



INSIGHTSIAS
SIMPLIFYING IAS EXAM PREPARATION

INSTA STATIC QUIZ

JULY 2020

2021



INSIGHTSIAS
SIMPLIFYING IAS EXAM PREPARATION

INSTA CLASSES

★ ONLINE & OFFLINE ★

★ Starts:
15th August 2020

★ Duration:
12-15 Months



**FULL-FLEDGED CLASSROOM COURSE
FOR UPSC CSE 2021**

(Integrated Prelims, Mains and Interview Program)

Table of Contents

1. POLITY	3
2. GEOGRAPHY	12
3. ECONOMY	22
4. ART AND CULTURE.....	32
5. HISTORY.....	41
6. ENVIRONMENT	49

When things didn't fall in line even in my third Mains, I emailed InsightsonIndia to seek guidance for the next attempt. InsightsIAS Offline program suited all my requirements. Thus, I moved in and stayed nearby Insights institute.

I followed offline prelims test series of Insights and also, prelims cum mains integrated study plan that was given to core batch students. I scheduled my day in accordance with the test series timetable (please make your own timetable which suits you the best). In my timetable I ensured 8 hours of sleep, one hour of sports and 5 minutes break in between. Make a realistic timetable which is practically possible to implement, set achievable targets and be honest to yourself in following it.

I improved immensely by getting the personal feedback by Vinay Sir, and was able to top the UPSC CSE-2016.

NANDINI K R ”

AIR 01, CSE 2016



1. Polity

1) Consider the following statements regarding Lok Sabha.

1. The work and conduct of the Speaker cannot be discussed and criticized in the Lok Sabha except on a substantive motion.
2. No discussion on a matter of general public importance can take place except on a motion made with the consent of the Speaker.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: c)

The work and conduct of the Speaker cannot be discussed and criticized in the Lok Sabha except on a substantive motion: This is done with a view to safeguard the independence and Impartiality of the office of the Speaker as it is vested with great prestige, position and authority.

No discussion on a matter of general public importance can take place except on a motion made with the consent of the Speaker/Chairman as the case may be.

2) Which of these is/are some of the general characteristics of Parliamentary committees?

1. All members should be elected by the house.
2. It presents its report to the Speaker or the Chairman of the house.
3. It must have the status of a consultative committee with any Ministry at the Centre.

Select the correct answer code:

- a) 1, 3
- b) 2 only
- c) 1, 2
- d) 3 only

Solution: b)

A parliamentary committee means a committee that:

- Is appointed or elected by the House or nominated by the Speaker/Chairman.
- Works under the direction of the Speaker / Chairman
- Presents its report to the House or to the Speaker / Chairman.
- Has a secretariat provided by the Lok Sabha / Rajya Sabha.

The consultative committees, which also consist of members of Parliament, are not parliamentary committees as they do not fulfill above four conditions.

3) Consider the following statements regarding the terms of the Office of the Governor.

1. The Governor can resign at any time by addressing a resignation letter to the Chief Minister of the State.
2. The Constitution does not lay down the grounds upon which a governor may be removed by the President.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: b)

The resignation letter is submitted to the President, and not the Chief Minister.

A governor holds office for a term of five years from the date on which he enters upon his office. However, this term of five years is subject to the pleasure of the President.

The Supreme Court held that the pleasure of the President is not justifiable. The governor has no security of tenure and no fixed term of office. He may be removed by the President at any time without mentioning any grounds for his removal.

4) Which of the following from the Constitution of India is/are specially relevant to Social Justice and Empowerment?

1. Preamble
2. First Schedule
3. Third Schedule
4. Fundamental Rights
5. Directive Principles of State Policy

Select the correct answer code.

- a) 1, 5
- b) 2, 3, 4
- c) 1, 4, 5
- d) 1, 2, 5

Solution: c)

Preamble: The words "JUSTICE, social, economic and political; EQUALITY of status and of opportunity; and to promote among them all FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation".

First Schedule: It talks about Indian states and Indian territory.

Third Schedule: It contains forms of Oaths and affirmations for office holders.

Fundamental Rights:

A 23. Prohibition of traffic in human beings and forced labour

A 24. Prohibition of employment of children in factories, etc.

Directive Principles of State Policy:

A38. State to secure a social order for the promotion of welfare of the people

A39 (only first part) - The State shall, in particular, direct its policy towards securing – (a) that the citizens, men and women equally, have the right to an adequate means of livelihood.

5) Consider the following statements with reference to the Union Government.

1. The Department of Revenue is responsible for the preparation of Union Budget that is presented to the parliament
2. No amount can be withdrawn from the Consolidated Fund of India without the authorization of Parliament of India.
3. All the disbursements made from Public Account also need the Authorization from the Parliament of India

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 2 only

d) 1, 2, 3

Solution: c)

- The constitution establishes three types of funds – Consolidated Fund of India; Public Account; Contingency Fund.
- Prior authorization is required for withdrawing from Consolidated Fund of India. For Contingency fund of India, withdrawal can be authorized by the Parliament afterwards too. For Public Account, no such authorization is needed.
- Assessing the revenues from different central taxes is the primary function of the Department of Revenue and the expenditure estimates for the current and the next year for various expenditure heads are assessed by the Department of Expenditure. The Department of Expenditure also assesses the resources of the public sector undertakings (PSUs).
- The Budget division is a part of the Department of Economic Affairs.

6) Consider the following statements regarding the powers of the Lok Sabha Speaker.

1. Speaker prorogues an ongoing session of the Lok Sabha.
2. Speaker approves all the bills before it is sent for Presidential assent.
3. Speaker heads the appointments committee of the Cabinet and the appointments committee of the Lok Sabha.

Which of the above statements is/are correct?

- a) 2 only
- b) 1, 3
- c) 3 only
- d) None of the above

Solution: d)

President prorogues the session, i.e. ends it. Speaker can only adjourn it for some time.

Speaker only notifies whether a bill is money bill or not. So, statement 2 is wrong.

The PM heads the appointments committee of the Cabinet. There is no appointments committee in the Lok Sabha.

7) With reference to Parliamentary Standing Committees consider the following statements:

1. Standing Committees not only supervise the work of various departments but also their budget.
2. Public Accounts Committee is an example of Standing Committee.
3. Members of the Standing committees are selected from both Houses.
4. Standing Committees are permanent in nature.
5. Standing Committees are means of parliamentary control over the executive.

Which of the above statements is/are correct?

- a) 1, 4, 5
- b) 1, 3, 5
- c) 1, 2, 4, 5
- d) 1, 2, 3, 4, 5

Solution: c)

Standing Committees not only supervise the work of various departments but also their budget, their expenditure and bills that come up in the house relating to the department.

It is a **permanent and regular committee** which is constituted from time to time according to the provisions of an Act of Parliament or Rules of Procedure and Conduct of Business. The work done by the Indian Parliament is not only voluminous but also of a complex nature, hence a good deal of its work is carried out in these Parliamentary Committees. There are two types of Parliamentary Committee, the Standing Committee and the Ad hoc Committee. **Public Accounts Committee is an example of Standing Committee.** Members of the Standing

committees are selected from both Houses, except for **Estimates Committee where all the members are from Lok Sabha Only.**

8) Governor is appointed by the Central government to oversee the functioning of state governments. Which of the following is not such a function?

- a) Ensuring that state Government works within the Constitutional provisions
- b) Ensuring that laws made by State legislature are within the constitutional framework
- c) Ensuring that State governments do not disregard constitutional directions given by the Central government
- d) None of the above

Solution: d)

If a state government does not work within the constitutional framework or if the state government disregards Centre's directions, the Governor can recommend to the Centre the imposition of President's rule in the State.

Governor also reserves state bills for the President which a) seem ultra vires the constitution; b) seem to be breach of Centre's laws; c) seems to endanger the position of High Court etc.

9) Consider the following statements with reference to *Motion of Thanks*.

1. Amendments to *Motion of Thanks* can be moved in both the houses *in such form as may be considered appropriate by the Speaker*.
2. *The Motion of Thanks is deemed to be a no-confidence motion.*

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: b)

Notices of amendments to Motion of Thanks on the President's Address can be tabled after the President has delivered his Address. *Amendments may refer to matters contained in the Address as well as to matters, in the opinion of the member, the Address has failed to mention.* **Amendments can be moved to the Motion of Thanks in such form as may be considered appropriate by the Speaker in Lok Sabha and Chairman in Rajya Sabha.**

Members of Parliament vote on this motion of thanks. This motion must be passed in both the houses. A failure to get motion of thanks passed amounts to defeat of government and leads to collapse of government. This is why, the **Motion of Thanks is deemed to be a no-confidence motion.**

10) Consider the following statements:

1. The basic structure of the Constitution has been defined under article 368.
2. Principle of reasonableness and Welfare state are one of the elements of basic structure.
3. National emergency can be imposed by the President when the security of India is threatened by war or external aggression only.

Which of the above statements is/are correct?

- a) 2 only
- b) 2, 3
- c) 3 only
- d) 1, 2, 3

Solution: a)

- Basic structure of constitution is not defined in constitution.

- National emergency can be imposed on the basis of armed rebellion also.

11) The first Law Commission was established, under the Chairmanship of Lord Macaulay by the

- Government of India Act 1935
- Charter Act of 1833
- Law Commission Act, 1867
- Government of India Act of 1919

Solution: b)

Law Reform in the ancient period was ad hoc and not institutionalised.

However, since the third decade of the nineteenth century, Law Commissions were constituted by the Government from time to time.

The first law commission was established in 1834 under the Charter Act of 1833.

Thereafter, the second, third and fourth Law Commissions were constituted in 1853, 1861 and 1879 respectively helped adapt English Laws to Indian conditions.

The First Law Commission of Independent India was established in 1955 with the then Attorney-General of India, Mr. M. C. Setalvad, as its Chairman.

12) Article 131 of the Indian Constitution deals with

- Power of the President to seek an opinion from the apex court
- States can move directly to the Supreme Court in matters of dispute with the Centre
- Appellate jurisdiction of Supreme Court in appeals from High Courts in certain cases.
- Special leave to appeal by the Supreme Court.

Solution: b)

Article 131 of the Constitution provides for state to move directly to the Supreme Court in matters of dispute with the Centre.

Source

13) According to Eleventh Schedule of the Indian Constitution, which of the following functional items were exclusively placed within the purview of panchayats?

- Small-scale industries, including food processing industries
- Fuel and fodder
- Technical training and vocational education
- Cattle ponds, prevention of cruelty to animals.
- Libraries
- Vital statistics including registration of births and deaths.

Select the correct answer code:

- 1, 2, 3, 4, 5
- 1, 4, 5, 6
- 1, 2, 3, 5
- 2, 3, 4, 5, 6

Solution: c)

Eleventh Schedule: It contains the following **29 functional items** placed within the purview of panchayats:

- Agriculture, including agricultural extension
- Land improvement, implementation of land reforms, land consolidation and soil conservation
- Minor irrigation, water management and watershed development
- Animal husbandry, dairying and poultry
- Fisheries
- Social forestry and farm forestry

7. Minor forest produce
8. Small-scale industries, including food processing industries
9. Khadi, village and cottage industries
10. Rural housing
11. Drinking water
12. Fuel and fodder
13. Roads, culverts, bridges, ferries, waterways and other means of communication
14. Rural electrification, including distribution of electricity
15. Non-conventional energy sources
16. Poverty alleviation programme
17. Education, including primary and secondary schools
18. Technical training and vocational education
19. Adult and non-formal education
20. Libraries
21. Cultural activities
22. Markets and fairs
23. Health and sanitation including hospitals, primary health centres and dispensaries
24. Family welfare
25. Women and child development
26. Social welfare, including welfare of the handicapped and mentally retarded
27. Welfare of the weaker sections, and in particular, of the scheduled castes and the scheduled tribes
28. Public distribution system
29. Maintenance of community assets.

14) Consider the following statements.

1. The convention of appointing the senior most judge of the supreme court as the Chief Justice of India is violated more than once.
2. The Supreme Court in the first Judges Case ruled that the senior most judge of the Supreme Court should alone be appointed to the office of the chief justice of India.
3. The judge of a Supreme Court is removed on the grounds of proved misbehaviour or incapacity.

Which of the above statements is/are correct?

- a) 1, 3
- b) 2, 3
- c) 1 only
- d) 1, 2

Solution: a)

From 1950 to 1973, the practice has been to appoint the senior most judge of the Supreme Court as the chief justice of India. This established convention was violated in 1973 when A N Ray was appointed as the Chief Justice of India by superseding three senior judges. Again in 1977, M U Beg was appointed as the chief justice of India by superseding the then senior-most judge. This discretion of the government was curtailed by the Supreme Court in the Second Judges Case (1993), in which the Supreme Court ruled that the senior most judge of the Supreme Court should alone be appointed to the office of the chief justice of India.

A judge of the Supreme Court can be removed from his Office by an order of the president. The President can issue the removal order only after an address by Parliament has been presented to him in the same session for such removal. The address must be supported by a special majority of each House of Parliament (ie, a majority of the total membership of that House and a majority of not less than two-thirds of the members of that House present and voting). The grounds of removal are two—proved misbehaviour or incapacity.

15) The Supreme Court of India has been assigned a very significant role in the Indian democratic political system. Which of the following are the roles and functions of the Supreme Court?

1. It is a federal court

2. It is the highest court of appeal
3. It is the guarantor of the fundamental rights of the citizens
4. It is the guardian of the Constitution.

Select the correct answer code:

- a) 1, 2, 3
- b) 1, 3, 4
- c) 2, 3
- d) 1, 2, 3, 4

Solution: d)

The Supreme Court has been assigned a very significant role in the Indian democratic political system. It is a federal court, the highest court of appeal, the guarantor of the fundamental rights of the citizens and guardian of the Constitution.

16) Which of the Acts passed by the British Parliament introduced an open competition system of selection and recruitment of civil servants in India before independence and a separate legislative wing for the Governor-General?

