements given above is/are correct?
(A) Only (i) (B) Only (ii)
(C) Both (i) and (ii) (D) Neither (i) nor (ii)
13. Which of the following statements about Narmada Valley region is/are correct?
(i) Narmada valley is situated very close to the Tropic of Cancer.
(ii) The average maximum temperature in this zone is received in the month of May and the minimum in December.
(A) Only (i) (B) Only (ii)
(C) Both (i) and (ii) (D) neither (i) nor (ii)
14. Based on the climate, the seasons of Madhya Pradesh can be divided into how many categories?
(A) 1 (B) 2
(C) 3 (D) 4
15. Match the following lists

List-I(Zone)	List-II(Type of Climate)
A. Malwa Plateau	1. Summer-moderately hot
B. Northern Plains	2. Summer-extremely hot
C. Vindhyan Hills	3. Summer-less hotter

Codes

A B C	A B C
(A) 2 1 3	(B) 1 2 3
(C) 3 1 2	(D) 2 3 1
16. Which of the following statements about Baghelkhand Plateau region is/are correct?
(i) This region has monsoon climate because the Tropic of Cancer passes almost from the middle of the region.
(ii) The average temperature of summer is 35.5°C whereas in winter it is 12.5°C .
Codes:
(A) Only (i)
(B) Only (ii)
(C) Both (i) and (ii)
(D) Neither (i) nor (ii)
17. The Place receiving Maximum rainfall in Madhya Pradesh is the Pachmarhi, which receives an average annual rainfall of
(A) 300.3 cm (B) 212.3 cm

- (C) 100 cm (D) 400 cm
18. During December-January, there could be some rain in Madhya Pradesh because of the Western Disturbances which is locally called as
(A) Saawath (B) Maawath
(C) Western (D) None of the above
19. Which among the following districts receive(s) rainfall more than average rainfall i.e. 125cm to 150 cm.
(A) Betul (B) Seoni
(C) Chhindwara (D) All of the above
20. Average rainfall for Northern plains zone is even lesser than because this zone lies in sub-tropical humid climatic zone.
(A) 60 cm (B) 75 cm
(C) 100 cm (D) 125 cm
21. In malwa plateau region, the hottest month of the year is
(A) March (B) April
(C) May (D) June
22. In Madhya Pradesh, the winter season is from
(A) October to January
(B) November to January
(C) November to February
(D) October to December

23. Which among the following districts of Madhya Pradesh receives excess rainfall?
(A) Mandla (B) Sidhi
(C) Balaghat (D) All of the above
24. Which among the following regions of Madhya Pradesh receives excess rainfall?
(A) South-Western region
(B) South-Eastern region
(C) North-Eastern region
(D) North-Western region
25. Which zone is slightly dry continental as compared to tropical monsoon type?
(A) Malwa Plateau
(B) Chhotanagpur Plateau
(C) Deccan Plateau
(D) Peninsular Plateau

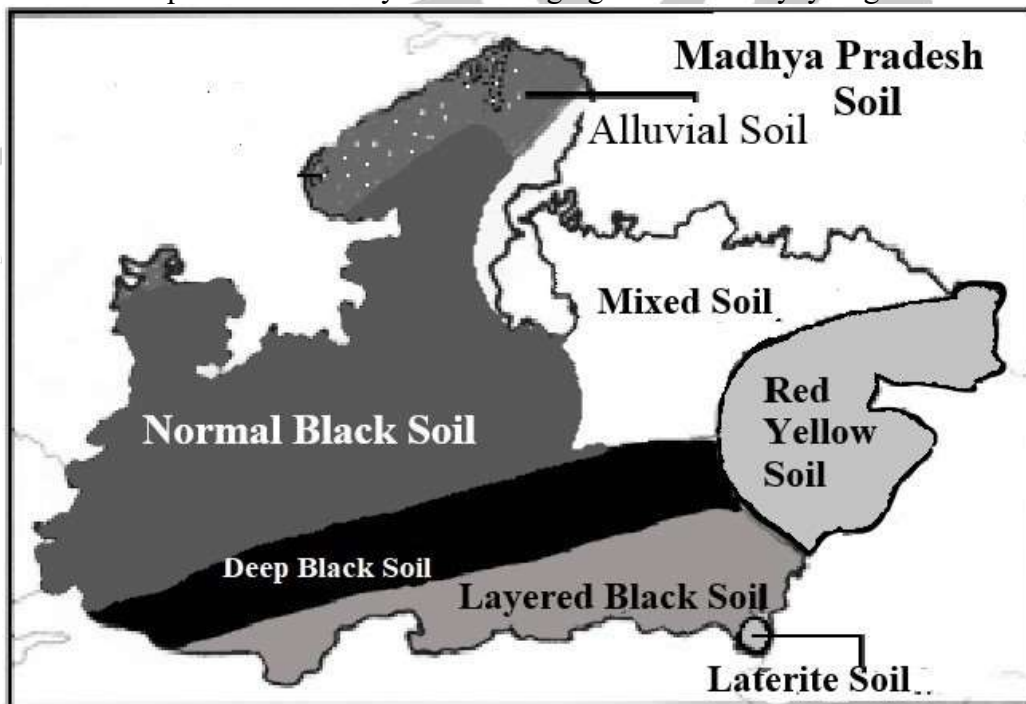
Answer sheet

1	2	3	4	5	6	7	8	9	10
A	D	D	D	A	C	B	C	B	C
11	12	13	14	15	16	17	18	19	20
B	C	C	C	B	C	B	B	D	B
21	22	23	24	25					
C	C	D	B	A					

Chapter- 3

Natural Resources - Soil and Major Mineral of Madhya Pradesh

- Soil is a living system. Like any other organism, they too develop and decay, get degraded, respond to proper treatment.
- Soils of Madhya Pradesh vary as per the structure, colour, texture and composition in the different regions.
- Madhya Pradesh is that part of the peninsular plateau of India where residual soils are found in an extensive area.
- The rock formation determines the soil structure and composition in this state.
- As a result of this organic materials are found at a large scale in soils.
- In this state the problem of soil erosion is almost negligible but due to excessive use of the land, the problem of soil erosion is accelerating.
- Madhya Pradesh comprises of a variety of soils ranging from rich clayey to gravel soil.



Black Soil

- Black soil is also known as Regur soil, Black Cotton Soil (BCS), locally, it is also called Karail. Internationally, it is known as Tropical Chernozems.
- Black soil are composed of Basaltic rocks mainly found in the Deccan Trap (Malwa Plateau).
- This soil is spread over 43.44% of the total geographical area of Madhya Pradesh.

- This soil is found in Malwa Plateau, Narmada Valley and in Panna, Datia, Gwalior, Shivpuri and other districts, located in Vindhyan and Satpura Ranges.
- Black soil is formed by weathering and erosion of Deccan trap.
- Chemically, the black soils are rich in lime, iron, magnesia and alumina. It also contains potash, but it lacks phosphorous, nitrogen and organic matter.

- Due to the excessive presence of iron, this soil is black in colour. This soil is alkaline in nature and it has a pH of 7.5-8.6.
- This soil is suitable for the cultivation of Sorghum (Jowar), Cotton, Wheat, Gram, Mustard and Barley. Black Soil is mainly of

Deep Black Soil

- Deep black soil is spread over 16.21 million hectares of area in Madhya Pradesh, which is 36.5% of the total state's area.
- This soil is mainly found in the areas of Narmada Valley, Malwa Plateau and Satpura Range.
- Clay constitutes a very high proportion (20-60%) in this soil. This soil is suitable for the cultivation of Wheat, Oilseeds, Gram, Sorghum (Jowar).
- Deep black soil is found in about 35 districts of Madhya Pradesh, mainly in Hoshangabad, Harda, Narsinghpur, Shahdol, Umaria, Jabalpur, Katni, Sagar etc.

Medium and Shallow Black Soil

- Medium and shallow black soil is spread over 3.06 Million hectares of area in Madhya Pradesh, which is 6.91% of the total geographical area of the state.
- This soil is found in the districts of Betul, Chhindwara, Seoni, Narsinghpur etc located in the southern part of Malwa Plateau, Nimar region and the adjoining areas of Satpura range.
- Medium black soil is brownish and light black in colour, while Shallow Black soil is yellowish and deep black in colour.
- The black soil constitutes of extremely fine clay i.e. clayey material (15-20%).

Other names of soils

- Black soil - Regur, Cotton Soil, Chernozem
- Red-yellow soil - Chalka, Dorsa
- Alluvial soil - Domat, Kachhari
- Laterite soil - red-brown or white soil

Alluvial Soil

- Alluvial soil is also known as Loamy Soil. These soils are formed mainly due to silt

deposited by the Himalayan and Peninsular rivers.

- The proportion of nitrogen and humus is generally low but potash, phosphoric acid, and alkalies are adequate, while iron oxide and lime vary within a wide range.
- This soil is neutral in nature i.e. it has a pH of 7. It is of two types: Khadar and Bangar.
- The soil spreads over 3 million acres of land in the state, which is approximately 3% of - the total soil of state.
- In Madhya Pradesh, this soil is derived from sediments (kachar) deposited by Chambal and its tributaries, this soil is also known as sedimentary (kachari) soil. Due to the high fertility of this soil, it is most suitable for agriculture.
- This soil is found in northern parts of Madhya Pradesh, in Bhind, Morena, Sheopur and Gwalior districts. This soil is suitable for cultivation of Wheat, Gram, Mustard, Canola, Barley etc.

Soil Erosion in Alluvial Soil

- Soil erosion means removal of the upper layer of soil by erosive agents like wind, water, ice, snow, air, plants, animals, humans and gravity.
- Soil erosion is also known as soil degradation and creeping death. Drainage basin of Chambal river is the main reason for soil erosion in Bhind, Sheopur, Morena, Gwalior etc districts.

Kachari Soil

- This soil has been formed by Chambal and associated tributaries, within their catchment area.
- Its expands in Bhind, Morena, Sheopur, Gwalior.
- Crops mainly cultivated here are: wheat, sugarcane, cotton etc. Its nature is neutral.

Red and Yellow Soil

- Red and Yellow Soil is formed by weathering and erosion of metamorphic rocks.
- This soil is spread over 36% area of Madhya Pradesh, which is mainly found in Mandla, Balaghat, Sidhi and Shahdol districts in Bundelkhand and Baghelkhand regions.

- This is made up of Gondwana rock group. In this soil, ferric oxide is found, due to which its color is red, when ferric oxide undergoes hydrolysis, its color becomes yellow.
- It contains large amount of lime and it is of basic nature, which is suitable for cultivation of Rice.
- This soil is acidic in nature, which is deficient in nitrogen, phosphorus and humus. This soil is often found in barren regions.

Laterite Soil

- Laterite soil is formed as a result of intense leaching due to tropical rains. Lime and silica are washed away with rain, while soils rich in iron oxide and aluminium compounds are left behind. Locally, it is also known as Bhata. The laterite soil is formed in areas having high temperature and high rainfall. It is found in monsoon climatic region which is characterised by seasonal rainfall.
- This soil is commonly considered to have formed in regions having hot and wet tropical climate. Successive change in humidity and dryness plays an important role in its formation.
- The soil lacks organic content, nitrogen, phosphate and calcium while iron oxide and potash are in excess.
- This soil is suitable for the cultivation of plantation crops like tea and coffee.
- This soil is found in abundance in Chhindwara and Balaghat districts.

Red and Black Mixed Soil

- This soil is also known as red clay soil which is a mixture of all type of soils. This soil is formed by disintegration of Gneiss and Granite rocks.
- Mixed Red and Black soil is spread over 8.11 million hectare area of Madhya Pradesh, which is 18.30% of the total geographical area of the state.
- It is found in Bundelkhand area and Cereal grain crops are mainly produced. This soil is found in approximately 18 districts of Madhya Pradesh, mainly in Mandla, Dindori, Balaghat,

Rewa, Satna, Panna, Chhattarpur, Tikamgarh, Shivpuri, Guna etc.

- In Madhya Pradesh, this soil is found in the areas of red-yellow soil and black soil in mixed form.
- It is also found mixed with sand and clay in some parts of Bundelkhand.
- Mixed Red and Black soil is suitable for the cultivation of Sorghum (Jowar) and Millet.

MAJOR MINERALS OF MP

1) Iron Ores

- In Madhya Pradesh, Iron ore are found in the Dharwar rocks.
- Madhya Pradesh ranks 6th in the production of iron ore in India.
- Mainly magnetite and haematite Iron ores are found in Madhya Pradesh.
- Iron ores are found in Jabalpur, Mandla, Balaghat, Gwalior, Khandwa, Khargone and Sidhi in Madhya Pradesh. Maximum iron ores are found in Jabalpur district.
- The Iron ore of Madhya Pradesh is being exported to Germany and Japan.

2) Manganese

- Madhya Pradesh is at **second place** in the country in manganese production.
- Madhya Pradesh produces nearly 22.82% of the country's manganese production while nearly 10.90% of the total manganese in the country is found in Madhya Pradesh.
- Manganese is produced in **Balaghat**, Chhindwara, Seoni, Mandla and Thandla in Jhabua district of Madhya Pradesh.
- In Madhya Pradesh, maximum manganese production is from Balaghat district (500 lakh tonnes) and Chhindwara (180 lakh tonnes).
- Manganese is produced at Katheria, Ukwa, **Bharveli**, Katagziri, Woroziri, Kochewahi, Nega mines in Balaghat district.
- Manganese is produced at Kachithana, Gaumukh, Seetamhou, ChhotiGowari, Dhona, Wardhnau and Wutkum mines in Chhindwara districts.
- Manganese is produced at Nandania and Agarwara mines in Seoni district.

- Manganese is used in Ferro Alloy industry.
- Manganese produced in Madhya Pradesh is being exported to USA, Great Britain, Germany and Russia.

3) Copper

- Copper is found in igneous and metamorphic rocks.
- Madhya Pradesh ranks **first in the country** in copper production. Madhya Pradesh accounts for 41% of reserves of country. 69% of country's copper is produced in Madhya Pradesh.
- 95% to 97% copper is produced at Malajkhand in Baihar tehsil of Balaghat district of Madhya Pradesh. **Malajkhand** mine is 170 meter long and 20 meter wide .
- Excavation of copper from the Malajkhand (Balaghat) copper mine is being done by Hindustan Copper limited
- Some amount of copper is found in Sagar, Jabalpur, Hoshangabad, Narsinghpur, Shahdol, and Umariya too. The copper ore is a 170 meter long and 20 meter wide belt. Copper is used for making electronic equipments, wires and in mixing with other metals in various chemical processes to form alloys

4) Bauxite

- It is an ore of aluminium. When the content of aluminium is more than 40% in an ore then it is called bauxite.
- Madhya Pradesh stands 6th among all the states in production of bauxite
- The highest production of Bauxite in Madhya Pradesh is done in Balaghat.
- Bauxite is being excavated at Jabalpur, Mandla, Katni, Shahdol, Anuppur, Satna, and Rewa in Madhya Pradesh.
- Excavation for Bauxite started for the first time in the state at **Katni** in the year 1908.
- Bauxite is sent from Amarkantak (Anuppur) to Renukot Aluminium Plant in Uttar Pradesh.
- Before the separation of Chhattisgarh country's 44% of bauxite was produced by Madhya Pradesh.
- Bauxite is mainly used in aircraft industries.

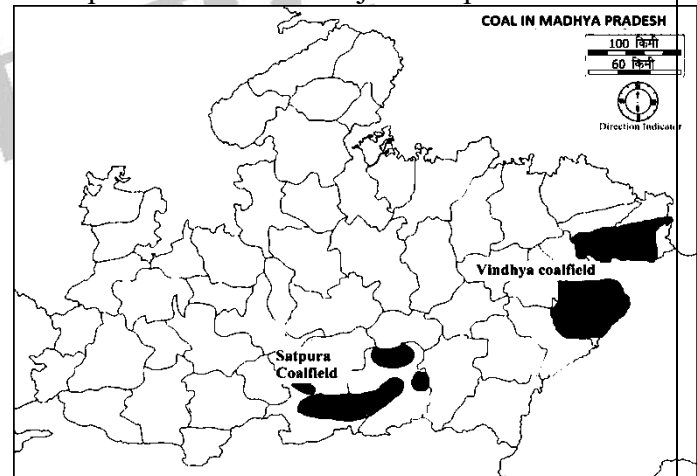
5) Diamond

- Madhya Pradesh is the largest diamond producer state of India.

- Underground diamond reserves are at Panna, Chhattarpur, Satna in Madhya Pradesh.
- The main diamond production centres are at Mazgawa in Satna district, Panna and Hinauta in Panna district and Angaur in Chhattarpur district. Major types of diamond such as Kohinoor, Great Mughal, Pit, Orlock etc. have been found in this area.
- The Igneous plate of Kimberlite rocks spread from Panna district to Satna is the major area of diamonds.
- National Mineral Development Corporation does excavation of diamonds in the state.
- Diamonds are found from deposits of Bhogan River at Ramkheria in Panna. The storage of 1,15,000 carat has been found at Ramkheria in Panna district.

6) Coal

- Coal is considered as the back bone of all industries, it is also known as 'Black gold'.
- In terms of coal production, Madhya Pradesh **ranks fourth in the country**.
- In Madhya Pradesh, Central India coalfield and Satpura coalfield are major coal producers.



❖ Central India Coalfield

- In **Central India Coalfield**, eastern districts of Madhya Pradesh like Umariya, Anuppur, Shahdol, Singrauli are included. It is also called **Vindhya Pradesh coalfield**.
- Vindhya Pradesh coalfield is at first position in the state in coal stock.
- Major coal mines in Central India coalfield are Baidan (Singrauli), Sohagpur (Shahdol), Korar (Umariya) and Johila Valley.

- Sohagpur coalfield (Shahdol) is the biggest coalfield and Umaria is the smallest in Madhya Pradesh.
- In Singrauli, the coal layer is 136 meter thick which is the thickest layer of Asia and second thickest layer in the world.

❖ Satpura coalfield-

- **Satpura coalfield**, which is in Kanha and Pench Valley, includes southern districts of Betul, Hoshangabad, and Chhindwara.
- Major coal mines of Satpura coalfield includes- Shahpur (Narmadapuram), Mohpani, Dulhara (Betul), Dumua, Nimarkhera, Jamai, Parasiya (Chhindwara), Kanha valley (Seoni), Pench valley, Patharkhera (Betul) etc.

Coal Bed Methane (CBM)

Coal Bed Methane is found at Sohagpur (Shahdol). CBM is natural gas stored or absorbed in coal seams. India, with the world's fourth largest proven coal reserves, holds significant potential for CBM exploration and production. CBM gas is similar to natural gas, containing 90-95% methane.

Reliance Gas Pipeline Ltd (RGPL) is commercially producing CBM since 2017 at east and west Sohagpur. Reliance Gas Pipeline Ltd (RGPL) has laid around 312km of pipeline to carry natural gas from Shahdol in Madhya Pradesh close to its CBM blocks to Phulpur in Uttar Pradesh.

7) Tungsten

- The main mineral ore of Tungsten are wolframite and scheelite.
- In Madhya Pradesh, tungsten is found only in Agariya in Hoshangabad district.
- Tungsten is used to manufacture electric bulbs, x-ray tubes, radar, television sets, radio etc.

8) Rock Phosphate

- Madhya Pradesh produces 7.11% of country's total rock phosphate and stands **second** in terms of production.
- High quality rock phosphate has been found in Khargone district.
- Maximum rock phosphate is produced in Jhabua and Alirajpur districts of Madhya Pradesh. Besides rock phosphate is produced in Chhattarpur, Sagar too.
- It is used in making fertilizers.

9) Corundum

- Corundum is the second hardest metal after diamond.

- Corundum is found in Madhya Pradesh at Panna, Singrauli and Sidhi districts.

10) Mica

- It is found in ancient igneous and metamorphic rocks.
- The maximum production of mica is found in Balaghat.
- Mica is mined in Gwalior, Balaghat, Chhindwara, Hoshangabad, Jhabua, Mandasaur, Sidhi, Singrauli.
- Mica is the insulator/non conductor of electricity, that's why it is used mainly in electrical industries.
- Shahdol, Tikamgarh, Narsinghpur district.

11) Asbestos

- In Madhya Pradesh, maximum Asbestos is produced in Jhabua and Alirajpur districts.
- Asbestos is mined in Balaghat, Sidhi, Singrauli, Narsinghpur, Hoshangabad, Tikamgarh districts in small quantity.

12) Fire Clay

- Madhya Pradesh is at Fifth rank in production of fire clay and produces 10% of country.
- Maximum production of fire clay is made in Jabalpur. Besides, fire clay is found in Narsinghpur, Shahdol, Panna, Katni and Chhindwara districts that led to establishment of number of refractory and some ceramic industries in the state.

13) Limestone

- With 13.43% of the country's total limestone production, Madhya Pradesh is at third place as limestone producer state.
- In Madhya Pradesh, maximum limestone production is done in Murwara, Jhukehi, Tikuria in Katni district.
- Limestone is produced in Jabalpur, Satna, Damoh, Chhindwara, Dhar, Jhabua, Gwalior, Morena, Sagar, Panna etc. districts too.

14) Dolomite

- Madhya Pradesh is at seventh place in Dolomite production.
- In Madhya Pradesh, maximum dolomite is produced at Jabalpur. Besides, dolomite is produced at Sidhi, Singrauli, Satna, Balaghat, Betul, Chhindwara, Chhattarpur, Jhabua, Alirajpur districts.

15) Soapstone (Talc)

- Soapstone is found at Bhedaghat in Jabalpur, Narsinghpur, Alirajpur and Jhabua.
- It is used in inlaid designs, sculpture coasters kitchen countertops and sinks.

16) Marble

- White marble is found in Jabalpur district of Madhya Pradesh.
- Coloured marble is found in Betul, Seoni, Chhindwara, Narsinghpur districts.
- Red and Green marble is found at Bagh near Gwalior and Chhindwada.
- Used in architectural designs for floors and walls. Articles like fountains, statues, animal figures, plates, home decoratives, Kitchen counter tops etc. can also be made by marble.

17) Graphite

- In Madhya Pradesh, Betul is the largest graphite producer district.
- It is used in making paints, batteries and pencil etc.

18) Lead

- Lead mineral is found at Jabalpur, Hoshangabad, Datia, Shivpuri, Jhabua and Alirajpur districts in the state.
- Lead is widely used for Car batteries, weights for lifting; cable, lead crystal glasses, radiation protection etc.

19) Ocher

- Madhya Pradesh stands second in Ocher production.
- Ocher is found in Jabalpur, Mandla, Balaghat, Chhattarpur, Chhindwara, Dhar, Datia, Devas, Gwalior, Sehore, Shivpuri, Rewa, Sidhi, Singrauli, Shahdol districts of Madhya Pradesh. Presently excavation is in Jabalpur, Mandla, Satna, Rewa, Shahdol, Dhar districts.

headquarter Bhopal for extraction , research and marketing purpose of minerals. Last mineral policy was formed in year 2010 by state government.

