



**INSIGHTSIAS**  
SIMPLIFYING IAS EXAM PREPARATION

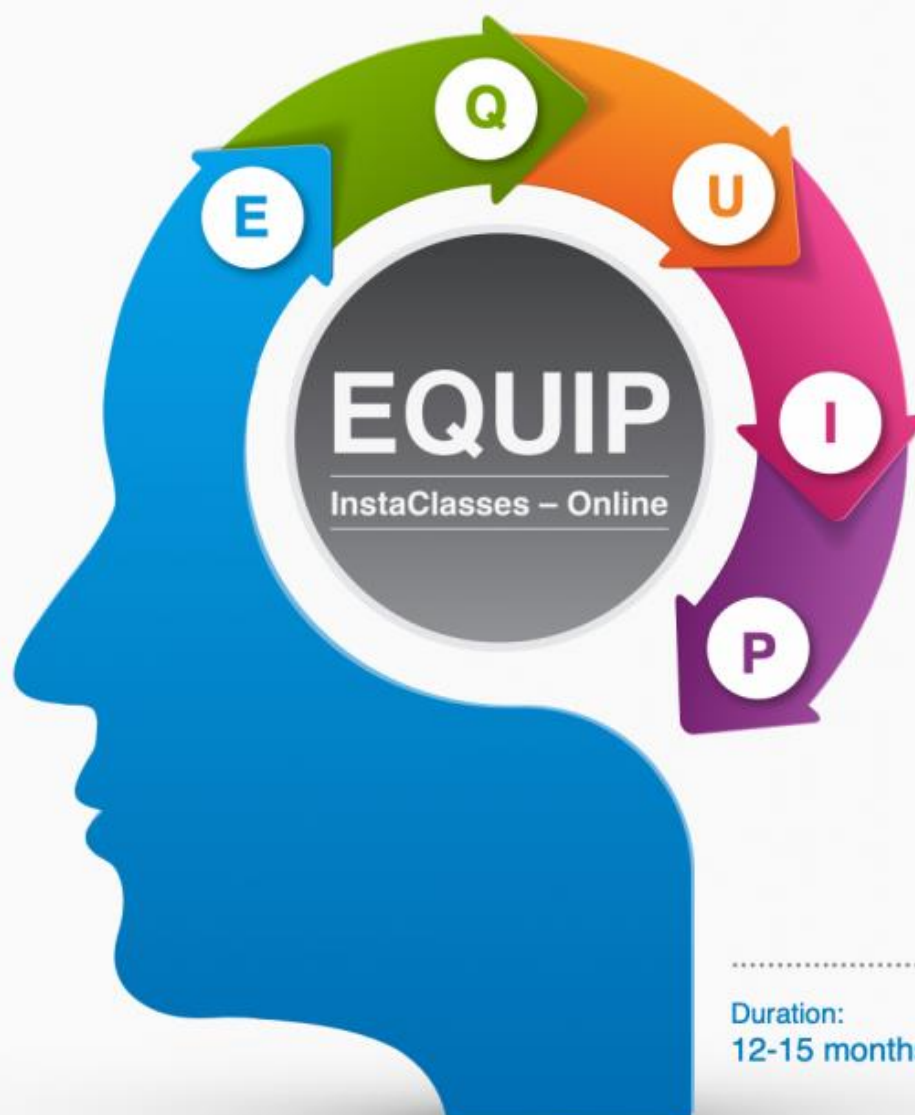
# INSTA STATIC QUIZ

## NOVEMBER 2020

<https://www.insightsonindia.com>



**INSIGHTSIAS**  
SIMPLIFYING IAS EXAM PREPARATION



Duration:  
12-15 months

## FULL-FLEDGED CLASSROOM COURSE FOR UPSC CSE 2021

(Integrated Prelims, Mains and Interview Program)

**Driven by EQUIP Strategy**  
**A Unique Initiative of InsightsIAS**

## Table of Contents

1. POLITY .....	3
2. GEOGRAPHY .....	12
3. ECONOMY .....	20
4. ART AND CULTURE .....	28
5. HISTORY .....	35
6. ENVIRONMENT .....	43

### INSIGHTSIAS Toppers from Offline Classroom Program (OGP) and CORE BATCH

									
<b>Jeydev C S</b> Rank 5 OGP 2019 + Core Batch	<b>Dheeraj Kumar Singh</b> Rank 64 OGP 2019	<b>Yashaswini B</b> Rank 71 Core Batch + Mains Test Series 2019	<b>Nidhin K Biju</b> Rank 89 Core Batch + Mains Test Series	<b>M V Satya Sai Karthik</b> Rank 103 OGP 2018	<b>Kumar Shivashish</b> Rank 108 OGP 2019 + Core Batch	<b>Keerthana H S</b> Rank 167 OGP 2018	<b>Abhishek Gowda MJ</b> Rank 278 OGP 2018	<b>Vishnusankar</b> Rank 384 OGP 2018	<b>Kumari Manisha</b> Rank 617 OGP 2018



**INSIGHTSIAS**  
SIMPLIFYING IAS EXAM  
PREPARATION

**Hearty Congratulations to AIR 2 & 4 of our Online Test Series and all our proud 160+ Rank Holders in UPSC CSE 2019!**

# 1. Polity

1) Which of the following can be challenged in the courts as violating a Fundamental Right and hence, can be declared as void?

1. Constitutional amendment
2. Permanent laws enacted by the Parliament
3. Ordinances issued by the president
4. Statutory instruments like bye-law, rule, regulation or notification.

Select the correct answer code:

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

Solution: d)

Not only a legislation but any of the following can be challenged in the courts as violating a Fundamental Right and hence, can be declared as void.

- (a) Permanent laws enacted by the Parliament or the state legislatures;
- (b) Temporary laws like ordinances issued by the president or the state governors;
- (c) Statutory instruments in the nature of delegated legislation (executive legislation) like order, bye-law, rule, regulation or notification; and
- (d) Non-legislative sources of law, that is, custom or usage having the force of law.

Supreme Court held in the Kesavananda Bharati case (1973) that a Constitutional amendment can be challenged on the ground that it violates a fundamental right that forms a part of the 'basic structure' of the Constitution and hence, can be declared as void.

2) The 42<sup>nd</sup> Amendment Act of 1976 transferred which of the following subjects to Concurrent List from State List?

1. Education
2. Protection of wild animals and birds
3. Economic and social planning
4. Administration of justice

Select the correct answer code:

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

Solution: c)

The 42<sup>nd</sup> Amendment Act of 1976 transferred five subjects to Concurrent List from State List, that is, **(a)** education, **(b)** forests, **(c)** weights and measures, **(d)** protection of wild animals and birds, and **(e)** administration of justice; constitution and organisation of all courts except the Supreme Court and the high courts.

3) Consider the following important parts of the constitution and the subject that they deal with:

1. Part IV: Fundamental Rights
2. Part V: The States
3. Part XI: Relations between the Union and the States

Select the correct answer code:

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

d) 1, 2, 3

Solution: b)

Part III	Fundamental Rights	Art. 12 to 35
Part IV	Directive Principles	Art. 36 to 51
Part V	The Union	Art. 52 to 151
Part VI	The States	Art. 152 to 237
Part XI	Relations between the Union and the States	Art. 245 to 263

4) Consider the following statements

1. The Rajya Sabha represents both the states and union territories of the Indian Union.
2. The representatives of states in the Rajya Sabha are elected by the members of state legislative assemblies and councils.

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 Rajya Sabha is the Upper House and the Lok Sabha is the Lower House. **The former represents the states and union territories of the Indian Union**, while the latter represents the people of India as a whole. **The representatives of states in the Rajya Sabha are elected by the elected members of state legislative assemblies.** The election is held in accordance with the system of proportional representation by means of the single transferable vote.

5) Consider the following statements

1. A person shall not be a citizen of India if he/she has voluntarily acquired the citizenship of any foreign state.
2. Equal pay for equal work for men and women is one of the element/ features of Fundamental Rights.
3. Constituent Assembly's States Committee (Committee for Negotiating with States) was chaired by Jawaharlal Nehru.

Which of the above statements is/are correct?

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

Solution: a)

Equal pay for equal work for men and women is one of the element/features of DPSP.

6) Which of the following in the Constitution reveal the secular character of the Indian State?

1. Preamble
2. Directive Principles of State Policy
3. Fundamental Rights

Select the correct answer code:

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

d) 1, 2, 3

Solution: d)

The term 'secular' was added to the Preamble of the Indian Constitution by the 42<sup>nd</sup> Constitutional Amendment Act of 1976. The Preamble secures to all citizens of India liberty of belief, faith and worship.

The State shall endeavour to secure for all the citizens a Uniform Civil Code (Article 44) is mentioned in DPSP – Part IV.

The State shall not deny to any person equality before the law or equal protection of the laws (Article 14).

The State shall not discriminate against any citizen on the ground of religion (Article 15).

Equality of opportunity for all citizens in matters of public employment (Article 16).

All persons are equally entitled to freedom of conscience and the right to freely profess, practice and propagate any religion (Article 25).

Every religious denomination or any of its section shall have the right to manage its religious affairs (Article 26).

Similarly Articles 27-30 also uphold values of secularism.

7) Consider the following statements.

1. Supreme Court has declared Right to decent environment including pollution free water as part of Article 21.

2. Parliament may by law provide for the adjudication of any dispute with respect to the use, distribution and control of waters of any inter-state river and river valley.

3. Development of inter-state rivers, water supplies, irrigation and canals come under the Union List.

Which of the above statements is/are correct?

a) 1, 3

b) 2, 3

c) 1, 2

d) 1, 2, 3

Solution: c)

Right to decent environment including pollution free water and air and protection against hazardous industries is part of Article 21.

While water supplies, irrigation and canals, drainage and embankments and storage fall in the State List, issues like **development of inter-state rivers come under the Union List.**

8) Which of the following are the mandatory provisions of the 73rd and 74th Constitutional amendment?

1. Regular direct elections to all local bodies

2. Mandatory reservation of seats for Dalits and Adivasis in every local body, proportionate to their share in the population.