- a) Charter Act of 1853
- b) Indian Councils Act of 1861
- c) Indian Councils Act of 1892
- d) Charter Act of 1833

Solution: a)

Features of the 1853 Act

1. It **separated, for the first time, the legislative and executive functions of the Governor-General's council**. It provided for addition of six new members called legislative councillors to the council. In other words, it established a **separate Governor-General's legislative council** which came to be known as the **Indian (Central) Legislative Council**. This legislative wing of the council functioned as a mini-Parliament, adopting the same procedures as the British Parliament. Thus, legislation, for the first time, was treated as a special function of the government, requiring special machinery and special process.

2. It introduced an **open competition system of selection and recruitment of civil servants**. The covenanted civil service was thus thrown open to the Indians also. Accordingly, the **Macaulay Committee (the Committee on the Indian Civil Service) was appointed** in 1854.

(Before this the Charter Act of 1833 attempted to introduce a system of open competition for selection of civil servants, and stated that the Indians should not be debarred from holding any place, office and employment under the Company. However, this provision was negated after opposition from the Court of Directors.)

3. It extended the Company's rule and allowed it to retain the possession of Indian territories on trust for the British Crown. But it did not specify any particular period, unlike the previous Charters. This was a clear indication that the Company's rule could be terminated at any time the Parliament liked.

4. It introduced, for the first time, **local representation in the Indian (Central) Legislative Council**. Of the six new legislative members of the governor-general's council, four members were appointed by the local (provincial) governments of Madras, Bombay, Bengal and Agra.

17) Consider the following statements.

1. Constitutionalism denotes the principle that the government derives its authority from a body of fundamental law and is limited by it.
2. Fundamental Rights in Indian Constitution helps in enforcing the philosophy of Constitutionalism.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: c)

‘Constitutionalism’ is “a compound of ideas, attitudes and patterns of behaviour elaborating the principle that the authority of government derives from the fundamental law”.

The Directive Principles along with the Fundamental Rights contain the philosophy of the Constitution and is the soul of the Constitution.

[Source](#)

18) Consider the following statements regarding Question Hour in Parliament.

1. The first hour of every parliamentary sitting is slotted for Question Hour where questions are asked only to Ministers and for private members it is asked in Zero Hour.
2. A starred question requires an oral answer and hence supplementary questions can follow.
3. Questions may lead to the appointment of a Commission, a Court of Enquiry or even Legislation.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 2 only

Solution: c)

The first hour of every parliamentary sitting is slotted for Question Hour. During this time, the members ask questions and the ministers usually give answers. The questions are of three kinds, namely, starred, unstarred and short notice.

A starred question (distinguished by an asterisk) requires an oral answer and hence supplementary questions can follow.

In addition to the ministers, the questions can also be asked to the private members. Thus, a question may be addressed to a private member if the subject matter of the question relates to some Bill, resolution or other matter connected with the business of the House for which that member is responsible.

Questions enable Ministries to gauge the popular reaction to their policy and administration. Questions bring to the notice of the Ministers many loopholes which otherwise would have gone unnoticed. Sometimes questions may lead to the appointment of a Commission, a Court of Enquiry or even Legislation when matters raised by Members are grave enough to agitate the public mind and are of wide public importance.

[Source](#)

19) Consider the following statements regarding the Speaker Pro Tem.

1. She is elected by the Lok Sabha from amongst the members of the house.
2. She is responsible for chairing the meetings of Lok Sabha until the new elected Speaker becomes acquainted with the Parliamentary procedures.
3. The Speaker Pro Tem has all the powers of the Speaker.

Which of the above statements is/are correct?

- a) 3 only
- b) 1 and 2 only
- c) 1 only
- d) None of the above

Solution: a)

As provided by the Constitution, the Speaker of the last Lok Sabha vacates his office immediately before the first meeting of the newly elected Lok Sabha. Therefore, the **President appoints a member of the Lok Sabha as the Speaker Pro Tem**. Usually, the seniormost member is selected for this.

The Speaker Pro Tem has all the powers of the Speaker. She presides over the first sitting of the newly elected Lok Sabha. Her main duty is to **administer oath to the new members**. She also enables the House to elect the new Speaker.

When the new Speaker is elected by the House, the office of the Speaker Pro Tem ceases to exist. Hence, this office is a temporary office, existing for a few days.

20) Which of the following Parliamentary committees does not witness any participation from Rajya Sabha?

- a) Public Accounts Committee
- b) Committee on Empowerment of Women
- c) Committee of Privileges
- d) Estimates Committee

Solution: d)

Committee of Privileges: The functions of this committee are semi-judicial in nature. It examines the cases of breach of privileges of the House and its members and recommends appropriate action. The Lok Sabha committee has 15 members, while the Rajya Sabha committee has 10 members.

Committee on Empowerment of Women: This committee was constituted in 1997 and consists of 30 members (20 from Lok Sabha and 10 from Rajya Sabha).

It considers the reports of the National Commission for Women and examines the measures taken by the Union Government to secure status, dignity and equality for women in all fields.

Estimates Committee: The Rajya Sabha has no representation in this committee. These members are elected by the Lok Sabha every year from amongst its own members, according to the principles of proportional representation by means of a single transferable vote.



2. Geography

1) Consider the following statements.

1. About 95 per cent of iron ore reserves in India is located in the States of Odisha, Jharkhand and Chhattisgarh.
2. In Karnataka, iron ore deposits occur in Baba Budan hills and Kudremukh.
3. Manganese deposits are mainly associated with Dharwar system.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: c)

About 95 per cent of total reserves of iron ore is located in the States of Odisha, Jharkhand, Chhattisgarh, Karnataka, Goa, Telangana, Andhra Pradesh and Tamil Nadu.

In Karnataka, iron ore deposits occur in Sandur-Hospet area of Ballari district, Baba Budan hills and Kudremukh in Chikkamagaluru district and parts of Shivamogga, Chitradurg and Tumakuru districts.

Manganese deposits are found in almost all geological formations, however, it is mainly associated with Dharwar system. Odisha is the leading producer of Manganese.

2) Consider the following statements.

1. It is the ore which is used in manufacturing of aluminium.
2. It is mainly in tertiary deposits and is associated with laterite rocks.
3. It also occurs in the coastal tracts of India.

The above statements refer to

- a) Copper
- b) Bauxite
- c) nickel
- d) None of the above

Solution: b)

Bauxite is the ore which is used in manufacturing of aluminium. Bauxite is found mainly in tertiary deposits and is associated with laterite rocks occurring extensively either on the plateau or hill ranges of peninsular India and also in the coastal tracts of the country. Odisha happens to be the largest producer of Bauxite.

3) Consider the following pairs:

Multipurpose project		River
1. Bhakra Nangal	:	Indus
2. Hirakud	:	Godavari
3. Nagarjunasagar	:	Kaveri

Which of the above pairs is/are correctly matched?

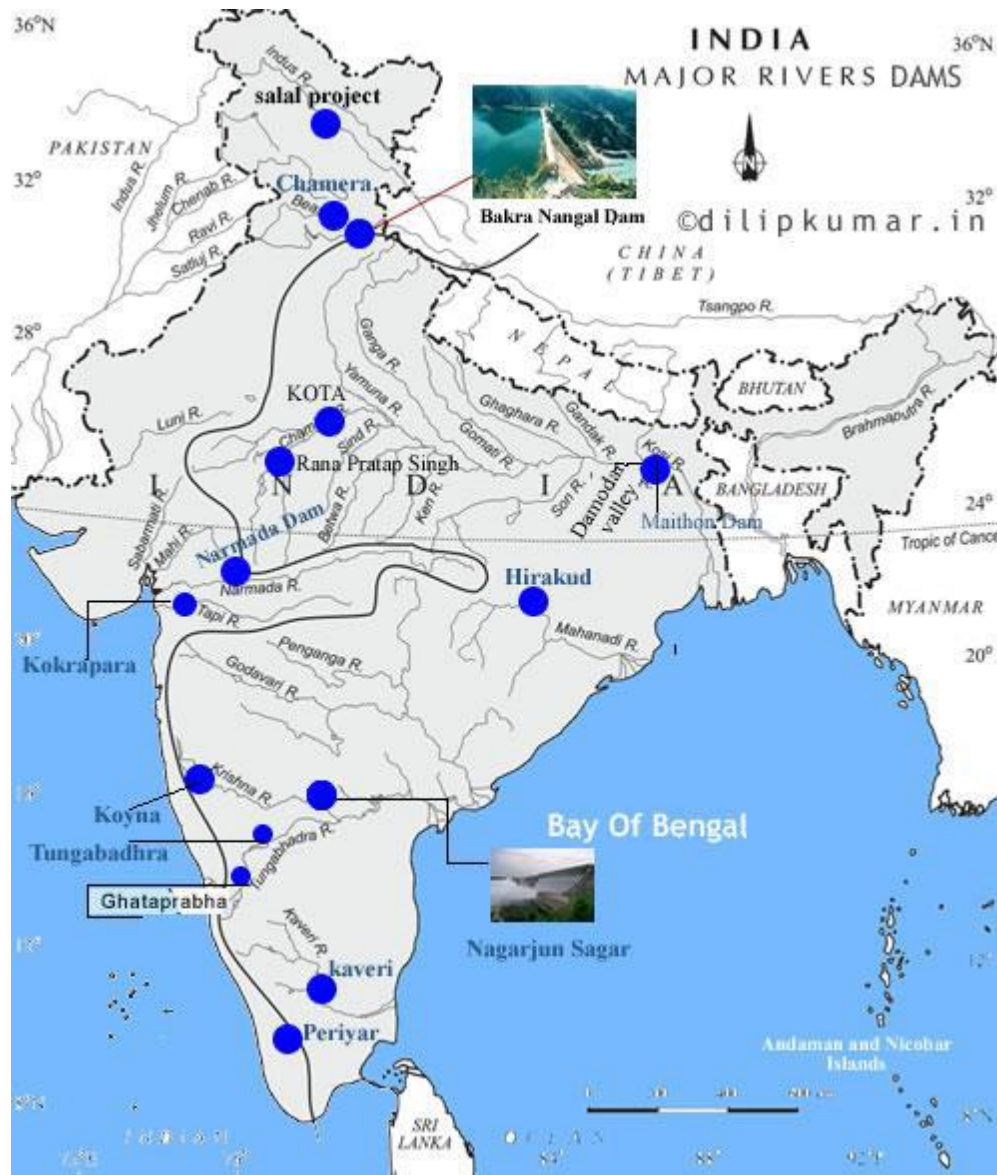
- a) 1 only
- b) 1, 2
- c) 2, 3
- d) None of the above

Solution: d)

Bhakra Nangal dam is a multipurpose project built across Satluj River located in Himachal Pradesh.

Hirakud dam is a multipurpose hydel project built across Mahanadi River located in Orissa.

Nagarjunasagar dam built across Krishna River at Nagarjuna Sagar which straddles the border between Guntur district, Andhra Pradesh and Nalgonda district, Telangana.



4) Arrange the following Islands of Indian Ocean region from South to North

1. Seychelles
2. Maldives
3. Reunion
4. Mauritius

Select the correct answer code:

- a) 3-4-1-2
- b) 4-3-1-2
- c) 4-3-2-1
- d) 3-4-2-1

Solution: a)



5) Like tropical cyclones, Tornados also cause devastating effect on life and material property. How tornedos are different from tropical cyclones?

1. Tornadoes originate over land, while cyclone originate on water.
2. Tornadoes forms on relatively larger area than tropical cyclone.
3. Tornadoes mostly occur in middle latitude, while tropical cyclone occurs in 5 to 25 degree north and south latitude.

Select the correct answer code:

- a) 1 only
- b) 2 only
- c) 1, 3
- d) None of the above

Solution: c)

Tornadoes forms in relatively smaller area compare to tropical cyclones.

All other statements are correct regarding tornadoes.

6) Planets in the solar system are broadly classified into Terrestrial and Jovian Planets. In this context, consider the following statements:

1. Terrestrial Planets are relatively larger in size when compared to Jovian Planets.
2. Terrestrial Planets were formed in close vicinity of the Sun, while Jovian planets were formed at relatively distant location.
3. Terrestrial Planets has lost most of its earlier atmosphere due to solar wind, while similar phenomenon is not been observed in Jovian Planets.

Which of the above statements is/are correct?

- a) 1 only
- b) 2, 3
- c) 1, 2, 3
- d) 1, 2

Solution: b)

- Terrestrial planets like Mercury, Venus and Earth are relatively smaller than the bigger Jovian planets like Jupiter, Saturn and Uranus.
- Terrestrial planets are closer to Sun and most of their early atmosphere is wiped out due to intense solar storm.
- Terrestrial planets are made up of solid rock whereas Jovian planets are gaseous in nature.

7) Consider the following statements:

1. Annual range of temperature is greater in the Pacific Ocean than that in the Atlantic Ocean.
2. Annual range of temperature is greater in the Northern Hemisphere than that in the Southern Hemisphere.

Which of the above statements is/are correct?

- a) 1 only

- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: b)

- Annual range of temperature is relatively low in larger ocean.
- Annual range of temperature is relatively high in Northern hemisphere due to continental influence (Large land area in Northern hemisphere w.r.t southern hemisphere).

8) Consider the following statements about Anticyclones.

1. Anticyclone is a region where the atmospheric pressure is high compared with that of adjacent areas.
2. Their extent is always small.
3. In the northern hemisphere the general wind circulation is clockwise round the anticyclone.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: c)

Anticyclone is a region where the atmospheric pressure is high compared with that of adjacent areas. In the northern hemisphere the general wind circulation is clockwise round the anticyclone, while in the southern hemisphere it is anticlockwise. The extents are generally large and the effects are also pronounced.

9) Which of the following are the conditions for the emergence of a tropical cyclone?