Mineral Policy of Madhya Pradesh– 2010

Mineral Policy for the Madhya Pradesh State 2010 was given approval at the meeting of the cabinet on September 7, 2010. The major provisions of the policy are as follows:

1. Encouragement to the private sector for survey, assessment and prospect of new minerals deposits using the latest technology.
2. Encouragement for Studies and uses, for blending of high grade with low grade mineral in a certain proportion.
3. Coordination between various departments to curb illegal mining and transportation of minerals.
4. Formation of minerals development fund.
5. Transparency in the process to grant leases of minerals.
6. Developing E-permit system for transportation of minerals.
7. Emphasis on exploration of precious metals.
8. Making existing rules more stringent, to control illegal mining and transportation of minerals.

Regional Production of Various Minerals	
Mineral	Producing Districts
Diamond	Panna (Hinota), Satna (Majhgawan), Jabalpur
Manganese	Balaghat, Chindwara, Jhabua, Khargone
Iron ore	Balaghat, Hoshangabad, Sagar, Mandla, Jabalpur, Gwalior.
Copper	Balaghat (Malajkhand), Katni, (Salimanabad), Hoshangabad, Sagar etc.
Coal	Shahdol, Singrauli Chindwara, Hoshangabad, Betul.
Bauxite	Mandla, Jabalpur, Rewa, Satna, Shahdol, Sidhi Anuppur etc.
Limestone	Jabalpur, Mandsaur, Rewa, Satna, Katni etc.
Dolomite	Balaghat, Narsinghpur, Seoni, Chindwara, Jabalpur
Tungsten	Agargaon (Hoshangabad)
Graphite	Betul

Regulation of Mines and Minerals of Madhya Pradesh

According to constitution, 'Minerals' comes under the state government and the centre can only regulate this subject by **mine and minerals Act of 1957**. This Act was subsequently ammended in year 1972, 1986 and 1999 respectively.

Madhya Pradesh brought its **first Mineral Policy in year 1995** though the state had established **Madhya Pradesh State Mineral Corporation on January 19, 1962** with

Mica	Balaghat, Chindwara, Hoshangabad, Jhabua, Mandsaur
Pyrite	Tikamgarh, Dewas, Dhar, Jhabua, Shivpuri
Slate	Mandsaur
Antimony	Jabalpur
Lead	Rewa, Sidhi, Datia, Shivpuri, Hoshangbad.
Asbestos	Jhabua
Corundum	Parkota, Peepra, Singrauli
Diaspore	Chhattarpur, Tikamgarh, Shivpuri
Fluorite	Jabalpur
Feldspar	Chhindwara, Jabalpur, Shahdol
Ocher	Satana, Panna, Gwalior, Jabalpur
Rock Phosphate	Jhabua, Chhattarpur, Sagar
Marble	Jabalpur, Betul, Seoni, Chhindwara, Gwalior
Tin	Govindpur, Churwara, Betul
Calcite	Barwani
Uranium	Shahdol
Gold	Balaghat
Talc (Soapstone)	Bhedaghat, Kapor (Jabalpur)
Gypsum	Shahdol, Morena, Satna, Rewa.
Fire Clay	Dubar, Piparia (Jabalpur), Narsinghpur
Beryl	Balaghat, Chhindwara, Rajgarh, Sidhi
Nickel	Sidhi.
Platinum	Betul.
China clay	Betul
Granite	Datia
Quartz	Jabalpur

Minerals Particular Mines/Area

Manganese	Bharveli (Balaghat)
Copper	Malajkhand (Balaghat)
Coal	Sohagpur (Shahdol)
Limestone	Mundwara (Katni)
Diamond	Majhgawan (Panna)
Bauxite	Amarkantak (Anuppur), Betul
Graphite	Betul
Corundrum	Pipra-Parkota (Singrauli)
Marbels	Bhedhaghat (Jabalpur)
Felsphar	Lamheta Valley (Jabalpur)
Soap Stone (Steatite)	Bhedaghat (Jabalpur)
Tungsten (wolfram)	Agariya (Hoshangabad)
Barite	Surajpur (Tikamgarh), Talcum
Stone	Bhedaghat, (Jabalpur),

Important Facts

- Madhya Pradesh government made the minor Minerals Act, 1996 more effective and handed over the mines of minor minerals to three level panchayats
- Madhya Pradesh is at third place in the country in generation of mineral revenue (excluding oil and natural gas).
- The thickest coal belt is in sohagpur (Shahdol).
- A stone park (Marble Hub) is proposed in Sleemnabad (Katni)
- Madhya Pradesh ranks fourth in coal production. Top three states are : West Bengal, Jharkhand, Orissa
- Highest coal reserves of Madhya Pradesh has Vindhyan region (Baghelkhand).
- Limestone is found in Calcareous Rocks.
- Madhya Pradesh produces 22% of total copper of country.
- Reserves of Gold have been found in Majhauri (Sidhi).
- Diamond mines are present in Majhgawa (Panna) & Kothariya (Satna) Such mines are also found in Ankor (Chhattarpur) & Hanota (Panna)
- High quality of Rock Phosphate is found in Jhabua and Khargone, while its medium quality reserves are present in Sagar & Chhattarpur.
- Reserves of CBM (Coal Bed Methane) are explored by Reliance Industries limited in Sohagpur (Shahdol).
- Bauxite of Amarkantak (Anuppur) is sent to Renukoot aluminum plant in Uttar Pradesh.
- Major mines & minerals are mainly concentrated in eastern & southern belt of Madhya Pradesh.
- 2/3rd of the minerals are produced by Singrauli-Sidhi (46.82%) & Anuppur-Shahdol (20.01%) district.
- Highest increase of revenue is being experienced in the copper production in recent period.
- Silica is produced in Jabalpur district of Madhya Pradesh.
- Antimony deposits are found in Jabalpur district of Madhya Pradesh.
- Madhya Pradesh is the only state in India producing slate. It is at second place in the country in Rock Phosphate, Calcite production while at third position in production of lime Stone, manganese and fire clay.
- Madhya Pradesh is at second place in the country in production of lime stone based cement production while it is at third place in the total production of Cement.

- Four companies are working on finding Methane gas at Shahdol, Anuppur, and Chhindwara in the state.
- Stone Park has been established at Katni district of Madhya Pradesh.
- Madhya Pradesh stands first in the production of Diamond, Slate, Diaspore and Copper ore.

Objective Questions

- On the basis of coal reserves Madhya Pradesh stands..... in the country?
(A) First (B) Second
(C) Third (D) Fourth
- In coal production Madhya Pradesh stands in the country?
(A) First (B) Second
(C) Third (D) Fourth
- Which district has India's biggest manganese mine?
(A) Korba (B) Balaghat
(C) Serguja (D) Korea
- Kattha (from Khair Tree) manufacturing plant is setup in?
(A) Shivpuri (B) Banmore
(C) Dewas (D) Both (A) & (B)
- Where is the laakh manufacturing plant in Madhya Pradesh?
(A) Gwalior (B) Umaria
(C) Shivpuri (D) Indore
- Which state has the highest Diamond reserves in India?
(A) Madhya Pradesh
(B) Karnataka
(C) Uttar Pradesh
(D) Chhatisgarh
- Kanha valley is related to?
(A) Iron (B) Bauxite
(C) Coal (D) Diamond
- Reliance has explored gas reserves in which district?
(A) Gwalior (B) Umaria
(C) Shahdol (D) Shivpuri
- The only district of state which has reserves of Rock Phosphate?
(A) Guna (B) Ujjain
(C) Korba (D) Jhabua
- Major barite producing districts of Madhya Pradesh are?
(A) Umaria, Shahdol (B) Tikamgarh, Rewa
(C) Umaria, Rewa (D) Rewa, Satna
- Which among the following sentences is incorrect?

- (A) Madhya Pradesh State Mineral Corporation had established on January 19, 1962 with headquarter Bhopal.
- (B) First Mineral Policy of state Madhya Pradesh came in year 1995.
- (C) Second Mineral Policy of Madhya Pradesh came in year 2009.
- (D) Minerals is the subject of state list.
- Which mine of state is known for highest coal reserves?
(A) Mohan Ghati (B) Sohagpur
(C) Raoghat (D) Cheri Khandan
- Wolfram producing area is?
(A) Jabalpur (B) Agariya
(C) Bijapur (D) Guna
- In terms of production of following which two minerals Madhya Pradesh ranks first in the country?
(A) Iron/Coal (B) Diamond/Copper
(C) Gold/Uranium (D) Diamond/Iron
- Graphite is found in?
(A) Guna (B) Betul
(C) Jabalpur (D) Gwalior
- Bauxite is found in?
(A) Indore (B) Hoshangabad
(C) Jabalpur (D) Betul
- Match the following?
a. Coal 1. Mazgaon
b. Diamond 2. Malaj Khand
c. Copper 3. Bharveli
d. Manganese 4. Baidan
Code-a b c d a b c d
(A) 1 2 3 4 (B) 4 1 2 3
(C) 4 3 2 1 (D) 4 2 1 3

Answer sheet									
1	2	3	4	5	6	7	8	9	10
C	D	B	D	B	A	C	C	D	B
11	12	13	14	15	16	17			
C	B	B	B	B	C	B			

CHAPTER- 4**Major Crops, Water Resources, Irrigation and
Irrigation Projects.****Major Crops of Madhya Pradesh**

- Agriculture contributes 21.40% to the total domestic production of the state.
- Of the total available land in Madhya Pradesh, 49% is cultivated which is 9% of the total agricultural land in the country.
- Maximum agricultural land in Madhya Pradesh is under **soyabean cultivation**. However, in Madhya Pradesh maximum agricultural production is of wheat. Jowar is at second and soyabean is at third position in terms of production.
- Madhya Pradesh holds first position in production of soyabean, gram (chana), linseed (alsi) and oilseeds (tilhan).
- Sorghum (jowar) and linseed are cultivated both in kharif and in Rabi seasons.
- Cash crops include cotton, sugarcane, jute, mesta, sunn hemp (sanai), opium (afeem), cannabis (ganja), tobacco, seame (til), soyabean, sunflower (surajmukhi), muskmelon (kharbuja), watermelon (tarbuj), cucumber (kakadi/kheera) etc.

Classification of Crops based on Cropping seasons

Crop	Kharif	Rabi	Zaiad
Season	Monsoon	Winter	Summer
Sowing	June- July	October- November	March- April
Harvesting	September – October	February-March	May- June
Example	Maize, Paddy, Cotton, Soyabean	Wheat, Mustard, Peas, Gram	Watermelon, Pimpkin

Types of other crops

1. Fiber crops – Jute, cotton, jute and flax.
2. Stimulant Crops – Coffee, tobacco, tea, hemp, opium, hemp
3. Fodder Crops – Napier, Levia, Jowar, Rizka, Barseem, Lucerne.
4. Root crops- Carrot, Radish, Beetroot, Sweet potato.
5. Stem Crops – Potato, ginger, garlic, onion, turmeric.
6. Oilseeds Crops – Groundnut, linseed, mustard, safflower, mustard, sunflower.
7. Pulses Crops – Peas, Urad, Moong, Pigeon pea, Lentil, Gram, Barbat.
8. Cash Crops- Sugarcane, tobacco, groundnut, tea, coffee, cotton.
9. Foodgrains Crops – Wheat, rice, maize.

Classification of Agricultural Regions of Madhya Pradesh based on Crops -

Madhya Pradesh had been divided in following eight belts on the basis of crops:

1. **Sorghum (Jowar) belt**-Shivpuri, Ashoknagar, Guna, Sheopur, Morena.
2. **Wheat and Sorghum (jowar) belt**- Morena, Bhind, Gwalior, Datia, Tikamgarh, Narsinghpur, Damoh, Vidisha, Bhopal, Raisen and Sagar.
3. **Cotton belt**-Khargone, Barwani, Dhar, Alirajpur, Jhabua, Ratlam, parts of Indore and Dewas.

4. **Cotton – Wheat belt**-Neemuch, Mandsaur, Ujjain, Rajgarh, Devas, Sehore, Shajapur etc.
5. **Cotton-Rice belt**- Khandwa, Burhanpur.
6. **Sorghum (Jowar) - Cotton - Rice belt**-Hoshangabad, Betul, Chhindwara, Seoni.
7. **Rice belt**-Entire Eastern Madhya Pradesh Balaghat, mandla, Dindori, Singrauli, Shahdol, Umaria, Anupur, Sidhi, Rewa, Jabalpur, Seoni.
8. **Kodo Millet (kodra) – Little millet (Kutki) belt**-Rewa, Satna, Sidhi, Shahdol, singrauli, Jabalpur, Mandla, Dindori, Balaghat.

Classification of Agricultural Regions of Madhya Pradesh by Agriculture Department

1. **In the west, black soil region of Malwa**
Mandsaur, Neemuch, Ratlam, Khandwa, Jhabua, Alirajpur, Badwani, Harda, Dhar, Dewas, Ujjain, Rajgarh, Shajapur, Agar malwa Indore, Khandwa and Khargone are regions of cotton and Jowar
2. **In the North, region of wheat and jowar** Morena, Sheopur, Bhind, Gwalior, Datia, Shivpuri, Guna, Chhatarpur, Niwari and Tikamgarh districts. An additional area lies in Chhindwara and Betul as well.
3. **In the Center, region of wheat**
Bhopal, Sehore, Hoshangabad, Narsinghpur, Raisen, Vidisha, Sagar and Damoh districts are included.
4. **Region of wheat and rice**
It includes the belt of districts like Panna, Satna, Katni, Umaria, Jabalpur upto the south of Seoni.
5. **Entire Eastern Madhya Pradesh, region of rice**
It Includes districts such as Rewa, Shahdol, Anuppur, Dindori, Chhindwara, Balaghat, Mandla Sidhi, Balaghat etc.

Major Crops in Madhya Pradesh

Rice -

- Family – Gramineace
- Botanical name – *Oryza sativa*
- Climate – Tropical Average rainfall – 100 cm. more than
- Varieties - Chinnaur, Ranjit Sab 1, Aman, Golden Rice (source of Vitamin A), Hansa, Dry Samrat,
- Leading producing districts – Balaghat, Seoni
- **Rice Research Centre** has been formed at Barwani in Madhya Pradesh.

Wheat -

- Family – Gramineace
- Botanical name – *Triticum aestivum*
- Climate – Temperate
- Average rainfall – 100 cm. fewer
- Varieties – Sharbati, Raj, Lokman, Sujata, Kalyan Sona, Macaroni, Macaroni Wheat.
- Triticale has been created by scientists from a hybrid of wheat, rye and wheat.
- Diseases - Tundu, Kittu Disease (Rust)
- Leading producing districts- Hoshangabad, Sehore, Narsinghpur

Sorghum (Jowar)

- Sorghum (Jowar) is cultivated on 3.95 lakh hectare area of Madhya Pradesh.
- In Madhya Pradesh, sorghum (jowar) is cultivated as **both kharif crop and Rabi crop**.

- Sorghum (jowar) is cultivated as kharif crop in north western districts of Madhya Pradesh such as Morena, Shivpuri, Seopur, Guna, Bhind, Mandsaur, Ratlam and Ujjain.
- Madhya Pradesh is **at fourth place** in the country in production of Sorghum (jowar).
- Maximum production of Sorghum (jowar) is in Khargone, Shajapur and Ujjain.
- Sorghum (jowar) is cultivated as Rabi crop in Dhar, Khandwa, Khargone, Jhabua, Balaghat, Chhindwaraseoni districts.
- In Madhya Pradesh, per hectare production of sorghum (jowar) is 1,416 kgs approximatly.

Gram (Chana)

- Madhya Pradesh **holds first** position in the country in production of gram (chana).
- Out of the total production of gram (chana) in India, Madhya Pradesh produces 31%.
- In Madhya Pradesh maximum gram (chana) production is in Chhindwara district.
- Gram (chana) producing districts of Madhya Pradesh include Ujjain, Sagar, Vidisha, Hoshangabad, Harda, Mandsaur, Neemuch, Vidisha, Jhabua, Devas, Ratlam, Jabalpur, Narsinghpur, Raisen, Tikamgarh etc.

Soyabean-

- Family - Leguminaceae
- Botanical Name – *Glycine Max*

- Madhya Pradesh ranks first in the soyabean production in the country.
- Out of the total production of soyabean in the country, 59% is produced in Madhya Pradesh. Therefore Madhya Pradesh is called 'capital of soyabean' or 'soya state'.
- National soyabean research centre has been established in Indore.
- Malwa area and Narmada valley produces maximum soyabean. Top producing districts of soyabean in Madhya Pradesh are Ujjain, Dewas, Shahjapur.

Pigeon pea (Tuar /Arhar)

- Madhya Pradesh holds **first place** in the country in production of Pigeon pea (Tuar/Arhar). Maximum production of pigeon pea (tuar/arhar) is in Chhindwara district.
- The major pigeon pea (tuar/arhar) producing districts of Madhya Pradesh include Narsinghpur, Hoshangabad, Harda, Sagar, Damoh, Betul, Bhind, Dhar, Gwalior, Ujjain, Nimar, Devas, Indore, Khandwa, Jabalpur etc.

Linseed (Alsi)

- Madhya Pradesh holds **first** position in linseed (alsi) production.
- Madhya Pradesh produces 38% of country's total linseed (alsi) produce.
- This crop is mainly produced in Rewa.
- Other linseed producing districts are Satna, Balaghat, Hoshangabad, Jhabua, Sagar, Guna, Morena, Panna, etc.

Mustard (Sarson)

- Mustard (sarson) is the main Rabi crop which has maximum effect of **Yellow Revolution**.
- Maximum production of mustard (sarson) is in Bhind, Morena, and Shivpuri. Besides, it is sown in Gwalior, Chhattarpur, Tikamgarh, Rewa and Satna.
- Madhya Pradesh holds **second** place in mustard (sarso) production.
- Morena district of Madhya Pradesh has the biggest oil mill.

Cotton

- Cotton is main **cash crop** of Madhya Pradesh.
- Cotton is produced in the regions of Malwa plateau and Narmada valley due to the presence of Black soil.
- Major Cotton producing district include Khandwa, Khargone, Barwani, Dhar, Dewas, Indore, Mandsaur, Neemuch, Burhanpur etc.
- Madhya Pradesh holds **fifth place** in cotton production. Nimad region (Khargone, Khandwa) is known as '**White Gold**' .

Groundnut (Moongfali)

- Groundnut (moongfali) is cultivated for both oil production and consumption as food.
- Groundnut is an important cash crop.
- Groundnut is a kharif crop which gets harvested in 3-4 months.
- Its major producing region is Malwa plateau and Narmada valley region. Major groundnut producing districts are Mandsore, Neemuch, Khargone, Dhar, MalwaPlateau.

Sugarcane

- Sugarcane crop needs day temperature in the range of **25 to 30⁰ C.** , crop gets ready to harvest in 9 to 14 months.
- It needs water retaining soil and irrigation infrastructure.
- Maximum sugarcane crop producing districts is Narsinghpur.
- Sugarcane is produced on nearly 1 lakh hectares land in Balaghat, Ujjain, Dewas, Sehore, Gwalior, Nimar, Shajapur, Ratlam, Morena, Chhindwara, Betul, districts.

COFFEE-

- Family - Rubiaceae
- Varieties – Arabica (high grade variety),
- Robusta (highest production in India), Liberica
- Leading producing district – Betul
- Specific -British citizens St. Wilford and Florence Hendrix had planted 110 hectares of coffee plantations on the Kukdu Hills of Betul.

Corn –

- Corn is a Kharif crop.
- Chhindwara is called the City of Corn.
- Other maize producing districts include Ujjain, Mandsore, Neemuch, Ratlam, Dhar, Shahjapur, Rajgarh, and Indore districts.

Sunn Hemp (Sanai)

- This is a fibrous crop.
- Sunn Hemp (Sanai) is cultivated in Shivpuri, Mandla, Chhindwara, Sidhi, Singrauli, Rewa, Nimar, Hoshangabad, Betul etc.

Opium (Afeem)

- Alkaline obtained from opium (afeem) is used in production of medicines.
- Opium (afeem) producing districts of Madhya Pradesh are Mandsaur and Neemuch.

Cannabis (Ganja)

- Cannabis (Ganja) is an intoxicating alkaline.
- Cannabis (Ganja) is produced in Khandwa and Burhanpur districts of Madhya Pradesh. Besides, it is also produced in northern Ujjain and northern Ratlam.

Millet (Bajra)

- Millet (Bajra) is important crop among bigger grains.

- Madhya Pradesh is at **seventh** place in the country in production of pearl millet (bajra).
- It is produced in Rewa, Satna, Sidhi, etc.

Barley (Jau)

- Barley (Jau) is oldest crop of India.
- Madhya Pradesh is at **fifth** place in the country in production of barley.

Major crops and their producing Districts in Madhya Pradesh

Crop	Producing Districts
Wheat (Genhu)	Hoshangabad , Vidisha, Damoh, Satna, Sagar, Rewa, Ratlam, Jabalpur, Ujjain etc.
Rice (Chawal)	Balaghat , Mandla, Shahdol, Betul, Rewa, Sidhi, Satna, Chhindwara, Jhabua, Khargone, Barwani etc.
Maize (Makka)	Dhar, Chhindwara , Khargone, Barwani, Mandasaur, Ratlam, Neemuch, Ujjain etc.
Sorghum (Jowar)	Ashoknagar, Vidisha, Narsinghpur, Raisen, Guna, Mandasore, Ratlam, Indore, Dewas etc.
Gram (Chana)	Chhindwara , Sidhi, Betul, Raisen, Hoshangabad, Vidisha, Ujjain, Narsinghpur etc.

Pigeon pea (Tuar/ Arhar)	Chhindwara, Sidhi , Ujjain, Shajapur, Rajgarh, Dewas, Dhar, Harda, Betul, Jabalpur, Narsinghpur etc.
Soyabean	Dhar, Ujjain , Indore, Dewas, Ratlam, Nimad region etc.
Mustard (Rae-Sarson)	Bhind, Morena , Sidhi, Chhattarpur, Tikamgarh, Shahdol, Hoshangabad etc.
Sesame (til)	Rewa, Sidhi, Chhattarpur, Sagar, Tikamgarh
Linseed (Alsi)	Shivpuri, Khargone, Khandwa,
Groundnut (Moongfali)	Mandasore, Neemuch, Barwani, Chhindwara, Seoni, Khargone , Khandwa, Barwani, Burhanpur, Indore etc.
Cotton (Kapas)	Khargone , Khandawa, Narsinghpur, Chhindwara, Indore, Ujjain, Jhabua, Barwani etc.
Sugarcane (Ganna)	Shivpuri, Narsinghpur , Datia, Sehore etc.
Onion (Pyaj)	Khandwa
Potato (Aalu)	Indore , Devas, Chhindwara
Opium (Afeem)	Mandasaur , Neemuch
Cannabis (Ganja)	Khandwa

AGRO CLIMATIC ZONES IN MADHYA PRADESH

Madhya Pradesh is endowed with varying climatic conditions, soils and diverse cropping pattern. Its land area has therefore been divided into **11 AgroClimatic Zones** and **5 crop zones** which offer vast opportunities for agricultural diversification in the state. The following table describes the details of the agro climatic zones of Madhya Pradesh along with districts, soil type and normal rainfall range.