3. Setting up of District Planning Committees that consolidate plans of rural and urban bodies.

4. Setting up of state-level election commission and finance commissions.

Select the correct answer code:

a) 1, 2, 3

b) 1, 3, 4

c) 2, 3, 4

d) 1, 2, 3, 4

Solution: d)

The key mandatory provisions of the 73rd and 74th amendments, are:

- Regular direct elections to all local bodies.
- Setting up of state-level election commission and finance commissions.

- Mandatory reservation of seats for Dalits and Adivasis in every local body, proportionate to their share in the population.
- 33% reservation for women.
- Setting up of District Planning Committees that consolidate plans of rural and urban bodies.

[Source](#)

9) Consider the following statements regarding Question Hour.

1. Always the last hour of a sitting of Lok Sabha is devoted to the Questions and this hour is called the Question Hour.
2. Asking of questions is an inherent and unfettered parliamentary right of members.
3. Sometimes questions may lead to the appointment of a Commission or a Court of Enquiry when matters raised by Members are of wide public importance.

Which of the above statements is/are correct?

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

Solution: c)

Generally, the **first hour of a sitting of Lok Sabha is devoted to the Questions and this hour is called the Question Hour.**

Asking of questions is an **inherent and unfettered parliamentary right of members**. It is during the Question Hour that the members can ask questions on every aspect of administration and Governmental activity. Government policies in national as well as international spheres come into sharp focus as the members try to elicit pertinent information during the Question Hour.

It is through questions in the Parliament that the **Government remains in touch with the people** in as much as members are enabled thereby to ventilate the grievances of the public in matters concerning the administration.

**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](#)

10) Consider the following statements.

1. A Starred Question is not called for oral answer in the House and no supplementary question can be asked thereon.
2. **Short Notice Questions** involves matter of urgent public importance.
3. There are no provisions of **Questions to Private Members**.

Which of the above statements is/are incorrect?

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

Solution: d)

The questions are of four types:

**(i) Starred Questions- A Starred Question is one to which a member desires an oral answer from the Minister in the House and is required to be distinguished by him/her with an asterisk. Answer to such a question may**



**be followed by supplementary questions by members.**

**(ii) Unstarred Questions-** An Unstarred Question is one to which written answer is desired by the member and is deemed to be laid on the Table of the House by Minister. Thus it is not called for oral answer in the House and no supplementary question can be asked thereon.

**(iii) Short Notice Questions-** A member may give a notice of question on a matter of public importance and of urgent character for oral answer at a notice less than 10 days prescribed as the minimum period of notice for asking a question in ordinary course.

**(iv) Questions to Private Members-** A Question may also be addressed to a Private Member, provided that 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.

11) Consider the following statements regarding the interpretation of Secularism in the Indian context.

1. The state treats all religions equally.
2. The State does not participate in any religious matter whatsoever.
3. All Educational institutions, without any exception, are free to impart religious instruction.
4. The state makes no discrimination on the basis of religion in matters of employment.

Which of the above statements is/are incorrect?

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

Solution: c)

The Constitution of India stands for a secular state. Hence, it does not uphold any particular religion as the official religion of the Indian State. The Preamble secures to all citizens of India liberty of belief, faith and worship. Hence, the Indian Constitution embodies the positive concept of secularism, i.e., **giving equal respect to all religions** or protecting all religions equally. But **Article 28 says that no religious instruction shall be provided in any educational institution maintained by the State.**

**Article 15: Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.**

The Islamic Central Wakf Council and many Hindu temples of great religious significance are **administered and managed by the Indian government.**

12) The National Commission for Women perform which of the following functions?

1. Review the Constitutional and Legal safeguards for women
2. Recommend remedial legislative measures
3. Facilitate redressal of grievances
4. Advise the Government on all policy matters affecting women

Select the correct answer code:

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

Solution: d)

The National Commission for Women was set up as statutory body in January 1992 under the National Commission for Women Act, to:

- review the Constitutional and Legal safeguards for women;
- recommend remedial legislative measures;
- facilitate redressal of grievances and
- advise the Government on all policy matters affecting women.



[Source](#)

13) Consider the following statements

1. Parliament under Article 368 can amend any part of the Constitution including the Fundamental Rights but without affecting the 'basic structure' of the Constitution.
2. Supreme Court is yet to define or clarify as to what constitutes the 'basic structure' of the Constitution.

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 present position is that the Parliament under Article 368 can amend any part of the Constitution including the Fundamental Rights but without affecting the 'basic structure' of the Constitution.
- However the Supreme Court is yet to define or clarify as to what constitutes the 'basic structure' of the Constitution.

14) Consider the following statements regarding Fundamental Rights.

1. They limit the authority of the government, and arbitrary laws of the legislature.
2. Fundamental Rights are not absolute and cannot be suspended.
3. They secure vital political rights to the citizens of India.

Which of the above statements is/are correct?

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

Solution: b)

They operate as limitations on the tyranny of the executive implies that **they limit the authority of the government, and arbitrary laws of the legislature**. They are justiciable in nature, that is, they are enforceable by the courts for their violation.

Rights such as equality to contest for political office, right against discrimination etc show the political and social equality of citizens.

Fundamental Rights are not absolute and subject to reasonable restrictions. Further, they are not sacrosanct and can be curtailed or repealed by the Parliament through a constitutional amendment act. They can also be **suspended during the operation of a National Emergency** except the rights guaranteed by Articles 20 and 21.

15) Consider the following statements about pro- tem speaker.

1. Speaker of the previous Lok Sabha appoints the pro- tem speaker immediately before the first meeting of the newly elected house.
2. The office of the pro-tem speaker is in co-existence with the speaker of Lok Sabha.

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 speaker of the Lok Sabha/legislative assembly vacates the office immediately before the first meeting of the newly elected house.

Hence President/governor appoints the pro-tem speaker to preside over the sittings of the house.

Usually the senior most member is elected as the pro-tem speaker.

The president/governor will administer the oath of the office for the pro-tem speaker.

When the house elects the new speaker the office of the pro-tem speaker ceases to exist. Hence the office of the pro-tem speaker is a temporary one which will be in existence for few days.

16) Consider the following statements regarding the Amendment of the Constitution.

1. Article 368 of the constitution deals with the powers of Parliament to amend the constitution and its procedure.
2. Constitution amendment bill can be introduced only in the Parliament and not in the state legislatures.
3. President can either withhold his assent to the Constitution amendment bill or return the bill for reconsideration.

Which of the above statements is/are correct?

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

Solution: c)

**Article 368 in Part XX of the Constitution deals with the powers of Parliament to amend the Constitution and its procedure.**

- An amendment of the Constitution can be initiated **only by the introduction of a bill for the purpose in either House of Parliament and not in the state legislatures.**
- The bill can be introduced either by a minister or by a private member and does not require prior permission of the president.
- If the bill seeks to amend the federal provisions of the Constitution, it must also be ratified by the legislatures of half of the states by a simple majority, that is, a majority of the members of the House present and voting.
- After duly passed by both the Houses of Parliament and ratified by the state legislatures, where necessary, the bill is presented to the president for assent.
- **The president must give his assent to the bill. He can neither withhold his assent to the bill nor return the bill for reconsideration of the Parliament.**

17) Consider the following statements.

1. All laws that are inconsistent with or in derogation of any of the fundamental rights shall be void.
2. Ordinances issued by the president or the state Governors can be challenged in the courts on the ground of contravention of any of the Fundamental Rights.
2. A constitutional amendment is not a law and hence cannot be challenged in the Supreme Court.

Which of the above statements is/are correct?

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

Solution: a)

**Article 13 declares that all laws that are inconsistent with or in derogation of any of the fundamental rights shall be void.**

The term 'law' in Article 13 has been given a wide connotation so as to include the following:

(a) Permanent laws enacted by the Parliament or the state legislatures;

- (b) Temporary laws like **ordinances issued by the president or the state governors**;
- (c) Statutory instruments in the nature of delegated legislation (executive legislation) like order, bye-law, rule, regulation or notification; and
- (d) Non-legislative sources of law, that is, custom or usage having the force of law.

Further, Article 13 declares that a constitutional amendment is not a law and hence cannot be challenged. However, the Supreme Court held in the Kesavananda Bharati case (1973) that a **Constitutional amendment can be challenged on the ground that it violates a fundamental right** that forms a part of the 'basic structure' of the Constitution and hence, can be declared as void.

18) As per the Constitution of India, the Union executive consists of

1. President of India
2. Vice President of India
3. Union Council of Ministers
4. Attorney General of India

Select the correct answer code:

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

Solution: d)

Articles 52 to 78 in Part V of the Constitution deal with the Union executive. The Union executive consists of the President, the Vice-President, the Prime Minister, the council of ministers and the attorney general of India.

19) Consider the following statements regarding the appointment of Chief Minister.

1. The Constitution contain specific procedure for the selection and appointment of the Chief Minister.
2. According to the Constitution, the Chief Minister should be selected from the Lower House.

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: c)

**The Constitution does not contain any specific procedure for the selection and appointment of the Chief Minister.** Article 164 only says that the Chief Minister shall be appointed by the governor.

According to the Constitution, the Chief Minister may be a member of any of the two Houses of a state legislature. Usually Chief Ministers have been selected from the Lower House (legislative assembly), but, on a number of occasions, a member of the Upper House (legislative council) has also been appointed as Chief Minister.

20) Consider the following statements regarding Leader of the Opposition in either House of the Parliament of India.