1. Large and continuous supply of warm and moist air.
2. Strong Coriolis force
3. Strong vertical wind
4. Unstable condition through the Troposphere

Select the correct answer code:

- a) 1, 2, 3
- b) 1, 2, 3, 4
- c) 2, 3, 4
- d) 1, 2, 4

Solution: d)

Some initial conditions for the emergence of a tropical cyclone are:

- (i) Large and continuous supply of warm and moist air that can release enormous latent heat.
- (ii) Strong Coriolis force that can prevent filling of low pressure at the centre (absence of Coriolis force near the equator prohibits the formation of tropical cyclone between 0°-5° latitude).
- (iii) Unstable condition through the troposphere that creates local disturbances around which a cyclone develops.
- (iv) Finally, absence of strong vertical wind wedge, which disturbs the vertical transport of latent heat.

10) Consider the following statements about Dew point.

1. Dew point is the temperature at which the atmosphere is saturated with water vapour.
2. The dew point gives an indication of the humidity.
3. A higher dew point means there will be less moisture in the air.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: a)

Dew point, the temperature at which the atmosphere is saturated with water vapour, when it is cooled without changing its pressure or vapour content. A given volume of air containing much water vapour has a higher dew point than the same volume of drier air; thus the dew point gives an indication of the humidity. In meteorology the dew point is applied, for example, in predicting the height of the base of certain types of clouds. A higher dew point means there will be more moisture in the air.

11) Consider the following statements.

1. The Coromandal Coast stands between Western Ghats and Arabian Sea.
2. Doddabetta is the highest peak in the southern peninsula.
3. Palghat Pass is located between the Nilgiri Hills to the north and Anaimalai Hills to the south.

Which of the above statements is/are incorrect?

- a) 1, 2
- b) 2, 3
- c) 3 only
- d) 1, 3

Solution: a)

The Coromandal Coast stands between the Eastern Ghats and the Bay of Bengal. The Western Ghats runs along the Arabian sea and the lands between these are known as Konkan up to Goa and beyond that as Kanara. The southernmost part is known as Malabar Coast.

The Anaimudi is the highest peak in the southern peninsula. Doddabetta is one of the highest peaks in the Western Ghats.

Palghat Pass is located between the Nilgiri Hills to the north and Anaimalai Hills to the south.

12) Which of the following statement best describes 'Doldrums'?

- a) High pressure area in subtropical region where westerlies originate.
- b) Belt of calm region in equatorial region where prevailing trade winds meet.
- c) Tropical region in Indian ocean where cyclone often originate.
- d) Frigid zone of the earth where there is little atmospheric circulation.

Solution: b)

Doldrums, also called **equatorial calms**, equatorial regions of light ocean currents and winds within the intertropical convergence zone (ITCZ), a belt of converging winds and rising air encircling Earth near the Equator. The northeast and southeast trade winds meet there; this meeting causes air uplift and often produces clusters of convective thunderstorms. They occur along the Equator in the Indian and western Pacific oceans and slightly north of the Equator off the African and Central American west coasts.

13) Blizzards is classified as

- a) Terrestrial Disaster
- b) Aquatic Disaster
- c) Biological Disaster
- d) Atmospheric Disaster

Solution: d)

Atmospheric disasters include blizzard, thunderstorm, lightning, tropical cyclone, tornado, drought, hailstorm, frost, heat wave, cold waves, etc.

14) Polar vortex is a

- a) Persistent, large-scale cyclone that circles either of the planet's geographical poles
- b) Persistent large-scale ocean current in either of Earth's geographical poles
- c) Higher atmospheric jet streams over the polar regions
- d) None of the above

Solution: a)

A polar vortex is a persistent, large-scale cyclone that circles either of the planet's geographical poles. On Earth, the base of the polar vortices are located in the middle and upper troposphere and extend into the stratosphere. They surround the polar highs and lie in the wake of the polar front. These cold-core low-pressure areas strengthen in the winter and weaken in the summer due to their dependence upon the temperature differential between the equator and the poles. They usually span less than 1,000 kilometers in diameter within which the air circulates in a counter-clockwise fashion in the Northern Hemisphere, and in a clockwise fashion in the Southern Hemisphere. As with other cyclones, their rotation is caused by the Coriolis effect.

15) Consider the following statements about Coriolis force?

- 1. It results from the Earth's revolution around the Sun.
- 2. It deflects winds towards the right in Northern Hemisphere and left in Southern hemisphere.
- 3. It is one of the causes of the directional change of ocean currents.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: b)

Coriolis force is formed due to rotation of earth not revolution.

16) As one moves from Equator towards Poles, one will observe:

- 1. Decrease in length of longitudes.
- 2. Decrease in altitude.
- 3. Decrease in distance between longitudes.

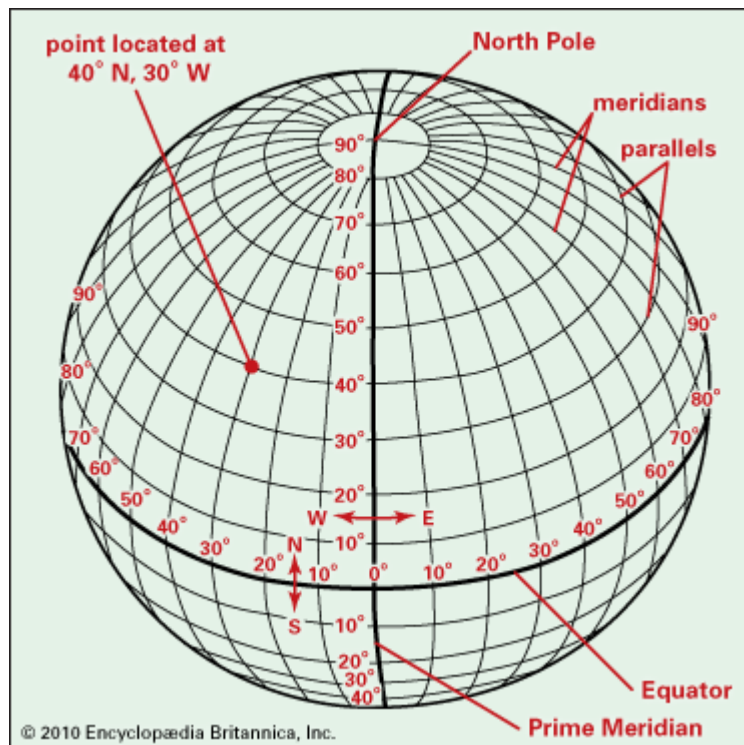
Which of the above statements is/are incorrect?

- a) 1, 3
- b) 1, 2
- c) 3 only
- d) 2, 3

Solution: b)

Longitude is measured by imaginary lines that run around the Earth vertically (up and down) and meet at the North and South Poles. These lines are known as meridians. The meridians of longitude converge at the poles. Unlike the parallels of latitude, longitudes are all equal in length.

Altitude is the height of a place over sea level. Altitude has no correlation with latitude or longitude of a place. As longitudes converge towards the poles, the distance between the longitudes decreases pole wards.



17) Consider the following statements:

1. Annual range of temperature is greater in the Pacific Ocean than that in the Atlantic Ocean.
2. Annual range of temperature is greater in the Northern Hemisphere than that in the Southern Hemisphere.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: b)

Annual range of temperature is relatively low in larger ocean.

Annual range temperature is relatively high in Northern hemisphere due to continental influence (Large land area in Northern hemisphere w.r.t southern hemisphere).

18) Consider the following statements regarding Caucasus Mountains.

1. The Caucasus Mountains are a mountain system at the intersection of Europe and Asia.
2. It stretches between the Black Sea and the Caspian Sea.
3. Aconcagua is the highest peak in the Caucasus range.

Which of the above statements is/are correct?

- a) 1, 3
- b) 2, 3
- c) 1, 2
- d) 1, 2, 3

Solution: c)

The Caucasus Mountains are a mountain system at the intersection of Europe and Asia. Stretching between the Black Sea and the Caspian Sea. The highest peak in the Caucasus range is Mount Elbrus.



19) Consider the following statements.

1. India's coastline touches 10 states and 4 union territories.
2. Gujarat has the longest coastline followed by Tamil Nadu.
3. At present India has 8 union territories.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: b)

India is a federal union comprising 28 states and 8 union territories, for a total of 36 entities.

In November 2019, the Government of India introduced legislation to merge the union territories of Daman and Diu and Dadra and Nagar Haveli into a single union territory to be known as **Dadra and Nagar Haveli and Daman and Diu**, effective from 26 January 2020.

India's coastline touches 9 states (Gujarat, Andhra Pradesh, Tamil Nadu, Maharashtra, Kerala, Odisha, Karnataka, Goa and West Bengal) and **4 union territories** (Daman & Diu, Puducherry, Andaman & Nicobar Islands and Lakshadweep Islands).

20) Consider the following statements.

1. Among the States and Union Territories in India, Bihar has the highest population density.
2. Among the North-eastern states, Assam has the highest population.
3. Rajasthan followed by Madhya Pradesh has the largest geographical area in India.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: c)

According to 2011 Census, among the states Bihar has the highest population density (1,102/km²), and among Union Territories NCT Delhi has the highest population density (11,297/km²).

21) Which of the following cities are located above the tropic of cancer.

1. Agartala
2. Kolkata
3. Aizawl

Select the correct answer code:

- a) 1, 2
- b) 1, 3
- c) 3 only
- d) 1, 2, 3

Solution: b)

Tropic of Cancer lies at 23°26' north of the Equator.

Kolkata lies below the tropic of cancer at 22.5726°N

Agartala (23°50'N) and Aizawl (23°43'N) lies above the tropic of cancer.

22) Which of the following state capital lies closer to the Standard Meridian?

- a) Lucknow
- b) Bhopal
- c) Raipur
- d) Amaravati

Solution: c)

23) Consider the following statements regarding Sabarmati river.

1. Sabarmati river originates in the Aravalli Range.
2. It flows through Rajasthan and Gujarat.
3. Sabarmati river flows into Gulf of Kutch.

Which of the above statements is/are correct?

- a) 1, 3
- b) 1, 2
- c) 2, 3
- d) 1, 2, 3

Solution: b)

The Sabarmati river is one of the major west-flowing rivers in India. It originates in the Aravalli Range of the Udaipur District of Rajasthan and meets the Gulf of Khambhat of Arabian Sea after travelling 371 km (231 mi) in a south-westerly direction across Rajasthan and Gujarat. (Mahi river, Tapi river and Narmada river also flows into Gulf of Khambhat.)

The Sabarmati is a seasonal river whose flows are dominated by the monsoon, with little or no flows post-monsoon.

24) Consider the following statements with respect to Schedule Tribes (STs) population in India according to 2011 census.

1. Madhya Pradesh has the highest number of ST population in India.
2. Mizoram and Lakshadweep had more than 90 percentage of its population as ST.
3. Punjab and Haryana had no ST population.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: d)

Madhya Pradesh, Maharashtra, Orissa, Gujarat, Rajasthan, Jharkhand, Chhattisgarh, Andhra Pradesh, West Bengal, and Karnataka are the State having larger number of Scheduled Tribes. Mizoram and Lakshadweep had the highest percentage of its population as ST (~95%). No Scheduled Tribes is notified in Punjab, Chandigarh, Haryana, Delhi, and Pondicherry.

Source

25) Consider the following statements:

1. The lapse rate usually is more in winter than summer.
2. In hilly areas, a hot day followed by calm, cloudless night act as favourable condition for the phenomenon of temperature inversion.
3. If the moist air ascends rapidly to the cooler layers of the atmosphere, the water droplets freeze into ice pellets and fall to the earth as hail.

Which of the above statements is/are correct?

- a) 1, 2
- b) 3 only
- c) 2, 3
- d) 1, 2, 3

Solution: c)

The lapse rate usually is more in summer than winter.

In hilly areas, a hot day followed by calm, cloudless night act as favourable condition for the phenomenon of temperature inversion.

If the moist air ascends rapidly to the cooler layers of the atmosphere, the water droplets freeze into ice pellets and fall to the earth as hail.

3. Economy

1) Revenue receipts of the government do not include which of the following?

1. Taxes imposed on goods imported into and exported out of India
2. Income of PSUs
3. Profits on investments made by government

Select the correct answer code:

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) All are part of revenue receipts of government.

Solution: d)

Revenue receipts are divided into tax and non-tax revenues.

Tax revenues consist of the proceeds of taxes and other duties levied by the central government. Tax revenues, an important component of revenue receipts, comprise of **direct taxes** – which fall directly on individuals (personal income tax) and firms (corporation tax), and **indirect taxes** like excise taxes (duties levied on goods produced within the country), customs duties (taxes imposed on goods imported into and exported out of India) and service tax.

Non-tax revenue of the central government mainly consists of **interest receipts** (on account of loans by the central government which constitutes the single largest item of non-tax revenue), dividends and profits on investments made by the government, fees and other receipts for services rendered by the government. Cash grants-in-aid from foreign countries and international organisations are also included.

2) How would you distinguish between the revenue and capital receipts of the government?

1. Revenue receipts are non-redeemable unlike certain capital receipts.
2. Capital receipts are always debt creating unlike revenue receipts.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: a)

The main difference between revenue receipts and capital receipts is that **in the case of revenue receipts, government is under no future obligation to return the amount, i.e., they are non-redeemable**. But in case of capital receipts which are borrowings, government is under obligation to return the amount along with interest.

Capital receipts may be debt creating or non-debt creating.

Examples of debt creating receipts are—Net borrowing by government at home, loans received from foreign governments, borrowing from RBI. Examples of non-debt capital receipts are—Recovery of loans, proceeds from sale of public enterprises (i.e., disinvestment), etc. These do not give rise to debt.

3) Which of the following are considered as Non-Banking Financial Companies (NBFCs)?

1. Chit Fund companies
2. Housing Finance Companies
3. Venture Capital Fund Companies
4. Insurance companies

Select the correct answer code:

- a) 1, 2, 3
- b) 1, 3, 4
- c) 2, 3, 4
- d) 1, 2, 3, 4

Solution: d)

Merchant Banking Companies, Housing Finance Companies, Stock Exchanges, Companies engaged in the business of stock-broking/sub-broking, Venture Capital Fund Companies, Nidhi Companies, Insurance companies and Chit Fund Companies are NBFCs.