S.No.	AGRO-CLIMATIC REGIONS	CROP ZONES	SOIL TYPE	RAINFALL (in m.m.)	DISTRICTS COVERED
I	Chhattisgarh plains	Rice zone	Red & Yellow (Medium)	1200 to 1600	Balaghat.
II	Northern Hill Region of Chhattisgarh		Red & Yellow Medium Black & skeltal (Medium/light)	1200 to 1600	Shahdol, Mandla, Dindori, Anuppur, Sidhi(Partly), Umaria
III	Kymore Plateau & Satpura Hills	Wheat Rice Zone	Mixed red and Black soils (Medium)	1000 to 1400	Rewa, Satna, Panna, Jabalpur, Seoni, Katni, Sidhi
IV	Central Narmada Valley	Wheat zone	Deep Black (deep)	1200 to 1600	Bhopal, Sagar, Damoh, Vidisha, Raisen(except Bareli Teh.), Sehore(except Budni Teh.), Guna(Partly).

V	Vindhya Plateau		Medium Black & deep Black	1200 to 1400	Narsinghpur, Hoshangabad, Sehore (Partly), Raisen (Partly)
VI	Gird Region	Wheat-Jowar	Alluvial (Light)	800 to 1000	Gwalior, Bhind, Morena, Sheopur-Kala, Shivpuri, Guna, Ashoknagar
VII	Bundelkhand		Mixed red and Black (Medium)	800 to 1400	Chhattarpur, Datia, Tikamgarh, & Shivpuri (Partly)
VIII	Satpura Plateau		Shallow Black (Medium)	1000 to 1200	Betul & Chhindwara
IX	Malwa Plateau	Cotton Jowar	Medium Black (Medium)	800 to 1200	Mandsaur, Neemuch, Ratlam, Ujjain, Dewas, Indore, Shajapur, Rajgarh, Dhar
X	Nimar Plains		Medium Black (Medium)	800 to 1000	Khandwa, Burhanpur, Kargone, Barwani, Harda, Dhar (Partly) District.
XI	Jhabua Hills		Medium Black skeletal (Light/Medium)	800 to 1000	Jhabua District. (except Petlawad Tehsil) & Dhar (Partly)

Agricultural Institutes and Centres in Madhya Pradesh

Centre/Institute	Headquarter
Agricultural Engineering Research Centre	Bhopal
Agricultural Engineering College	Jabalpur
Jawaharlal Nehru Agricultural University (1964)	Jabalpur
International Centre for Maize and Wheat Research	Jabalpur
National Soyabean research Centre	Indore
Rice Research Center	Barwani
Fodder plant for Livestock	Indore
India's first organic Farming Holding	Indore
Cotton Research Centre	Khargone
Rajmata Vijayarajscindia Agriculture University (2008)	Gwalior
Central Potato Research Centre	Gwalior
National Grapes Research Centre	Ratlam
DeenDayal Agriculture Research Centre	Satna
Sugarcane Research Centre	Narsinghpur
Mustard Research Centre	Morena

Source of Irrigation in Madhya Pradesh

There are following type of irrigation sources present in the state - (i) Wells, (ii) Canals, (iii) Ponds, (iv) other sources.

(i). Wells and Tubewells :

- Wells are the main source of irrigation in the state, which is used to irrigate 69.76% of the agricultural area.
- Wells are used for irrigation mainly in Malwa Plateau and northern districts of the state.
- Irrigation through wells has increased by 47% in the state under the Million Wells scheme.

(ii). Canals :

- Canals are also the major source of irrigation in the state.
- 17.8% of the irrigation is done with the help of the canals in Madhya Pradesh.
- Canals are used for irrigation in Morena, Gwalior, Bhind, and Sheopur (Chambal Basin), Tikamgarh, Chhattarpur (Bundelkhand) and Hoshangabad, Vidisha, Raisen (Narmada Basin).

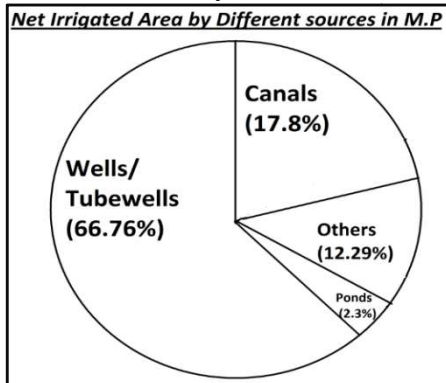
(iii) Ponds :

- Ponds are third important source of irrigation in Madhya Pradesh.
- Construction of canals becomes difficult because the terrain is not leveled. Therefore rivers and rivulets are bounded to create ponds.

- Ponds contribute 2.3% to the total irrigation of the state.
- Ponds are used for irrigation mainly in Balaghat and Seoni district.

(iv). Other Sources :

Bore wells – In almost every district of the state, bore wells are used for irrigation. In Bhind, Morena, Datia, Chhattarpur, Tikamgarh, Jabalpur, Vidisha, Indore borewell are widely used.



Important Irrigation Projects of Madhya Pradesh

Chambal Valley Project

- This project is located on Chambal River, which is a tributary of the Yamuna River.
- This is the second largest river basin project of country.
- This is a joint project of Madhya Pradesh and Rajasthan.
- Construction work of this project commenced in the year 1953-1954 and concluded in 1960.
- This project was completed in three phases. It includes following three reservoirs : -

A. Gandhi Sagar Reservoir (Mandsaur)

- In the first phase, Gandhi Sagar Reservoir has been constructed in Bhanupura tehsil of Mandsaur district of Madhya Pradesh.
- Its height is 64 meters and length is 514 meters.
- Its irrigation Capacity is 11.00 lakh acres.
- In 1960, Gandhi Sagar Hydro Power Station was installed in it. It produces 115 MW power.

B. Rana Pratap Sagar Reservoir (Chittor)

- This reservoir has been constructed on Chambal River in Chittorgarh district of Rajasthan.
- This reservoir is built 56 kms downstream from Gandhi Sagar reservoir.
- Its height is 54 meters and length is 1,143 meters.

- Its water storage Capacity is 1,567 million cubic meters.
- Besides irrigation, this project is utilized for production of 172 MW powers which is shared by Madhya Pradesh and Rajasthan in 50:50 ratios.
- This is a joint project of Madhya Pradesh and Rajasthan.

C. Jawahar Sagar or Kota Barrage (Kota)

- This reservoir was built on Chambal River in the last phase of Chambal basin project.
- It is located in Kota district of Rajasthan, 23 kms downstream from Rana Pratap Sagar reservoir.
- Its water storage Capacity is 1,944 million cubic meters and it produces 99 MW power.
- The left bank canals of this project irrigate Rajasthan while the right bank canals irrigate Madhya Pradesh.
- Ambah, Morena and Mhow Canals of Madhya Pradesh were constructed in the last phase. They irrigate 3.50 lakh Acre land.

Narmada Valley Project

- This multi-purpose project is being constructed on Narmada River, the '**Lifeline of Madhya Pradesh**'.
- There are 30 major dams, 135 medium dams and around 3000 dam projects are proposed along with long canals on the Narmada basin by Narmada Valley Development Authority.
- This multi-purpose river basin project would help irrigate 27.55 lakh hectares land and generate 3,000 MW power.

A. Indira Sagar Reservoir

- Late Mrs. Indira Gandhi laid foundation stone of Indira Sagar Project on October 23, 1984.
- This is the highest dam of Madhya Pradesh.
- The main reservoir under this project has been constructed at Punasa in **Khandwa district**.
- Eight turbines of 125 MW Capacity have been installed on the reservoir to generate 1,000 MW power.
- Since, Harsud town of Khandwa district got submerged in the project. People of this district were rehabilitated at new town named Chanera. A total of 249 villages were affected due to this project.

B. Omkareshwar Reservoir

- This reservoir has been constructed at the pilgrim centre of Omkareshwar in **Khandwa district** of Madhya Pradesh.

- This project would irrigate 1.47 lakh hectare areas.
- Generation of 520 MW power has started.
- Spread over 94 sq. km., this reservoir would attract 5 lakh tourists per annum.

C. Maheshwar Reservoir

- This reservoir is located 40km. downstream of Omkareshwar Project over Narmada in **Khargone district**.
- Initially the target was to generate 320 MW power from this reservoir. Now it has increased to 450 MW.

D. Sardar Sarovar Project

- Sardar Sarovar project is constructed on Narmada River near Navagam in **Bharuch district of Gujarat**. Its height is 163m.
- Its foundation stone was laid out by Pandit Jawaharlal Nehru on 5th April 1961.
- It is a joint project of Madhya Pradesh, Rajasthan, Gujrat and Maharashtra state.
- Under this project, a 1,210 meter long and 138 meter tall reservoir is constructed on Narmada River.
- The power stations being constructed at the site would generate 1,462 MW power.
- On 17th September, 2017 this dam was inaugurated by Prime minister.

Rani Awantibai Sagar Project

- This is also called Bargi Reservoir project.
- This project is located on Bargi River (tributary of the Narmada River) near Bijaura village in **Jabalpur district**.
- This project was completed in 1980 and the benefited area includes Jabalpur, Narsinghpur, Mandla, Seoni districts.
- This project would irrigate 2.42 lakh hectare lands.

Tawa River Project

- This project is located on Tawa River near Ranipur village in Itarsi tehsil of **Hoshangabad district of Madhya Pradesh**.
- Its irrigation Capacity is 3.33 lakh hectares but at present, this project irrigates 2.47 lakh hectares of land.
- Longest dam of Madhya Pradesh has been built on Tawa River in Hoshangabad district.

Halali (Samrat Ashok Sagar) Project

- This Project is on Halali River in **Vidisha and Raisen districts**.

- A 945 meter long and 29.57 meter tall reservoir has been constructed under this project.
- Its irrigation Capacity is 37,000 hectares.

Mann Project

- This project has been completed across the river Man (tributary of the Narmada River) at Jirbadvillage near **Dhar district**. This project aims at irrigating 15000 hectares of tribal villages.

Bansagar Project

- This reservoir is a multi purpose project near Deolond village in **Shahdol district**.
- It is a joint project of Madhya Pradesh, Uttar Pradesh and Bihar. It would generate 405 MW powers, of which Madhya Pradesh would get 50% while Uttar Pradesh and Bihar would get 25% each.
- A 120 meter long and 63 meter tall reservoir is being constructed on Son River under this project.

Urmil Project

- It is a joint project of Madhya Pradesh and Uttar Pradesh which is located on Urmil River at Bhirota village in **Chhattarpur**.
- Water of this project is distributed between Madhya Pradesh and Uttar Pradesh in 60:40 ratios.
- 137 km long canal has been built under this project.

Ken-Betwa Project

- It is a joint project of Madhya Pradesh and Uttar Pradesh.
- It is first project under the River Linking Project.
- Completion of the scheme would extend irrigation infrastructure in interiors of Bundelkhand and it would also tackle drinking water shortage.
- A reservoir will be built at Daudhan in **Chhattarpur district** under this project.
- Three power generations stations of 20 MW Capacity each and five power generation stations of 6 MW Capacity will be installed under this project.

Matatila Project

- This is a joint project of Madhya Pradesh and Uttar Pradesh on Betwa River at **lalitpur Uttar Pradesh in 1958**.
- This project would irrigate 1.16 lakh hectare land in six districts of Madhya Pradesh and 1.09 lakh hectare land in four districts of Uttar Pradesh.

Rajghat Reservoir (Rani Laxmibai Project)

- This is a joint project of Madhya Pradesh and Uttar Pradesh on Betwa River at the boundary of **Lallitpur (Jhansi) and Ashoknagar**.

- This project provides for irrigation of 34,000 hectare land in Madhya Pradesh and Uttar Pradesh.

Barna Project

- This project is located at Bari Village in **Raisen district**.
- This project would irrigate 48,805 hectare land in Raisen district and 11,695 hectares land in Sehore district.

Mahi Project

- Mahi project has been constructed on Mahi river. Under this project, a reservoir has been constructed near Labria village in **Dhar district** and its secondary reservoir is being constructed near Kali Karai reservoir (Jhabua).
- This project would irrigate 12,770 hectare land.

Thanwar Project

- This project is situated at Julpur village of Nainpur Tehsil (**Mandla District**) on the Thanwar River.
- A 900 meter long reservoir being constructed under the project would irrigate 18,212 hectare land.

Sanjay Sarovar (Upper Wainganga) Project

- Under this project, Bheemgarh Dam or Sanjay Sarovar Dam is built Across the Wainganga River in Chhapra tehsil of **Seoni district**.
- This project would irrigate 1,03,722 hectare land in Balaghat and Seoni districts.

Pench Project

- This is a joint project of Madhya Pradesh and Maharashtra.
- A reservoir on Pench River has been constructed at Manchgora village in **Chhindwara** district under this project.
- This project would irrigate 63,338 hectare land in Balaghat and Chhindwara districts of Madhya Pradesh.

Bawanthari Project (Rajiv Sagar)

- This is a joint project of Madhya Pradesh and Maharashtra.
- This project is under construction at Kudwa village in Katangi tehsil of **Balaghat** district on Bawanthari River.
- This project would irrigate 18,615 hectare land in Madhya Pradesh and 17,537 hectare land in Maharashtra.

Bagh Project

- This is a joint project on Bandh River at Sirpur village on Madhya Pradesh and Maharashtra border.
- It would irrigate **Barwani** District of Madhya Pradesh.

Sukta Project

- This project is constructed on Sukta River in **Khandwa** district.
- This project would irrigate 18,538 hectare land in Khandwa district.

Kolar Project

- This project proposes a reservoir on a tributary of Narmada River, Kolar River, near Lawakheri village in **Sehore** district.
- It would irrigate 60,087 hector area of Sehore district besides providing 0.15 million cubic feet water to Bhopal.

Nargawa Project

- This joint project of Madhya Pradesh and Uttar Pradesh is on Nargawa river, a tributary of Ken River, in **Chhattarpur**.
- It would irrigate 16,190 hectare land in Chhattarpur district.

Choral River Project

- This project is proposed on Choral river (Indore). It would irrigate 5,000 hectare land in Mhow tehsil of Dhar.

Major Canals of Madhya Pradesh

- **Halali Canal**– This canal irrigates 73.5 thousand of land in Vidisha and Raisen districts. This is a major canal of Vidisha district.
- **Barna Canal**– This is a major canal of Raisen district. It irrigates 66,400 hectare land in Raisen and Sehore districts.
- **Tawa Canal**– This is a major canal of Hoshangabad district. It originates from Wainganga River and irrigates around 3 lakh hectare of land.
- **Waingana Canal**– This is a major canal of Balaghat district. It originates from Wainganga River and irrigates 4,000 hector land of Balaghat districts.
- **Chambal Canal** – This is a major canal of Shivpuri, Morena and Bhind districts. It originates from Chambal River. Chambal Canal irrigates 2.50 lakh hectare of land of 13,000 villages.
- **Morena Canal and Ambah Canal** - originate from Chambal canal.

Major Joint River Projects

Project	River	State Concerned
Gandhi Sagar	Chambal River	Madhya Pradesh and Rajasthan
Rana Pratap Sagar	Chambal River	Madhya Pradesh and Rajasthan
Jawahar Sagar or Kota Barrage	Chambal river	Madhya Pradesh and Rajasthan
Sardar Sarovar	Narmada river	Madhya Pradesh, Maharashtra, Gujarat and Rajasthan
Ban Sagar	Son river	Madhya Pradesh, Uttar Pradesh and Bihar
Urmil	Urmil river	Madhya Pradesh and Uttar Pradesh
Rani Laxmibai Rajghat Project	Betwa river	Madhya Pradesh and Uttar Pradesh
Bagh Project	Bagh river	Madhya Pradesh and Maharashtra
Pench Project	Pench river	Madhya Pradesh and Maharashtra
Bawanthari Project	Bawanthari river	Madhya Pradesh and Maharashtra
Mata Tila Project	Betwa river	Madhya Pradesh and Uttar Pradesh
Kali Sagar	Bagh river	Madhya Pradesh and Maharashtra

Major Irrigation Projects of Madhya Pradesh

Project	River	Benifited District
Chambal Valley Project	Chambal	Seopur, Bhind, Morena, Gwalior, Mandsaur (2.25 lakh hector land irrigated with Chambal Canal)
Narmada Basin Project	Narmada river	All districts along Narmada river course, areas in Gujarat, Maharashtra and Rajasthan.
Bargi Project (Rani Awanti bai Sagar Project)	Bargi	Jabalpur, Mandla, Seoni etc.
Tawa Project	Tawa	Hoshangabad district
Halali Project (Samrat Ashok Sagar)	Halali	Vidisha, Raisen
Mann	Mann	Manawar (Dhar)
Bansagar Project	Son River	Rewa, Sidhi district in Madhya Pradesh. Reservoir in Deolod, Shahdol.
Urmil Project	Urmil river	Chhattarpur
Sinhpur Barrage	Urmil river	Chhattarpur
Ken Multi purpose project (Greater Gangau)	Ken river	Chhattarpur, Panna
Mata Tila Reservoir	Betwa river	Joint project of Madhya Pradesh and Uttar Pradesh on 1.16 lakh hectare in Madhya Pradesh
Barna Project	Barna River	Raisen
Mahi Project	Mahi river	Dhar, Jhabua Origin-Dhar
Thanwar Project	Thanwar river	Mandla
Sanjay Sarovar Project	Wainganga river	Balaghat, Seoni
Pench Project	Pench river	Balaghat, Chhindwara
Bawanthari Project / Rajiv Sagar Project	Bawanthari	Madhya Pradesh, Maharashtra
Bagh Project	Bagh	Border area of Madhya Pradesh and Maharashtra
Kolar Project	Kolar	Sehore
Sindh Project	Sindh	Shivpuri, Gwalior
Upper Narmada Project	Narmada river	Dindori
Bhander Canal Project	Betwa	Datia, Gwalior, Bhind
Choral River Project	Choral, Indore	Mhow tehsil of Indore
Dejla Deora Project		Khargone
Halon Project	Halon river	Mandla

❖ Important Facts

- Matatila Dam project is also known as Rajghat or Rani Laxmi Bai Project.
- River Basins of state bear 81% trillion cubic metre of water.
- In the year 1956, Water Resources Department was formed in Madhya Pradesh for equitable and balanced development of available water resources.
- The size of groundwater table storage in Madhya Pradesh is 2.25 crore acre feet.
- The state is called 'Drought Belt' due to inadequate rainfall recorded in it.
- Least irrigated district in Madhya Pradesh is Dindori (0.6%).
- The most irrigated district of Madhya Pradesh is Datia (64.06%)

Objective Questions

- What is the main source of irrigation in the state?
(A) Well (B) Ponds
(C) Canals (D) None of the above
- Irrigation through ponds is prevalent in which district of the state?
(A) Ujjain (B) Rewa
(C) Indore (D) Balaghat
- Which is the second largest river valley project of India?
(A) Chambal (B) Narmada
(C) Son (D) Betwa
- On which river 30 major, 135 medium and 3000 minor projects are proposed?
(A) Tapti (B) Wainganga
(C) Chambal (D) Narmada
- Which of the following project is situated on river Betwa?
(A) Bawanthari (B) Halali
(C) Bansagar (D) Rajghat
- Which project is not situated on river Chambal?
(A) Gandhi Sagar (B) Bargi
(C) Rana Pratap Sagar (D) Jawahar Sagar
- Which is the following is not correctly matched?
(A) Gandhi Sagar – 115 MW
(B) Indira Sagar – 1000 MW
(C) Omkareshwar – 520 MW
(D) Ban Sagar – 350 MW
- Which of the following in a joint project of Madhya Pradesh and Uttar Pradesh?
(A) Rajghat Project (B) Sardar Project
(C) Tawa Project (D) Maan Project
- Which is a joint project of Madhya Pradesh, Rajasthan, Gujrat and Maharashtra?
(A) Maan Project (B) Urmil Project
(C) Sardar Sarovar Project
(D) Tawa Project
- Another name of Halali Project is -
(A) Rani Avanti Bai Project
(B) Samrat Ashok Sagar Project
(C) Rani Laxmi Bai Project
(D) Baawanthari Project
- Which of the following statement is correct?
(A) Mata Tila Dam is also known as Rani Avanti Bai Project.
(B) Gandhi Sagar reservoir has been constructed in Bhanpura Tehsil.
(C) Jawahar Sagar reservoir is in Gujarat.
(D) Rana Pratap Sagar reservoir is in Madhya Pradesh.
- Longest Dam of the state is?
(A) Indira Sagar (B) Gangrel Dam
(C) Nala Dam (D) Ghonga Dam
- Which is not included under irrigation source?
(A) Canal (B) Ponds
(C) Wells (D) Snowfall
- Which district has lowest irrigated area?
(A) Dindori (B) Bhind
(C) Shivpuri (D) Indore
- Match the following -
I Tawa Project Balaghat
II Bansagar Project Itarasi
III Sindh Project Shahdol
IV Baawanthari Project Shivpuri

I II III IV
(A) 2 3 4 1
(B) 2 3 1 4
(C) 3 2 4 1
(D) 3 2 1 4

Answer sheet									
1	2	3	4	5	6	7	8	9	10
A	D	A	D	D	B	D	A	C	B
11	12	13	14	15					
B	A	D	A	A					

CHAPTER- 5

CONVENTIONAL AND NON - CONVENTIONAL SOURCES OF ENERGY

Sources of Energy

- The **Conventional sources** of energy can be use for definite time & amount .There is coal, natural gas, atomic energyetc.Coal is the biggest source of energy in State.
- The **Non-conventional sources** of energy which is used indefinite time in any amount. There are wind energy, tidal energy, solar energy and Bio gas energy.

FACTS-

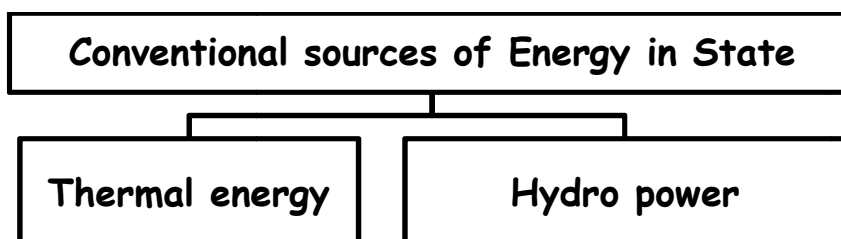
- In 1905, for the first time in Gwalior state, electricity generation from steam was 240 KW.
- Electricity Board of Madhya Pradesh was formed on 1 December 1950 in Jabalpur.
- Chandni Madhya Pradesh in 1953. The first thermal power station of India was established at Neapanagar (Burhanpur).
- In 1960, M.P. The first hydro power project of India was established at Gandhi Sagar (Mandsaur).
- On 25 August 1982, M.P. Energy Development Corporation was established in Bhopal.
- The Electricity Board building located in Jabalpur is called 'Shakti Bhawan'.