1. The position of Leader of the Opposition received statutory recognition through the Salary and Allowances of Leaders of Opposition in Parliament Act, 1977
2. When no party in the Lok Sabha secures required seats to form an opposition party and to designate a Leader of opposition, the matter is then decided by the President of India.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2

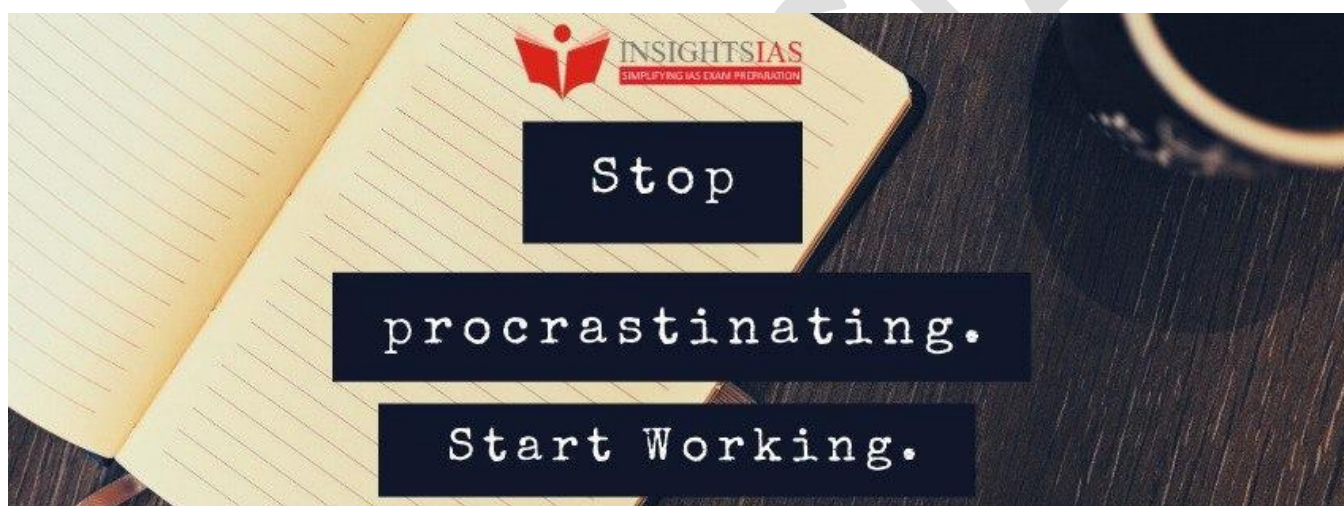
d) Neither 1 nor 2

Solution: a)

The Leader of the Opposition is the politician who leads the official opposition in either House of the Parliament of India. To claim the status of "official opposition" in either house a party has to secure 55 seats (10%) of the seats in the Lok Sabha and likewise 25 (10%) of the seats in the Rajya Sabha.

**It received statutory recognition through the Salary and Allowances of Leaders of Opposition in Parliament Act, 1977** which defines the term "Leader of the Opposition" as that member of the Lok Sabha or the Rajya Sabha who, for the time being, is the Leader of that House of the Party in Opposition to the Government having the greatest numerical strength and recognised, as such, by the Chairman of the Rajya Sabha or the Speaker of the Lok Sabha.

As per the Salary and Allowances of Leaders of Opposition in Parliament Act, 1977 by which the post has got official and statutory status, **the majority required is decided by the heads of the houses, that is speaker and chairman as the case may be.**



## 2. Geography

1) Consider the following statements regarding Sea floor.

1. Volcanic eruptions are common along the mid-oceanic ridges.
2. The age of the rocks decreases as one moves away from the crest.
3. The ocean crust rocks are much younger than the continental rocks.

Which of the above statements is/are correct?

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

Solution: b)

Sea floor spreading is verified using these phenomena:

- It was realised that all along the mid-oceanic ridges, volcanic eruptions are common and they bring huge amounts of lava to the surface in this area. The sediments on the ocean floor are unexpectedly very thin.
- **The age of the rocks increases as one moves away from the crest.**
- The **ocean crust rocks are much younger than the continental rocks.**
- The sediments on the ocean floor are unexpectedly very thin.
- The deep trenches have deep-seated earthquake occurrences while in the mid-oceanic ridge areas, the quake foci have shallow depths.

2) Consider the following statements regarding Thermosphere.

1. In thermosphere temperature decreases very rapidly with increasing height.
2. Radio waves transmitted from the earth are reflected back to the earth by this layer.
3. The space shuttle and the International Space Station both orbit Earth within the thermosphere.

Which of the above statements is/are correct?

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

Solution: c)

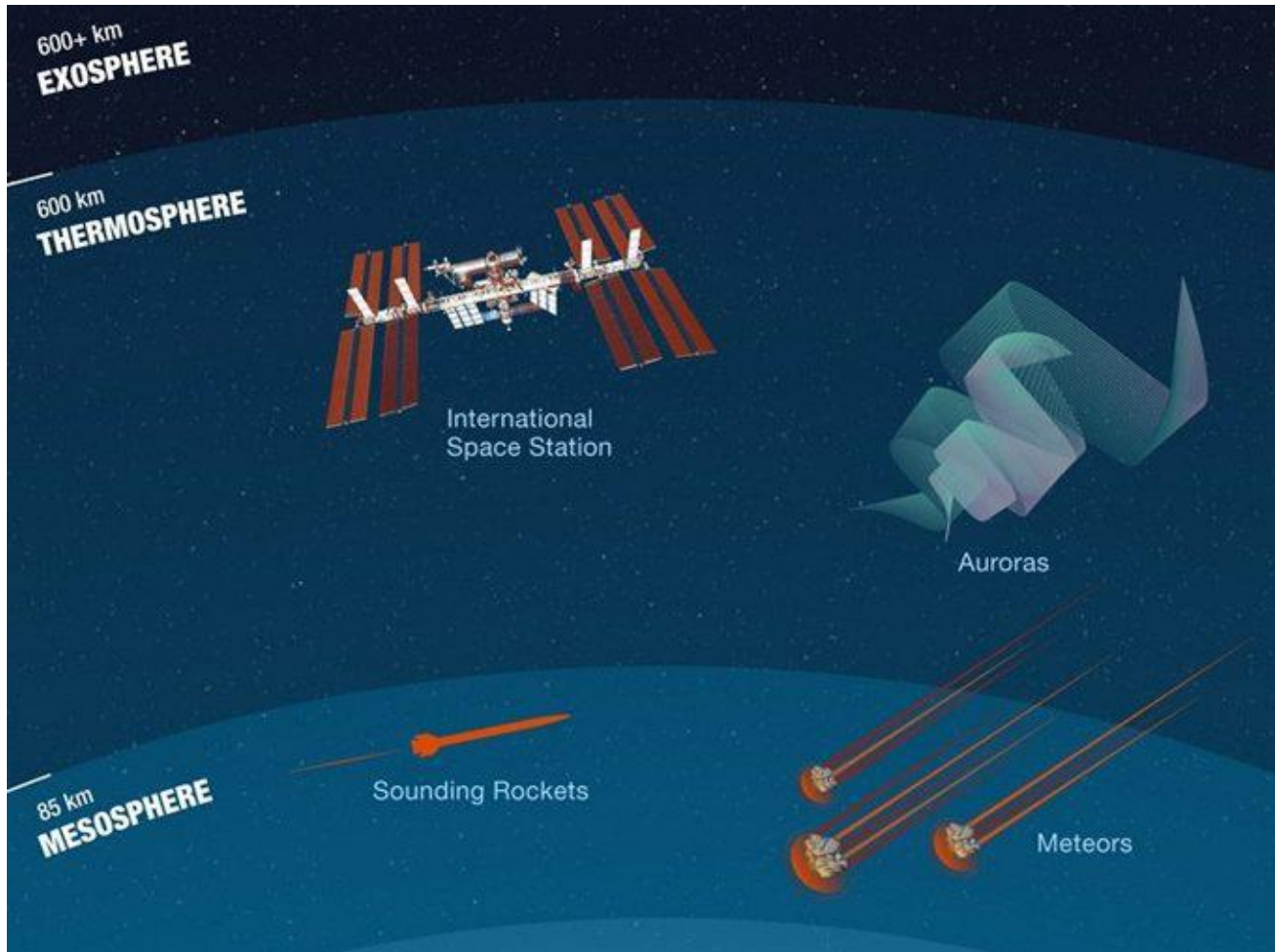
The thermosphere is a layer of Earth's atmosphere. The thermosphere is directly above the mesosphere and below the exosphere. It extends from about 90 km to between 500 and 1,000 km above our planet.

This layer helps in radio transmission. In fact, radio waves transmitted from the earth are reflected back to the earth by this layer.

The space shuttle and the International Space Station both orbit Earth within the thermosphere! This is also where you'll find low Earth orbit satellites.

It is called the thermosphere because temperatures can reach up to 1,500 degrees Celsius. However, despite the high temperatures, the pressure is very low, so satellites don't suffer heat damage.





3) Which of the following conditions are good for fisheries production & catch?

1. Coastal upwelling of nutrient rich colder water
2. Abundance of phytoplankton
3. Meeting of warm and cold currents
4. Shallow continental shelves in cold regions

Select the correct answer code:

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

Solution: d)

The following conditions are good for fisheries production & catch:

- Coastal upwelling of nutrient rich colder water
- Abundance of phytoplankton
- Meeting of warm and cold currents
- Shallow continental shelves in cold regions

4) The speed of tsunami waves in Ocean largely depends on

- a) Ocean depth
- b) Distance from mid-oceanic ridges
- c) Distance from the source of the wave
- d) Density of water

Solution: a)

Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the sea. Out in the depths of the ocean, tsunami waves do not dramatically increase in height. But **as the waves travel inland, they build up to higher and higher heights as the depth of the ocean decreases.**

**It depends on Ocean depth rather than the distance from the source of the wave.** Tsunami waves may travel as fast as jet planes over deep waters, only slowing down when reaching shallow waters.

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

Solution: b)

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.

6) Consider the following statements regarding White dwarf.

1. White dwarfs can tell us about the age of the Universe.
2. The heaviest stars at the end of their lives turn into white dwarfs.

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)

Where a star ends up at the end of its life depends on the mass it was born with. **Stars that have a lot of mass may end their lives as black holes or neutron stars. A low or medium mass star (with mass less than about 8 times the mass of our Sun) will become a white dwarf.** A typical white dwarf is about as massive as the Sun, yet only slightly bigger than the Earth. This makes white dwarfs one of the densest forms of matter, surpassed only by neutron stars and black holes.

White dwarfs can tell us about the age of the Universe.

7) Which of these drainage patterns is formed when streams flow in different directions from a central peak or dome like structure?

- a) Trellis
- b) Radial
- c) Rectangular
- d) Dendritic

Solution: b)



The Dendritic pattern develops where the river channel follows the slope of the terrain. The stream with its tributaries resembles the braches of a tree, thus the name dendritic.