4) Consider the following statements.

- 1. A cess is levied on the tax payable and not on the taxable income.
- 2. A cess can be levied on only direct tax.
- 3. Unlike a tax, a cess is levied to meet a specific purpose.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: c)

A cess is levied on the tax payable and not on the taxable income. In a sense, for the taxpayer, it is equivalent to a surcharge on tax.

A cess can be levied on both direct and indirect taxes.

Unlike a tax, a cess is levied to meet a specific purpose; its proceeds cannot be spent on any kind of government expenditure. Recent examples of cess are: infrastructure cess on motor vehicles, clean environment cess, Krishi Kalyan cess (for the improvement of agriculture and welfare of farmers), and education cess. To make the point clear, the proceeds from the education cess cannot be used for cleaning the environment and vice versa.

Source

5) Consider the following statements.

- 1. Direct taxes on income are compulsory transfers of private incomes (both individual and firm) to the government to meet collective aims.
- 2. The proceeds of all taxes and cesses are credited in the Consolidated Fund of India (CFI).
- 3. While the tax proceeds are shared with the States and Union Territories according to the guidelines by the Finance Commission, the cess proceeds need not be shared with them.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: d)

Direct taxes on income are compulsory transfers of private incomes (both individual and firm) to the government to meet collective aims such as the expansion of schooling infrastructure, an increase in health facilities, or an improvement of transportation infrastructure.

From the point of view of the government, the proceeds of all taxes and cesses are credited in the Consolidated Fund of India (CFI), an account of the Government of India. It constitutes all receipts, expenditures, borrowing and lending of the government. The CFI details are published annually as a part of the Union Budget documents. And the approval of Parliament is necessary to withdraw funds from the CFI. **While the tax proceeds are shared with**

the States and Union Territories according to the guidelines by the Finance Commission, the cess proceeds need not be shared with them.

To meet specific socioeconomic goals, a cess is preferred over a tax because it is relatively easier to introduce, modify, and abolish.

6) State led Industrial development is the principal feature of Independent India. Which of the following factors necessitated it?

1. Private sector lacked the huge capital required for setting up of heavy industries.
2. Maximization of profit compelled state intervention.
3. Private players had less incentive to invest in industrialization due to the low demand for industrial goods.

Select the correct answer code:

- a) 2, 3
- b) 1, 2, 3
- c) 1, 3
- d) 1, 2

Solution: c)

Maximization of profit was not a motive behind state intervention.

7) Which of the following statement about 'White Label ATMs' is correct?

- a) These ATMs are set up, owned and operated by Non-bank entities.
- b) These ATMs are set up, owned and operated by the sponsor bank whose brand is used on the ATM.
- c) ATMs owned by a service provider, but cash management and connectivity to banking networks is provided by a sponsor bank whose brand is used on the ATM.
- d) These are ATMs operated abroad to withdraw Indian currency.

Solution: a)

White Label ATMs – ATMs set up, owned and operated by non-bank entities are called "White Label ATMs" (WLAs).

Brown Label ATMs – ATMs where hardware and the lease of the ATM machine is owned by a service provider, but cash management and connectivity to banking networks is provided by a sponsor bank whose brand is used on the ATM.

8) Minimum Alternate Tax (MAT), often in news is

- a) A form of direct tax
- b) Imposed on High Net Worth Individuals (HNIs)
- c) Applied on goods for import and export in foreign trade
- d) All of the above

Solution: a)

Income tax is paid as per the provisions of the Income Tax Act (IT Act) but companies calculate their profit (through profit and loss account) as per the provisions of the Companies Act.

The IT Act allows several kinds of exemptions and other incentives from total income together with deductions on the gross income.

As a result of these exemptions, deductions and other incentives under IT Act, companies show their taxable income either 'nil' or 'negative', and this way, the 'zero tax' companies emerge and pay no taxes even though they may be paying huge dividends (under the Companies Act) to their shareholders.

To bring such companies under the income tax, MAT was imposed accordingly.

9) In taxation, horizontal equity implies

- a) Similarly situated people pay the same taxes.
- b) Better off people pay more taxes.
- c) Everyone pays the same amount of tax.
- d) Taxation is independent of income levels.

Solution: a)

Taxation is based on the idea of Fairness. Though fairness (i.e., the first criteria of a good tax system) is not always easy to define, economists suggested inclusion of two elements in the tax system to make it fair namely, horizontal equity and vertical equity.

Individuals in identical or similar situations paying identical or similar taxes is known as horizontal equity. When 'better off people pay more taxes it is known as vertical equity.

10) A tax is buoyant when

- a) Tax revenue collection registers a steady annual rise irrespective of other economic changes
- b) Tax revenues increase by more than 1 per cent for a 1 per cent increase in Tax base
- c) Tax revenues are relatively unaffected by economic slowdown or a phase of boom
- d) Tax revenues increase by more than 1 per cent for a 1 per cent increase in GDP

Solution: d)

Tax buoyancy is an indicator to measure efficiency and responsiveness of revenue mobilization in response to growth in the Gross domestic product or National income.

A tax is said to be buoyant if the tax revenues increase more than proportionately in response to a rise in national income or output.

A tax is buoyant when revenues increase by more than, say, 1 per cent for a 1 per cent increase in GDP.

11) After liberalization, India has undergone structural change in its economy. In this context, 'structural change' necessarily implies

- a) Change in demographic characteristics
- b) Change in the contribution of different sectors of economy to GDP.
- c) Change in exploitation pattern of natural resources
- d) Change in the production pattern of agriculture.

Solution: b)

STRUCTURAL CHANGE represents the fundamental CHANGES that occurring in the basic features of the ECONOMY over a long period. STRUCTURE of the ECONOMY MEANS the occupational STRUCTURE, sectoral distribution of income, industrial pattern, composition of exports, saving- GDP ratio etc.

Due to LPG reforms, largely agriculture-based economy has transformed into service-based economy in subsequent years or decades.

12) An inverted duty structure for a particular product can tend to discourage its

- 1. Domestic value addition
- 2. Associated Foreign Direct Investment
- 3. Import of finished goods as compared to its raw material

Select the correct answer code:

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 2 only

Solution: a)

Inverted duty structure is a situation where import duty on finished goods is low compared to the import duty on raw materials that are used in the production of such finished goods.

For example, suppose the tariff (import tax) on the import of tyres is 10% and the tariff on the imports of natural rubber which is used in the production of tyres is 20%; this is a case of inverted duty structure.

When the import duty on raw materials is high, it will be more difficult to produce the concerned good domestically at a competitive price. Several industries depend on imported raw materials and components. High tax on the raw materials compels them to raise price.

The disadvantage of the inverted duty structure increases with the increased use of imported raw materials. An inverted duty structure discourages domestic value addition.

On the other hand, foreign finished goods will be coming at a reduced price because of low tax advantage. In conclusion, manufactured goods by the domestic industry becomes uncompetitive against imported finished goods.

In such a case, even foreign investors would not be interested in setting up a firm for production in the country.

Statement 3 is wrong as it will be just the opposite.

13) Consider the following statements regarding Current Account Deficit (CAD).

1. The current account measures the flow of goods, services and investments into and out of the country.
2. Current Account Deficit may help a debtor nation in the short-term.
3. High software receipts and private transfers can lower current account deficit.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: c)

Current Account Deficit or CAD is the shortfall between the money flowing in on exports, and the money flowing out on imports. Current Account Deficit (or Surplus) measures the gap between the money received into and sent out of the country on the trade of goods and services and also the transfer of money from domestically-owned factors of production abroad.

The current account constitutes net income, interest and dividends and transfers such as foreign aid, remittances, donations among others.

A country with rising CAD shows that it has become uncompetitive, and investors are not willing to invest there. They may withdraw their investments.

Current Account Deficit may be a positive or negative indicator for an economy depending upon why it is running a deficit. Foreign capital is seen to have been used to finance investments in many economies. Current Account Deficit may help a debtor nation in the short-term, but it may worry in the long-term as investors begin raising concerns over adequate return on their investments.

There were number of factors which led to lowering of current account deficit. One is software receipts have gone up, and also private transfers have also gone up.

14) Which of the following factors can lead to Demand-pull inflation?

1. Strong consumer demand
2. Increase in money supply
3. When prices go up
4. Technological innovation

Select the correct code:

- a) 1, 2, 3
- b) 1, 2, 4
- c) 1, 3, 4
- d) 1, 2, 3, 4

Solution: b)

When the aggregate demand in an economy strongly outweighs the aggregate supply, prices go up. Economists describe demand-pull inflation as a result of too many dollars chasing too few goods.

If a government reduces taxes, households are left with more disposable income in their pockets. This, in turn, leads to increased consumer spending, thus increasing aggregate demand and eventually causing demand-pull inflation.

Cost-push inflation is when prices go up.

15) Consider the following statements regarding Call money rate.

1. Banks resort to Call money loans to fill the asset liability mismatch, comply with the statutory CRR and SLR requirements and to meet the sudden demand of funds.
2. Demand and supply of liquidity affect the call money rate.
3. Only RBI and banks are the participants of the call money market.

Which of the above statements is/are correct?

- a) 1, 3
- b) 2 only
- c) 1, 2
- d) 2, 3

Solution: c)

Call money rate is the rate at which short term funds are borrowed and lent in the money market.

The duration of the call money loan is 1 day. Banks resort to these types of loans to fill the asset liability mismatch, comply with the statutory CRR and SLR requirements and to meet the sudden demand of funds. RBI, banks, primary dealers etc are the participants of the call money market. Demand and supply of liquidity affect the call money rate. A tight liquidity condition leads to a rise in call money rate and vice versa.

16) Consider the following statements.

1. While Gross Domestic Product includes the production of goods and services within a country by all producers, Gross National Product captures all goods and services that is produced by the citizens of a country.
2. Usually Gross National Product tends to be less, if an economy is highly globalised and competitive and many of its MNCs are operating in other countries.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: a)

Gross Domestic Product (GDP) includes the production within a country by all producers i.e. citizens as well as foreign multi national corporations.

Gross National Product (GNP) captures all that is produced by the citizens of the country, whether it is within the geography of the country or abroad.

GNP is GDP + net factor income from abroad.

In the age of globalisation, one country's GDP is another country's GNP.

If it's a highly globalised and competitive economy and many of its MNCs are operating in other countries, its GNP tends to be more.

17) Tax buoyancy refers to the responsiveness of tax revenue growth to changes in GDP. If there is an output growth and the tax buoyancy is not commensurate, then it can imply

- a) There is tax evasion
- b) Growth in the non-taxed part of GDP
- c) Both a and b
- d) Neither a nor b

Solution: c)

Tax buoyancy explains this relationship between the changes in government's tax revenue growth and the changes in GDP. It refers to the responsiveness of tax revenue growth to changes in GDP. When a tax is buoyant, its revenue increases without increasing the tax rate.

If the output grows and the tax buoyancy is not commensurate it means one of the following or both: There is tax evasion or growth in the non-taxed part of GDP (Eg: agriculture)

18) Income tax in India is

- a) Levied, collected and appropriated by Central government
- b) Levied, collected by Central government; and distributed between Centre and state governments
- c) Levied by Central government, but collected and appropriated by state governments
- d) Levied, collected and appropriated by state governments

Solution: b)

The income-tax is levied and collected by the Centre but its proceeds are distributed between the Centre and the states.

19) External Aids is the best means to finance a government's fiscal deficit because

- 1. It brings in foreign currency that is also useful to bridge the Balance of payments (BoP) apart from its utility in developmental expenditures.
- 2. It does not cause crowding out effect in the domestic market and is favourable to the domestic borrowers.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: c)

If external aid is a grant or coming without interest, no better way to finance the deficit, if we ignore their inflationary effects.

When the domestic market has limited amount of funds, and if the government desires to borrow a large share of it to finance the fiscal deficit, it tends to raise the demand for funds in the market. This shoots the market interest rate for the funds and causes problems to the domestic investors who now have to pay a higher interest rate to avail the same loan.

If the same money is borrowed from abroad, the crowding out effect doesn't occur.

20) Match the following pairs

Term	Definitions
------	-------------

- | | |
|-----------------|---|
| 1. Deflation | A. Reduction in the rate of inflation |
| 2. Disinflation | B. General fall in the level of prices |
| 3. Stagflation | C. Combination of inflation and rising unemployment due to recession |
| 4. Reflation | D. Attempt to raise the prices to counteract the deflationary prices. |

Select the correct answer code:

- a) 1-A, 2-B, 3-C, 4-D
- b) 1-B, 2-A, 3-C, 4-D
- c) 1-B, 2-A, 3-D, 4-C
- d) 1-A, 2-B, 3-D, 4-C

Solution: b)

21) Consider the following statements regarding Fiscal Deficit.

- 1. Fiscal deficit is reflective of the total borrowing requirements of the Government.
- 2. A higher fiscal deficit can lead to higher interest rates in the economy.

Which of the above statements is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: d)

Fiscal Deficit is the difference between the Revenue Receipts plus Non-debt Capital Receipts (NDCR) and the total expenditure.

In other words, fiscal deficit is “reflective of the total borrowing requirements of the Government”.

If the fiscal deficit ratio is too high, it implies that there is a lesser amount of money left in the market for private entrepreneurs and businesses to borrow.

Lesser amount of this money, in turn, leads to higher rates of interest charged on such lending.

So, simply put, a higher fiscal deficit means higher borrowing by the government, which, in turn, mean higher interest rates in the economy.

A high fiscal deficit and higher interest rates would also mean that the efforts of the Reserve Bank of India to reduce interest rates are undone.

22) Which of the following are considered or counted while calculating GDP?

- 1. Rental value of all houses
- 2. Newly produced cars as well as second-hand cars
- 3. Pensions and scholarships given by the Government.

Select the correct answer code:

- a) 1 only
- b) 1, 2
- c) 1, 3
- d) 2, 3

Solution: a)

In calculating GDP, only newly produced goods are counted. Transactions in existing goods like second-hand cars are not included, as these do not involve the production of new goods. But the services provided by the agents while selling second-hand cars are counted. The agents make some money through commission which adds to the service economy.