INSTITUTES RELATED TO ENERGY

- M.P. Power Generating Company (2005), Headquarter - Jabalpur
- M.P. Power Transmission Company (2005), Headquarter - Jabalpur
- M.P. Power Trading Company (2006), Headquarter - Jabalpur
- M.P. Power Management Company (2012)
 - Western Region (Indore)
 - Central Zone (Bhopal)
 - Eastern Region (Jabalpur)

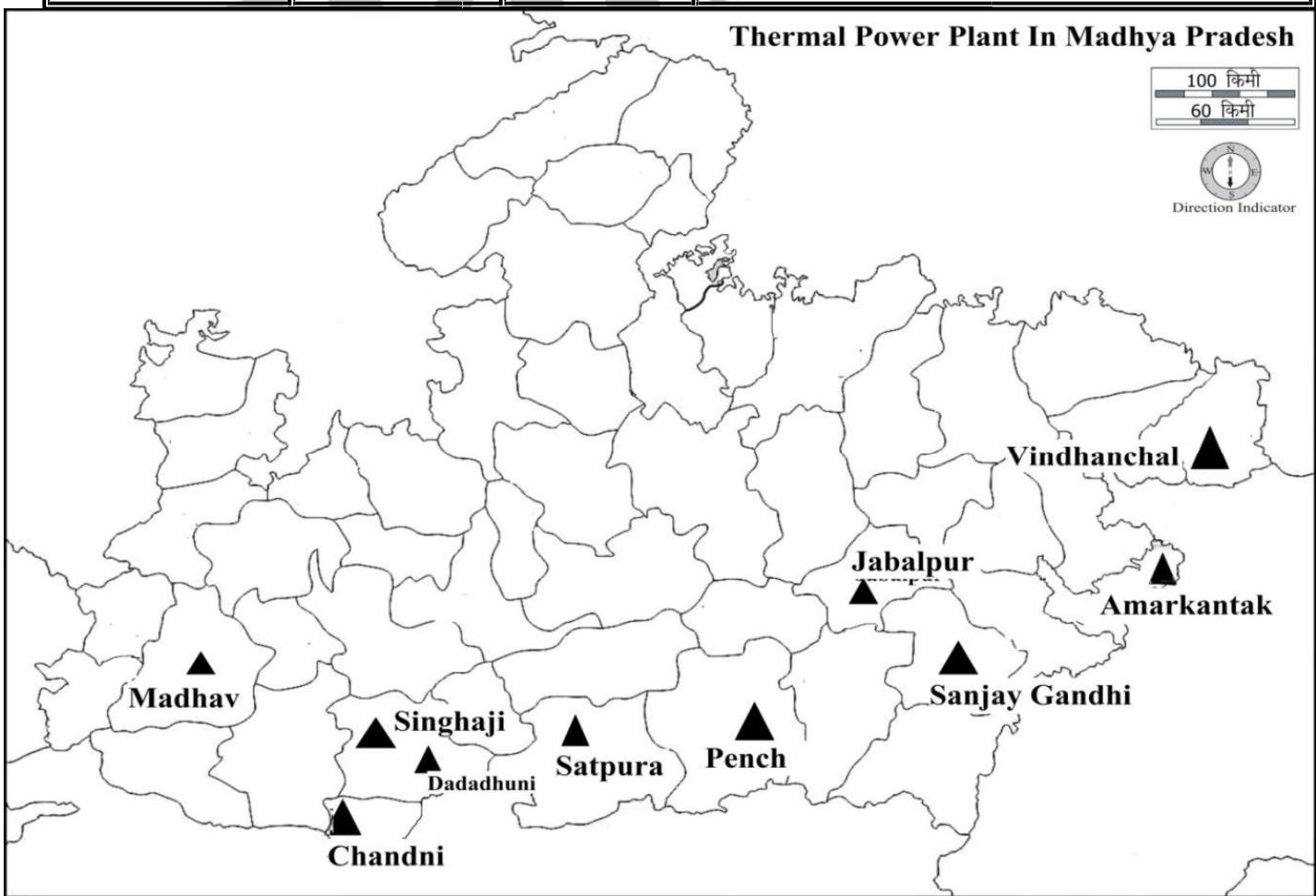
Energy Budget 2023-24

- The total power capacity of Madhya Pradesh has become 28000 MW in the year 2022.
- Per capita availability of electricity is expected to be around 1185 KW in 2022.
- A provision of Rs 13000 crore subsidy has been made for electricity consumption in irrigation in the agricultural sector.
- Sanchi will be made the first solar city of Madhya Pradesh.



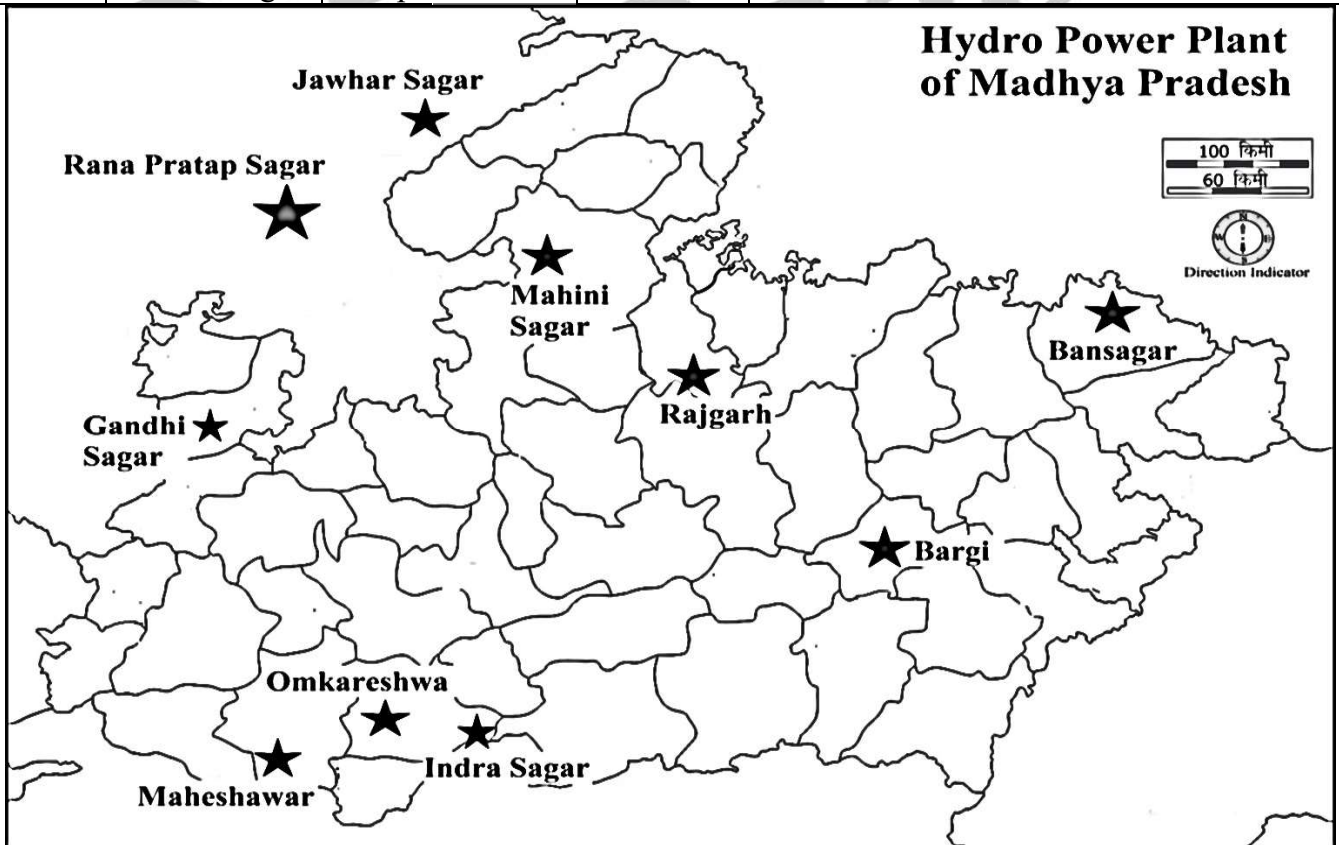
Thermal Power Plant

Name	Location	Capacity	Important facts
Vindhyachal	Singrouli	4760 MW	It is the largest thermal power plant of Madhya Pradesh which supplies electricity to five states .
Satpura	Patharkhera, B (Betul)	1437 MW	It is a joint project of Madhya Pradesh & Rajasthan.
Sanjay Gandhi	Umaria	588 MW	It uses the coal of Johila region.
Amarkantak	Anuppur	490MW	It uses coal of Shahpur & Tawa region
Chandni	Nepanagar (Burhanpur)	17 MW	It is the oldest power plant of Madhya Pradesh. It uses the coal of Tawa region. It was established in year 1953.
Pench	Chhindwada	210 MW	
Singhaji	Khandwa	1200 MW	Started working in 2014. It was inaugurated by Prime Minister.
Dadadhuni	Khandwa	1600 MW	
Mandav	Dhar	2000 MW	Joint venture of Madhya Pradesh & Gujarat
Jabalpur	Jabalpur		



Hydro Electric Power Plants

River	Hydro Power Plant	location	Capacity	Important facts
Chambal	Gandhi Sagar	Mandsour	115 MW	It is a joint effort of Madhya Pradesh & Rajasthan Its construction was started in year 1960.
	Rana Pratap Sagar	Chhitourgarh (Rajasthan)	172 MW	It was established in year 1967-68
	Jawahar Sagar	Kota (Rajasthan)	99 MW	This project uses the water drained by Gandhi Sagar & Rana Pratap Sagar Dam.
Bargi	Bargi (Rani Avantibai)	Jabalpur	90 MW	It has two units producing 45 MW each
Betwa	Rajghat	Lalitpur U.P	45 MW	It is a joint project of Madhya Pradesh & Uttar Pradesh This project was started in 1991
Son	Bansagar	Rewa	405 MW	It is a joint project M.P., U.P. & Bihar. Electricity distribution is being done in 2:1:1 proportion.
Narmada	Indira Sagar	Khandwa	1000 MW	It was started from 2004.
	Omkareshwar	Khandwa	520 MW	It was started from 2007.
	Maheshwar	Khargone	450 MW	It was started in 1975.
Tons	Tons	Rewa	315 MW	It was established in 1990
Sindh	Mohini Sagar	Shivpuri	60 MW	It was started in 2008.



Non-Conventional Sources

Given the climate change and the harmful effect to whole ecology and mankind, there is movement for looking for alternative and renewable source of energy which is clean and eco friendly. Therefore Madhya Pradesh also launched a drive towards the generation of electricity in the form of several policies and institutions of state government like-

- Madhya Pradesh wind power policy 2012 (amended in 2013)
- Madhya Pradesh small hydro power policy 2011
- Madhya Pradesh Biomass power policy 2011 (amended in 2013)
- Madhya Pradesh solar power policy 2012
- Department of New and Renewable Energy (founded in 2010)

The Indian government has announced to contribute 175 GW renewable energy target by 2022. Under this target the state of Madhya Pradesh is supposed to have 5675 megawatt of solar, 3200 megawatt of wind, 118 megawatt of biomass and 25 megawatt of small hydro plants.

• Wind energy –

- Among the renewable sources of energy wind energy contributed the highest in present scenario. It is the direct effect of wind energy policy released in 2012. State government has the target of installed wind Capacity of at least 6200 megawatt by 2022.
- Maximum number of wind mill is in **Indore**.
- Wind energy based state's plant is Jamgodrani of Dewas which is biggest station of Madhya Pradesh Its production Capacity in 20 MW.

• Solar plant –

- Madhya Pradesh receives a high solar radiation of more than 5.5 Kilowatt per hour per square meter per day, with around 300 day of clean Sun because of tropic of cancer. Therefore Madhya Pradesh has a great scope for harnessing solar energy. Madhya Pradesh has come down with solar policy in 2012 with a view to trap the solar energy.
- **Kasturba village** of Indore is the first village of Madhya Pradesh which is fully based on solar energy.
- At present state's biggest solar power plant is in Neemuch.

Other facts and issues related to solar energy

Rewa ultra solar plant

- The state's largest solar power plant (750 MW) is located in Rewa Ultra Solar Power Plant.
- Through this, 24% electricity will be provided to Delhi Metro.
- Rewa Ultra Solar Power Plant was inaugurated by Prime Minister Narendra Modi on 10 July 2020.
- This solar plant is spread over 1590 acres at a cost of Rs 4500 crore.

Solar city

- Sanchi will be made the first solar city of Madhya Pradesh at a cost of Rs 75 crore.
- Sandi's houses, roads and government-private offices will all be powered by solar energy.

Chetan Singh Solanki

- Professor Chetan Singh Solanki, known as Solar Man of India and Solar Gandhi, will now be the brand ambassador of Solar Energy in Madhya Pradesh.
- Chetan Singh Solanki is continuously promoting solar energy, under his solar program he has so far deliversolar lamps to 7.5 million families.

Proposed solar plant in the state (25 November 2021)

- Agar Solar Plant 550 MW
- Shajapur Solar Plant 450 MW
- Beench Solar Plant-550 MW

3. Gas based electricity center –

- Bhandar (Datia) is the first gas based power station Madhya Pradesh of capacity 300 MW electricity.

4. Biomass based energy –

- Kasai village of Betul is India's first village which is based on biomass fully.

5. Bran/Husk Based

- Bran based electricity plant is situated in Jadukheda of district Dhar. Its production capacity 0.95 MW.

Important Facts

- Madhya Pradesh Electricity Department – 1945
- Madhya Pradesh Electricity Supply Act passed in the year 1948. Under which MPEB (Madhya Pradesh Electricity Board) was formed on 10th December, 1950.
- MPEB is India's first Electricity Board.
- Village Electricity Corporation in Madhya Pradesh had established in the year 1960.
- Biggest Plant of solar water heater is found in Bhopal. It is India's biggest. Its capacity is 54000 litre of water heating every day.
- Energy Capital of Madhya Pradesh – Bedhan (Singrauli).
- Diesel based thermal power plant have been established in Indore, Gwalior and Ratlam.
- Nuclear energy- In May 2017, two new indigenous nuclear power reactors of 700 MW capacity, each was approved by the Union Government. The reactors will be built at Chutka village of Mandla in Madhya Pradesh.
- Madhya Pradesh power Generation Company limited is headquartered at Jabalpur.

Objective Questions

1. First thermal power production plant in Madhya Pradesh is :
(A) Chandani (B) Amarkantak
(C) Vindhyaachal (D) Satpura
2. Which river of state has highest dam?
(A) Narmada (B) Chambal
(C) Parvati (D) Tapti
3. Power Generation Capacity Vindhyaachal Thermal Power Plant is -
(A) 2210 MW (B) 4760 MW
(C) 1810 MW (D) 1900 MW
4. State benefitted from Satpura power plant are-
(A) Madhya Pradesh and Rajasthan
(B) Chhatisgarh, Madhya Pradesh, Bihar
(C) Rajasthan, Madhya Pradesh, Bihar
(D) Chhatisgarh, Madhya Pradesh, Rajasthan.
5. Where is the largest solar energy plant for boiling water setup?
(A) Bhopal (B) Dewas
(C) Neemuch (D) Rewa
6. Where is the Gandhi Sagar Hydro Power plant located -
(A) Mandsaur (B) Chittorgarh
(C) Kota (D) Dewas
7. What is the share of Madhya Pradesh in Sardar Sarover power plant?
(A) 57% (B) 27%
(C) 16% (D) 12%
8. Where was the first gas based power plant set up in Madhya Pradesh?
(A) Datia (B) Indore
(C) Bhind (D) Umaria
9. Which of the following is known as energy capital of Madhya Pradesh?
(A) Sidhi (B) Singrauli

- (C) Amarkantak (D) Katni
10. Choose the incorrect one?
(A) Bansagar Hydro Power Plant: Rewa
(B) Maheshwar Hydro Power Plant: Khargone.
(C) Bargi Hydro Power Plant: Indore
(D) Rana Pratap Hydro Power Plant: Chhitorgarh
11. Match the following thermal power plants with their concern place.
- | | |
|----------------|----------------|
| 1. Amarkantak | A. Anuppur |
| 2. Satpuda | B. Patharkhera |
| 3. Vindhyachal | C. Singrouli |
| 4. Pench | D. Chhindwara |

Code -

- | | |
|-------------|-------------|
| 1 2 3 4 | 1 2 3 4 |
| (A) A B C D | (B) B A D C |
| (C) C B D A | (D) D C B A |
12. Which among the following is not the part of Narmada hydro power project?
(A) Indirasagar (B) Maheshwar
(C) Omkareshwar (D) Jawahar Sagar
13. Which of the following sentences is incorrect?
(A) Madhya Pradesh small hydro power policy came in year 2011.
(B) Kasai village of Betul is India's first village which is based on Biomass completely.
(C) Kasturba village of Indore is the first village of Madhya Pradesh which is fully based on wind energy.
(D) Maximum number of wind mills are located in Indore.
14. Arrange the following thermal power plants from east to west
- | |
|--------------------------------------|
| 1. Satpura thermal power plant |
| 2. Singaji thermal power plant |
| 3. Sanjay Gandhi thermal power plant |
| 4. Amarkantak thermal power plant |
- | | |
|----------|----------|
| (A) 4321 | (B) 3421 |
| (C) 4312 | (D) 1234 |
15. Consider the following statements
- | |
|--|
| 1. Diesel based thermal power plants have been established in Indore Gwalior and Ratlam. |
| 2. Madhya pradesh electricity board was established in the year 1949. |
| 3. Share of thermal power energy in total installed capacity in Madhya Pradesh is 63%. |
- Choose the correct statement/statements -
- | | |
|-------------|-------------|
| (A) only 1 | (B) 1 and 3 |
| (C) 1 and 2 | (D) only 3 |

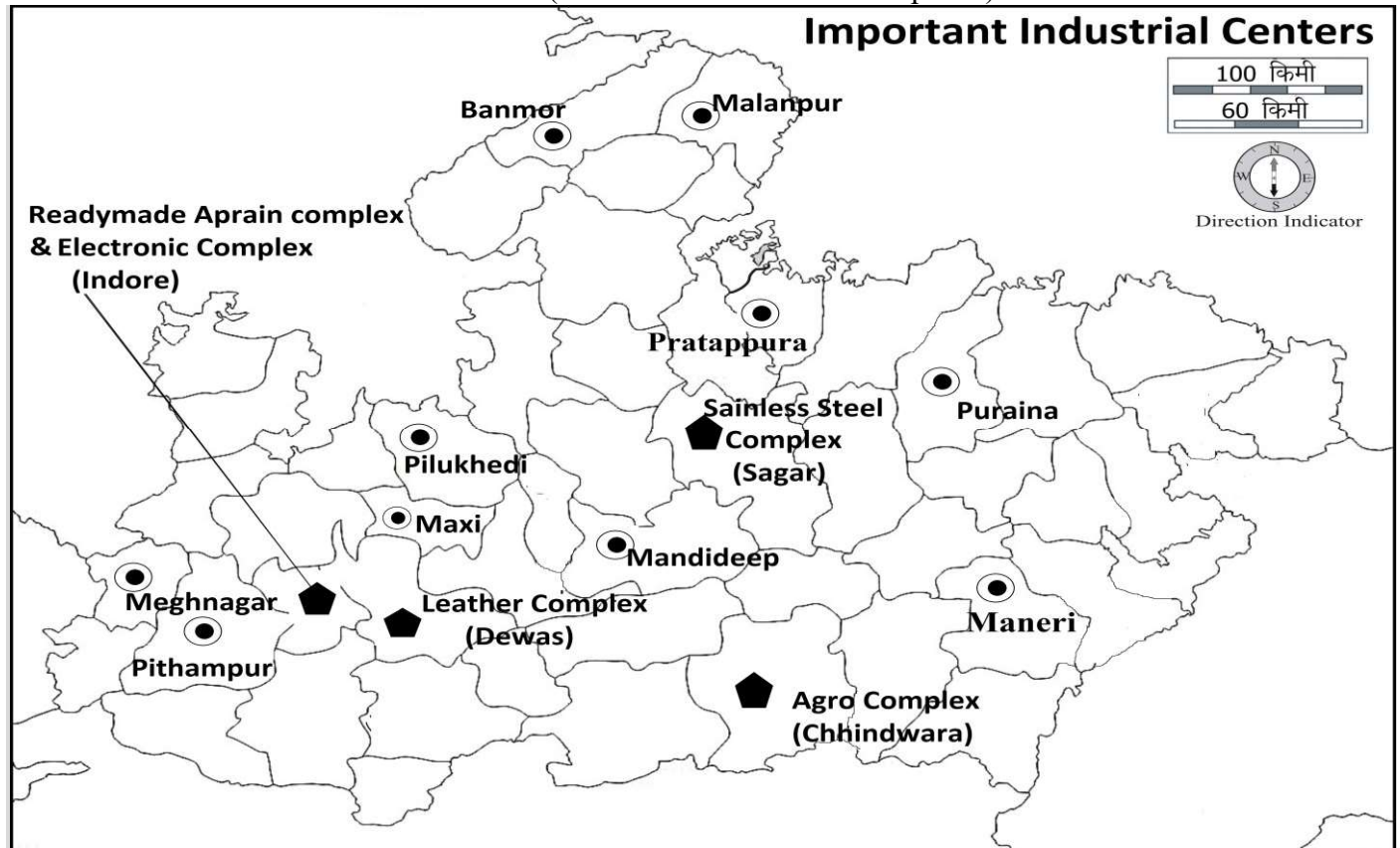
Answer sheet

1	2	3	4	5	6	7	8	9	10
A	A	B	A	A	A	A	A	B	C
11	12	13	14	15					
A	D	C	C	B					

Chapter- 6

Major Industries of Madhya Pradesh

Manufacturing Industries contributes 26% in state's GDP. Madhya Pradesh ranks 7th in country in terms of industries and **fourth** in terms of MSMEs (Micro Small Medium Enterprises).



Major Industrial Centers of Madhya Pradesh

Industrial Development Centers	Districts
Pithampur	Dhar
Malanpur	Bhind
Meghnagar	Jhabua
Pilukheri	Rajgarh
Maneri	Mandla
Puraina	Panna
Mandideep	Raisen
Bagaspur	Narsinghpur
Kiranpur	Balaghat
Karodhara	Shivpuri
Murkal Khapa	Seoni
Bhavsinghpur	Khandwa
Pratappura	Tikamgarh

Baidhan	Singrauli
Maxi	Shajapur
Chandrapur	Chhattarpur
Jawara	Ratlam
Boregaon	Chhindwara
Badol	Seoni
Bandera	Datia
Amanpura	Damoh
Siddhagawa	Sagar

Major Industrial Complexes of Madhya Pradesh

- i. Electronics Complex – Indore
- ii. Leather Complex – Dewas
- iii. Readymade apprain Complex – Indore
- iv. Agro Complex – Chhindwara
- v. Stainless Steel Complex – Sagar

Industries founded in Madhya Pradesh under central government's public sector**1. Central Installations of Defence Ministry****i) Government Ordnance Factory,**

- Founded in 1943-44
- Located in Khamaria (Jabalpur)
- Defence Equipments are being manufacture here.

ii) Gun Carriage Factory, Jabalpur

- Founded in 1943-44
- Defence Equipments are being manufacture here

iii) Heavy Vehicles Factory, Jabalpur

- Founded in 1955
- Manufactures heavy vehicles for defence and commercial purpose.