A river Joined by its tributaries, at approximately right angles, develops a trellis pattern. A trellis drainage pattern develops where hard and soft rocks exist parallel to each other.

A rectangular drainage pattern develops on a strongly jointed rocky terrain.

**The radial pattern develops when streams flow in different directions from a central peak or dome like Structure.**

8) Which of the following inhibit the development of cyclones in the North Indian Ocean?

1. Weak La Nina conditions along the equatorial Pacific Ocean.
2. Influence of Madden Julian Oscillation (MJO).
3. Vertical wind shear

Select the correct answer code:

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

Solution: d)

October to December period is among the favourable months for the development of cyclones in the Bay of Bengal and the Arabian Sea. This year, however, October passed without witnessing a cyclonic storm.

**Why were there no cyclone developments this year?**

- Ocean disturbances enter the Bay of Bengal from the South China sea side and head towards the Indian coast. This year, however, there was no system which intensified to form a cyclone.
- Another reason is the **weak La Nina conditions along the equatorial Pacific Ocean**.
- There was also the **influence of Madden Julian Oscillation (MJO)**. MJO is kind of an eastward-moving cyclic weather event along the tropics that influences rainfall, winds, sea surface temperatures and cloud cover. They have a 30 to 60-day cycle.
- Also, in November, **the vertical wind shear** created due to significant wind speed difference observed between higher and lower atmospheric level prevented the low-pressure systems and depression from strengthening into a cyclone.

9) Which one of the following places is located at the confluence of Alaknanda and Bhagirathi

- a) Vishnuprayag
- b) Devaprayag
- c) Rudraprayag
- d) Karnaprayag

Solution: b)

Devaprayag – Confluence of Alaknanda and Bhagirathi

Vishnuprayag – Confluence of Alaknanda and Dhauliganga

Rudraprayag – Confluence of Alaknanda and Mandakini

Karnaprayag – Confluence of Alaknanda and Pindar

10) Which of the following regions of the world is/are seismically active?

1. Alpine-Himalayan belt
2. Mid-Atlantic Ridges
3. Central Africa

Select the correct answer code:

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

- c) 1, 3
- d) 1 only

Solution: a)

**Seismic belt**, narrow geographic zone on the Earth's surface along which most earthquake activity occurs. The two major seismic belts are the Circum-Pacific Belt, which surrounds the Pacific Ocean, and the Alpide Belt or **Alpine-Himalayan orogenic belt**, which stretches from the Azores through the Mediterranean and Middle East to the Himalayas and Indonesia, where it joins the Circum-Pacific Belt. A purely oceanic seismic belt lies along the **mid-Atlantic ridge**.

**Seismicity of West and Central Africa is low to moderate**, as is normal with stable continental interiors.

11) Most of the world's deserts are located in the western margins of continents in the subtropics. This is because?

1. The tropical easterly winds become dry by the time they reach the western margins of the continents.
2. Presence of warm ocean currents along the western shores of continents.

Select the correct answer code:

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

Solution: a)

The prevailing winds in the tropics are tropical easterly winds. **The tropical easterly winds become dry by the time they reach the western margins of the continents and so they bring no rainfall.**

Thus, the region becomes devoid of moisture which causes dry conditions leading to formation of deserts.

The **presence of cold ocean currents along the western shores of continents** leads to the development of high pressure over the water surface. This high pressure leads to subsidence of air hinders cloud formation.

12) Which of the following factors affect the climate of a place?

1. Relief of a place
2. Altitude
3. Distance from Sea
4. Circulation of ocean currents
5. Wind flow

Select the correct answer code:

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

Solution: d)

Climate is affected by a multitude of factors like relief of a place, its altitude, distance from Sea, circulation of ocean currents and wind flow etc.

13) Conditions favourable for Delta Formation are

1. No strong current running at right angle to the river mouth.
2. Presence of Continental shelf.
3. Presence of large lake in the way of the river.
4. The coast should be sheltered preferably without tides.

Which of the above statements is/are correct?

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

Solution: c)

Conditions favourable for the formation of deltas

- Lateral erosion and vertical erosion in the upper course of the river to provide extensive sediments to be eventually deposited as deltas.
- The coast should be sheltered and preferably without tides.
- The sea should be shallow near the delta region or else the load will disappear in the deep water.
- There should not be the presence of large lakes in the river course to filter off the sediments.
- The currents should be weak and no strong current should run at right angles to the river mouth as it can wash the sediment away.

14) Consider the following statements regarding Dharwar System of rocks.

1. It is the oldest system of rocks in India.
2. It contains metamorphic sedimentary rocks.
3. It hosts gold mines.

Which of the above statements is/are correct?

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

Solution: d)

**Dharwar system is later than the Archean system.** The Dharwar period of rock formation has been largely fixed from 2500 million years ago to 1800 million years ago. Dharwar Rock System is special because it is the first **metamorphic sedimentary rocks in India.**

They are named Dharwar system because they were first studied in Dharwar region of Karnataka. But they are also found in Aravallis, Tamil Nadu, Chotanagpur plateau, Meghalaya, Delhi, and the Himalayas region.

15) With reference to Aurora or Northern lights, consider the following statements:

1. Auroras are the glowing lights at high latitude.
2. Auroras can be normally observed in stratosphere.
3. Change in the atmospheric temperature cause Auroras.

Which of the above statement is/are correct?

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

Solution: b)

An aurora, sometimes referred to as polar lights, northern lights (aurora borealis) or southern lights (aurora australis), is a natural light display in the Earth's sky, predominantly seen in the high latitude regions (around the Arctic and Antarctic).

Auroras are produced when the **magnetosphere is sufficiently disturbed by the solar wind**. It usually **occurs in upper atmosphere (thermosphere/exosphere) due to Earth's magnetic field.**

16) Consider the following statements.

1. Earth's crust is the thinnest of all the major layers of earth.
2. The crust is thicker on the continent than on the ocean floor.

3. The oceanic crust mainly consists of manganese and iron.

Which of the above statements is/are correct?

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

Solution: a)

The uppermost layer over the earth's surface is called the **crust. It is the thinnest of all the layers.** It is about 35 km. on the continental masses and only 5 km on the ocean floors.

The main mineral constituents of the continental mass are silica and alumina. It is thus called sial (si-silica and al-alumina). The **oceanic crust mainly consists of silica and magnesium**; it is therefore called sima (si-silica and ma-magnesium).

17) Hot Spots within the earth help produce Geothermal Energy. What are these 'Hot Spots'?

- a) Areas of intense pressure inside the mantle
- b) Region in crust where hot molten rocks are trapped
- c) Regions of high volcanism on earth's surface
- d) Areas of intense magnetic activity within the upper mantle

Solution: b)

Due to geological changes, **molten rocks formed in the deeper hot regions of earth's crust are pushed upward and trapped in certain regions called 'hot spots'.**

When underground water comes in contact with the hot spot, steam is generated. Sometimes hot water from that region finds outlets at the surface. Such outlets are known as hot springs.

18) Consider the following statements regarding Monsoon rainfall.

- 1. Half of India's rainfall is received from Northeast monsoon.
- 2. Northeast monsoon in India is almost confined to the Southern peninsula.
- 3. Maldives, Sri Lanka and Myanmar also record rainfall during Northeast monsoon.

Which of the above statements is/are correct?

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

Solution: c)

India receives rainfall during two seasons. About **75 per cent of the country's annual rainfall is received from the Southwest monsoon** between June and September. The Northeast monsoon, on the other hand, occurs during October to December, and is a comparatively small-scale monsoon, which is **confined to the Southern peninsula.**

Also called the winter monsoon, the rainfall associated with the Northeast monsoon is important for Tamil Nadu, Puducherry, Karaikal, Yanam, coastal Andhra Pradesh, Kerala, north interior Karnataka, Mahe and Lakshadweep.

Some South Asian countries such as Maldives, Sri Lanka and Myanmar, too, record rainfall during October to December.

Tamil Nadu records about 48 per cent (447.4 mm) of its annual rainfall (943.7 mm) during these months, making it the key factor for undertaking agricultural activities and reservoir management in the state.

[Source](#)

19) Consider the following statements.

1. Almost all the world deserts are confined within the 30 to 45 degrees parallels of latitude north and south of the equator.
2. Deserts lie in the trade wind belt on the western parts of the continents where Trade winds are off-shore.

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 pattern that can be identified in the location of the world's deserts is that **almost all the deserts are confined within 15 to 30 degrees parallels of latitude north and south of the equator.**

**They lie in the trade wind belt on the western parts of the continents where Trade winds are off-shore.** They are bathed by cold currents which produced a 'desiccating effect' so that moisture is not easily condensed into precipitation.

Dryness or aridity is the key note. Such deserts are tropical hot deserts or 'Trade wind deserts'. They include the Great Sahara Desert; Arabian, Iranian and Thar Deserts; Kalahari, Namib, and Atacama Deserts; the Great Australian Deserts and the deserts of the south-west U.S.A, and northern Mexico.

In the continental interiors of the mid-latitudes, the deserts such as the Gobi and Turkestan are characterised by extremes of temperatures.

20) Warm moist summer, cool dry winter, great annual temperature range, rainfall throughout the year are the characteristic feature of which type of climate?

- a) Hot, Wet Equatorial climate
- b) Sudan climate
- c) British type climate
- d) China type climate

Solution: d)

This type of climate is found on the eastern margins of continents in warm temperate latitudes, just outside the tropics. It has comparatively more rainfall than the Mediterranean climate in the same latitudes, coming mainly in the summer. It is, in fact, the climate of most parts of China –a modified form of monsoonal climate. It is thus also called the Temperate Monsoon or China Type of climate.

Climatic Condition: Warm moist summer and a cool, dry winter. The mean monthly temperature varies between 5°C and 25°C and is strongly modified by maritime influence. The relative humidity is a little high in mid-summer. Rainfall is more than moderate, anything from 25 inches to 60 inches. Another important feature is the fairly uniform distribution of rainfall throughout the year. There is rain every month, except in the interior of central China, where there is a distinct dry season.

### 3. Economy

- 1) Gross Domestic Product of India include
- a) Value of goods and services provided by NRIs
  - b) Gross capital investments made in India during a financial year
  - c) Both a and b
  - d) Neither a nor b

Solution: b)

GDP is the value of the final goods and services produced within a country within an year.