There are **imputed values as part of GDP**. All houses are assumed to be rented as it is not possible for the government to check which one is owner occupied and which one is rented. Thus, rental value of all houses is part of GDP.

Transfer payments like scholarships, pensions and universal basic income that the government gives do not fetch any direct returns in terms of addition to GDP and thus are not included in the GDP.

23) Which of the following expenditure by the Government are considered as Transfer payments?

1. Universal Basic Income.
2. Subsidies paid to farmers
3. Conditional cash transfers

Select the correct answer code:

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: b)

Expenditure like pensions, scholarships and UBI are direct transfers of money and do not create any output. They are called Transfer payments. They are one-way payment of money for which no good or service is received in exchange. Transfer payments may be conditional cash transfers or unconditional cash transfers. Subsidies are not considered transfer payments because they are linked to an economic transaction.

24) Consider the following statements.

1. Factor cost refer to the price arrived after deducting from the market price the government subsidy and adding the indirect taxes.
2. GDP at factor cost is useful to see how competitive market forces are and how distortionary indirect taxes are.

Which of the above statements is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: a)

Factor costs are the actual production costs at which goods and services are produced in an economy. Factor cost refer to the price arrived after deducting from the market price the indirect taxes and adding to the resulting number government subsidies if any.

25) In India, deficit financing is usually resorted in order to

1. Finance the revenue deficit component
2. Undertake developmental expenditure
3. Bridge the short-term Current Account Deficit (CAD)

Select the correct answer code:

- a) 1, 2
- b) 2, 3
- c) 2 only
- d) 1, 3

Solution: a)

In India, revenue deficit is one of the major reasons for a large fiscal deficit. This means that the government cannot finance its revenue operations by the resources it generates.

Statement 2: This is done because the internal resources of the government are not adequate to undertake development expenditure. It must borrow money from the market.

CAD is financed by external flows. If government borrows from outside it would increase our external capital deficit, but not affect the short-term CAD.

DOWNLOAD

Study Materials & Previous Question Papers

Discover New Learning Possibilities



INSIGHTSIAS
SIMPLIFYING IAS EXAM
PREPARATION

Apply Now at

▶ www.insightsonindia.com

4. Art and Culture

1) Consider the following statements.

1. It is known as Kakanaya and Bota-Sripavata in ancient times.
2. It has the singular distinction of having specimen of Buddhist art and architecture from the early Mauryan period.
3. It is a world heritage site.

The above statements refer to?

- a) Ajanta Caves
- b) Bodh-Gaya
- c) Elephanta Caves
- d) Sanchi

Solution: d)

The Great Stupa at Sanchi is one of the oldest stone structure in India and was originally commissioned by the emperor Ashoka in 3rd Century BCE. He erected the Great Stupa here after redistribution of mortal remains of Lord Buddha for erecting several stupas all over the country in order to spread Buddhism.

This stupa was originally a low structure of brick. It is also known as Kakanava and Kakanadabota. Since the fourteenth century Sanchi remained deserted and uncared for till 1818 when General Taylor rediscovered the site.

Sir John Marshall established an archaeological museum in 1919, which was later transformed into the present site museum at Sanchi.

2) One of the most important buildings in Fatehpur Sikri, it is also known as the "Dream of Stones":

- a) Jantar Mantar
- b) Naqqar khana
- c) Panch Mahal
- d) Hawa Mahal

Solution: c)

Hawa Mahal is a palace in Jaipur.

Jantar Mantar (there are many, but the famous one) is in Delhi.

The Panch Mahal is known as the wind catcher tower. It was commissioned by sikarwar rajputs.

This is an extraordinary structure employing the design elements of a Buddhist Temple; entirely columnar, consisting of four stories of decreasing size arranged asymmetrically upon the ground floor. It is also called "THE DREAM OF STONES"



Naqqar khana was a drum house from where ceremonial music was played in Mughal palaces.

3) Consider the following statements regarding Guru Nanak.

1. Guru Nanak is the founder and first guru of Sikhism.
 2. Guru Granth Sahib contains entirely the teachings of Guru Nanak and is considered as holy text of Sikhism.
 3. Guru Nanak believed that God is formless and there is One God who dwells in every one of his creations and constitutes the eternal Truth.
- Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: b)

Guru Nanak (15 April 1469 – 22 September 1539) was the founder of Sikhism and is the first of the ten Sikh Gurus.

Compositions of Guru Nanak and other Sikh gurus and the writings of other figures like Shaikh Farid, Sant Kabir, Bhagat Namdev were compiled in Guru Granth Sahib, the holy scripture of the Sikhs.

Nanak is said to have travelled far and wide across Asia teaching people the message of ik onkar ('one God'), who dwells in every one of his creations and constitutes the eternal Truth. He believed that God is Formless (Nirankar).

- 4) Tirukkural, a Tamil literature is a
- a) Oldest surviving Tamil grammar
 - b) Collection of poems in the praise of Chera Kings
 - c) Ancient treatise on the Code of Ethics
 - d) Tamil Buddhist literature

Solution: c)

The Tirukkural is a classic Tamil language text consisting of 1,330 couplets or Kurals. Considered one of the greatest works on ethics and morality, it is known for its universality and secular nature. Its authorship is traditionally attributed to Valluvar, also known in full as Thiruvalluvar. The text has been dated variously from 300 BCE to 5th century CE.

- 5) Consider the following statements regarding Indian Digital Heritage (IDH) Project.

1. It is the initiative of *Ministry of Culture* for digital documentation and interpretation of our tangible and intangible heritage.
2. The basic goal of the IDH project was to bring about a fine synergy of Geospatial technologies with matured ICT technologies and develop technology tools to help preserve, use, and experience India's vast heritage in digital form.
3. The world heritage site of Hampi is the first site to be documented under the project.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: c)

The Indian Digital Heritage (IDH) Project was a unique initiative of the **Department of Science & Technology (DST)**, Government of India, supporting collaborative projects between researchers in the areas of technology and humanities for the **digital documentation and interpretation of our tangible and intangible heritage**.

The basic goal of the IDH project was to bring about a fine synergy of Geospatial technologies with matured ICT technologies and develop technology tools to help preserve, use, and experience India's vast heritage in digital form.

The World Heritage Site of Hampi in Karnataka, the capital of the Vijayanagara empire from the mid 14th to mid 16th century, provided an ideal canvas for this novel experiment with its rich, diverse and dazzling legacy of architectural ruins, temples, art and living traditions.

6) Consider the following statements.

1. There are evidences of Lower Paleolithic people producing art.
2. Symbols do not form part of Prehistoric paintings.
3. The largest number of paintings belongs to Chalcolithic period.
4. Hunting scenes predominate in Mesolithic paintings.

Which of the above statements is/are correct?

- a) 3, 4
- b) 1, 3, 4
- c) 4 only
- d) 2, 3, 4

Solution: c)

We have **no evidences of lower Paleolithic people producing art**, it is only during Upper Paleolithic that the production of art begins.

The paintings can be divided into three categories: human beings, animals and geometric patterns.

The largest number of paintings belongs to Mesolithic age.

Hunting scenes predominate in Mesolithic paintings.

7) The Indus Valley Civilisation (IVC) was a

- a) Iron-age Civilisation
- b) Bronze-age Civilisation
- c) Copper-age civilization
- d) None of the above

Solution: b)

The Indus Valley Civilisation (IVC), or Harappan Civilisation, was a Bronze Age civilisation (3300–1300 BCE; mature period 2600–1900 BCE) mainly in the north-western regions of South Asia, extending from what today is northeast Afghanistan to Pakistan and northwest India. Along with Ancient Egypt and Mesopotamia, it was one of three early cradles of civilisations of the Old World, and of the three, the most widespread.

8) With reference to the Painted Grey Ware culture (PGW), consider the following statements:

1. It is a Bronze Age culture of the western Gangetic plain and the Ghaggar-Hakra valley.
2. It is associated with the rise of the great mahajanapada states and of the Magadha Empire.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: d)

The **Painted Grey Ware culture (PGW)** is an **Iron Age culture** of the western Gangetic plain and the Ghaggar-Hakra valley, lasting from roughly 1200 BCE to 600 BCE.

It is a **successor of the Black and red ware culture (BRW)** within this region, and contemporary with the continuation of the BRW culture in the eastern Gangetic plain and Central India.

Characterized by a style of fine, grey pottery painted with geometric patterns in black, the PGW culture is **associated with village and town settlements, domesticated horses, ivory-working, and the advent of iron metallurgy.**

The PGW Culture probably corresponds to the middle and late Vedic period, i.e., the Kuru-Panchala kingdom, the first large state in South Asia after the decline of the Indus Valley Civilization.

It is succeeded by Northern Black Polished Ware from c. 700-500 BCE, associated with the rise of the great mahajanapada states and of the Magadha Empire.

9) If you stroll inside the Ajanta caves, you are likely to find which of the following famous images/sculpture there?

1. Mahaparinirvana of Buddha
2. Shiva slaying Andhaka and Wedding of Shiva
3. Padmapani and Vajrapani
4. Trimurti, Gangadhara and Ardhanarishvara

Select the correct answer code:

- a) 2, 3
- b) 1, 2, 4
- c) 1, 3
- d) 1, 2, 3, 4

Solution: c)

The Ajanta Caves are approximately 30 rock-cut Buddhist cave monuments which date from the 2nd century BCE to about 480 CE in Aurangabad district of Maharashtra state of India. The caves include paintings and rock-cut sculptures described as among the finest surviving examples of ancient Indian art.

The paintings of Cave 1 cover the walls and the ceilings. The two most famous individual painted images at Ajanta are the two over-life-size figures of the protective bodhisattvas **Padmapani and Vajrapani** on either side of the entrance to the Buddha shrine on the wall of the rear aisle.

The sculptures in Cave 26 are elaborate and more intricate. The major artworks include the **Mahaparinirvana of Buddha** (reclining Buddha) on the wall, followed by the legend called the "Temptations by Mara". The Mahaparinirvana of the Buddha is when he finally achieves release from the mortal world.

Statement 2 and 4: These are found in Elephanta caves. Described as a "masterpiece of Gupta-Chalukyan art", the most important sculpture in the Elephanta caves is the Trimurti. The carved panel facing this one is a two-level depiction of Ravana lifting Kailash.

10) Which of the following is incorrect about the Mughal School of painting?

- a) It does not portray naturalistic themes.
- b) It is aristocratic and secular in nature.
- c) It is closely influenced by Persian school of painting.
- d) None of the above

Solution: a)

Emperor Akbar was keenly interested in the art of painting and architecture.

The Mughal style is marked by supple naturalism based on close observation of nature and fine and delicate drawing. It is of a high aesthetic merit. It is primarily aristocratic and secular.

11) Consider the following statements.

1. Prabandhas – Composition by Alvars
2. Dravida Veda - Composition by Nayanars
3. Ashtadhyayi - Sanskrit treatise on grammar written by Kapila

Which of the above are correctly matched?

- a) 1 only
- b) 1, 2
- c) 1, 3
- c) 2, 3

Solution: b)

Vaishnava poet-saints known as alvars (a Tamil word denoting those drowned in Vishnu-bhakti) preached single-minded devotion (ekatmika bhakti) for Vishnu and their songs were collectively known as prabandhas.

The Shaiva movement in the South flourished at the beginning through the activities of many of the 63 saints known in Tamil as Nayanars (Siva-bhakts). Their appealing emotional songs in Tamil were called Tevaram Stotras, also known as Dravida Veda and ceremonially sung in the local Shiva temples.

Ashtadhyayi - Sanskrit treatise on grammar written in the 6th to 5th century BCE by the Indian grammarian Panini.

12) Consider the following statements regarding Indo-Islamic architecture in India.

1. Indo-Islamic structures were heavily influenced by the sensibilities of Indian architectural and decorative forms.
2. Indo-Islamic architecture introduced spaciousness and Massiveness in the architecture.
3. The Indo-Islamic architecture used more of human and animal figures.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: a)

Indo-Islamic structures were heavily influenced by prevailing sensibilities of Indian architectural and decorative forms.

The Indo-Islamic architecture avoided the use of human and animal figures.

While the Hindu architecture had become too congested, the Indo-Islamic architecture introduced spaciousness, massiveness and breadth to it.

13) Lapis lazuli is a rich blue semi-precious stone sometimes flecked with gold. In medieval India, it was used in ornaments and official seals. Where the stone was usually sourced from?

- a) Java
- b) Northern Afghanistan
- c) China
- d) Western Ghats, India

Solution: b)

The main source in the ancient world was the mountains of Badakshan, northern Afghanistan, from where it was traded widely.

Lapis lazuli was used as inlay in ornaments, jewellery, seals, etc Today mines in northeast Afghanistan and Pakistan are still the major source of lapis lazuli.

Important amounts are also produced from mines west of Lake Baikal in Russia, and in the Andes mountains in Chile.

Smaller quantities are mined in Italy, Mongolia, the United States and Canada. It was used by some of the most important artists of the Renaissance and Baroque, including Masaccio, Perugino, Titian and Vermeer.

- 14) Sarais, a prominent feature during medieval India is
- a) Big hall in front of the temple
 - b) Curves in an arch
 - c) Dharamshala
 - d) Decoration on walls and floors with mosaic

Solution: c)

Sarai: Dharamshala or a traveller's lodge.

A hugely interesting feature of medieval India was the sarais which ringed cities and dotted the vast space of the Indian subcontinent. Sarais were largely built on a simple square or rectangular plan and were meant to provide temporary accommodation to Indian and foreign travellers, pilgrims, merchants, traders, etc. In effect, sarais were public domains which thronged with people of varied cultural backgrounds. This led to cross-cultural interaction, influences and syncretic tendencies in the cultural mores of the times and at the level of the people.