2. Central Installations of Finance Ministry**i) Security Paper Mills, Hoshangabad**

- Founded in 1967-68
- Bank note printing paper, stamp papers and similar government documents are manufactured here.

ii) Currency Printing Press, Dewas

- Founded in 1975-76.
- Paper currency notes having denomination of more than Rs. 10 are being printed here.

iii) Alkalide Factory, Neemuch

- Founded in 1975-76
- Refining of Morphine, Codeine and Narcotics is done here.

3. Central Installations of Communication**Ministry****i) Government Post and Telegraph Workshop, Jabalpur**

- Founded in 1943-44
- Telephone and telegraph equipments are manufactured here.

4. Central Installations of Mining Ministry**i) Bailadila Iron Project, Bachel (Jabalpur) - 1967-68.****ii) Northern Coalfields Limited, Singrauli****iii) Western Coalfields Limited, Nagpur (Maharashtra)****iv) Hindustan Copper Project, Malajkhand (Balaghat) -1960.****5. Installations of Railways Ministry****i) Railway Coach Factory, Bhopal****ii) Railway Sleeper- Bundhni (Sehore)****iii) Diesel Engine Factory, Indore****6. National Textile Industry Corporation's****Installations****i) Burhanpur Tapti Mills Ltd, Burhanpur**

- Foundation – 1906 – 07.

ii) Indore Malwa United Mills Ltd. Indore.

- Foundation – 1907-08

iii) Swadeshi Cotton and Flour Mills Ltd. Indore.

- Foundation – 1928-29.

iv) Kalyanmal Mills Ltd, Indore

- Foundation – 1934-35

v) Hira Mills Ltd., Ujjain

- Foundation – 1934-35

vi) The New Bhopal Textile Ltd., Bhopal

- Foundation – 1938-39.

- All these mills manufactured cloth and yarn.

7. Food Corporation of India Installation**i) Cotton seeds Solvent Extension Plant**

- Foundation – 1963-64.

- Oil is extracted here from cotton seeds and ground nuts.

8. Other Installations of Central Public**Sector****i) Bharat Heavy Electricals Ltd., Piplani (Bhopal)**

- Foundation 1960-61 in association with Britain.

ii) National Newsprint and Paper, Nepanagar (Burhanpur)

- Foundation – 1948.
- Functioning since 1956-57.
- This is the country's first newsprint factory.

iii) Grey Iron Foundry, Jabalpur

- Raw iron is being manufactured here.

iv) I.I.S.O. Extension Pipe and Foundry Company Ltd., Ujjain.

- Foundation – 1968-69
- Cast iron pipes are being manufactured here.

Agro Based Industries in Madhya Pradesh

1. Sugar Industry-

Madhya Pradesh has following important sugar factories: -

- Jaora Sugar Mills Ltd., Jawra (Ratlam)- It was the first sugar mill of the state.
- Bhopal Sugar Mills, Sehore
- Dabra Sugar Mills Ltd., Dabra (Gwalior)
- Jivajirao Sugar Company Ltd., Dalanda, Mandsaur (Run by Madhya Pradesh State Industries Corporation Ltd.)
- Seth Govindram Sugar Mills (Ujjain).
- Sarangpur Sugar Mills, Sarangpur (Rajgarh)
- Barlai Sugar Mills, Indore (on Cooperation basis) is the largest sugar mill in Madhya Pradesh.

2. Cotton Fabric Industry

- Madhya Pradesh is at third place after Maharashtra and Gujarat in textile production.
- **First cotton mill was established in Biranpur in 1906.**
- Indore is largest cotton fabric manufacturing district in the state.
- Madhya Pradesh has 513 cotton fabric mills.
- The maximum number of mills in the state is in Indore, Gwalior and Ujjain.
- Western part of Madhya Pradesh is called 'Hub of Cotton Fabric'.

3. Synthetic Fibre Cloth Manufacturing Industry

- Synthetic Fibre Mill is at Nagda (Ujjain) in Madhya Pradesh.
- Synthetic Fibre Cloth Mills are in Indore, Nagda Gwalior, Ujjain and Devas in Madhya Pradesh.

4. Vegetable Oil

- Several vegetable oil factories are at Ganj Basoda (Vidisha), Jabalpur, Satna, Khandwa, Gwalior and Indore in Madhya Pradesh.
- Maximum production of vegetable oil is done at Ganj Basoda.

5. Soyabean Oil Industry

- **Asia's largest Soybean Oil plant is at Ujjain.**
- Soya plants are found in Indore, Ujjain, Barwaha (Khargone).

6. Rice Mills

- Rice Mills are at Indore, Bhopal, Jabalpur, and Rewa in Madhya Pradesh.

7. Silk Industry

- Mandla district is leading district in silk production in Madhya Pradesh.
- Madhya Pradesh Government founded Silk Directorate in 1984 to promote cultivation of Mulberry.

8. Fine Flour (Maida) Mills

- Fine Flour (Maida) Mills are located in Bhopal and Indore.

Mineral Based Industries in Madhya Pradesh

1. Cement Industry

- Banmore Cement Factory, Morena (1922) - **First cement factory.**
- Kaimur Cement Factory, Katni (1923)
- Sarla Cement, Maihar (Satna) (1980-81)
- Sarla Cement Works, Satna (1962) (Founded by Birla Group)
- J.P. Cement, Rewa
- Jamul, Chhindwara
- Cement Factory, Neemuch (1980-81)
- Cement Corporation of India, Naya Gaon (Mandsaur)
- Malanpur Cement Works, Bhind (1984)
- Jeerabad Cement Factory, Dhar (1985)

2. China Clay Industry

- China Clay factories are at Gwalior, Jabalpur, Ratlam, Katni

3. Manganese Industry

- Manganese based industries are at Balaghat and Chhindwara in Madhya Pradesh.

4. Copper Industry

- National Copper Project is at Malajkhand of Balaghat district.

6. Diamond Industry

- Diamond refining factories are at Panna, Satna, Jabalpur in Madhya Pradesh.

7. Rock Phosphate Industry

- Rock Phosphate factory is at Jhabua in Madhya Pradesh.

Forest Based industries in Madhya Pradesh

1. Paper Industry

- National Newsprint and Paper Mills, Neapanagar (Burhanpur)
- Orient Paper Mills, Amlai (Shahdol)
- Fine Paper Factory is at Indore.
- Paper Mills are in Bhopal, Ratlam and Gwalior.

2. Bidi Industry

- Madhya Pradesh has nearly **260** bidi factories.
- **Jabalpur** is a hub of bidi plants. Bidi factories are also at Rewa, Damoh, Sagar, Satna.

3. Catechu (kattha) Industry

- Catechu factories are at Banmore, Shivpuri, Rewa.
- It is majorly run by tribals of Khairwar tribe.

4. Saw Mills/ Saw Mill Industry

- Madhya Pradesh has nearly 113 sawing mills. They are in Jabalpur, Mandla, Balaghat, Chhindwara districts.

Other Important industries

Industries	Location
Government run sealing wax factory	Umaria
Madhya Pradesh Lamps Ltd	Vidisha
National Fertilizers Ltd	Guna
Marbal polishing centre	Jabalpur
Leather toys	Indore.
Sulphuric Acid Plant	Nagda (Ujjain)
PVC cable factory	Satna district
Dry battery cells Manufacturing factory	Bhopal
Umbrella Industries	Mahu
Insulin Manufacturing Industry	Dewas
Biscuit factory	Gwalior
Optical fibre Manufacturing unit	Mandideep
Bush and Sports Industry	Indore
Metal Works (Barbed Wires, Nails)	Vidisha
Umbrella Industry	Mhow (Dhar)

Institutions Founded in Madhya Pradesh to develop Industries

Institute	Headquarter	Function
Madhya Pradesh Industrial Development Corporation	Bhopal (1965)	Providing financial, technical help to big and medium industries.
Madhya Pradesh Finance Corporation	Indore	Providing financial help to private and cooperative sector industries.
Madhya Pradesh State Industrial Corporation	Bhopal (1969)	Providing help to cooperative and joint sector industries.
Madhya Pradesh Small Scale Industries Corporation	Bhopal (1969)	Providing raw material to industries and selling their raw material in the market.
Madhya Pradesh Khadi and Gramodyog Board	Bhopal	Promoting Khadi industry
Madhya Pradesh Handloom Directorate	Bhopal	Providing capital for handloom and power loom industry.
Madhya Pradesh Handicraft Circle	Bhopal	Providing financial aid to handicraft and promoting them.
Madhya Pradesh Mining Corporation	Bhopal	Arranging for exploration, prospecting and marketing of minerals.
Madhya Pradesh Agro Industries Corporation	Bhopal	Providing aid to agro industry.
Madhya Pradesh Export Corporation	Bhopal (1977)	Arranging for export of small scale industries.
Madhya Pradesh Textile Corporation	Indore (1970)	Main function is to run government owned textile mills.
District Entrepreneurship Centre	Every District	Providing financial aid and raw material to industries.

CHAPTER - 7

Population Growth, Distribution And Density, Urbanisation

National Census – 2011 : Related Facts

- Census is conducted by the Registrar General and Census Commissioner of India under the Ministry of Home Affairs Government of India.
- Motto of Census 2011 was - "Our Census Our Future".
- Final data released on 30th April 2013.

Comparative Study of India and Madhya Pradesh

Points	Madhya Pradesh	India
Population	7,26,26,809	1.21 Billion
Growth Rate	20.30%	17.70%
Sex Ratio	931	943
Child Sex Ratio	918	919
Literacy	69.3%	73%
Rural Population	72.4%	68.8%
Population Density	236	382
Scheduled Caste Population	15.60%	16.6%
Scheduled Tribe Population	21.10%	8.60%

Census of Madhya Pradesh –2011

Population wise Madhya Pradesh is the Sixth largest state in India, according to census 2011. But after bifurcation of Andhra Pradesh, (formation of Telangana) Madhya Pradesh is now the fifth largest state in India. Population growth rate of Madhya Pradesh has been 20.3% for the last decade. Population of only 18 countries exceeds the population of Madhya Pradesh.

Rank of Madhya Pradesh in different parameters of census

Category	Among States	Among States and Union Territory
Population	6 th (Now 5 th)	6 th (Now 5 th)
Growth rate	9 th	13 th
Density	17 th	23 th
Sex-Ratio	18 th	20 th (with Nagaland)
Literacy	21 st	28 th
Child Sex-ratio	19 th	22 nd
Scheduled Tribe Population wise	1 st	1 st
Scheduled tribe percentage wise	11 th	13 th
Scheduled caste population wise	7 th	7 th
Scheduled cast percentage wise	17 th	14 th
Urban Population	8 th	8 th
Rural Population	6 th	6 th

Census of Madhya Pradesh: Comparative Data

Year	2011	2001
Population	7,26,26,809	6,03,48,023
Population growth	20.3%	24.26%
Sex Ratio	931	919
Child Sex Ratio	918	932
Literacy Rate	69.3%	63.7%
Literacy (Male)	78.7%	76.1%
Literacy (Female)	59.2%	50.3%

❖ Population

- Total Population : 7,26,26,809 (6% of India)
- Male: 3,76,12,306 (51.70%)
- Female: 3,50,14,503 (48.30%)
- Rural: 5,25,57,404 (72.40%)
- Urban: 2,00,69,405 (27.60%)
- Schedule castes: 1,13,42,320 (15.60%)
- Schedule Tribe: 1,53,16,784 (21.10%)
- Four states exceed the population of Madhya Pradesh : (1) Uttar Pradesh (2) Maharashtra, (3) West Bengal (4) Bihar

Comparison between Census 2001 & 2011

	Census 2001	Census 2011	Growth rate 2001-2011
Persons	6,03,48,023	7,26,26,809	20.3%
Males	3,14,43,652	3,76,12,306	19.6%
Females	2,89,04,371	3,50,14,503	21.1%

Districts with highest population(census 2011)

S.Number	District	Population
1.	Indore	32,76,697
2.	Jabalpur	24,63,289
3.	Sagar	23,78,458
4.	Bhopal	23,71,061
5.	Rewa	23,65,106

Districts with least Population (census 2011)

S.No.	District	Population
1.	Niwari	404,807
2.	Agar Malwa	480,000
3.	Harda	5,70,465
4.	Umaria	6,44,758
5.	Sheopur	6,87,861

❖ Child Population (0-6 Years Age Group) 2011 in Madhya Pradesh

- As compared to last decade the child population marginally increased by 27,181 in the current decade. Child sex ratio (918) declined by 14 as compared to previous decade (932)

Total Child Population -

	Total	Rural	Urban
Person	1,08,09,395	83,25,731	24,83,664
Child (Male)	56,36,172	43,29,993	13,06,179
Child (Female)	51,73,223	39,95,738	11,77,485

- Percentage of Child population in total population is 14.5%.
- Highest child sex ratio is in - Alirajpur (978), Dindori (970) and Mandla (970)
- Lowest Child Sex Ratio : Morena (829)
- Districts with highest child population: Jabalpur (12.0%), Balaghat (12.5%)
- Madhya Pradesh ranked fourth in child population (Top three states : Uttar Pradesh, Bihar, Maharashtra)
- District with highest decline in child population is Chhindwara.

❖ Sex Ratio

Sex Ratio is defined as the number of female per thousands of male. Sex Ratio of Madhya Pradesh, as per census – 2011, is 931. It is slightly short of National Average (943), it is increased by 12 as compare to last decade (919). Balaghat has recorded the highest sex ratio in respect of total, rural and urban population.

- District of highest sex Ratio :Balaghat (1021)
 - District with lowest Sex Ratio :Bhind (837)
 - Districts with 1000 plus Sex Ratio - four (Balaghat, Alirajpur, Mandla & Dindori)
 - Sex ratio wise position of Madhya Pradesh in India : 18th (in states) and : 20th (in states and Union Territory)
 - Rural sex ratio : 936 : Urban sex ratio : 918
- 26 districts of state, have sex ratio more than national sex ratio. Madhya Pradesh's average sex ratio is equal to the sex ratio of Rewa district i.e. 931.

Districts with highest Sex Ratio

S.no.	District	Sex ratio
1.	Balaghat	1021
2.	Alirajpur	1011
3.	Mandla	1008
4.	Dindori	1002
5.	Jhabua	990

Districts with least Sex ratio

S.no.	District	Sex ratio
1.	Bhind	837
2.	Morena	840
3.	Gwalior	864
4.	Datia	873
5.	Shivpuri	877

Districts with highest Child Sex Ratio (0-6 year)

S.no.	District	Sex ratio
1.	Alirajpur	978
2.	Dindori and Mandla	970
3.	Balaghat	967
4.	Betul	957
5.	Chhindwara	956

Districts with Least Child Sex Ratio (0-6 year)

S.Number	District	Sex ratio
1.	Morena	829
2.	Gwalior	840
3.	Bhind	843
4.	Datia	856
5.	Rewa	885

❖ Literacy

Persons, who can understand, read and write any one language, is assumed to be a Literate person. According to census 2011, the literacy rate of Madhya Pradesh is 69.3%. It is less than national average (73%).

Comparison of Madhya Pradesh & India in terms of literacy -

	Madhya Pradesh	India
Total Literacy	69.3%	73%
Literacy Rate (Male)	78.7%	80.9%
Literacy Rate (Female)	59.2%	62.6%

- Highest Literate District: Jabalpur (81.1%)
- Most Literate (Male) Districts: Indore & Jabalpur (each 87.3%)
- Most literate (female) districts: Bhopal (74.8%)
- Lowest Literate District: Alirajpur (36%)
- Least Literate (Male): Alirajpur (42.0%)
- Least Literate (Female): Alirajpur (30.3%)
- Literacy Rank of Madhya Pradesh in India : 21st (in state), 28th (State and Union territory)
- It is remarkable that literacy percentage of Madhya Pradesh's nine districts exceeds national average and literacy rate of Raisen district is equal to that of national average.

Literacy in Census 2001 and 2011

	2001	2011	Growth
Person	63.7%	69.32%	5.62%

Male Literacy	76.1%	78.73%	2.6%
Female Literacy	50.3%	59.2%	8.9%

Districts with highest literacy

S.No.	District	Literacy rate
1.	Jabalpur	81.1%
2.	Indore	80.9%
3.	Bhopal	80.4%
4.	Balaghat	77.1%
5.	Gwalior	76.7%

Districts with least literacy

S.No.	District	Literacy rate
1.	Alirajpur	36.1%
2.	Jhabua	43.3%
3.	Barwani	49.1%
4.	Sheopur	57.4%
5.	Dhar	59.0%

Districts with highest male literacy

S.No.	District	Literacy rate
1.	Jabalpur	87.29%
2.	Indore	87.25%
3.	Bhopal	85.42%
4.	Bhind	85.40%
5.	Balaghat	85.36%

Districts with least male literacy

S.No.	District	Literacy rate
1.	Alirajpur	42.02%
2.	Jhabua	52.85%
3.	Barwani	55.70%
4.	Dhar	68.95%
5.	Sheopur	69.33%

Districts with highest female literacy

S.No.	District	Literacy rate
1.	Bhopal	74.87%
2.	Jabalpur	74.37%
3.	Indore	74.02%
4.	Balaghat	69.04%
5.	Gwalior	67.38%

Districts with least female literacy

S.No.	District	Literacy rate
1.	Alirajpur	30.29%
2.	Jhabua	33.77%
3.	Barwani	42.39%
4.	Sheopur	44.23%

5.	Dhar	48.77%
----	------	--------

❖ Population Growth

Comparing to the decade 1991-2001 (24.26%) the last decade's population growth rate slows down to 20.3%, even though it is more than the population growth rate of India (17.7%).

- Population growth rate of the decade : 20.30%
- Population growth rate (rural) : 12.3%
- Population Growth rate (Urban) : 31.8%
- District with highest Population growth rate: Indore (32.7%)
- District with lowest Population growth rate: Anuppur (12.3%)
- Madhya Pradesh is included in 15 states whose population growth rate is more than the national average.
- Madhya Pradesh stands 9th in all states and 13th in all states as well as union territory regarding population growth rate.

Districts with highest population growth rate in Madhya Pradesh		
S.No.	District	Growth
1.	Indore	32.88%
2.	Jhabua	30.70%
3.	Bhopal	28.62%
4.	Singrauli	28.05%
5.	Barwani	27.57%

Districts with least population growth rate in Madhya Pradesh		
S.No.	District	Growth
1.	Anuppur	12.3%
2.	Betul	12.9%
3.	Chhindwara	13.1%
4.	Mandsaur	13.2%
5.	Balaghat	13.6%

❖ Population Density

Number of persons per sq.km area is called as population density. In Madhya Pradesh population density is 236; it is less than national average 382. In last decade it was 196, i.e. increase in 40 persons. The plain areas are denser as compare to hilly area.

- Population Density : 236 Persons per square kilometer
- District with highest population density : Bhopal (855)

- District with lowest population density :Dindori (94)
- Density wise Madhya Pradesh's rank in India: 17th (in States) and 23rd (in State & union Territories).
- Population density of Bhopal, Indore, Jabalpur, Morena and Gwalior exceed the national average.

Districts with highest Area in Madhya Pradesh		
S.No.	District	Area (kms)
1.	Chhindwara	11815
2.	Sagar	10252
3.	Shivpuri	10066
4.	Betul	10043
5.	Balaghat	9229

Districts with Least Area in Madhya Pradesh		
S.No.	District	Area (kms)
1.	Niwari	1318
2.	Datia	2691
3.	Bhopal	2772
4.	Agar Malwa	2785
5.	Harda	3334
6.	Burhanpur	3427

Districts with Least density in Madhya Pradesh		
S.No.	District	Population density
1.	Dindori	94
2.	Sheopur	104
3.	Panna	142
4.	Betul	157
5.	Raisen	157

Districts with highest density in Madhya Pradesh		
S.No.	District	Population density
1.	Bhopal	855
2.	Indore	841
3.	Jabalpur	473
4.	Gwalior	446
5.	Morena	394

URBANISATION

- Maximum population of Madhya Pradesh is rural (72.4%). In term of rural population state exceeds the national average (68.8%).
- Total Urban Population of Madhya Pradesh: 27.6%.
- Total Rural Population of Madhya Pradesh: 72.4%.
- District with highest rural Population :Rewa (19.68 Lakh)
- District with highest rural Population percentage: Dindori (95.40%)
- Rural Literacy Rate: 63.9% (National Rural literacy Rate 67.8%)
- Urban Literacy Rate: 82.8% (National Urban litera Rate 84.1%)
- District with highest urban population : Indore (24.24 Lakh)
- District with highest urban percentage: Bhopal (80.9%)
- There are total four districts with more than 50% urban population (Bhopal, Indore, Gwalior, and Jabalpur) in Madhya Pradesh.
- Rank in India in Urban Population : 8th (Both in State and Union territory)

Districts with highest Urbanisation (%wise)		
S.No.	District	Percentage
1.	Bhopal	80.9%
2.	Indore	74.1%
3.	Gwalior	62.7%
4.	Jabalpur	58.5%
5.	Ujjain	39.2%

Districts with least Urbanisation(% wise)		
S.No.	District	Percentage
1.	Dindori	4.6%
2.	Alirajpur	7.8%
3.	Sidhi	8.3%
4.	Jhabua	9.0%
5.	Seoni	11.9%

Districts with highest rural population (% wise)		
S.No.	District	Rural Percentage %
1.	Dindori	95.4%
2.	Alirajpur	92.2%
3.	Sidhi	91.7%
4.	Jhabua	91.7%

5.	Seoni	88.1%
----	-------	-------

Districts with least rural population (% wise)		
S.No.	District	Rural Population %
1.	Bhopal	19.1%
2.	Indore	25.9%
3.	Gwalior	37.3%
4.	Jabalpur	41.5%
5.	Ujjain	60.8%

❖ ST/SC Census

Districts with heighest SC Population (In Number)		
S.No.	District	Population
1.	Indore	545239
2.	Ujjain	523869
3.	Sagar	501630
4.	Morena	421519
5.	Chattarpur	405313

Districts with lowest SC Population (In Number)		
S.No.	District	Population
1.	Jhabua	17427
2.	Alirajpur	26877
3.	Dindori	39782
4.	Chindwara	48425
5.	Umaria	58147

Highest SC population (Percentage wise)		
S.No.	District	Percentage
1.	Ujjain	26.4
2.	Datia	25.5
3.	Tikamgarh	25
4.	Shajapur	23.4
5.	Chattarpur	23

Least SC Population (Percentage wise)		
S.No.	District	Percentage
1.	Jhabua	1.7
2.	Alirajpur	3.7
3.	Mandla	4.6
4.	Dindori	5.6
5.	Barwani	6.3

Highest SC Population (decadal growth)		
S.No.	District	Percentage
1.	Umaria	65.5
2.	Anuppur	53.8
3.	Indore	40.4
4.	Bhopal	38.5
5.	Shahdol	32.9

Least SC Population (decadal Growth)

S.No.	District	Percentage
1.	Alirajpur	5.1
2.	Betul	7.1
3.	Balaghat	8.1
4.	Chhindwara/Seoni	8.4
5.	Burhanpur	14.1

Highest ST Population

S.No	District	Population
1.	Dhar	1222814
2.	Barwani	962145
3.	Jhabua	891818
4.	Chhindwara	769778
5.	Khargone	730169

Least ST Population

S.No	District	Population
1.	Bhind	6131
2.	Datia	15061
3.	Morena	17030
4.	Mandsaur	33092
5.	Shajapur	37836

Highest ST Population (Percentage wise)

S.No.	District	Population
1.	Alirajpur	89.0
2.	Jhabua	87.0
3.	Barwani	69.4
4.	Dindori	64.7
5.	Mandla	57.9

Least ST Population (Percentage wise)

S.No.	District	Percentage
1.	Bhind	0.4
2.	Morena	0.9
3.	Datia	1.9
4.	Mandsaur/Shajapur/Ujjain	2.5
5.	Bhopal	2.9

Highest ST Population (decadal growth percentage)

S.Number	District	Population
1.	Chattarpur	42.6
2.	Shivpuri	42.0
3.	Burhanpur	36.8
4.	Ashoknagar	35.6
5.	Khandwa	34.9

Least ST Population (decadal growth)

S.Number	District	Population
1.	Mandsaur	-11.8
2.	Bhind	-8.8
3.	Ujjain	-8.5
4.	Shajapur	7.2
5.	Sagar	13.0

❖ Religious Census of Madhya Pradesh

Madhya Pradesh is a land that embraces all the major religions of India- Hinduism, Islam, Sikhism, Jainism, Buddhism and Christianity. The state upholds 'Unity in Diversity' on which the concept of secularism rests. Madhya Pradesh is a common abode of people belonging to different religions, castes and creeds.