**Indian nationals living abroad do not contribute to India's GDP.** They do however contribute to India's GNP.

But, the gross capital investments made during a financial year directly accounts as a part of GDP since it creates infrastructure which has an economic value.

- 2) Hard currency is usually preferred because
1. It is seen as politically and economically stable.
  2. It is widely accepted around the world as a form of payment for goods and services.
  3. It is not likely to depreciate or appreciate suddenly.

Select the correct answer code:

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

Solution: c)

Hard currency refers to money that is issued by a nation that is seen as **politically and economically stable**. Hard currencies are widely accepted around the world as a form of payment for goods and services and may be preferred over the domestic currency.

A hard currency is expected to **remain relatively stable** through a short period of time, and to be highly liquid in the forex or foreign exchange (FX) market. The most tradable currencies in the world are the U.S. dollar (USD), European euro (EUR), Japanese yen (JPY), British pound (GBP), Swiss franc (CHF), Canadian dollar (CAD) and the Australian dollar (AUD). All of these currencies have the confidence of international investors and businesses because they are **not generally prone to dramatic depreciation or appreciation**.

- 3) Deposit insurance and credit guarantee corporation (DICGC) a wholly owned subsidiary of Reserve Bank of India insures which of the following deposits?

1. Local Area Banks
2. Payment Banks
3. Small Finance Banks
4. Inter-bank deposits
5. Regional Rural Banks

Select the correct answer code:

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

Solution: b)

Insured Banks

Public Sector Banks

Private Sector Banks  
 Foreign Banks  
 Small Finance Banks  
 Payment Banks

Regional Rural Banks  
 Local Area Banks  
 State Co-operative banks  
 District Central Co-op banks  
 Urban Co-op banks

The DICGC insures all deposits such as savings, fixed, current, recurring, etc. deposits except the following types of deposits

- Deposits of foreign Governments;
- Deposits of Central/State Governments;
- **Inter-bank deposits;**
- Deposits of the State Land Development Banks with the State co-operative bank;
- Any amount due on account of and deposit received outside India
- Any amount, which has been specifically exempted by the corporation with the previous approval of Reserve Bank of India

4) Consider the following statements regarding Consumer Price Index — Industrial Workers (CPI-IW).

1. CPI-IW is primarily used to regulate the dearness allowance of government employees and the workers in the industrial sectors.
2. It is also used in the determination and revision of minimum wages in scheduled employments.
3. The base year for CPI-IW is 2016.

Which of the above statements is/are correct?

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

Solution: d)

**The government recently launched a new series for Consumer Price Index — Industrial Workers (CPI-IW) changing the base year to 2016 from 2001.**

The CPI-IW is primarily used to **regulate the dearness allowance of government employees and the workers in the industrial sectors**. It is also used in the determination and revision of minimum wages in scheduled employments.

The new series is more representative in character and reflects the latest consumption pattern of the industrial workers.

Labour Bureau, a unit of the labour ministry, has been compiling and releasing CPI-IW numbers since its inception in 1946. The base year for inflation gauges is typically changed from time to time to capture the complex churnings in the economy.

[Source](#)

5) Consider the following statements regarding Yield curve.

1. The yield curve is a graph showing the relationship between interest rates earned on lending money for different durations.
2. The yield curve turns positive when near-term Treasuries yield more than their long-term counterparts.

[www.insightsonindia.com](http://www.insightsonindia.com)



Which of the above statements is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both
- d) None

Solution: b)

The yield curve is a graph showing the relationship between interest rates earned on lending money for different durations.

Normally, someone who lent to the government or a corporation for one year (by buying a one-year government or corporate bond) would expect to get a lower interest rate than someone who lent for five or ten years, making the yield curve upward-sloping.

Recently In US the ten-year bond rate had fallen to the point at which the ten-year rate was below the two-year rate – so the yield curve was inverted.

The yield curve turns negative when near-term Treasuries yield more than their long-term counterparts.

6) Consider the following statements regarding First Five-year Plan (FYP) in India.

- 1. The First Five-year Plan mainly focused on development of the primary sector.
- 2. The First Five-year Plan was followed by the Bombay Plan which became the basis for the Second Five Year Plan.

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 First Five-year Plan was launched in 1951 which mainly focused in development of the primary sector.** The First Five-Year Plan was based on the Harrod–Domar model with few modifications.

The Bombay Plan is the name commonly given to a World War II-era set of proposals for the development of the post-independence economy of India. The plan was published in 1944/1945.

Second Plan (1956–1961).

7) Printing currency is usually the last resort for the government in managing its deficit. This is because

- 1. Government expenditure using this new money boosts incomes and raises private demand in the economy, thus leading to inflation.
- 2. Excess supply of rupee will cause its depreciation.

Select the correct answer code:

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

Solution: c)

Government expenditure using this new money boosts incomes and raises private demand in the economy. Thus, it fuels inflation.

Easy monetary policy and high inflation are two of the leading causes of currency depreciation.

8) If the Cash Reserve Ratio (CRR) is increased, it may lead to which of the following?

1. Lesser availability of loanable funds with the banks
2. Immediate foreign institutional investment flows in the economy
3. Reduction in fiscal deficit of the government

Select the correct answer code:

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

Solution: a)

CRR is one of the major weapons in the RBI's arsenal that allows it to maintain a desired level of inflation, control the money supply, and also liquidity in the economy. The lower the CRR, the higher liquidity with the banks, which in turn goes into investment and lending and vice-versa. **Higher CRR can also negatively impact the economy as lesser availability of loanable funds**, in turn, slows down investment. It thereby reduces the supply of money in the economy.

Fiscal deficit depends on government's receipts and expenditures. CRR does not have a direct bearing on fiscal deficit.

9) The Reserve Bank of India monitors which of following indicators in the banking sector?

1. Cash flow with banks
2. Credit activities of banks
3. Spurious transactions

Select the correct answer code:

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

Solution: d)

Banks maintain a minimum cash balance out of the deposits they receive. The RBI monitors the banks in actually maintaining cash balance.

Similarly, the RBI sees that the banks give loans not just to profit-making businesses and traders but also to small cultivators, small scale industries, small borrowers etc.

Banks need to report spurious transactions to Financial Intelligence Unit. The norms are regulated by RBI.

10) Which among the following is/are likely to result in current account surplus of Balance of Payments (BoP)?

1. Steep fall in global crude oil prices
2. Increase in the remittances received from abroad.
3. External commercial borrowing

Select the correct answer code:

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

Solution: b)

External Commercial borrowing is a part of Capital account.

11) In India, which of the following are considered as Alternative Investment Funds (AIFs).

1. Social Venture Capital Funds
2. Real estate Funds
3. Hedge Funds
4. Private Equity (PE) Funds

Select the correct answer code:

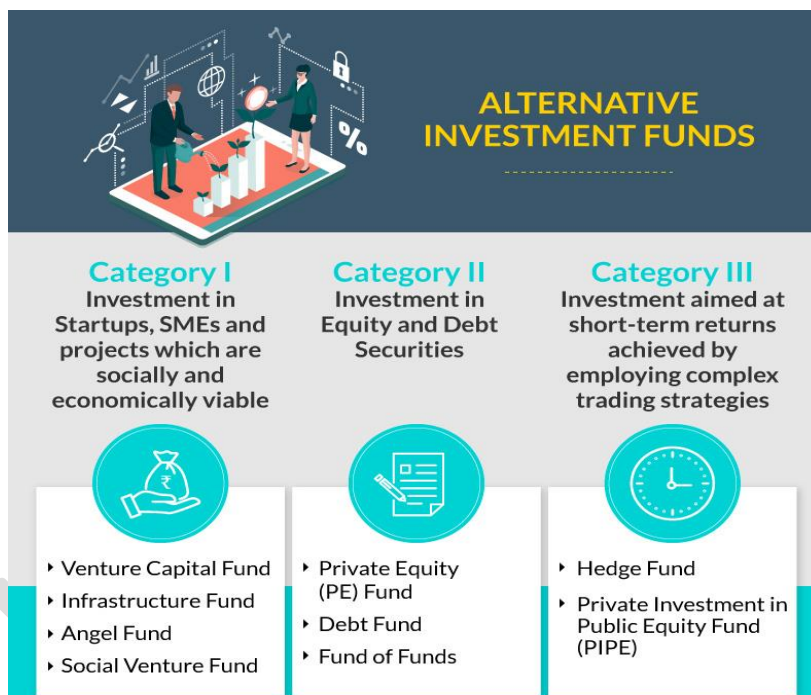
- a) 1, 2, 3
- b) 1, 3, 4
- c) 2, 3, 4
- d) 1, 2, 3, 4

Solution: d)

Alternative Investment Fund (AIF) refers to an investment which differs from conventional investment avenues such as stocks, debt securities, etc.

Alternative Investment Fund is described under Regulation 2(1)(b) of the Regulation Act, 2012 of Securities and Exchange Board of India (SEBI). AIF can be established in the form of a company or a corporate body or a trust or a Limited Liability Partnership (LLP).

**Generally, high net worth individuals and institutions invest in Alternative Investment Funds as it requires a high investment amount, unlike Mutual Funds.**



12) Consider the following statements regarding GDP deflator.

1. The GDP deflator is basically a measure of inflation.
2. It helps show the extent to which the increase in gross domestic product has happened on account of higher prices rather than increase in output.
3. It covers only those goods and services directly consumed by households.

Which of the above statements is/are correct?

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

Solution: b)

**The GDP deflator, also called implicit price deflator, is a measure of inflation.** It is the ratio of the value of goods and services an economy produces in a particular year at current prices to that of prices that prevailed during the base year.

This ratio helps show the extent to which the **increase in gross domestic product has happened on account of higher prices** rather than increase in output.

Since the deflator covers the entire range of goods and services produced in the economy — as against the limited commodity baskets for the wholesale or consumer price indices — it is seen as a **more comprehensive measure of inflation**.

Changes in consumption patterns or introduction of goods and services are automatically reflected in the GDP deflator. This allows the GDP deflator to absorb changes to an economy's consumption or investment patterns. Often, the trends of the GDP deflator will be similar to that of the CPI.