- 15) Consider the following statements regarding Padmanabhaswamy temple.
1. The Padmanabhaswamy temple is a Hindu temple located in Tamil Nadu.
 2. The temple is built in an intricate fusion of the Chera style and the Dravidian style of architecture.
 3. The main deity in the Padmanabhaswamy Temple is of Lord Vishnu in posture of eternal yogic sleep on the serpent Adi Shesha.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: c)

The Padmanabhaswamy temple is a Hindu temple located in Thiruvananthapuram, Kerala. The temple is built in an intricate fusion of the Chera style and the Dravidian style of architecture, featuring high walls, and a 16th-century gopura. The principal deity Padmanabhaswamy (Vishnu) is enshrined in the "Anantha Shayana" posture, the eternal yogic sleep on the serpent Adi Shesha. Padmanabhaswamy is the tutelary deity of the royal family of Travancore.



16) With reference to 'Warli Paintings', consider the following statements.

1. It is being practiced by indigenous people that occupy mainly the Tamil Nadu- Kerala border.
2. Geometrical figures like triangle, circle and square are used to represent human figures.
3. For painting white pigment is used, which is made of a mixture of gum and rice powder.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 3 only
- d) 1, 2, 3

Solution: b)

Warli Painting:

The name of the painting comes from the people who have been carrying the painting tradition that goes back to 2500-3000 BC. They are called the **Warlis, indigenous people that occupy mainly the Gujarat-Maharashtra border**. These paintings have close resemblance to the mural paintings of Bhimbetka in Madhya Pradesh that date back to the pre-historic period.

These ritualistic paintings have a central motif of a chaukat or chauk, which is surrounded by scenes portraying fishing, hunting, farming, dances, animals, trees and festivals. Among the Goddesses, Palaghata (goddess of fertility) is drawn and among the male gods, those spirits that have taken human form are represented.

Traditionally, the paintings are done on the walls using very basic graphic vocabulary, including a triangle, a circle and a square. These shapes are inspired from nature, i.e. circle from sun or moon, triangle from conical shaped trees or mountains and square from sacred enclosure or piece of land. **To represent a human or animal, two triangles are joined at the tip, with circles acting like their head.** The base is made of a mixture of mud, branches and cow dung that gives it a red ochre colour. **For painting only white pigment is used, which is made of a mixture of gum and rice powder.**



17) During the early phase of Buddhism, Buddha is depicted symbolically through

1. Footprints
2. Stupas
3. Lotus throne
4. Chakra

Select the correct answer code:

- a) 1, 3
- b) 1, 2, 3
- c) 1, 3, 4
- d) 1, 2, 3, 4

Solution: d)

During the early phase of Buddhism, Buddha is depicted symbolically through footprints, stupas, lotus throne, chakra, etc. This indicates either simple worship, or paying respect, or at times depicts historicisation of life events.

18) Consider the following statements regarding Indo-Saracenic architecture.

1. It was a hybrid architectural style.
2. Medieval buildings in India with their domes and Chhatris inspired it.
3. The Gateway of India was built in this style.

Which of the above statements is/are correct?

- a) 1, 3
- b) 2, 3
- c) 1 only
- d) 1, 2, 3

Solution: d)

Towards the beginning of the twentieth century a new hybrid architectural style developed which combined the Indian with the European. By integrating Indian and European styles in public architecture the British wanted to prove that they were legitimate rulers of India. This was called Indo-Saracenic.

The inspiration for this style was medieval buildings in India with their domes, chhatris, jalis, and arches.

The Gateway of India, built in the traditional Gujarati style to welcome King George V and Queen Mary to India in 1911, is the most famous example of this style.

19) With reference to Thatheras and its craft, mentioned in the UNESCO Intangible Heritage list, consider the following statements.

1. It is the traditional technique of manufacturing brass and copper utensils.
2. It originated from the state of West Bengal.
3. The craft and the process of manufacturing is transmitted orally from one generation to the other.

Which of the above statements is/are correct?

- a) 1 only
- b) 1, 2
- c) 1, 3
- d) 2, 3

Solution: c)

The craft of the Thatheras of Jandiala Guru constitutes the traditional technique of manufacturing brass and copper utensils in Punjab.

This is an oral tradition that is passed on to generations of the 'Thathera' community. The metals are heated and moulded into thin plates with curved shapes.

It is recommended for medicinal purposes in several Ayurveda texts. It was patronized and encouraged by Maharaja Ranjit Singh in the 19th century.

The utensils are of wide variety like those used in household and community kitchens (langar) of Sikh Gurudwaras.



20) Qutub Minar is built in the memory of

- a) Iltutmish
- b) Qutubddin Aibak
- c) Qutbuddin Bakhtiyar
- d) None of the above

Solution: c)

Qutbuddin Aibak started the construction of Qutub Minar after the name of a famous Sufi saint Khwaja Qutbuddin Bakhtiyar. It was later completed by Iltutmish.

Qutub Minar also demonstrates the influence of Sufism in that period.

5. History

1) Who among the following rulers founded the Vikramsila University?

- a) Samudragupta
- b) Gopala
- c) Dharmapala
- d) Bhoja

Solution: c)

Vikramashila University was one of the two most important centres of learning in India during the Pala Empire, along with Nalanda. Vikramashila was established by King Dharmapala in response to a supposed decline in the quality of scholarship at Nalanda.

2) In the Gupta empire, Paramabhattaraka was a

- a) Council of Peace and conflict
- b) Minister for foreign affairs
- c) In charge of granaries
- d) Title adopted by Gupta Kings

Solution: d)

The Gupta kings patronized Brahmanical Hinduism. In other words, the period witnessed the ascendancy of Brahmanical religious beliefs like Vaishnavism, Saivism, Shakti worship etc. The rulers themselves were ardent worshippers of Vishnu and accepted Vaishnavite titles like Parama Bhagabata, Parama Bhattaraka etc.

3) In Medieval India, Mahamandaleshvara was a term often used for

- a) Samantas who gained power and wealth to overpower their Lords
- b) Kings who undertook an overseas expedition
- c) Priests who performed the most Ashvamedha sacrifices
- d) Patrons of temples with several deities

Solution: a)

By the seventh century there were big landlords or warrior chiefs in different regions of the subcontinent. Existing kings often acknowledged them as their subordinates or samantas.

They were expected to bring gifts for their kings or overlords, be present at their courts and provide them with military support.

As samantas gained power and wealth, they declared themselves to be maha-samanta, mahamandaleshvara (the great lord of a "circle" or region) and so on.

Sometimes they asserted their independence from their overlords.

4) Which of the following could be the possible implications of the Battle of Plassey?

1. It resulted in the victory of East India Company (EIC) leading greater powers to extract revenue and its consolidation of its presence in Bengal.
2. It resulted in the EIC gaining greater military might which allowed them to push other European colonial powers away from Bengal.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: c)

The Battle of Plassey was essentially due to the conflicts between the Bengal Nawab and the East India Company. This is judged to be one of the pivotal battles in the control of Indian subcontinent by the colonial powers. The British now wielded enormous influence over the Nawab and consequently acquired significant concessions for previous losses and revenue from trade.

The British further used this revenue to increase their military might and push the other European colonial powers such as the Dutch and the French out of South Asia, thus expanding the British Empire.

5) Consider the following statements with reference to Theosophical Society.

1. It was founded in Calcutta by Bhikaji Cama.
2. Main aim was to promote the study of ancient religions and philosophies.
3. Central Hindu School was chosen as the parent organization that acted as a catalyst for the growth of this society.

Which of the above statements is/are incorrect?

- a) 1 only
- b) 1, 2
- c) 2, 3
- d) 1, 3

Solution: d)

The Theosophical Society was founded in New York (USA) in 1875 by Madam H.P. Blavatsky, a Russian lady, and Henry Steel Olcott, an American colonel.

Their main objectives were to form a universal brotherhood of man without any distinction of race, colour or creed and to promote the study of ancient religions and philosophies. They arrived in India and established their headquarters at Adyar in Madras in 1882.

Later in 1893, Mrs. Annie Besant arrived in India and took over the leadership of the Society after the death of Olcott. Mrs. Annie Besant founded the Central Hindu School along with Madan Mohan Malaviya at Benaras which later developed into the Banaras Hindu University.

6) What is common between the places: Rummindei, Sanchi, Sarnath and Sahasram?

- a) They are the major rock edicts of Ashoka.
- b) They were the capitals of the Mahajanpadas.
- c) They are some of the earliest cities, even before the Indus valley civilization was discovered.
- d) They contain Ashokan pillar inscriptions.

Solution: d)



Asoka was the first ruler who inscribed his messages to his subjects and officials on stone surfaces – natural rocks as well as polished pillars.

He used the inscriptions to proclaim what he understood to be dhamma. This included respect towards elders, generosity towards Brahmanas and those who renounced worldly life, treating slaves and servants kindly, and respect for religions and traditions other than one's own.

- 7) In ancient India, 'Kutagarashala' referred to
- A place where children of high Brahman family were given education.
 - A place where the head of a tribe resided.
 - A place where the debate between philosophers took place.
 - None of the statements (a), (b) and (c) are correct.

Solution: c)

Kutagarashala – literally, a hut with a pointed roof – or in groves where travelling mendicants halted. Debates between philosophers took place here. If a philosopher succeeded in convincing one of his rivals, the followers of the latter also became his disciples.

8) Consider the following statements regarding the opinions voiced by different leaders on the question of Indian support to British war efforts during Second World War.

- Gandhi advocated an unconditional support to the Allied powers.
- Jawaharlal Nehru advocated that it was the ideal time to launch a civil disobedience movement.

Which of the above statements is/are correct?

- 1 only

- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: a)

Different opinions were voiced on the question of Indian support to British war efforts.

Gandhi, who had all sympathy for Britain in this war because of his total dislike of the fascist ideology, **advocated an unconditional support to the Allied powers**. He said that he was not willing to embarrass the British government during the war.

Subhas Bose and other socialists, such as Acharya Narendra Dev and Jayaprakash Narayan had no sympathy for either side in the war. They thought it was the **ideal time to launch a civil disobedience movement**, to thus take advantage of the situation and snatch freedom from Britain.

Jawaharlal Nehru was not ready to accept the opinion of either Gandhi or of the socialists. He advocated **no Indian participation till India itself was free**. However, at the same time, **no advantage was to be taken of Britain's difficulty by starting an immediate civil disobedience movement**.

9) Consider the following statements regarding the proposals in the August Offer.

1. Expansion of viceroy's executive council which would have a majority of Indians.
2. Making of the Constitution will be solely in Indian hands.
3. Future Constitution to be adopted with the consent of minorities.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1 only

Solution: b)

August Offer (August 1940) which proposed:

- dominion status as the objective for India;
- expansion of viceroy's executive council which would have a majority of Indians (who would be drawn from major political parties);
- setting up of a constituent assembly after the war where mainly Indians would decide the constitution according to their social, economic and political conceptions, subject to fulfilment of the obligation of the government regarding defence, minority rights, treaties with States, all India services; and
- no future constitution to be adopted without the consent of minorities.

10) 'Delhi Chalo Movement', in the context of Modern Indian History, is associated with

- a) Quit India Movement
- b) Individual Satyagraha
- c) Non-Cooperation Movement
- d) None of the above

Solution: c)

Individual Satyagrah was the resultant of August offer. Mahatma Gandhi initiated the Individual Satyagraha to affirm the right to free speech. The demand of the satyagrahi would be the freedom of speech against the war through an anti-war declaration. If the government did not arrest the satyagrahi, he or she would not only repeat it but move into villages and start a march towards Delhi, thus precipitating a movement which came to be known as the 'Delhi Chalo Movement'.

11) Which one of the following Upanishads talk about the childhood of lord Krishna for the first time?

- a) Katho Upanishad
- b) Mundaka Upanishad
- c) Jabala Upanishad
- d) Chandogya Upanishad

Solution: d)

Chandogya Upanishad talks about the childhood of lord Krishna for the first time.

12) Consider the following statements regarding Ashoka's Dhamma.

- 1. It contained the ideal of a 'welfare state'.
- 2. It banned punishment of offenders and their imprisonment.
- 3. It advocated tolerance among all the religious sects.
- 4. Animal sacrifices were practiced.

Which of the above statements is/are incorrect?

- a) 1, 2
- b) 2, 4
- c) 2, 3, 4
- d) 1, 3, 4

Solution: b)

Efficient organization of administration in the direction of social welfare and maintenance of constant contact with people through the system of Dhammayatras (tours) was an important feature of Ashoka's dhamma.

The Dhamma Mahamatras were asked by Ashoka to take steps against unjust imprisonment. Remission of sentences is also mentioned in Ashoka's inscriptions. But, he did not advocate non-punishment.

Other features were:

- Service to father and mother, practice of ahimsa, love of truth, reverence to teachers and good treatment of relatives.
- Prohibition of animal sacrifices and festive gatherings and avoiding expensive and meaningless ceremonies and rituals.
- Humane treatment of servants by masters and prisoners by government officials.
- Consideration and non-violence to animals and courtesy to relations and liberality to Brahmins.

13) The Allahabad Pillar inscription is associated with which one of the following?

- a) Mahapadma Nanda
- b) Chandragupta Maurya
- c) Ashoka
- d) Samudragupta

Solution: d)

It was written by Samudragupta's court poet Harisena.

14) Akbar ordered one of his close friends and courtiers, Abul Fazl to write Akbar Nama, a work of three volumes. The volumes deal with

- 1. Akbar's ancestors
- 2. Evolution of administrative setup in Indian subcontinent
- 3. Geography of India
- 4. Events of Akbar's reign

Select the correct answer code.

- a) 1, 4

- b) 2, 3
- c) 1, 2, 3
- d) 1, 2, 3, 4

Solution: a)

The first volume dealt with Akbar's ancestors and the second volume recorded the events of Akbar's reign. The third volume is the Ain-I Akbari. It deals with Akbar's administration, household, army, the revenues and geography of his empire.

It also provides rich details about the traditions and culture of the people living in India. The most interesting aspect about the Ain-i Akbari is its rich statistical details about things as diverse as crops, yields, prices, wages and revenues.