According to Census 2011, 90.89% of the Madhya Pradesh residents followed Hinduism, while others are Muslims (6.5%), Jains (0.7%), Christians (0.29%) Buddhists (0.3%) Sikhs (0.2%), other (0.83%) & not stated (0.13%) .

Important Facts

- Madhya Pradesh was included in Census – 1941: with central India.
- Madhya Pradesh was included in Census 1951 : Old Madhya Pradesh (C.P. & Barar)
- Number of district in Madhya Pradesh under census – 2001 : was 45
- Number of District Madhya Pradesh District in Madhya Pradesh under census 2011 : 50 (as on 1st March, 2011)

Large-Small : Divisions

- Largest in Area - Jabalpur
- Largest in Population - Indore
- Smallest in Area - Chambal
- Smallest in Population - Shahdol
- Highest Sex Ratio - Shahdol
- Lowest Sex Ratio - Chambal
- Highest Literacy Rate - Jabalpur
- Lowest Literacy Rate - Indore
- Highest Growth Rate - Gwalior
- Lowest Growth Rate – Narmadapuram

Objective Questions

1. Male literacy rate – 2011 Madhya Pradesh is?
(A) 82.1% (B) 72.1%
(C) 78.1% (D) 63.0%
2. Female literacy rate – 2011 in Madhya Pradesh is?
(A) 59.20% (B) 61.5%
(C) 62.0% (D) 63.0%
3. According to census 2011, what is the percentage of schedule caste in total population of Madhya Pradesh?
(A) 8.91% (B) 21.10%
(C) 20.82% (D) 15.60%
4. According to census 2011, what is the percentage of schedule tribe in total population of Madhya Pradesh?
(A) 20.91% (B) 21.10%
(C) 20.82% (D) 20.72%
5. Choose the incorrect option-
(A) Highest ST population is found in Dhar
(B) Lowest ST population is found in Bhind
(C) Highest SC population is found in Indor
(D) Lowest SC Population is found in Ujjain.
6. Consider the statement -
(1) District with highest population growth rate is Indore.
(2) Population of Bhopal district is least in Madhya Pradesh.
Choose the incorrect statement/statements-
7. (A) Only 1 (B) Only 2
(C) Only 1 and 3 (D) neither 1 nor 2
What is the rank of Madhya Pradesh among India states, according to population?
(A) Fourth (B) Fifth
(C) Sixth (D) Seventh
8. Which of the following statement is incorrect?
(A) Indore district of Madhya Pradesh has the highest population.
(B) Anuppur district has the lowest decadal growth rate.
(C) Dindori district of Madhya Pradesh has the highest percentage of urban population.
(D) Bhopal has maximum population density.
9. Which is the most literate district of Madhya Pradesh?
(A) Bhopal (B) Jabalpur
(C) Sagar (D) Narsinghpur
10. Which district of Madhya Pradesh has the lowest literacy rate?
(A) Shivpuri (B) Khargone
(C) Ratlam (D) Alirajpur

Answer

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
C	A	D	B	D	B	B	C	B	D

CHAPTER -8

Madhya Pradesh: a General Introduction



Madhya Pradesh is a state in central India. Its capital is **Bhopal**. It is known as Madhya Pradesh because of its location. The name Madhya Pradesh was given by **Pt. Jawahar Lal Nehru**. It is also known as the “**Heart of India**”. It came into existence on **November 1, 1956** but its present boundaries were carved out on **November 1, 2000** after its bifurcation a new state Chhattisgarh was created. Madhya Pradesh is the second largest state in the country after Rajasthan (area wise).

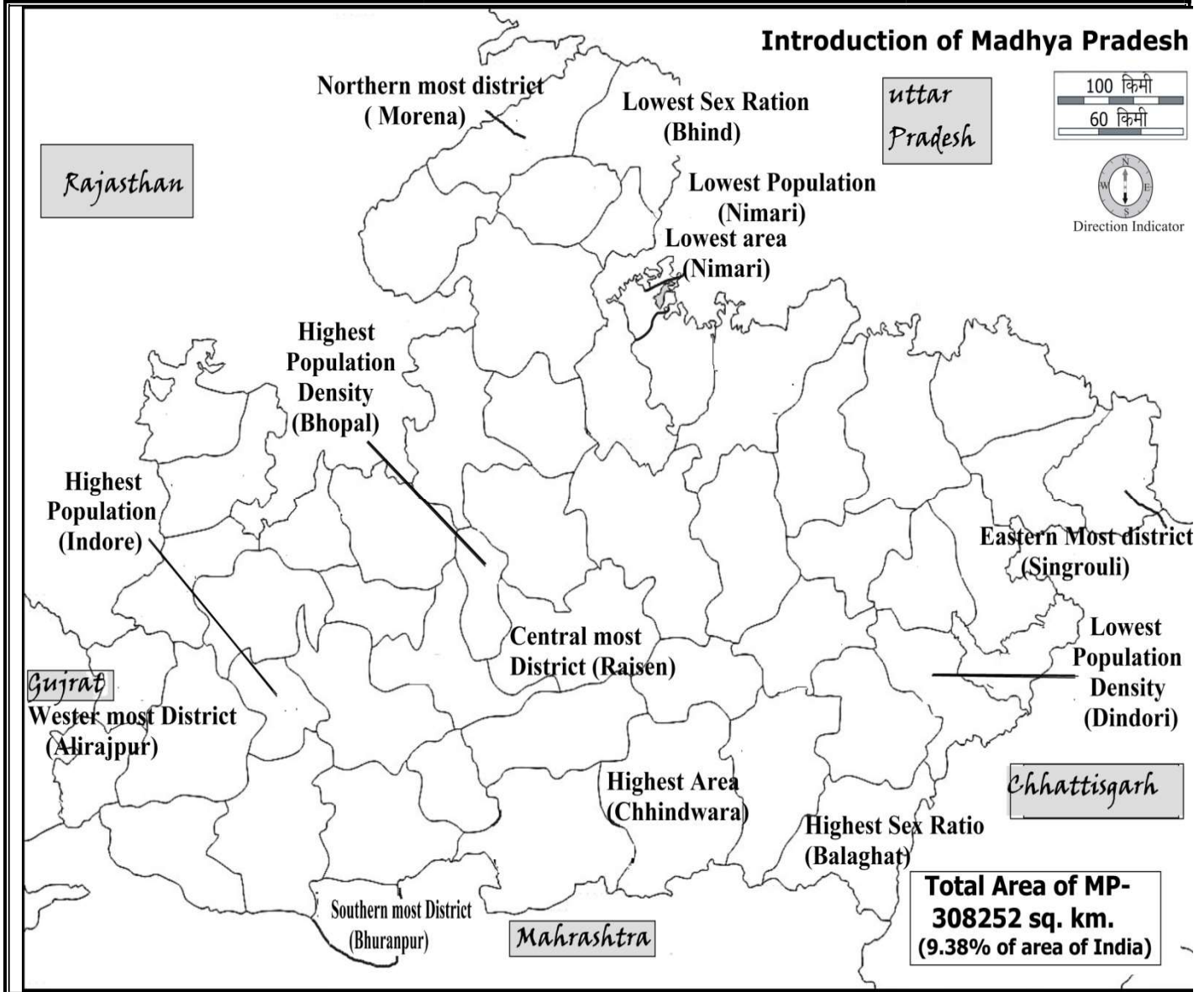
After India's independence, Madhya Pradesh state was created with Nagpur as its capital. This state included the southern part of the present day Madhya Pradesh and Maharashtra.

In 1956, on the recommendation of State re-organization commission Madhya Pradesh with its capital Bhopal came into existence. This state was the largest state of India till 2000. In 2000, state was bifurcated to create a new state Chhattisgarh and Rajasthan became geographically largest state of India.

The present state of Madhya Pradesh lies between **21⁰6' N to 26⁰30' N latitudes** and **74⁰9' E to 82⁰48'E longitudes**. Its total geographical area is 3,08,252sq km which is 9.38% of geographical area of India. It divided among the 52 districts of the state. Its extent from East to West is **870 km** and from North to South is **605 km**.

Its Northern boundary is drawn by the Chambal and Southern boundary by the Tapti river. Eastern and Western boundaries are made by hills of Maikal, Kaimur and the state of

Gujarat respectively. The Tropic of Cancer divides the state into two equal halves parallel to the river Narmada.



It passes through the following 14 districts of the state- Ratlam, Ujjain, Shajapur, Rajgarh, Bhopal, Vidisha, Raisen, Sagar, Damoh Jabalpur, Katni, Umari, Shahdol and Anuppur. Singrauli is the only district through which the Standard time Meridian of India line passes (82.5° E longitude). **Time difference between east and west extreme points of Madhya Pradesh is 34 minutes.**

It is bordered with the states of **Uttar Pradesh** to the northeast, **Chhattisgarh** to the southeast, **Maharashtra** to the south, **Gujarat** to the west, and **Rajasthan** to the northwest. The

bordering districts of Madhya Pradesh sharing the boundary with other states are as follow –

Districts of Madhya Pradesh sharing border with other states	
State	District (Madhya Pradesh)
Uttar Pradesh (14 Districts)	Morena, Bhind, Datia, Shivpuri, Ashoknagar, Sagar, Niwari, Tikamgarh, Chhatarpur, Panna, Satna, Rewa, Mauganj, and Singrauli
Rajasthan (10 Districts)	Morena, Shivpuri, Guna, Rajgarh, Shajapur, Neemuch, Mandsaur, Ratlam, Jhabua and Sheopur

Maharashtra (10 Districts)	Pandurna, Badwani, Khandwa, Betul, Chhindwara, Seoni, Balaghat, Alirajpur and Burhanpur
Chhattisgarh (6 Districts)	Sidhi, Shahdol, Dindori Mandla, Balaghat and Anuppur.
Gujarat (2 Districts)	Jhabua and Alirajpur

The climate of Madhya Pradesh is **Sub-Tropical monsoonal** where the yearly rainfall took place from June to September. The annual rainfall tends to decrease from south to north and east to west. From March to May, the climate is hot and dry with temperature ranging from 33 to 44° C and during winters temperature lies between 10 to 15° C.

The main river systems of Madhya Pradesh are the **Chambal**, the **Betwa**, the **Sindh**, the **Narmada** and the **Tapti**. Narmada is the **lifeline of Madhya Pradesh**.

Nearly one third of the state's area is covered with Tropical Forests ranging between the river Chambal in the north and Tapti in the south.

Our state is a mineral rich state. Manganese, Coal and Copper are among the more important minerals of Madhya Pradesh.

Being an agrarian state, a major chunk of population is involved in agriculture or its allied sector. Around 1/3rd of the cultivated land is under irrigation. The major food crops here include jowar, wheat, rice and gram. Among the cash crops, the oilseeds, cotton and sugarcane are important.

The state is famous for traditional village crafts such as chanderi sarees, attractive pottery, carpets, leather and clay toys. State is highly investing in agro based industries. Being an energy surplus state, diversified cropping, better road and rail connectivity etc, Madhya Pradesh provides favourable atmosphere for industrial development.

Madhya Pradesh is famous for its legendary tourist destination such as the temples of **Khajuraho**, the **majestic fort of Gwalior**, **Buddhist stupas of Sanchi** and the various wildlife sanctuaries that Madhya Pradesh is peppered with.

Madhya Pradesh was one of the first states in India to actively engage in securing the **Right to Information** for the public. In 1994, Madhya Pradesh became the first to implement the constitutional system of local Government. (i.e. decentralisation of power).

Madhya Pradesh General Information

Organisation	1 November, 1956
Reorganisation	1 November, 2000
Area	3,08,252 square Km.
Population	7,26,26,809
Sex Ratio	931
Literacy rate	69.32%
Official Language	Hindi
State Symbol	Sanchi Stupa
State Tree	Banyan tree
State Bird	Paradise Flycatcher (Doodhraj)
State Animal	Swamp deer
State Crop	Soyabean
State Fruit	Mango (Mangifera Indica)
State Dance	Rai
State Emblem	Banyan tree, ear enclosed in 24 stups, wheat ear & paddy ear, National emblem.
State Flower	White Lily
State Sport	Malkhamb
State Folk Drama	Maach
Folk dance	Rai
State Fish	Mahseer
High Court	Jabalpur
Benches of High Court	Indore and Gwalior
Song of Madhya Pradesh	Sukh Ka Daata Sab Ka Sathi Written by- Mahesh Shrivastava
Divisions	10

Districts	52
Tehsils	373
Development Blocks	313
Tribal Development Blocks	89
Towns	476
Total Villages	54903
Habitated Villages	52117
Municipal Corporation (Nagar Nigam)	16
Municipal Council (Nagar Palikayen)	98
Nagar Panchayat	264
Village Panchayat	23043
Janpad Panchayat (Block Panchayat)	313
District Panchayat	52
Number of Lok Sabha Seats	29
Seats reserved for ST in Lok Sabha	6
Seats reserved for SC in Lok Sabha	4
Number of Seats in Rajya Sabha	11
Number of Seats in Legislative Assembly	230+1 (Anglo-Indian Member)
Number of Seats Reserved for ST in Legislative Assembly	47
Number of Seats Reserved for SC in Legislative Assembly	35

First in Madhya Pradesh

First Governor	Dr. Pattabhi Sitaramayya
First Female Governor	Sarala Grewal
First Chief Minister	Pt. Ravishankar Shukla
First Non-congress Chief Minister	Virendra Seklecha
First Female Chief Minister	Uma Bharti
First Chief Justice	M. Hidayatullah
First Speaker of Legislative Assembly	Kunjilal Dubey
First Deputy Speaker of Legislative Assembly	Vishnu Vinayak Sarvate
First Leader of opposition of Legislative Assembly	Vishwanath Tamaskar
First Information Commissioner	T.N. Shrivastava
First Lokayukta	P.V. Dixit
First Chief Secretary	H.S. Kamath
First Woman Chief Justice	Sarojini Saxena
First Chief Secretary	H S Kamath
First Female Chief Secretary	Nirmala Booch
First Advocate General	M. Dharmadhikari
First Adivasi Female Governor	Urmila Singh
First Chairman of Public Service Commission	D. V. Rege
First Director General of Police	V.P Dubey
First Inspector General of Police	B.G Ghate
First Chairperson of Finance Commission	Sheetla Sahay
First Election Commissioner	N.V Lohani
First Chairman of State Planning Commission	Prakash Chandra Sethi
First Vice Chairman of State Planning Commission	Dr. Dayashankar Nag
First Woman IPS	Asha Gopalan
First Woman IAS	Nirmala Booch
First Woman Leader of Opposition in State Legislative Assembly	Jamuna Devi
First National Park	Kanha Kisli
First University	Dr. Hari Singh Gaur University
First Biosphere Reserve	Panchmarhi
First Newspaper	Gwalior Akhbar

First Solar Energy Village

Kasturba village , Indore

Prominent Research and Training Institutes of Madhya Pradesh

Integrated Police Organization	Bhopal
Wildlife Forensic and Medical Center	Jabalpur
State's First Jail Research Organization	Chhindwara
Animal Surrogacy Lab	Bhopal
First Nursing Research Center	Indore
Forestry Institute	Chhindwara
Tropical Forest Institute	Jabalpur
Cotton Research Institute	Khargone
Human Development Institute (The Center for Forestry Research and Human Resource Development)	Chhindwara
Police Wireless Training College	Indore
Mahatma Gandhi State Rural Development Institute	Jabalpur
Laser Wave Energy Research Center	Indore
Madhya Pradesh Forest Research Institute	Jabalpur
Water and Land Management Institute (WALMI)	Bhopal
Eklavya Archery Academy (proposed)	Jabalpur
Atal Bihari Bajpai Arts and Cultural Center (Proposed)	Morena
Sanjay Gandhi Youth Leadership and Rural Development Training Institute	Pachmarhi
Rural Panchayat Training Institute	Amarkantak
MP's First Wildlife Awareness Center	Ralamandal (Indore)
National Administration and City Management Institute Proposed	Bhopal
Dr Ambedkar National Social Science Institute	Indore
International Maize and Wheat Research Center Proposed	Khamaria(Jabalpur)
National Institute of Design	Gwalior
National Institute of Fashion Technology	Bhopal
Atal Bihari public Administration Institute	Bhopal
Vehicle Employees Training Institute	Rewa
Traffic Training Institute	Bhopal
Crime Research Training Institute	Sagar
Forensic Science Laboratory	Sagar
Dogs Training Center	Bhadbhada (Bhopal)
National Law Institute	Bhopal
Indian Institute of Information Technology and management	Gwalior
Indian Institute of Information Technology and Management	Gwalior
Indian Institute of Forest Management (IIFM)	Bhopal
Calamities Management Institute (Country's First)	Bhopal
Arms and Practice Center	Indore
New Guards/Platoon Commando Training Institute Sixth Battalion	Jabalpur
Patwari Training Center	Gwalior
State's Education Institute	Bhopal
Madhya Pradesh Rice Research Center	Barwani
Grape Research Center	Ratlam
Geo Satellite Telecommunication Research Center	Guna
Central Agricultural Engineering Institute	Bhopal
Infantry Educational Training College and Center	Pachmarhi

Infantry Educational Training College and Center	Guna
State's Institute of Education Management and Training	Bhopal
MP Wheat research Center	Pawar Kheda (Hoshangabad)
Tulsi Research Institute	Chitrakoot
Indian Institute of Tourism and Tourism Management	Gwalior
Indian Institute Of Management	Indore
Madhya Pradesh Naronha Administration Academy	Bhopal
National technical Traning and research Institute	Bhopal
MP Land Revenue and Records training Institute	gwalior
High Security Animal Laboratory	Bhopal
IT Enabled Services Traning Center	Bhopal
National Training Institute For DSP's Proposed	Bhopal
State's Coucil of Educational Reserch and Training	Bhopal
State's Science Education Institute	Jabalpur
Bharat Ratna Bhim Rao Ambedkar Telecommunication Training Institute	Jabalpur
Center For Research and Industrial Staff Performance (CRIPS)	Bhopal
State Information of Information technology (IIIT)	Bhopal
Women and Child Development Training Institute	Betul

Offices & Headquarters Of Prominent Organizations and Institutes of Madhya Pradesh

Capital of Madhya Pradesh	Bhopal
Madhya Pradesh Public Service Commission	Indore
Madhya Pradesh High Court	Jabalpur
Madhya Pradesh High Court's Bench	Indore and Gwalior
Madhya Pradesh State Secretariat	Bhopal
State Election Commission	Bhopal
Madhya Pradesh Scheduled Tribes Commission	Bhopal
Madhya Pradesh Backward Caste Commission	Bhopal
Madhya Pradesh State Minorities Commission	Bhopal
ECO-Tourism Development Board	Bhopal
Madhya Pradesh Seed & Farm Development Corporation (1980)	Bhopal
Madhya Pradesh State Industrial Corporation (1991)	Bhopal
Madhya Pradesh Small Industries Corporation (1969)	Bhopal
Madhya Pradesh Industrial Development Corporation (1963)	Bhopal
Madhya Pradesh Garment Industry Board (1972)	Bhopal
Madhya Pradesh Mining Corporation	Bhopal
Madhya Pradesh Finance Corporation	Indore
Madhya Pradesh Agro Industries Corporation	Bhopal
Madhya Pradesh Khadi & Rural Industries Board	Bhopal
Madhya Pradesh Garments Industries Board	Indore
Madhya Pradesh Garments Industries Corporation (1970)	Bhopal
Madhya Pradesh Handloom Directorate (1976)	Bhopal
Madhya Pradesh Export Corporation Limited (1977)	Bhopal
Madhya Pradesh Handicrafts Development Corporation (1981)	Bhopal
Madhya Pradesh State Social Welfare Board	Bhopal
Madhya Pradesh Wakf Board	Bhopal
Madhya Pradesh Backward Castes and Minorities Finance and Development	Bhopal

Corporation	
Madhya Pradesh Cow Husbandry and animal Growth Board	Bhopal
Madhya Pradesh State Mining Corporation (Khanji Nigam)	Bhopal
Madhya Pradesh Leather Development Corporation	Bhopal
Madhya Pradesh Auditor General Office	Gwalior
Madhya Pradesh Badminton Association (1946)	Jabalpur
Regional Office of Sports Authority Of India (SAI)	Goragaon (Bhopal)
Madhya Pradesh Electricity Board Headquarter	Jabalpur
Madhya Pradesh Pollution Control Board	Bhopal
Jawaharlal Nehru Police Academy (1986)	Sagar
Madhya Pradesh State Development Corporation	Bhopal
Madhya Pradesh Energy Development Corporation	Bhopal
Dhrupad Sangeet Academy	Bhopal
Madhya Pradesh State Legal Service Authority	Jabalpur
RCVP Noronha Administration Academy	Bhopal
Mati Kala Board	Bhopal
Madhya Pradesh Science and Technology Council	Bhopal
Madhya Pradesh Human Rights Commission	Bhopal
Madhya Pradesh State Women Commission	Bhopal
Madhya Pradesh Consumers Commission	Bhopal
Madhya Pradesh Road Transport Corporation	Bhopal
Madhya Pradesh State Forests Development Corporation Limited	Habibganj (Bhopal)
Entrepreneurship Development Center	Bhopal
Madhya Pradesh Labour Welfare Board	Bhopal
Madhya Pradesh Madarasa Board	Bhopal
Narmada Valley Development Authority	Bhopal
Madhya Pradesh Lands Developments Corporation	Bhopal
Madhya Pradesh Professional Examination Board (MPPEB, also known as VyavsayikPariksha Mandal or VYAPAM)	Bhopal
Madhya Pradesh Agro Industries Corporation	Bhopal
Railway Recruitment Board	Bhopal
Madhyanchal Bhavan	Delhi
National Bhavan	Delhi
Bational Horticulture Institute	Indore (Proposed)
National Institute Of Fashion Technology (NIFT)	Bhopal
National Institute of governance and Urban Management	Bhopal