[Source](#)

13) Consider the following statements regarding Currency Deposit Ratio (CDR).

1. CDR is calculated only with respect to the Term deposits.
2. It reflects people's preference for liquidity.
3. It generally increases during the festive season.

Which of the above statements is/are correct?

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

Solution: b)

**The currency deposit ratio (cdr) is the ratio of money held by the public in currency to that they hold in bank deposits.**  $cdr = CU/DD$ . If a person gets Re 1 she will put Rs  $1/(1 + cdr)$  in her bank account and keep Rs  $cdr/(1 + cdr)$  in cash. It reflects people's preference for liquidity. It is a purely behavioural parameter which depends, among other things, on the seasonal pattern of expenditure. For example, **cdr increases during the festive season as people convert deposits to cash balance for meeting extra expenditure during such periods.**

14) Consider the following statements regarding revenue receipts and capital receipts of the government.

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

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: c)

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.

15) Consider the following statements regarding Cash Reserve Ratio (CRR).

1. It is the fraction of the total Net Demand and Time Liabilities (NDTL) of a Scheduled Commercial Bank in India that has to maintain as cash deposit with the RBI.
2. It applies uniformly to all banks in the country irrespective of an individual bank's financial situation or size.
3. Banks are paid interest for parking the required cash under CRR.

Which of the above statements is/are correct?

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

Solution: b)

**Cash Reserve Ratio refers to the fraction of the total Net Demand and Time Liabilities (NDTL) of a Scheduled Commercial Bank held in India, that it has to maintain as cash deposit with the Reserve Bank of India (RBI).**

The requirement applies uniformly to all banks in the country irrespective of an individual bank's financial situation or size. In contrast, certain countries e.g. China stipulates separate reserve requirements for 'large' and 'small' banks.

As per the RBI Act 1934, all Scheduled Commercial Banks (that includes public and private sector banks, foreign banks, regional rural banks and co-operative banks) are required to maintain a cash balance on average with the RBI on a fortnightly basis to cater to the CRR requirement.

**Presently, banks are not paid any interest on behalf of the RBI for parking the required cash.** If a bank fails to meet its required reserve requirements, the RBI is empowered to impose a penalty by charging a penal interest rate.

- 16) The Agreement on Trade-Related Investment Measures (TRIMs), is related to
- Current Account Convertibility
  - Domestic regulations a country applies to foreign investors
  - Most-favoured Nation principle
  - Duty free International market access to developing countries

Solution: b)

The Agreement on Trade-Related Investment Measures (TRIMs) are rules that are applicable to the domestic regulations a country applies to foreign investors, often as part of an industrial policy. The agreement, concluded in 1994, was negotiated under the WTO's predecessor, the General Agreement on Tariffs and Trade (GATT), and came into force in 1995. The agreement was agreed upon by all members of the World Trade Organization. Trade-Related Investment Measures is one of the four principal legal agreements of the WTO trade treaty.

TRIMs are rules that restrict preference of domestic firms and thereby enable international firms to operate more easily within foreign markets. Policies such as local content requirements and trade balancing rules that have traditionally been used to both promote the interests of domestic industries and combat restrictive business practices are now banned.

- 17) Consider the following statements regarding Special Drawing Right (SDR).

1. The SDR is an international reserve asset, created by the IMF to supplement its member countries' official reserves.
2. The value of the SDR is based on a basket of currencies of developed 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)

The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves. The value of the SDR is based on a basket of five currencies—the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.

- 18) Which of the following may lead to Inflation

1. A reduction in the total productive capacity of the economy even as more and more people are employed

2. Oversupply of goods in the economy.

Select the correct answer code:

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

Solution: a)

Inflation is basically too much money chasing too few goods, or excess demand chasing limited supply. If income rises faster, demand for goods and services will also rise. On the other hand, if the economy is unable to satisfy the increased demand, for e.g. due to poor infrastructure, lack of production etc, the higher income will spiral the prices upwards and lead to high inflation.

Excess supply is likely to bring prices down.

19) A receipt is a capital receipt if it satisfies which of the following conditions?

- 1. The receipts must create a liability for the government.
- 2. The receipts must cause a decrease in the Government assets.

Select the correct answer code:

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

Solution: c)

A receipt is a capital receipt if it satisfies any one of the two conditions:

- (i) The receipts must create a liability for the government. For example, Borrowings are capital receipts as they lead to an increase in the liability of the government. However, tax received is not a capital receipt as it does not result in creation of any liability.
- (ii) The receipts must cause a decrease in the assets. For example, receipts from sale of shares of public enterprise is a capital receipt as it leads to reduction in assets of the government.

20) With reference to World Trade Organization (WTO) affairs, which of the following best describes Special Safeguard Mechanism (SSM)?

- a) Mechanism provided for the developed countries to raise tariffs to deal with cheap goods from the developing nations.
- b) Mechanism to restrict the imports of disease infected agricultural products from other countries.
- c) Mechanism to curb the imports of goods whose manufacturing process has violated International labour norms
- d) A tool that will allow developing countries to raise tariffs temporarily to deal with import surges or price falls.

Solution: d)

It is a tool that will allow developing countries to raise tariffs temporarily to deal with import surges or price falls.

## 4. Art and Culture

1) The culture of wearing face masks for performing art can be found in

1. Indus Valley civilization
2. Natya Shashtra
3. Buddhist monasteries of Ladakh

Select the correct answer code:

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

Solution: d)

From the delicate pastel coloured masks and shimmering head-dresses worn by Chhau dancers to the **demon dance masks of the Buddhist monasteries of Ladakh** to the inexpensive animal masks of papier-mâché available in our cities, India has a vast and ancient tradition of masks and make-up for rituals and theatre.

Excavations have revealed **small hollow masks dating back to the Indus Valley Civilisation**. In fact in Bihar a terracotta mask of the fourth century has also been excavated. The **Natya Shastra** speaks of masks and their use in theatre. Here it is mentioned that masks can be made of ground paddy husks applied to cloth.

2) Which of the following temple complexes are the examples of Nagara school of architecture?

1. Lingaraja Temple
2. Sun temple of Konark
3. Shore Temple

Select the correct answer code:

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

Solution: a)

Shore Temple is located near Chennai in Tamil Nadu. **Shore Temple is an example for Dravidian architecture.**

3) Consider the following statements regarding the development of architecture during Mughal period.

1. Use of red sandstone is the chief feature of architecture during Akbar's time.
2. Humayun's tomb is an example for Charbagh style.

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 chief feature of the architecture of Akbar's time was the use of **red sandstone**.

Humayun's garden-tomb is an example of the charbagh (a four quadrant garden with the four rivers of Quranic paradise represented), with pools joined by channels.

4) Diwan-i-Khas in Red Fort is a

- a) A garden
- b) Hall of Private Audiences



- c) Palace of Colour
- d) Pearl Mosque

Solution: b)

The **Diwan-i-Khas or Hall of Private Audiences**, was a chamber in the Red Fort of Delhi built in 1571 as a location for receptions. It was the location where the Mughal Emperor Akbar received courtiers and state guests. It was also known as the Shah Mahal.

- 5) The Senia tradition is
- a) Musical tradition that invoked the name of Tansen, the celebrated musician of Akbar's Court
  - b) Dance drama written by Keshab Chandra Sen, a social reformer and philosopher
  - c) Musical tradition that emerged from the Mughal Sena
  - d) None of the above

Solution: a)

The word "Senia" is related to Tansen. The word "Gharana" implies a style of music. The followers of Tansen's school of music are widely known as the followers of "Senia gharana" (i.e. "Seniya" style/school of music).

Tansen was a vocalist but this tradition has also produced great Sitar Maestros.

The "Senia" style of Sitar playing started with the legendary great master of Sitar, Ustad Maseet Sen from the family of Tansen, the originator of "Maseetkhani" style.

- 6) Which one of the following animals was not depicted on the seals and terracotta art of the Harappan culture?
- a) Camel
  - b) Rhinoceros
  - c) Tiger
  - d) Elephant

Solution: a)

**Cow, camel, horse and lion were not depicted on seals.** Unicorn (bull) was the animal most commonly represented on the seals.

- 7) Ashokan edicts have been written in which of the following languages?
1. Prakrit
  2. Greek
  3. Kharoshti
  4. Aramaic

Select the correct answer code:

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

Solution: c)

Ashokan inscriptions comprise of major rock edicts, minor rock edicts and pillar edicts. Different languages like **Prakrit, Greek, Aramaic** and different **scripts like Brahmi, Kharoshti** were used. The most widely used script was Brahmi. Kharoshti was widely used in the inscriptions found in modern-day Pakistan. Greek and Aramaic was used in inscriptions found in Afghanistan - for example, the bilingual Greek-Aramaic inscription found in Kandahar.

- 8) Consider the following statements.

1. The temple is the largest of the rock-cut Hindu temples at the Ellora Caves.

2. Most of the excavation of the temple is generally attributed to the eighth century Rashtrakuta king Krishna I.

The above statements refer to

- a) Brihadishvara Temple
- b) Kailasha Temple
- c) Lingaraja Temple
- d) Vitthala temple

Solution: b)

**The Kailasha or Kailashanatha temple is the largest of the rock-cut Hindu temples at the Ellora Caves**, Maharashtra. A megalith carved from a rock cliff face, it is considered one of the most remarkable cave temples in the world because of its size, architecture and sculptural treatment, and "the climax of the rock-cut phase of Indian architecture".

The Kailasa temple (Cave 16) is the largest of the 34 Buddhist, Jain and Hindu cave temples and monasteries known collectively as the Ellora Caves.

**Most of the excavation of the temple is generally attributed to the eighth century Rashtrakuta king Krishna I**, with some elements completed later. The temple architecture shows traces of Pallava and Chalukya styles built by Kannadiga kings.

9) What is common to these personalities - Tyagaraja, Muthuswami Dikshitar and Syama Sastri?

- a) Theatre Presentation
- b) Carnatic music
- c) Temple Architecture
- d) Tamil Poetry and Prose

Solution: b)

The birth of the Musical Trinity - Tyagaraja, Muthuswami Dikshitar and Syama Sastri - at Tiruvarur between the years 1750 to 1850 A.D. ushered in an era of dynamic development in Carnatic music.