15) Consider the following statements regarding the proposals of the Crips Mission.

1. An Indian Union with a dominion status would be set up.
2. Defence of India would remain in British hands.
3. It allowed the Muslims the right to self-determination and the creation of Pakistan.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2 only
- d) 2, 3

Solution: a)

The main proposals of the Crips mission were as follows.

1. An **Indian Union with a dominion status** would be set up; it would be free to decide its relations with the Commonwealth and free to participate in the United Nations and other international bodies.
2. After the end of the war, a constituent assembly would be convened to frame a new constitution. Members of this assembly would be partly elected by the provincial assemblies through proportional representation and partly nominated by the princes.
3. The British government would accept the new constitution subject to two conditions: (i) any province not willing to join the Union could have a separate constitution and form a separate Union, and (ii) the new constitution making body and the British government would negotiate a treaty to effect the transfer of power and to safeguard racial and religious minorities.
4. In the meantime, **defence of India would remain in British hands** and the governor-general's powers would remain intact.

The Congress objected to:

- (i) the offer of dominion status instead of a provision for complete independence;
- (ii) representation of the princely states by nominees and not by elected representatives;
- (iii) right to provinces to secede as this went against the principle of national unity; and
- (iv) absence of any plan for immediate transfer of power and absence of any real share in defence; the governor-general's supremacy had been retained, and the demand that the governor-general be only the constitutional head had not been accepted.

The Muslim League

- (i) criticised the idea of a single Indian Union;
- (ii) did not like the machinery for the creation of a constituent assembly and the procedure to decide on the accession of provinces to the Union; and
- (iii) thought that the **proposals denied the Muslims the right to self-determination and the creation of Pakistan.**

16) Consider the following statements regarding Chola Education and Literature:

1. Temples and mathas served as the only educational centres.
2. Not only Vedas and Epics, but subjects like mathematics and medicine were also taught.

3. Endowment of lands was made to run educational centres.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 3 only
- d) 1, 2, 3

Solution: b)

During this period, besides the temples and mathas as educational centres, several educational institutions also flourished.

The development of Tamil literature reached its peak during the Chola period. And a lot of it came from the contribution of education and literature to the enrichment of this culture.

Mathematics and medicine studies showed that Kings encouraged logical and intellectual pursuits and were not centred entirely on religious studies.

17) Consider the following statements

- 1. Many chaityas and monasteries were cut out of the solid rock in the north-western Deccan during the regime of Satavahanas.
- 2. Amaravati stupa is full of sculptures which depict the various scenes from the life of the Buddha.
- 3. Pampa, Ponna and Ranna contributed to the development of Sangam Literature.

Which of the above statements is/are correct?

- a) 2 only
- b) 1, 2
- c) 2, 3
- d) 1, 2, 3

Solution: b)

The Satavahana phase is famous for the construction of many chaityas and viharas which were cut out of the solid rock in the north-western Deccan or Maharashtra. They were constructed with great precision and skill.

Pampa, Ponna and Ranna contributed to the development of Kannada Literature.

18) During Quit India Movement, which of the following were Gandhi's general instructions spelt out to various sections of society?

- 1. Government servants must resign and declare true allegiance to the Congress.
- 2. If zamindars are anti-government, pay mutually agreed rent, and if zamindars are pro-government, do not pay rent.
- 3. Soldiers not to fire on compatriots.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: c)

Gandhi's special instructions were spelt out at the Gowalia Tank meeting but not actually issued. They were directed at various sections of society.

- Government servants: Do not resign but declare your allegiance to the Congress.
- Soldiers: Do not leave the Army but do not fire on compatriots.
- Students: If confident, leave studies.
- Peasants: If zamindars are anti-government, pay mutually agreed rent, and if zamindars are pro government, do not pay rent.

- Princes: Support the masses and accept sovereignty of your people.
- Princely states' people: Support the ruler only if he is anti-government and declare yourselves to be a part of the Indian nation.

19) During Quit India Movement, who among the following leaders carried out Underground activities.

1. Jayaprakash Narayan
2. Aruna Asaf Ali
3. Usha Mehta
4. Lala Lajpat Rai

Select the correct answer code:

- a) 1, 2, 3
- b) 1, 3, 4
- c) 1, 2, 4
- d) 1, 2, 3, 4

Solution: a)

The main personalities taking up underground activity were Rammanohar Lohia, Jayaprakash Narayan, Aruna Asaf Ali, Usha Mehta, Biju Patnaik, Chhotubhai Puranik, Achyut Patwardhan, Sucheta Kripalani and R.P. Goenka. Usha Mehta started an underground radio in Bombay. This phase of underground activity was meant to keep up popular morale by continuing to provide a line of command and guidance to distribute arms and ammunition.

Lala Lajpat Rai died on November 17, 1928, after suffering grievous injuries during a *lathi-charge* carried out by the police during the Protests against Simon Commission.

20) Arrange the following historical events in the chronological order.

1. Proposal of Rajagopalachari Formula
2. Quit India Movement
3. Wavell Plan
4. Proposal of Desai-Liaquat Pact

Select the correct answer code:

- a) 2-1-3-4
- b) 2-1-4-3
- c) 1-2-3-4
- d) 1-2-4-3

Solution: b)

INSTACOURSES - 2021

(Prelims Test Series 2021, IPM (Integrated Prelims and Mains)
Test Series – 2021, Mains Yearlong Test Series – 2021 available now)

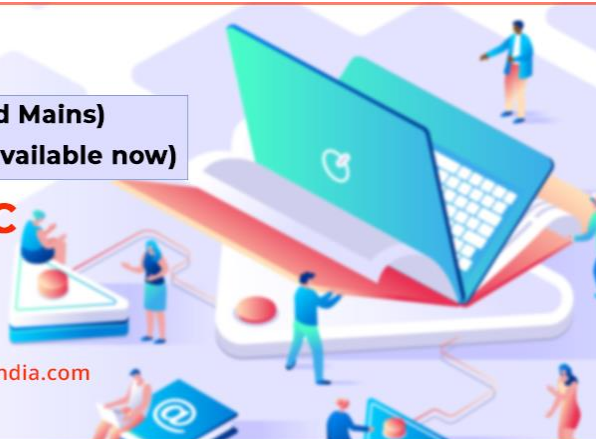
INSIGHTSIAS PRELIMS THEMATIC TEST SERIES (PTS) 2020

BUY NOW



INSIGHTSIAS
SIMPLIFYING IAS EXAM PREPARATION

www.insightsonindia.com



6. Environment

1) Consider the following statements regarding Wildlife Protection Act, 1972.

1. The Act is applicable for both Flora and Fauna and extends to the whole of India.
2. Animals listed under Schedule I and part II of Schedule II are accorded highest protection.
3. Schedule V includes the animals which cannot be hunted.

Which of the above statements is/are correct?

- a) 1, 3
- b) 1, 2
- c) 2, 3
- d) 1, 2, 3

Solution: b)

The Wild Life Protection Act, 1972 is an Act of the Parliament of India enacted for **protection of plants and animal species**. The Act established schedules of protected plant and animal species. It has **six schedules** which give varying degrees of protection.

Schedule I and part II of Schedule II provide absolute protection - offences under these are prescribed the highest penalties.

Species listed in Schedule III and Schedule IV are also protected, but the penalties are much lower.

Schedule V includes the animals which may be hunted. They are known as Vermins.

Schedule VI is exclusive for Plants. The specified endemic plants in Schedule VI are prohibited from cultivation and planting.

2) Consider the following statements regarding Ice Sheets.

1. Ice sheets form in areas where snow that falls in winter does not melt entirely over the summer.
2. Today there are only two ice sheets on Earth, they are Greenland and Antarctica Ice sheets.
3. Ice sheets also influence weather and climate.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: d)

An ice sheet is a mass of glacial land ice extending more than 50,000 square kilometers (20,000 square miles). The **two ice sheets on Earth today cover most of Greenland and Antarctica**. During the last ice age, ice sheets also covered much of North America and Scandinavia.

Ice sheets contain enormous quantities of frozen water. Together, the **Greenland and Antarctic Ice Sheets contain more than 99 percent of the freshwater ice on Earth**.

Ice sheets form in areas where snow that falls in winter does not melt entirely over the summer. Over thousands of years, the layers of snow pile up into thick masses of ice, growing thicker and denser as the weight of new snow and ice layers compresses the older layers.

Ice sheets are constantly in motion, slowly flowing downhill under their own weight.

The Greenland and Antarctic ice sheets also influence weather and climate.

The mass of ice in the Greenland Ice Sheet has begun to decline.

3) Consider the following statements.

1. Decline in forest cover can lead to Nutrient depletion like phosphorus and nitrogen in the soil.
2. Increase in salinity in the soil can lead to change in the Plant Species Distribution in the region.

Which of the above statements is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: d)

Increasing anthropogenic activities along with natural stresses have led to massive degradation of one of India's World Heritage Site — the Sunderbans.

Nutrient depletion especially phosphorus and nitrogen was found to be directly connected with the decline in forest cover.

There was a change in the species distribution — salt-sensitive ones such as *Heriteira fomes*, *Xylocarpus* species and *Phoenix paludosa* were not able to cope up with the increase in the salinity and declined while the tolerant varieties thrived.

Source

4) Consider the following statements regarding National Board for Wildlife.

1. It is a "Statutory Organization" constituted under the Wildlife Protection Act, 1972.
2. No alternation of boundaries in national parks and wildlife sanctuaries can be done without approval of the NBWL.
3. Its recommendations are binding on the Central Government while framing policies and measures for conservation of wildlife in the country.
4. The NBWL is chaired by the Environment Minister.

Which of the above statements is/are incorrect?

- a) 1, 2
- b) 1, 2, 3
- c) 3, 4
- d) 2, 3, 4

Solution: c)

National Board for Wildlife:

- It is a "Statutory Organization" constituted under the Wildlife Protection Act, 1972.
- Its role is "advisory" in nature and advises the Central Government on framing policies and measures for conservation of wildlife in the country.
- Primary function of the Board is to promote the conservation and development of wildlife and forests.
- It has power to review all wildlife-related matters and approve projects in and around national parks and sanctuaries.
- No alternation of boundaries in national parks and wildlife sanctuaries can be done without approval of the NBWL.
- The NBWL is chaired by the Prime Minister.

5) Depending upon the amount of net primary productivity the various ecosystems can be arranged in a decreasing sequence of yield. Which of these is the correct order?

- a) Tropical seasonal forest – Tropical rain forest – Temperate Grassland – Woodland and Shrub land.

- b) Tropical seasonal forest – Tropical rain forest – Woodland and Shrubland – Temperate Grassland
- c) Tropical rain forest – Temperate Grassland – Woodland and Shrubland – Tropical seasonal forest.
- d) Tropical rain forest – Tropical seasonal forest – Woodland and Shrubland – Temperate Grassland.

Solution: d)

The order can be logically arrived at by elimination.

Tropical rain forests receive overall more rainfall than seasonal forests and grasslands. So, (a) and (b) are eliminated.

Also, a forest will certainly be more productive than grassland. So, (c) is also eliminated. Correct answer will be (d).

6) Birds Following Army Ants is an example for which of the following types of symbiotic relationship between organisms?

- a) Mutualism
- b) Parasitism
- c) Commensalism
- d) Competition

Solution: c)

Commensalism is a type of symbiotic relationship between organisms in which one organism benefits without harming the other.

Many birds form a commensal relationship with some species of ants like the army ants. A great number of army ants trail on the forest floor, and while moving, stir up many insects lying in their path. The birds follow these army ants and eat up the insects that try to escape from them. The birds benefit by catching their prey easily, while the army ants are totally unaffected.

7) Mangroves, saltwater crocodile, Indian python, wild pigs and rhesus monkeys are found in which of the following national park?

- a) Bhitarkanika National Park
- b) Sundarbans National Park
- c) Nagarhole National Park
- d) Periyar National Park

Solution: a)

Flora and Fauna of Bhitarkanika National Park

Flora: Mangrove species, casuarinas, and grasses like the indigo bush.

Fauna: The Park is home to the saltwater crocodile, Indian python, black ibis, wild boar, rhesus monkey, chital, darter, cobra, monitor lizard. Olive ridley turtles' nest on Gahirmatha and other nearby beaches. Bhitarkanika has one of the largest populations of saltwater crocodile in India.

8) Which of the following species are naturally found in India?

1. Red-headed vulture
2. Flying Squirrel
3. Koala
4. Golden Langur

Select the correct answer code.

- a) 1, 4
- b) 2, 3
- c) 1, 2, 4
- d) 1, 2, 3, 4

Solution: c)

The red-headed vulture also known as the Asian king vulture, Indian black vulture or Pondicherry vulture, is an Old World vulture mainly found in the Indian subcontinent, with small disjunct populations in some parts of Southeast Asia.

Flying squirrel, (tribe Pteromyini), any of more than 50 species of gliding squirrels. Three species are North American, two live in northern Eurasia, and all others are found in the temperate and tropical forests of India and other parts of Asia.

Gee's golden langur (*Trachypithecus geei*), also known as simply the golden langur, is an Old World monkey found in a small region of western Assam, India and in the neighbouring foothills of the Black Mountains of Bhutan.

The Koala is an arboreal herbivorous marsupial native to Australia.

9) In dry areas of low rainfall, thorny shrubs and scrubs grow. How do such plants adapt to the low level of moisture?

1. Such plants generally have shallow roots to utilize water more efficiently.
2. Some plant leaves have thorny and waxy surface to reduce loss of moisture by transpiration.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: b)

Statement 1: They have adapted to desert conditions by **developing extremely long root systems** to draw water from deep underground near the water table. The mesquite's roots are considered the longest of any desert plant and have been recorded as long as 80 feet.

Statement 2: Some have succulent leaves to store moisture. Some have thorny leaves to reduce water loss by transpiration. Waxy leaves protect soil moisture beneath the coating.

10) Consider the following statements about Global Soil Biodiversity Atlas.