➤ Largest and Smallest in Madhya Pradesh

Largest		Smallest	
Division (Population)	Indore	Division (Population)	Shahdol
Division (Area)	Jabalpur	Smallest Division (Area)	Shahdol
District (Population)	Indore	District (Population)	Niwari
District (Area)	Chhindwara	District (Area)	Niwari

District with the Highest Tribal Population	Dhar	District with the Lowest Tribal Population	Bhind
Largest National Park	Kanha Kisli (Mandla)	Smallest National Park	Fossils (Dindori)

- Largest Railway Junction - Itarsi (Hoshangabad)
 - Longest Bridge - On the Sindh River
 - Highest Bridge - Chambal River Bridge (Morena)
 - Most Populous Tribe - Bhil
 - Most Populous Schedule Caste - Jaatav
 - Highest Peak - Dhoopgarh (1350 m)
 - Longest River - Narmada (1312 km) (1077 km in MP)
10. Length of Madhya Pradesh measured from north to south is?
(A) 500 km (B) 520 km
(C) 560 km (D) 605 km
 11. Width of Madhya Pradesh measured from East to West is?
(A) 620 km (B) 750 km
(C) 830 km (D) 870 km
 12. Area wise the first two largest districts of Madhya Pradesh are?
(A) Chhindwada, Sagar
(B) Indore, Chhindwada
(C) Bhopal, Shahdol
(D) Sidhi, Chhindwada
 13. Area wise the first three smallest districts of Madhya Pradesh are?
(A) Harda, Umaria, Bhopal
(B) Sheopur, Niwari, Morena
(C) Niwari, Datia, Bhopal
(D) Jhabua, Mandla, Shivpuri
 14. Population wise, the first three largest districts of Madhya Pradesh are?
(A) Indore, Harda, Mandla
(B) Indore, Jabalpur, Sagar
(C) Sidhi, Barwani, Shivpuri
(D) Sidhi, Jabalpur, Sagar

Objective Questions

1. Madhya Pradesh shares its largest boundary with which state?
(A) Gujarat (B) Uttar Pradesh
(C) Rajasthan (D) Maharashtra
2. Madhya Pradesh shares its shortest boundary with which state?
(A) Chhatisgarh (B) Uttaranchal
(C) Gujarat (D) Uttarakhand
3. Which among the following is the nearest port to Madhya Pradesh?
(A) Mumbai (B) Vishakhapatnam
(C) Paradeep (D) Kandla
4. The boundary of how many states adjoin Madhya Pradesh?
(A) 5 (B) 6
(C) 7 (D) 8
5. The present area of Madhya Pradesh is?
(A) 3,48,256 sq.km. (B) 3,27,249 sq.km.
(C) 3,08,335 sq.km. (D) 3,08,252 sq.km.
6. What is the rank of Madhya Pradesh in India area wise?
(A) First (B) Second
(C) Third (D) Fourth
7. What is the rank of Madhya Pradesh in India population wise?
(A) Fourth (B) Fifth
(C) Sixth (D) Seventh
8. What is the time gap between eastern and western most points of Madhya Pradesh?
(A) 30 minutes (B) 45 minutes
(C) 34 minutes (D) 46 minutes
9. Latitudinal and longitudinal position of Madhya Pradesh is?
(A) 21°6' to 26°30' North latitude
(B) 74°59' to 82°66' East longitude
(C) Both A & B
(D) Neither A nor B
15. The line of India Standard time (IST) is passing through which district of M.P.?
(A) Rewa (B) Jabalpur
(C) Sagar (D) Singrauli
16. Which among the following is the false statement related to M.P.?
(A) Madhya Pradesh is a landlocked state
(B) Mortality rate in M.P. is higher than India.
(C) Birth rate in M.P. is lesser than India
(D) None of these
17. Which is the largest tehsil in Madhya Pradesh (area wise)?
(A) Bhandar (B) Indore
(C) Suthaliya (D) Ajaygarh
18. Which is the smallest tehsil in Madhya Pradesh (areawise)?
(A) Raun (B) Ajaygarh
(C) Khujner (D) Prathvipur
19. Which districts of Madhya Pradesh adjoin to Gujarat?
(A) Jhabua (B) Alirajpur, Jhabua
(C) Ratlam, Jhabua (D) Alirajpur

20. Which is the most literate district of Madhya Pradesh?
(A) Bhopal (B) Jabalpur
(C) Sagar (D) Narsinghpur
21. Which district of Madhya Pradesh has the lowest Sex-ratio?
(A) Panna (B) Satna
(C) Morena (D) Bhind
22. Which district of Madhya Pradesh has the highest Sex-ratio?
(A) Chhindwada (B) Balaghat
(C) Mandla (D) Umaria
23. Which district of Madhya Pradesh has the lowest population density?
(A) Shahdol (B) Umaria
(C) Katni (D) Dindori
24. Which district of Madhya Pradesh has highest population density?
(A) Bhopal (B) Ujjain
(C) Rajgarh (D) Guna
25. When was Madhya Pradesh come into existence?
(A) 1 Nov, 1954 (B) 1 Nov, 1955
(C) 1 Nov, 1956 (D) 1 Nov, 1957
26. How many divisions are there in Madhya Pradesh?
(A) 12 (B) 15
(C) 10 (D) 20
27. How many districts are there in M.P.?
(A) 52 (B) 55
(C) 60 (D) 65
28. Which is the state animal of Madhya Pradesh
(A) Tiger (B) Swamp deer
(C) Buffalo (D) Bear
29. Which is the state bird of Madhya Pradesh?
(A) Paradise flycatcher
(B) Cuckoo
(C) Pigeon
(D) Sparrow
30. Which among the following is the state tree of Madhya Pradesh?
(A) Margosa (Neem)
(B) Banyan tree (Bargad)
(C) Teak Tree
(D) Mango Tree
31. How many development Blocks are there in Madhya Pradesh?
(A) 300 (B) 312
(C) 313 (D) 260
32. According to Census-2011, what is the literacy rate of Madhya Pradesh?
(A) 70.30% (B) 61.48%
(C) 69.32% (D) 63.7%
33. According to Census- 2011, what is the population of Madhya Pradesh?
(A) 7,26,26,809 (B) 7,03,995,89
(C) 6,04,833,809 (D) 7,04,89,298
34. How many seats are there in the legislative Assembly of Madhya Pradesh?
(A) 231 (B) 240
(C) 250 (D) 260
35. When was the Banyan tree declared as the state tree of Madhya Pradesh?
(A) 1 Jan, 1980 (B) 1 Nov, 1981
(C) 26 Jan, 1981 (D) 15 Aug, 1980
36. Who has written the state song of Madhya Pradesh?
(A) Raja Mourya
(B) Rajesh Shivastav
(C) Mahesh Shrivastav
(D) Rajesh Bhaya
37. The eastern most district of Madhya Pradesh is _____
(A) Sidhi (B) Singrauli
(C) Shahdol (D) Anuppur
38. The western most district of Madhya Pradesh is _____
(A) Alirajpur (B) Jhabua
(C) Ratlam (D) Mandsaur
39. The northern most district of Madhya Pradesh is _____
(A) Morena (B) Bhind
(C) Sheopur (D) Gwalior
40. The southern most district of Madhya Pradesh is _____
(A) Burhanpur (B) Badwani
(C) Chhindwada (D) Balaghat

Answer Sheet

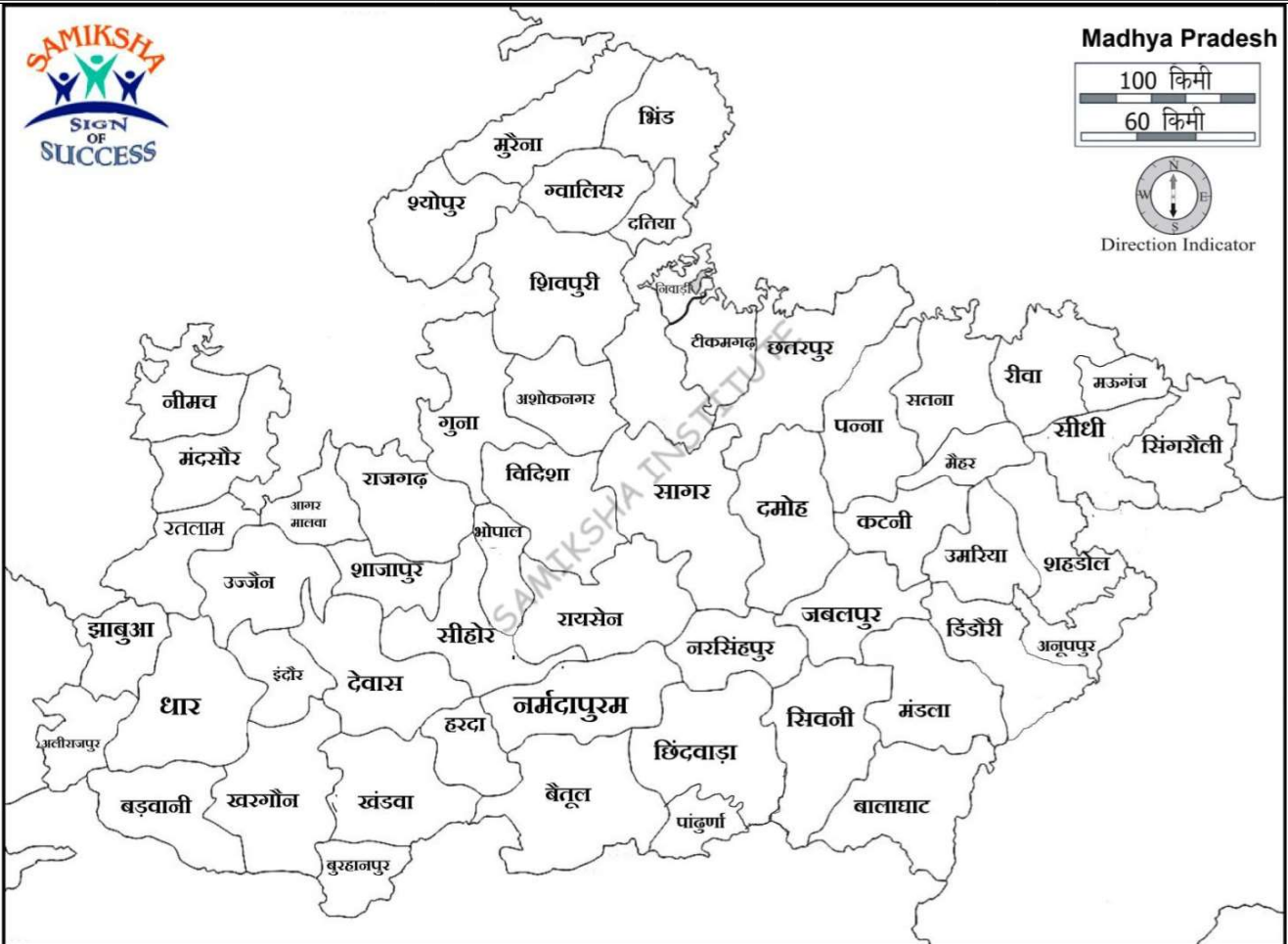
1	2	3	4	5	6	7	8	9	10
B	C	A	A	D	B	B	C	C	D
11	12	13	14	15	16	17	18	19	20
D	A	C	B	D	C	B	B	B	B
21	22	23	24	25	26	27	28	29	30
D	B	D	A	C	C	A	B	A	B
31	32	33	34	35	36	37	38	39	40
C	A	A	A	B	C	B	A	A	A

CHAPTER- 9

Madhya Pradesh: District & Divisions

Division is an administrative unit, where commissioner is the administrative head of division and he represents state government at this level. There are 10 divisions and 55 districts in Madhya Pradesh.

Divisions in Madhya Pradesh



	Division	Headquarter	District
1.	Indore (Population wise largest)	Indore	Indore, Dhar, Jhabua, Alirajpur, Khandwa (West Nimar) Barwani, Burhanpur
2.	Ujjain	Ujjain	Ujjain, Ratlam, Shajapur, Mandasaur, Neemuch, Dewas, Agar, Malwa
3.	Gwalior	Gwalior	Gwalior, Shivpuri, Guna, Datia, Ashoknagar
4.	Chambal	Morena	Morena, Bhind, Sheopur
5.	Rewa	Rewa	Rewa, Satna, Sidhi, Singrauli, Mauganj, Maihar
6.	Shahdol	Shahdol	Shahdol, Umaria, Anuppur
7.	Sagar	Sagar	Sagar, Damoh, Panna, Niwari, Chhatarpur, Tikamgarh
8.	Bhopal	Bhopal	Bhopal, Sehore, Raisen, Rajgarh, Vidisha

9.	Narmadapuram	Narmadapuram	Narmadapuram, Harda, Betul
10.	Jabalpur (Area Wise Largest)	Jabalpur	Jabalpur, Mandla, Pandurna, Narsinghpur, Dindori, Chhindwara, Seoni, Balaghat, Katni,

- Dindori was remerged in Jabalpur division in 2012.
- In August, 2008 the name of Hoshangabad division was changed to Narmadapuram. At the same time the Betul district was included in the division. Shahdol division was established on

14th June 2008. Population and area wise, it is the smallest division.

☞ **Note:** 11th division is expected to be constituted as Chhindwara division and it will include 3 districts; Chhindwara, Seoni and Balaghat.

Objective Questions

- Which of the following river of Madhya Pradesh serves as separation line between North and South India?
(A) Chambal (B) Betwa
(C) Narmada (D) Beganga
- Which of the following district is adjoining to Uttar Pradesh and Rajasthan?
(A) Morena (B) Bhind
(C) Datia (D) Sidhi
- Which district of Madhya Pradesh has Rice Research center?
(A) Indore (B) Ujjain
(C) Bhopal (D) Barwani
- Which was the first district of Madhya Pradesh to issue Human Development Report 1995?
(A) Gwalior (B) Indore
(C) Narsinghgarg (D) Rajgarh
- NH-3 passes through the National park of -
(A) KanhaKisli (B) Madhav
(C) Bandhavgarh (D) Satpura
- World's second and India's first Tribal Communication reserch Center is located in:-
(A) Mandla (B) Berasia
(C) Birsinghpur (D) Jhabua
- What is the name of emporium of Madhya Pradesh?
(A) Mrignayenee (B) Vasudha
(C) Both A and B (D) None of these
- Pithampur lies in which district of Madhya Pradesh?
(A) Indore (B) Bhopal
(C) Gwalior (D) Dhar
- The first village court of Madhya Pradesh was set up at:-
(A) Neemuch (B) Katni
(C) Seoni (D) Sagar
- Narmada valley is situated in between the mountain range of-
(A) Vindhyachal and Eastern Ghat
(B) Satpura and Western Ghat
(C) Vindhyachal and Aravali
(D) Vindhyachal and Satpura
- Fair of Tejaji is organized at-
(A) Guna (B) Rewa
(C) Porsa (D) Ujjain
- Which among the following is incorrect?
(A) Tomb of Bajirao - Khargone
(B) Tomb of Baiju Bawra - Chanderi
(C) Tomb of Holkar - Bhind
(D) Tomb of Chain Singh - Bhopal
- Which symbol is not found in the regional emblem of Madhya Pradesh?
(A) Stupa (B) Banyan
(C) Wheat grain (D) Plough
- Cultivation of opium (Afim) occurs maximum in which district of Madhya Pradesh?
(A) Morena (B) Mandsaur
(C) Dewas (D) Sehore
- State Forest Research Institute is located at-
(A) Hoshangabad (B) Jabalpur
(C) Betul (D) Narsinghpur
- OmkareshwarMandhata is located in the district of -
(A) Khandwa (B) Mandsaur
(C) Ujjain (D) Jabalpur
- Sidhi and Singrauli district come under which division-
(A) Gwalior division (B) Rewa division
(C) Chambal division (D) Ujjain division
- Which of the following district of Madhya Pradesh has maximum sex ratio, according to the census 2011?
(A) Jhabua (B) Balaghat
(C) Narsinghpur (D) Indore
- Heliodorus pillar in vidisha was erected for the sake of god-
(A) Ram (B) Vasudev
(C) Shiv (D) Varun
- National Social Science Institute of Madhya Pradesh is located at-
(A) Jhabua (B) Sarangpur
(C) Raghogarh (D) Mhow

Answer sheet

1	2	3	4	5	6	7	8	9	10
C	A	D	D	B	D	A	D	A	D
11	12	13	14	15	16	17	18	19	20
A	D	D	B	B	A	B	B	B	D

CHAPTER- 10

PRACTICE SET

- What is the length of Narmada River in M.P.?
(A) 1066 km (B) 1055 km
(C) 1077 km (D) 1070 km
- From how many districts of M.P. the line of cancer passes through?
(A) 12 (B) 13
(C) 14 (D) 15
- Which district of M.P. is famous for manganese ore?
(A) Balaghat (B) Chhindwara
(C) Mandla (D) Jabalpur
- Which of the following National highway does not pass through M.P.?
(A) NH - 3 (B) NH - 4
(C) NH - 12 (D) NH - 75
- Which is the longest state highway of M.P.?
(A) SH - 12 (B) SH - 18
(C) SH - 19 (D) SH - 20
- Which of the following districts of M.P. does not present on the border of Rajasthan?
(A) Guna (B) Neemuch
(C) Alirajpur (D) Mandsaur
- Kewati water fall is present on which river.
(A) Narmada (B) Chambal
(C) Mahana (D) None of these
- Sahasra dhara water falls present at which river?
(A) Chambal (B) Mahi
(C) Tapti (D) Narmada
- Tropic of cancer does not pass through which district?
(A) Mandsaur (B) Ujjain
(C) Ratlam (D) Vidisha
- Kuno wildlife sanctuary situated in which district of M.P.?
(A) Chhatarpur (B) Sheopur
(C) Tikamgarh (D) Indore
- Gondwana region in M.P.?
(A) South-east M.P.
(B) South-west M.P.
(C) North-east M.P.
(D) North-west M.P.
- Smallest sanctuary of M.P.?
(A) Ralamandal (B) Bori
(C) Kuno (D) Karera
- Which region is known as M.P.'s Cherapunji?
(A) Jhabua (B) Alirajpur
(C) Indore (D) None of these
- Which of the following is the smallest district of M.P. in area?
(A) Alirajpur (B) Datia
(C) Chhindwara (D) Katni
- Which river is the life line of M.P.?
(A) Kshipra (B) Chambal
(C) Mahi (D) Narmada
- Which river does not flow towards west?
(A) Mahi (B) Tapti
(C) Chambal (D) Narmada
- Which is the highest dam of M.P.?
(A) Indira Sagar dam (B) Gandhi Sagar dam
(C) Bairaj dam (D) None of these
- Which district has the Banganga canal?
(A) Raisen (B) Balaghat
(C) Vidisha (D) Narsingpur
- The districts through which the Tropic of Cancer does not pass?
(A) Ratlam-Ujjain (B) Agar-Rajgarh
(C) Bhopal-Jabalpur (D) Indore-Balaghat
- Which district has the highest number of Scheduled Tribes (ST)?
(A) Ratlam (B) Dhar (C) Ujjain (D) Shahdol
- Which of the following states does not touch the M.P.'s boundary?
(A) Uttar Pradesh (B) Chhatisgarh
(C) Rajasthan (D) Jharkhand

22. How much area is covered with forest in M.P.?
(A) 29% (B) 70 % (C) 30.72% (D) 23%
23. Which type of forest found in M.P.?
(A) Sub tropical (B) Tropical
(C) Dry decidrious (D) All
24. Which dam is not built on the Narmada River?
(A) Gandhi sagar (B) Bargi
(C) Indira sagar (D) Omkareswar
25. Which river formed Estuary?
(A) Tapti (B) Narmada and Tapti
(C) Chambal (D) Narmada
26. Which river does not flows in M.P.?
(A) Narmada (B) Krishna
(C) Tapti (D) Son
27. Which of the following district of M.P. is most affected by soil erosion?
(A) Sheopur (B) Bhopal
(C) Mandsaur (D) Morena
28. Which type of climate found in M.P.?
(A) Uniform climate (B) Dry continental
(C) Uniform temperate (D) Monsoon type
29. What is called, winter season in M.P.?
(A) Chaumasa (B) Unala
(C) Siyala (D) None
30. On the basis of climate diversity, M.P. is divided into how many parts?
(A) 8 (B) 5 (C) 4 (D) 6
31. By which Mansoon M.P. recieves its maximum precipitation?
(A) South - east Monsoon
(B) South - west Monsoon
(C) North - west Monsoon (D) All
32. Which month's summer is known as second season in M.P. ?
(A) July-August
(B) September-October
(C) August-September
(D) October-November
33. Which is the highest production crop of MP?
(A) Rice (B) Wheat (C) Maize (D) Soyabean
34. Which district produces highest rice?
(A) Guna (B) Balaghat
(C) Morena (D) Bhopal
35. Ban sagar project situated at?
(A) Narmada (B) Chambal
(C) Son (D) Tapti
36. Mahadev hills present in which state?
(A) Odhisa (B) Assam
(C) M.P. (D) Goa
37. Which is highest peak of malwa pleaeu
(A) Sigar (B) Janapav
(C) Guru Shikhar (D) Hazari
38. In which mountain series of M.P. Tapti River has its origin?
(A) Satpura hills (B) Rewa -panna plateau
(C) Malwa plateau (D) Janapav hills
39. Tropic of cancer passes centrally through which plateau of M.P.?
(A) Bundelkhand plateau
(B) Malwa plateau
(C) Baghel khand plateau
(D) Rewa - panna plateau
40. Pachmarhi situated in which range.
(A) Maikal range (B) Mahadev range
(C) Dhupgarh range (D) Aravali rang
41. Highest peak of Bundelkhand plateau.
(A) Sigar (B) Mahadev
(C) Siddha baba (D) Dhupgarh
42. Which era's rock's evidence does not found in M.P.?
(A) Dharwar group (B) Dravid group
(C) Puran group (D) Arya group
43. In MP coal is found in which group of rocks?
(A) Cuddapa (B) Gondawana
(C) Arya (D) Dharwad
44. By Geo - scientific view, M.p. is the part of which of the following.