The Trinity were not only contemporaries among themselves but, also contemporaries of great composers of Western Music, as Beethoven, Mozart, Wagner and Haydn.

It was the 'Golden Age' of music throughout the world. Carnatic music reached its pinnacle of artistic excellence during this period.

10) With reference to the history of philosophical thought in India, consider the following statements regarding Vaisheshika School

1. It believes in the physicality of the Universe and is considered to be the realistic and objective philosophy that governs the universe.
2. It developed the atomic theory, i.e. all material objects are made of atoms.

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 Vaisheshika school believes in the physicality of the Universe and is considered to be the realistic and objective philosophy that governs the universe.** The Kanada who also wrote the basic text governing the Vaisheshika philosophy is often considered the founder of this school.

They argue that everything in the universe was created by the five main elements: fire, air, water, earth and ether (sky). These material elements are also called Dravya.

As this school has a very scientific approach, **they also developed the atomic theory**, i.e. all material objects are made of atoms.

This school was also responsible for the beginning of physics in Indian subcontinent. They are considered to be the propounder of the mechanical process of formation of this Universe.

11) Consider the following statements regarding Bharhut stupa.

1. The construction of Bharhut stupa was started and completed during Shunga period.
2. They contain numerous birth stories of the Buddha's previous lives, or Jataka tales.

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 Bharhut stupa (in MP) may have been first built by the Maurya king Ashoka in the 3rd century BCE, but many works of art were apparently added during the Shunga period, with many friezes from the 2nd century BCE.

**They contain numerous birth stories of the Buddha's previous lives, or Jataka tales.** Many of them are in the shape of large, round medallions.

**Queen Maya's dream**, preceding the birth of the Buddha, is also a major theme on the railing of the Bharhut "stupa".



*Queen Maya's dream, Bharhut*

12) Consider the following statements.

1. Roman art style is more of ornamentation and decoration and is realistic in nature.
2. The Greeks art style is reflected in the muscular depictions of Gods.
3. Gandhara School integrates both Greek and Roman art styles.

Which of the above statements is/are correct?

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

Solution: d)

There exists some difference between Greek and Roman styles, and Gandhara School integrates both the styles. **The idealistic style of Greeks is reflected in the muscular depictions of Gods and other men showing strength and beauty.**

On the other hand, **Romans used art for ornamentation and decoration and is realistic in nature as opposed to Greek idealism.**

13) Consider the following statements regarding Bhakti saints.

1. Saint Kabir is famous for his dohas (couplets)
2. Surdas wrote Ramacharithmanas, one of the most revered Hindu texts.

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)

Kabir was a 15th-century Indian mystic poet and saint, whose writings, according to some scholars, influenced Hinduism's Bhakti movement. Kabir's verses are found in Sikhism's scripture Guru Granth Sahib. He is famous for his dohas (couplets).

Tulsidas wrote Ramacharithmanas

14) With reference to the Sangam age, Panar and Viraliyar were

- a) Temple guards
- b) Bull fighters
- c) Singing bards
- d) Charity donors

Solution: c)

Poetry, music and dancing were popular among the people of the Sangam age. Liberal donations were given to poets by the kings, chieftains and nobles.

**The royal courts were crowded with singing bards called Panar and Viraliyar.** They were experts in folk songs and folk dances.

The arts of music and dancing were highly developed. A variety of Yazhs and drums are referred to in the Sangam literature.

Dancing was performed by Kanigaiyar. Koothu was the most popular entertainment of the people.

15) Consider the following statements regarding Bharatnatyam dance.

1. The accompanying song while performing it is generally dedicated to good harvests.
2. Its performance ends with a tillana which has its origin in the tarana of Hindustani music.

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)

As a solo dance, Bharatnatyam leans heavily on the abhinaya or mime aspect of dance - the nritya, where the dancer expresses the sahitya through movement and mime.

**It is in the adoration of the Supreme Being.**

It is a vibrant dance performed to the accompaniment of musical syllables with a few lines of sahitya. The finale of the piece is a series of well designed rhythmic lines reaching a climax.

A Bharatnatyam performance ends with a tillana which has its origin in the tarana of Hindustani music.

16) Which of the following most appropriately describes "Toranas"?

- a) Collection of Chinars and Pietra duras seen in decorative works in Islami architecture
- b) Calligraphy inscribed on interior walls of royal durbars
- c) Gateways to Buddhist Stupas
- d) Style of dome-based architecture introduced by Turks

Solution: c)

Torana is a sacred or honorific **gateway in Buddhist and Hindu architecture**. It is made of wood or stone. Toranas are associated with Buddhist stupas like the **Great Stupa in Sanchi**, as well as with Jain and Hindu structures, and also with several secular structures.

17) Consider the following statements regarding Ajanta Caves Paintings

- 1. The human & animal forms show a variety of graceful poses.
- 2. It depicts themes of court life and natural scenes
- 3. Most of the paintings were depicted after Gupta Period

Which of the above statements is/are correct?

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

Solution: c)

The Ajanta Caves carved out of volcanic rock in the Maharashtra Plateau, situated near Aurangabad in Maharashtra.

Frescoes are paintings which are done on wet plaster in which colours become fixed as the plaster dries. They are found on the walls and ceilings at Ajanta.

The **human & animal forms show a variety of graceful poses**. Various methods were used to create the illusion of depth.

They depict themes of court life, feasting, processions, men and women at work, festivals and various natural scenes including animals, birds and flowers.

**Most of paintings were depicted well before Gupta's time.**

18) Rajaraja Chola I is associated with which of the following cultural heritages of India?

- 1. Brihadeeswara temple at Tanjore
- 2. The compilation of Thirumurai
- 3. Nagapattinam monastery

Select the correct answer code:

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

Solution: d)

He completed the construction of the famous Rajarajeswara temple or **Brihadeeswara temple** at Tanjore in 1010 A.D.

He also helped in the construction of a **Buddhist monastery at Nagapattinam**.

During his reign, the texts of the Tamil poets Appar, Sambandar and Sundarar were collected and edited into one **compilation called Thirumurai**.

Further, He initiated a massive project of land survey and assessment in 1000 CE which led to the reorganization of the country into individual units known as valanadus.

19) Consider the following statements regarding Kuchipudi.

1. It is mentioned in Natya Shastra.
2. As per tradition, the dance must be accompanied by live vocals without instrumental music.
3. It is recognized as an Indian classical dance.

Select the correct answer code:

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

Solution: c)

It has its roots in the ancient Hindu Sanskrit text of Natya Shastra. Like all major classical dances of India, it was also developed as a religious art linked to traveling bards, temples and spiritual beliefs.

The Kuchipudi style was conceived by Siddhendra Yogi, a talented Vaishnava poet of 17th century.

It begins with an invocation to Lord Ganesha followed by nritya (non-narrative and abstract dancing); shabdham (narrative dancing) and natya.

The dance is accompanied by song which is typically Carnatic music. The singer is accompanied by **musical instruments like mridangam, violin, flute and tambura.**

It is one of the major Indian classical dances. It originated in a village of Krishna district in modern Indian state of Andhra Pradesh.

It derives its name from this village.

20) Which of the following pairs are correctly matched?

1. Dhyana Mudra: supreme enlightenment
2. Vitarka Mudra: fearlessness
3. Dharmachakra Mudra: Turning the Wheel of the Dharma

Select the correct answer code:

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

Solution: b)

Abhaya Mudra: It indicates fearlessness.

**Dharmachakra Mudra: It means 'Turning the Wheel of the Dharma or Law', i.e., setting into motion the wheel of Dharma.**

Uttarabodhi Mudra: It means supreme enlightenment.

Dhyana Mudra: Indicates Meditation and is also called 'Samadhi' or 'Yoga' Mudra.

Vitarka Mudra: It indicates teaching and discussion or intellectual debate.

## 5. History

1) Consider the following statements about the Rock Shelters of Bhimbetka.

1. Bhimbetka owes its name to the characters of Mahabharata.
2. Upper Palaeolithic as well as Medieval period rock paintings can be found in these caves.
3. Bhimbetka paintings are highly secular in nature.

Which of the above statements is/are correct?

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

Solution: b)

Bhimbetka owes its name to the characters of the Mahabharata. It is believed that when the five brothers, called Pandavas, were banished from their kingdom, they came here and stayed in these caves, the massive rocks seating the gigantic frame of Bhima, the second Pandava.

The rock paintings have numerous layers belonging to various epochs of time, ranging from the **Upper Palaeolithic**, Mesolithic Age to the protohistoric, early historic and **medieval periods**. The most ancient scenes here believed to be commonly belonging to the Mesolithic Age.

Animals such as bison, tiger, rhinoceros, wild boar, elephants, monkeys, antelopes, lizards, peacocks etc. have been abundantly depicted in the rock shelters. **Popular religious and ritual symbols also occur frequently.**

2) Consider the following statements about Mesolithic period.

1. Microliths were used by Mesolithic people for hunting.
2. Domestication of animals and primitive cultivation started during this period.
3. First human colonization of the Ganga plains took place during this period.

Which of the above statements is/are correct?

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

Solution: d)

Mesolithic or Middle Stone Age which falls roughly from 10000 B.C. to 6000 B.C.

Mesolithic remains are found in Langhanj in Gujarat, Adamgarh in Madhya Pradesh and also in some places of Rajasthan, Uttar Pradesh and Bihar.

In the sites of Mesolithic Age, a different type of stone tools is found. These are tiny stone artifacts, often not more than five centimeters in size, and therefore called **microliths**.

The favourable climate, better rainfalls and warm atmosphere led to reduction in nomadism to seasonally sedentary settlement. They moved to new areas such as nearby rivers which provided water. **First human colonization of the Ganga plains took place during this period.**

Domestication of animals, horticulture and primitive cultivation started.

3) Consider the following statements.

1. During the end of the eighteenth century and the early nineteenth century, a class of rich peasants known as jotedars consolidated their position in the villages and acquired vast areas of land.