1. It is prepared by United Nations Convention to Combat Desertification (UNCCD).
2. India is among countries whose soil biodiversity faces the highest level of risk.
3. Soil biodiversity encompasses the presence of micro-organisms, micro-fauna and macro-fauna.

Which of the above statements is/are correct?

- a) 1, 2
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: b)

India's soil biodiversity is in grave peril, according to the **Global Soil Biodiversity Atlas prepared by the World Wide Fund for Nature**.

The WWF's 'risk index' for the globe — indicating threats from loss of above-ground diversity, pollution and nutrient over-loading, over-grazing, intensive agriculture, fire, soil erosion, desertification and climate change — shows India among countries whose soil biodiversity faces the highest level of risk.

Soil biodiversity encompasses the presence of micro-organisms, micro-fauna (nematodes and tardigrades for example), and macro-fauna (ants, termites and earthworms).

- 11) Consider the following statements regarding Bio-gas.
1. It is a combination of methane and carbon dioxide.
 2. It is formed by anaerobic digestion of organic materials.
 3. It normally burns without smoke and has a high heating capacity.

Which of the above statements is/are correct?

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: d)

Biogas is generated during anaerobic digestion when microorganisms break down organic materials in the absence of air (or oxygen). Biogas is mostly methane (CH₄) and carbon dioxide (CO₂), with very small amounts of water vapor and other gases. The carbon dioxide and other gases can be removed, leaving only the methane. Methane is the primary component of natural gas.

- 12) Consider the following statements about life forms.
1. Epiphytic: plants which derive nutrients from fungi that are attached to the roots of a vascular plant
 2. Terrestrial: plants growing on land and climbers
 3. Mycoheterotrophic: plants growing on another plants

Which of the above are correctly matched?

- a) 2 only
- b) 1, 2
- c) 2, 3
- d) 1, 2, 3

Solution: a)

Epiphytic (plants growing on other plants including those growing on rock boulders and often termed lithophyte),

Terrestrial (plants growing on land and climbers)

Mycoheterotrophic (plants which derive nutrients from mycorrhizal fungi that are attached to the roots of a vascular plant).

- 13) In terms of self-sustenance and endurance, which among the following is the most stable ecosystem?

- a) Forest
- b) Desert
- c) Ocean
- d) Mountains

Solution: c)

Ocean is a self-sustaining ecosystem and covers nearly 2/3rd of earth's area. It is the oldest ecosystem. It is least affected by natural calamities.

It is a highly diverse (from phytoplankton to sea grass to whales) and productive ecosystem and contains earliest evolutionary life forms. The evolutionary history has also been more stable than in terrestrial environments.

- 14) Tropics harbour more species than temperate or polar areas. What could be the possible reasons that tropics account for greater biological diversity than temperate regions.

1. Unlike temperate regions which were subjected to frequent glaciations in the past, tropical latitudes have remained relatively undisturbed for millions of years.
2. Tropical environments are less seasonal, relatively more constant and predictable unlike temperate regions.

3. There is more solar energy available in the tropics.

Select the correct answer code:

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: d)

What is so special about tropics that might account for their greater biological diversity? Ecologists and evolutionary biologists have proposed various hypotheses; some important ones are

(a) Speciation is generally a function of time, unlike temperate regions subjected to frequent glaciations in the past, tropical latitudes have remained relatively undisturbed for millions of years and thus, had a long evolutionary time for species diversification,

(b) Tropical environments, unlike temperate ones, are less seasonal, relatively more constant and predictable. Such constant environments promote niche specialisation and lead to a greater species diversity and

(c) There is more solar energy available in the tropics, which contributes to higher productivity; this in turn might contribute indirectly to greater diversity.

15) In the last 500 years, human activity is known to have forced more than 800 species to extinction. Which of the following species are extinct?

- 1. Steller's Sea Cow
- 2. Quagga
- 3. Caspian tiger
- 4. Sloth bear

Select the correct answer code:

- a) 1, 2, 3
- b) 1, 2
- c) 1, 3, 4
- d) 1, 2, 3, 4

Solution: a)

Some examples of recent extinctions include the dodo (Mauritius), quagga (Africa), thylacine (Australia), Steller's Sea Cow (Russia) and three subspecies (Bali, Javan, Caspian) of tiger.

The sloth bear is a myrmecophagous bear species native to the Indian subcontinent. It is listed as Vulnerable on the IUCN Red List, mainly because of habitat loss and degradation.

16) Which of the following have low Albedo?

- a) Bare Soil
- b) Desert Sand
- c) Fresh asphalt
- d) Ocean Ice

Solution: c)

Surface	Albedo
Fresh asphalt	0.04
Bare soil	0.17
Desert sand	0.40
Ocean ice	0.5 – 0.7

17) Consider the following statements regarding food chain in ecosystem:

- 1. In an aquatic ecosystem, more energy flows through grazing food chain than detritus food chain.

2. In a terrestrial ecosystem larger fraction of energy flow through detritus food chain than grazing food chain.
3. Only 10% of energy is lost in energy flow across different trophic levels.

Which of the above statements is/are correct?

- a) 1, 2
- b) 3 only
- c) 2, 3
- d) 1, 2, 3

Solution: a)

In an aquatic ecosystem, grazing food chain is the major conduit for energy flow. As against this, in a terrestrial ecosystem, a much larger fraction of energy flows through the detritus food chain than through the grazing food chain.

When energy is passed in an ecosystem from one trophic level to the next, only ten percent of the energy will be passed. Around 90% of energy will be lost.

18) Eutrophication of a water body necessarily involves

1. Gradual heating of the water body
2. Inflow of nutrients in the water body
3. Calcification of bed deposits

Select the correct answer code:

- a) 1 only
- b) 2, 3
- c) 2 only
- d) 1, 2, 3

Solution: c)

Eutrophication is the process by which a body of water acquires a high concentration of nutrients, especially phosphates and nitrates.

These typically promote excessive growth of algae. As the algae die and decompose, high levels of organic matter and the decomposing organisms deplete the water of available oxygen, causing the death of other organisms, such as fish.

Heated Industrial effluents increase the temperature of the water body and typically decrease the level of dissolved oxygen of water. This can harm aquatic animals such as fish, amphibians and other aquatic organisms. But, this is not necessary with Eutrophication.

Eutrophication is a natural, slow-aging process for a water body, but human activity (industrial effluents for e.g.) greatly speeds up the process.

19) Which of the following is most likely to survive in deep ocean waters?

- a) Green Algae
- b) Red Algae
- c) Brown Algae
- d) Yellow Algae

Solution: b)

Light is a limiting factor for life in deep oceans. Not all the colour components of the visible spectrum are available for marine plants living at different depths of the ocean.

Sunlight is broken into its seven component colours as it penetrates through the ocean water by dispersion. Longer wavelengths cannot penetrate deeper whereas shorter wavelengths do.

Algae use photosynthesis to manufacture food. So, the ones utilizing the short wavelength for photosynthesis survive.

Red algae have red pigment (phycoerythrin) which carries out photosynthesis using only short wavelength light found in greater depths.

They can be found as deep as 200 m in ocean water.

20) Increased Snow cover on a water body can lead to

1. Sudden spurt in phytoplankton population which are not dependent on photosynthesis
2. Improved oxygen exchange and nutrient recycling in the lake
3. A condition of winterkill causing large scale death of fishes and organisms

Select the correct answer code:

- a) 1, 2
- b) 3 only
- c) 1 only
- d) 1, 3

Solution: b)

Phytoplankton float on top surface of water bodies and require sunlight to thrive. Ice cover will reduce their breeding grounds and population.

The snow cover blocks exchange of nutrients and oxygen from the atmosphere.

Snow cover of ice on water body can effectively cut off light, plunging the waters into darkness.

Hence photosynthesis stops but respiration continues. Thus, in shallow lakes, oxygen gets depleted, and due to lack of oxygen there is large scale death of fishes and other organisms. This condition is known as winterkill.

21) Which of the following statements is incorrectly stated?

- a) Alpha diversity refers to diversity within a particular area or ecosystem.
- b) Food chain is more comprehensive than food web in displaying possible transfers of energy.
- c) Food chain implies a simple isolated relationship which seldom occurs in an ecosystem.
- d) None of the statements (a), (b), and (c) are incorrect.

Solution: b)

Alpha diversity

Alpha diversity describes the species diversity within a community at a small scale or local scale, generally the size of one ecosystem. When we casually speak of diversity in an area, more often than not it refers to alpha diversity.

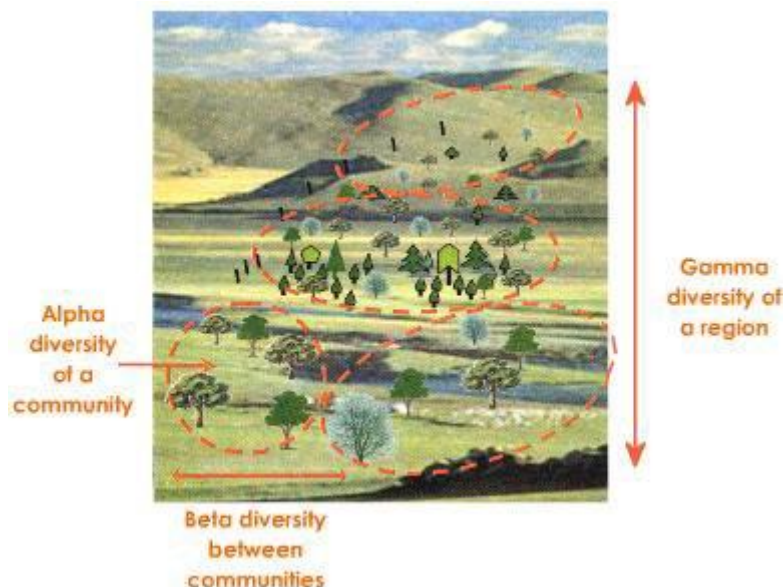
Beta diversity

Beta diversity describes the species diversity between two communities or ecosystems. It is at a larger scale, and looks to compare the species diversity between two separate entities that are often divided by a clear geographical barrier like a river or a mountain ridge.

Gamma diversity

Gamma diversity is studied at a very large scale—a biome—where species diversity is compared between many ecosystems. It could range over areas like the entire slope of a mountain, or the entire littoral zone of a sea shore.

Example: Let's take a mountain slope as our landscape. On this slope, there will be many different patches of forests and grasslands. Alpha diversity is the species diversity present within each forest or grassland patch of the slope. Beta diversity is represented by the species diversity between any two patches and their communities. Gamma diversity of the landscape is the species diversity along the entire range of the mountain slope.



Food web is more comprehensive than food chain.

22) Ecological Succession is generally characterized by

1. Increased productivity
2. Decreased niche development
3. Increased complexity of food webs

Select the correct answer code:

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) 1, 2, 3

Solution: b)

Ecological succession, the process by which the structure of a biological community evolves over time. The time scale can be decades (for example, after a wildfire), or even millions of years after a mass extinction. The community begins with relatively few pioneering plants and animals and develops through increasing complexity until it becomes stable or self-perpetuating as a climax community.

Two different types of succession—primary and secondary—have been distinguished. Primary succession occurs in essentially lifeless areas—regions in which the soil is incapable of sustaining life as a result of such factors as lava flows, newly formed sand dunes, or rocks left from a retreating glacier. Secondary succession occurs in areas where a community that previously existed has been removed; it is typified by smaller-scale disturbances that do not eliminate all life and nutrients from the environment.

Increased niche development is the characteristic feature of Ecological succession.

23) Consider the following statements regarding Peatlands.

1. Peatlands are wetlands that contain mixture of decomposed organic material.
2. Peatlands often lack oxygen as they are partially submerged in layer of water.
3. If they are drained, their high carbon content makes them vulnerable to incineration.

Which of the above statements is/are correct?

- a) 1 only
- b) 2, 3
- c) 1, 3
- d) 1, 2, 3

Solution: d)

Peatlands are wetlands that contain a mixture of decomposed organic material, partially submerged in a layer of water, lacking oxygen. The complex biodiversity of peatlands means they are home to variety of species. Their high carbon content makes them uniquely vulnerable to incineration if they are drained. They are globally important carbon store. The unregulated exploitation of peatlands can potentially be detrimental to environment and to climate, as it could release carbon emissions that have been locked in for millennia.



24) Estuaries are among the most productive ecosystems in the world. What could be the possible reason?

1. Some estuaries forms an ecotone of freshwater and salty seawater.
2. Estuaries are not subject to disturbing forces like tides and waves.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution: a)

Estuaries and their surrounding wetlands are bodies of water usually found where rivers meet the sea.

Estuaries are home to unique plant and animal communities that have adapted to brackish water—a mixture of fresh water draining from the land and salty seawater.

An ecotone is a transition area between two biomes. It is where two communities meet and integrate.

It has some of the characteristics of each bordering biological community and often contains species not found in the overlapping communities.

For e.g. the mangrove forests represent an ecotone between marine and terrestrial ecosystem. Other examples are grassland (between forest and desert.)

Estuaries are subject both to marine influences—such as tides, waves, and the influx of saline water—and to riverine influences—such as flows of fresh water and sediment.

The inflows of both sea water and fresh water provide high levels of nutrients both in the water column and in sediment, making estuaries among the most productive natural habitats in the world.

The banks of many estuaries are amongst the most heavily populated areas of the world

25) Inter-tidal zones support large mangrove population because

- a) It is abundant in nutrients.
- b) It is a fresh water zone
- c) It is not touched by either high or low tides.
- d) It is a sediment free zone.

Solution: a)

The intertidal zone, also known as the foreshore and seashore and sometimes referred to as the littoral zone, is the area that is above water at low tide and under water at high tide.

Water is available regularly with the tides but varies from fresh with rain to highly saline and dry salt with drying between tidal inundations.

It is very rich in nutrients and hence supports the growth of Mangroves the best.

FULFILL YOUR
IAS DREAMS
WITH
INSIGHTS



INSIGHTSIAS
SIMPLIFYING IAS EXAM
PREPARATION

Subscribe Now ► www.insightsonindia.com