- (A) Deccan trap shell (B) Vindhyan (A) Ujjain (B) Indore
(C) Gondwana (D) None of these (C) Bhopal (D) Dhar
45. Minerals found in M.P. 56. Where is Horticulture University?
(A) Atomic mineral (B) None - metallic (A) Jabalpur (B) Sagar
(C) Metallic mineral (D) All (C) Mandsaur (D) Balaghat
46. Which is the highest peak of Vindhyanchal Mountain? 57. What is the name of MP's first irrigation project?
(A) Dhupgarh (B) Amarkantak (A) Chambal project (B) Narmada project
(C) Pachmarhi (D) None (C) Tapti project (D) Betwa project
47. How much of India's geographical area occupied by M.P.? 58. Where does chambal originated from?
(A) 12.23% (B) 20% (C) 9.39% (D) 8.38% (A) Mahu (B) Amarkantak
(C) Malwa plateua (D) None
48. What is old name of Sanjay Gandhi national part of M.P.? 59. Which forest found in the region of 50-100 cm percipitation?
(A) Indira Gandhi (A) Tropical decidious forest
(B) Priya-Darsani (B) Tropical dry deciduoues
(C) Dubri (D) None (C) Tropical evergreen
(D) None of the above
49. State's only reptile park is situated at? 60. When did new forest policy made in M.P?
(A) Bandhavgarh (B) Kanha kisli (A) 1952 (B) 2005 (C) 2015 (D) 2019
(C) Bhopal (D) Panna
50. Bandhavgarh national park is fomous for? 61. Where the largest coal region of MP located?
(A) Barahsingha (B) Wild Bullalo (A) Sohagpur (B) Shahdol
(C) White tiger (D) Deer (C) Satna (D) Sidhi
51. How many national parks are there in M.P. 62. Bauxite is ore of which mineral?
(A) 10 (B) 15 (A) Aluminium (B) Copper
(C) 12 (D) 14 (C) Graphite (D) Lead
52. M.P.'s Metrological laboratory is situated at? 63. Where Asbestos is mainly found in M.P?
(A) Bhopal (B) Gwalior (A) Sagar (B) Alirajpur
(C) Khajuraho (D) Indore (C) Balaghat (D) Jhabua
53. M.P.'s most irrigated crop is? 64. Which soil is found in layers?
(A) Rice (B) Wheat (A) Red soil (B) Yellow soil
(C) Soyabean (D) Sugar cane (C) Black soil (D) Clay soil
54. What place does M.P. have in gram production? 65. In which soil there is maximum amount of gold?
(A) Second (B) Third (A) Red soil (B) Yellow soil
(C) Fourth (D) First (C) Black soil (D) Red - yellow soil
55. Where is national soyabean research centre situated? 66. Where is mix soil found in MP?
(A) Baghelkhand region
(B) Malwa region

- (C) Narmada region
(D) Bundelkhand region
67. Ratlam is situated on which river bank?
(A) Narmada (B) Tapti
(C) Chambal (D) None
68. Which of following areas of MP does not have the satpura range?
(A) Khandwa (B) Betul
(C) Harda (D) Chhindwara
69. Tropic of cancer passes through middle of M.P. is parallel to which river?
(A) Tapti (B) Godavari
(C) Mahanadi (D) Narmada
70. The Tava reservoir is located between?
(A) Satpura National park & Bori Sanctuary
(B) Kolar and Hallali Dam
(C) Rani Avantibai Sagar and Sukta sagar
(D) Wyrarna and Barma River.
71. Which crop sown in the maximum area of M.P?
(A) Paddy (B) Jowar
(C) Gram (D) Wheat
72. In the forest of M.P. which trees found most?
(A) Mango (B) Sal
(C) Shisham (D) Sagon
73. Which is the only hemp producing district of M.P.?
(A) Mandla (B) Kharguan
(C) Khandwa (D) Betul
74. In which year Kanha Kisli becomes national park?
(A) 1953 (B) 1943 (C) 1955 (D) 1956
75. In M.P. which is maximum soyabean producing region?
(A) Rewa-panna plateau (B) Narmada valley
(C) Bundel khand (D) Malwa
76. From the following river of M.P. which river flows from North to south?
(A) Chambal (B) Ken
(C) Kali sindh (D) None
77. Which of the following is iron ore producing district of M.P.
(A) Balaghat (B) Betul
(C) Rewa (D) Sidhi
78. Dimand is highly extracted in which region of MP?
(A) Salimabad (B) Umariya
(C) Mariya (D) Majhgawa
79. Akhajari scheme is in the river basin of?
(A) Yamuna (B) Ganga
(C) Chambal (D) Rihand
80. Where is Barna Dam located?
(A) Dindori (B) Ashok Nagar
(C) Barwani (D) Raisen
81. What type of structure of, even rain line on the map of madhya pradesh?
(A) Indulating (B) Linear
(C) Round (D) Modeled
82. Which region of M.P. has maximum effect of cold wave?
(A) South - east region
(B) South region
(C) South - west region
(D) North region
83. Which is lowest portion of M.P.?
(A) Bundelkhand plateau
(B) Baghelkhand plateau
(C) Narmada-son valley
(D) Malwa plateau
84. Which part of M.P. has maximum mineral
(A) Central part (B) Northern part
(C) East - south part (D) Southern part
85. What is big lake and small lake in Bhopal?
(A) Official residence of kings.
(B) Largest man-made lakes.
(C) The ponds
(D) Formal Garden
86. Which of the following is most developed from the Industrial view?
(A) Balaghat (B) Jabalpur

- (C) Ratlam (D)Rajgarh
87. Yashwant lake supplies water to this place?
(A) Gwalior (B)Indore
(C) Bhopal (D) Shahpura
88. Approximately how many minutes difference are there in the eastern and western part of MP?
(A) 24 min. (B) 28 min.
(C) 32 min. (D) 34 min.
89. Which natural part of M.P. is known as vindhayan plateua?
(A) Bundelkhand plateau
(B) Rewa plateau
(C) Central Indian plateau
(D)Baghelkhand plateau
90. Which is not correctly matched.
(A) Rajghat dam - Chambal river
(B) Gandhi sagar dam- Chambal river
(C) Bargi dam - Narmada river
(D) Ban sagar Dam - son river
91. Which is not correctly matched?
(A) Kapildhara - Bhangarh
(B) Bheda ghat - Jabalpur
(C) Chachai water fall - Rewa
(D) Dugdhdhara - Amarkantak
92. From the following which is origination place of tapti?
(A) Amarkantak (B) Rajpipla
(C) Mutai (D) Janupa
93. National part of madhya pradesh famous for kharmor bird?
(A) Madhav (B) Kanha
(C) Savana (D) Bandhavgarh
94. The Sanctuary which is known for preserving the 'Great Indian Bustard'?
(A)Kanha (B)Ghatigaon
(C)Chambal (D)Gharial
95. Which animal does not afraid of tigers and is found in all the sanctuaries and reserves of MP?
(A) Alsi Bhalu (B) Chintalas
(C) Gaur (D) Barasinga
96. Also known as sunset point Bombi dadar, it is a major attraction of which national park?
(A) Panna National Park
(B) Madhav National Park
(C) Fossil National Park
(D) Kanha National Park
97. Select the district group of MP that has more than 50% land under forests-
(A) Khandwa, Betul, Hoshangabad
(B) Mandla, Sidhi, Shahdol
(C) Chhindwara, Seoni, Harda
(D) Sagar, Vidisha
98. When was the MP state forest development board established?
(A) 24 July 1975 (B) 5 July, 1981
(C) 20 July, 1979
(D) 10 August, 1955
99. Which dam was constructed in 1927 in Morena?
(A) Kotwal (B) Pagara
(C) Pilua (D) Harsi
100. Which of following is classified as a major forest product in MP?
(A) Raisin (B) Bark
(C) Tendu leaves (D) Timber

Answer Key

1.	C	21.	D	41.	C	61.	A	81.	D
2.	C	22.	C	42.	B	62.	A	82.	D
3.	A	23.	B	43.	B	63.	D	83.	C
4.	B	24.	A	44.	C	64.	D	84.	C
5.	C	25.	B	45.	D	65.	D	85.	B
6.	C	26.	B	46.	D	66.	D	86.	B
7.	C	27.	D	47.	C	67.	C	87.	B
8.	D	28.	D	48.	C	68.	C	88.	D
9.	A	29.	C	49.	C	69.	D	89.	B
10.	B	30.	C	50.	C	70.	A	90.	A
11.	A	31.	B	51.	C	71.	A	91.	A
12.	A	32.	B	52.	D	72.	D	92.	C
13.	B	33.	D	53.	B	73.	C	93.	C
14.	B	34.	B	54.	D	74.	C	94.	B
15.	D	35.	C	55.	B	75.	D	95.	C
16.	C	36.	C	56.	C	76.	D	96.	D
17.	A	37.	A	57.	A	77.	A	97.	A
18.	B	38.	A	58.	A	78.	D	98.	A
19.	D	39.	B	59.	A	79.	B	99.	B
20.	B	40.	B	60.	B	80.	D	100.	D

Geography of MP

- MP is divided in how many forest circles?
(A) 12 (B) 13 (C) 15 (D) 16
- What is the percentage of reserved forests out of the total forest area of state?
(A) 63.36% (B) 64.36%
(C) 65.36% (D) 66.36%
- Shunglu committee is related to-
(A) Narmada River Dispute
(B) Chambal River Dispute
(C) Betwa River Dispute
(D) Kshipra River Dispute

- In which year river Narmada has given the title of living river?
(A) 2015 (B) 2016 (C) 2017 (D) 2018
- Which of the following river does not joins river Narmada from left side?
(A) Barnar (B) Ganjal
(C) Denwa (D) Tindoli
- When was the "Namami devi Narmade" Programme started?
(A) 10 Dec. 2016 (B) 11 Dec. 2016
(C) 12 Dec. 2016 (D) 13 Dec. 2016
- Which of the following river is not a tributary of Tapti?
(A) Purna(B) Shiva(C)Gopad(D) Girnar
- Which river was described in 'Kadambari' of Banbhatta and 'Meghdut of Kalidas'?
(A) Chambal (B) Narmada
(C) Betwa (D) Sindh
- What is 'Devgarh'?
(A) Iceland of Betwa
(B) Iceland of Narmada
(C) Iceland of Chambal
(D) Iceland of Sindh
- 'Ashta' city is situated on the bank of which river?
(A)Chambal(B)Parvati(C)Betwa(D)Sindh
- 'Bihad' and 'Velan' are the tributories of which river?
(A) Sindh (B) Tawa
(C) Tons (D) Kalisindh
- Which of the following is not correctly matched?
(A) Badhelkhand - 7%
(B) Rewa-Panna Plateau - 10.37%
(C) Bundelkhand - 7.7%
(D) Satpura-Maikal range - 26%
- Which is correctly matched?

Mountain		Height
(1) Peak of sigar	-	881 M.

- (2) Janapava - 854 M.
(3) Dhajari - 810 M.
(4) Peak of Siddhababa- 1172 M.
(A) 1 and 2 (B) 2 and 3
(C) 1, 2, 3 (D) All of them
14. The Malwa plateau spreads over how much percent land area of M.P.?
(A) 28.6% (B) 25.56%
(C) 26% (D) 29.23%
15. The tropic of cancer does not pass through which of the following district?
(A) Ujjain (B) Vidisha
(C) Umaria (D) Sidhi
16. The tropical savana type climate is not been observed in which of the following district?
(A) Jhabua (B) Badwani
(C) Burhanpur (D) Betul
17. Which Isothermal line divides the MP into two equal parts?
(A) 21°C (B) 22°C (C) 23°C (D) 24°C
18. Where the modern observatory was developed in MP?
(A) Jabalpur (B) Indore
(C) Ujjain (D) Bhopal
19. Where the only office of Indian Meterological Department (IMD) is located in MP?
(A) Bhopal (B) Ujjain
(C) Jabalpur (D) Indore
20. Average rainfall in Vindhyan Mountain Range is?
(A) 100-106 cm (B) 50-100 cm
(C) 210-216 cm (D) 310-316 cm
21. What is the rank of MP in mineral resource on the basis of availability.
(A) First (B) Second
(C) Third (D) Fourth
22. HINDALCO aluminium plant is supplied bauxite from which district of MP?
(A) Anuppur (B) Shahdol
(C) Katni (D) Sidhi
23. What is 'Corundum'?
(A) Oxide of Manganese.
(B) Oxide of Iron ore.
(C) Oxide of Bauxite.
(D) None of above
24. Which is the highest quality of Iron ore?
(A) Siderite (B) Mangnetite
(C) Hematite (D) Limonite
25. Which Iron ore is found in abundance in India?
(A) Hematite (B) Mangnetite
(C) Siderite (D) Limonite
26. Which district stands 2nd in the production of china clay?
(A) Jabalpur (B) Rewa
(C) Betul (D) Chhatarpur
27. Bhilai cement plant is supplied Dolomite from which place?
(A) Jhabua (B) Katni
(C) Sidhi (D) Satna
28. Which mineral is extracted from Ramkheria Mines?
(A) Tin (B) Bauxite
(C) Iron ore (D) Diamond
29. When was the MP mineral development board established?
(A) 8 Jan, 1956 (B) 19 Jan, 1962
(C) 22 Jan, 1962 (D) 29 Jan, 1995
30. Which year was announced as Road year in MP?
(A) 2005 (B) 2006
(C) 2007 (D) 2008
31. In which year the MP road transport corporation was established?
(A) 1952 (B) 1962

- (C) 1972 (D) 1982
32. Which district of MP has highest road density?
(A) Jabalpur (B) Indore
(C) Satna (D) Bhopal
33. Which is the second biggest National Highway of MP?
(A) NH-3 (B) NH-47
(C) NH-12 (D) NH-78
34. Which of the following National Highway does not pass through MP?
(A) NH-56 (B) NH-69A
(C) NH-86A (D) NH-74
35. What is the rank of MP according to length of National Highways?
(A) First (B) Second
(C) Third (D) Fourth
36. The shortest state highway passes through which district of MP?
(A) Chhatarpur (B) Panna
(C) Satna (D) Rewa
37. How many state highways pass through MP?
(A) 47 (B) 48 (C) 49 (D) 50
38. Software company Infosys Super Corridor is under construction in?
(A) Indore (B) Bhopal
(C) Jabalpur (D) Gwalior
39. Which is the shortest state highway of MP?
(A) SH-339A (B) SH-19A
(C) SH-44 (D) SH-37A
40. In which year the PM Gramin Sadak Yojana-2 was started?
(A) 2010-11 (B) 2011-12
(C) 2012-13 (D) 2013-14
41. Which of the following is not a dry port in MP?
(A) Dhar (B) Indore
(C) Bhind (D) Malanpur
42. Where is the confluence point of NH-7 & NH-27?
(A) Panna (B) Rewa
(C) Chhatarpur (D) Tikamgarh
43. The state farmers commission was established in which year in MP?
(A) 2005 (B) 2006 (C) 2007 (D) 2008
44. The second highest sown crop of MP?
(A) Wheat (B) Jowar
(C) Soyabean (D) Gram
45. In how many parts MP is divided on the basis of agricultural areas?
(A) 5 (B) 6 (C) 7 (D) 8
46. MP is divided into how many crop regions?
(A) 4 (B) 5 (C) 6 (D) 7
47. (S.R.I.) technique is related to which crop?
(A) Paddy (B) Soyabean
(C) Wheat (D) Gram
48. The first report of Farmers Economic Survey was issued in which year?
(A) 2011 (B) 2012
(C) 2013 (D) 2014
49. What is the average area of land holdings in MP?
(A) 1.78 Hectare (B) 1.6 Hectare
(C) 1.58 Hectare (D) 1.48 Hectare
50. In which year the "International Wheat and Maize Research Centre, Khemaria (Jabalpur) was established?
(A) 2009 (B) 2010
(C) 2011 (D) 2012
51. Which crop is also known as 'Queen of grains'?
(A) Barley (B) Jowar
(C) Milet (D) Maize
52. Where is the Asia's largest pulse and crops research and technology dissemination centre established?

- (A) Sehore (B) Bhopal (C) Raisen (D) Neemuch
(C) Jabalpur (D) Ujjain
53. For the farming of flowers the research centre in Sehore is being established with the help of which country?
(A) Israel (B) Malaysia
(C) America (D) Russia
54. What is the rank of MP in terms of live stock?
(A) First (B) Second
(C) Third (D) Fourth
55. Gujar Jamali and Badagaon tehsil are famous for?
(A) Production of Hemp.
(B) Production of Opium
(C) Production of Tabacco.
(D) Production of Sugarcane.
56. What is the rank of MP in crop production?
(A) Fourth (B) Fifth
(C) Sixth (D) Seventh
57. Where the second butterfly park of MP is established?
(A) Bhopal (B) Indore
(C) Raisen (D) Jabalpur
58. Where the agro-plastic park is established in M.P.?
(A) Guna (B) Ashoknagar
(C) Shivpuri (D) Datia
59. Where the first bamboo park of MP has established?
(A) Indore (B) Bhopal
(C) Jabalpur (D) Gwalior
60. Where is the maximum pattern of agriculture land holdings in M.P.?
(A) Hoshangabad (B) Datia
(C) Harda (D) Badwani
61. Which is the district with minimum net agricultural land?
(A) Ujjain (B) Mandla
62. From which year the National Domestic animal breeding project is being operated in MP?
(A) 1995 (B) 1997
(C) 1999 (D) 2000
63. The cow breed is considered as the best breed?
(A) Malwi (B) Gawlab
(C) Nimari (D) None of these
64. What is the density of cattles in MP?
(A) 110 cattles/sq km
(B) 106 cattles/sq km
(C) 107 cattles/sq km
(D) 108 cattles/sq km
65. Operation flood-II was started in MP in?
(A) 1978 (B) 1979
(C) 1980 (D) 1981
66. How much electricity is produced in Indira Sagar Project?
(A) 1000 MW (B) 1120 MW
(C) 1200 MW (D) 1320 MW
67. Which district does not get profit from Bargi erosional project.
(A) Jabalpur (B) Katni
(C) Satna (D) Mandla
68. Barna project built by the help of which international association?
(A) World Bank
(B) Asian Development Bank
(C) International Monetry Fund
(D) International Development Agency
69. Bhagwant sagar project is built on which river?
(A) Sukta river (B) Kolar river
(C) Barna river (D) Bargi river
70. Where is Kudwa dam situated?
(A) Mandla (B) Balaghat
(C) Dindori (D) Seoni

71. Which dam is not built under Ban Sagar Project?
(A) Anbar dam (B) Bakeli dam
(C) Kadbari dam (D) Purwa dam
72. Which is world's second largest soil dam?
(A) Matiyari dam
(B) Sanjay Sarovar dam
(C) Raighat dam
(D) Matatila dam
73. Which of the following are not correctly matched?
(A) Nimkheda dam - Raisen
(B) Makodiya dam - Vidisha
(C) Barari dam - Raisen
(D) Barghal dam - Tikamgarh
74. The proposal to connect the Mahi river with which river was approved in the year 2017?
(A) Chambal (B) Narmada
(C) Betwa (D) Tapti
75. In which district Bila dam project is situated?
(A) Sagar (B) Panna
(C) Damoh (D) Chhatarpur
76. Barua Sagar reservoir built on which river?
(A) Narmada (B) Chambal
(C) Sindh (D) Betwa
77. When was first sugar mill established in MP?
(A) 1932 (B) 1934 (C) 1936 (D) 1938
78. Which is not correctly matched?
(A) Bhopal sugar mill - Sehore
(B) Barlai sugar mill - Dewas
(C) Seth govind das mill - Ujjain
(D) Jiwaji sugar mill - Nimuch
79. Where did first successful Cotton Industry Mill established in MP?
(A) Indore (B) Jabalpur
(C) Bhopal (D) Gwalior
80. Where is silk mandi situated?
(A) Mandla (B) Balaghat
(C) Pachmarhi (D) Seoni
81. Why Seoni called as 'Lucknow of MP'?
(A) Mulberry silk production
(B) Iri silk production
(C) Tasar silk production
(D) None of these
82. In which district of MP biggest vegetable oil factory situated?
(A) Vidisha (B) Indore
(C) Ujjain (D) Gwalior
83. Where is private Mega food park is situated in MP?
(A) Ujjain (B) Khargone
(C) Mandsaur (D) Dewas
84. Where is India's largest co-operative soyabean factory situated?
(A) Bhopal (B) Ujjain
(C) Indore (D) Seoni
85. Which of the following statement is wrong?
(A) MP produces 51.3% soyabean of country's total production.
(B) Soyabean oil factory is situated at Seoni.
(C) Soyabean biscuit factory is situated at Bhopal.
(D) Asia's biggest soyabean factory is situated at Indore.
86. Straw board mills situated at?
(A) Neemuch (B) Mandsaur
(C) Agar-Malwa (D) Shajapur
87. Where granulated mixed manure plant is situated?
(A) Harda (B) Hoshangabad
(C) Jabalpur (D) Narsingpur
88. Hiramal cotton mill situated at?

- (A) Indore (B) Ujjain (A) Sidhi (B) Shahdol
(C) Bhopal (D) Burhanpur (C) Singrouli (D) Anup pur
89. In how many district of MP sustainable sugarcane development programme operated?
(A) 25 (B) 26 (C) 27 (D) 28
90. Manure processing industry is situated in Ghirogi and Pipariya, this is in which district?
(A) Hoshangabad (B) Harda
(C) Dewas (D) Khargon
91. In which year Minor forest produce (trading and development) co-operative development federation formed?
(A) 1980 (B) 1984
(C) 1991 (D) 1995
92. Which of the following statement is false in relation with sal trees in MP?
(A) MP has maximum number of sal trees
(B) These trees mainly found in Red-Yellow soil regions of country like Mandla, Dindori.
(C) Sal trees destroyed by insect named borar.
(D) All of the above
93. Which place does MP has in Bamboo production?
(A) First (B) Second
(C) Third (D) Fourth
94. State's first government showroom for bamboo selling opened at?
(A) Indore (B) Ujjain
(C) Hoshangabad (D) Balaghat
95. When Deendayal Vananchal Service was started?
(A) 2014 (B) 2015
(C) 2016 (D) 2017
96. In which district charan paduka yojna has started?
(A) Sidhi (B) Shahdol
(C) Singrouli (D) Anup pur
97. Eklavya Education Development Yojna started in which year?
(A) 1984 (B) 1991
(C) 1996 (D) 2010
98. In the year 2016-17, in Laharpur Ecological Park, 54 species of which forest produce were planted?
(A) Sal (B) Sagoun
(C) Bamboo (D) Harra
99. In which year MP state bamboo mission has started?
(A) 2013 (B) 2014 (C) 2015 (D) 2016
100. Where is forest research and Human resource development institution situated?
(A) Jabalpur (B) Chhindwara
(C) Bhopal (D) Shivpuri

Answer Key

1.	D	21.	C	41.	D	61.	A	81.	B
2.	C	22.	A	42.	B	62.	C	82.	A
3.	A	23.	C	43.	B	63.	B	83.	D
4.	C	24.	B	44.	B	64.	A	84.	D
5.	D	25.	A	45.	C	65.	C	85.	D
6.	B	26.	A	46.	B	66.	A	86.	D
7.	C	27.	A	47.	A	67.	D	87.	B
8.	C	28.	D	48.	B	68.	A	88.	B
9.	A	29.	B	49.	A	69.	A	89.	C
10.	B	30.	A	50.	C	70.	B	90.	A
11.	C	31.	B	51.	D	71.	D	91.	B
12.	B	32.	C	52.	A	72.	B	92.	D
13.	D	33.	B	53.	A	73.	D	93.	A
14.	A	34.	D	54.	C	74.	B	94.	A
15.	D	35.	C	55.	A	75.	A	95.	C
16.	D	36.	A	56.	C	76.	D	96.	C
17.	A	37.	B	57.	B	77.	B	97.	D
18.	C	38.	A	58.	B	78.	D	98.	C
19.	D	39.	A	59.	A	79.	A	99.	A
20.	B	40.	C	60.	C	80.	C	100.	B