2. Jotedars were loyal to the zamindars and helped them collect revenue from the ryots.

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)

While many zamindars were facing a crisis at the end of the eighteenth century, a **group of rich peasants were consolidating their position in the villages. This class of rich peasants were known as jotedars.** By the early nineteenth century, jotedars had acquired vast areas of land – sometimes as much as several thousand acres. They **controlled local trade as well as moneylending, exercising immense power over the poorer cultivators of the region.**

A large part of their land was cultivated through sharecroppers (adhiyars or bargadars) who brought their own ploughs, laboured in the field, and handed over half the produce to the jotedars after the harvest.

They fiercely resisted efforts by zamindars to increase the jama of the village, prevented zamindari officials from executing their duties, mobilised ryots who were dependent on them, and deliberately delayed payments of revenue to the zamindar.

The jotedars were most powerful in North Bengal. In some places they were called haoladars, elsewhere they were known as gantidars or mandals. **Their rise inevitably weakened zamindari authority.**

4) Arrange the following in the chronological order in which it was signed.

- 1. Treaty of Allahabad
- 2. Treaty of Bassein
- 3. Treaty of Srirangapatnam

Select the correct answer code:

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

Solution: c)

The **Treaty of Allahabad was signed on 12 August 1765**, between the Mughal Emperor Shah Alam II, son of the late Emperor Alamgir II, and Robert Clive, of the East India Company, as a result of the Battle of Buxar of 22 October 1764.

The **Treaty of Seringapatam was signed on 18 March 1792** at the end of the Third Anglo-Mysore War.

The **Treaty of Bassein was a pact signed on 31 December 1802** between the British East India Company and Baji Rao II, the Maratha Peshwa of Pune in India after the Battle of Poona.

5) The Moderates were called so because

- 1. They had rejected the idea of participating in legislative councils.
- 2. They believed in confrontation rather than persuasion.

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)

Moderates were called so because they **adopted peaceful and constitutional means** to achieve their demands. They had faith in British goodwill and justice. They **organized in parties and associations**, even extremists did the same, but the latter were more radical in their approach. Extremists believed in confrontation rather than persuasion.

6) Consider the following statements regarding Painted Grey Ware culture (PGW).

1. Painted Grey Ware culture (PGW) is a Stone Age culture.
2. It is contemporary to, and a successor of the Black and red ware culture.

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)

**Painted Grey Ware culture (PGW) is an Iron Age culture** of the Gangetic plain and the Ghaggar-Hakra valley, lasting from roughly 1200 BCE to 600 BCE. PGW are extremely fine to touch, with a nice, smooth surface. Perhaps these were used on special occasions, for important people, and to serve special food.

**It is contemporary to, and a successor of the Black and red ware culture.**

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.



7) Consider the following statements regarding the teachings of Jainism.

1. As per Mahavira, even inanimate objects have souls and varying degrees of consciousness.
2. Jainism believes in extreme penance and asceticism to attain ultimate knowledge.

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)

**Mahavira regarded all objects, both animate and inanimate, have souls and various degrees of consciousness.**

They possess life and feel pain when they are injured.

Even the practice of agriculture was considered sinful as it causes injury to the earth, worms and animals.

Similarly the **doctrine of asceticism and renunciation was also carried** to extreme lengths by the practice of starvation, nudity and other forms of self-torture.

8) Which of the following were annexed by the British citing the Doctrine of Lapse?

1. Satara
2. Sambalpur
3. Nagpur
4. Jhansi
5. Awadh

Select the correct answer code:

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

Solution: d)

The final wave of annexations occurred under Lord Dalhousie who was the Governor-General from 1848 to 1856. He devised a policy that came to be known as the Doctrine of Lapse. The doctrine declared that if an Indian ruler died without a male heir his kingdom would “lapse”, that is, become part of Company territory. One kingdom after another was annexed simply by applying this doctrine: **Satara (1848), Sambalpur (1850), Udaipur (1852), Nagpur (1853) and Jhansi (1854)**. Finally, in 1856, the Company also took over **Awadh**. This time the British had an added argument – they said they were “obliged by duty” to take over Awadh in order to free the people from the “misgovernment” of the Nawab! Enraged by the humiliating way in which the Nawab was deposed, the people of Awadh joined the great revolt that broke out in 1857.

9) Which of following movements was also known as the “Vande Matram movement”?

- a) Civil disobedience movement
- b) Non-cooperation movement
- c) Swadeshi movement
- d) Quit India Movement

Solution: c)

**Vandemataram Movement is also known as the Swadeshi Movement.** It was an anti-Bengal partition movement. The Viceroy Lord Curzon divided Bengal province into two in 1905. Bengal people observed 16th October as a day of mourning when partition came into force. The song Vandemataram written by Bakim Chandra Chatterjee became the prayer song for meetings on anti-partition movement.

10) The plan of Sir Stafford Cripps envisaged that after the Second World War

- a) India should be granted complete independence
- b) India should be partitioned into two before granting independence
- c) India should be made a republic with the condition that she will join the Commonwealth
- d) India should be given Dominion status

Solution: d)

The main proposals of the 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.

11) Which of the following were the practices associated with the Harappan Settlements?

- 1. Ploughing of crop fields
- 2. Mixed cropping
- 3. Practice of Irrigation

## 4. Consumption of animal products

Select the correct answer code:

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

Solution: d)

Archaeologists have found evidence of a **ploughed field** at Kalibangan (Rajasthan).

The Harappans ate a wide range of animal products. Archaeologists have been able to reconstruct use of animals from finds of charred animal bones found at Harappan sites. These include those of cattle, sheep, goat, buffalo and pig.

Most Harappan sites are located in semi-aridlands, where irrigation was probably required for agriculture.

**Traces of canals, water reservoirs and wells have been found at the Harappan sites** indicate that agriculture was practiced.

12) Consider the following statements.

- 1. As per Ramanuja, God is Sagunabrahman.
- 2. As per Madhava, the world is not an illusion but a reality.

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)

In the twelfth century, **Ramanuja preached Visishtadvaita.**

**According to him God is Sagunabrahman.** The creative process and all the objects in creation are real but not illusory as was held by Sankaracharya. Therefore, God, soul, matter are real. But God is inner substance and the rest are his attributes.

He also advocated prabattimarga or path of self-surrender to God. He invited the downtrodden to Vaishnavism.

In the thirteenth century, **Madhava from Kannada region propagated Dvaita or dualism** of Jivatma and Paramatma.

According to his philosophy, the world is not an illusion but a reality.

God, soul, matter are unique in nature.

13) Consider the following statements regarding Subsidiary Alliance.

- 1. According to Subsidiary Alliance, Indian rulers were not allowed to have their independent armed forces and were protected by the Company.
- 2. If the Indian rulers failed to make the payment, then part of their territory was taken away as penalty.
- 3. Indian rulers regularly paid for the subsidiary forces and none of the Indian territories were ceded by the British.

Which of the above statements is/are correct?

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

Solution: a)

According to the terms of this alliance, **Indian rulers were not allowed to have their independent armed forces.** They were to be protected by the Company but had to pay for the “subsidiary forces” that the Company was supposed to maintain for the purpose of this protection. **If the Indian rulers failed to make the payment, then part of their territory was taken away as penalty.**

For example, when Richard Wellesley was Governor-General (1798-1805), the Nawab of Awadh was forced to give over half of his territory to the Company in 1801, as he failed to pay for the “subsidiary forces”. Hyderabad was also forced to cede territories on similar grounds.

14) The aim of Public Safety Bill, 1928 was to

- a) Regulate the manufacture, sale, possession, and carrying of firearms.
- b) Allow British subjects to be tried by Indian judges.
- c) Deport the foreigners suspected of propagating socialist and communist ideas.
- d) Abolish oppressive social practices among various religious groups.

Solution: c)

Public safety bill aimed to **stop Communist movement in India** by cutting it off from British & foreign communist organizations. It called to deport the foreigners suspected of propagating socialist and communist ideas.

15) Consider the following statements about Champaran Satyagraha

- 1. The Champaran Satyagraha of 1917 was the first Satyagraha movement inspired by Gandhi in India.
- 2. Gandhi was requested by Rajendra Prasad to look into the problems of the indigo planters of Champaran.

3. Gandhi's method of inquiry at Champaran was based on surveys by the volunteers.

Which of the above statements is/are correct?

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

Solution: b)

**Gandhi was so thoroughly persuaded by Rajkumar Shukla, an indigo cultivator from Champaran that he decided to investigate into the matter.**

Gandhi's method of inquiry at Champaran was based on surveys by the volunteers. The respondents who willingly gave statements should sign the papers or give thumb impressions.

For those unwilling to participate, the reasons must be recorded by the volunteers. The principal volunteers in this survey were mostly lawyers like Babu Rajendra Prasad, Dharnidhar Prasad, Gorakh Prasad, Ramnawami Prasad, Sambhusaran and Anugraha Narain Sinha.

16) Consider the following statements regarding Mauryan Empire.

- 1. Slavery was largely absent in Mauryan Empire.
- 2. Mauryan government had equal control over all the regions of its 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)

**Slaves were employed in commercial activities.** Mauryan government didn't have equal control over all the regions of its empire, few regions were directly controlled under the Mauryan administration, while others were under the local kings, who accepted the over lordship of Mauryans.

17) Match List-I (Terms in Sangam Age) with List-II (Their meanings)

List-I	List-II
A. Enadi	1. The lowest class
B. Paraiyar	2. The Ruling class
C. Arasar	3. Rich peasants
D. Vellala	4. Agricultural Labourers
	5. Captains of the army

Select the correct answer code:

- A B C D  
 a) 5 4 2 3  
 b) 3 4 5 2  
 c) 3 1 4 2  
 d) 5 1 4 3

Solution: a)

18) Curzon brought in the Indian Universities Act which

- a) Removed social sciences from the curriculum of private universities to curb nationalism
- b) Did away with the territorial jurisdiction of the Universities
- c) Brought all the universities in India under the control of the government
- d) Nationalized all higher educational institutions in India

Solution: c)

Curzon took a serious view of the fall in the standard of education and discipline in the educational institutions. In his view the universities had degenerated into factories for producing political revolutionaries.

To set the educational system in order, he instituted in 1902, a Universities Commission to go into the entire question of university education in the country.

On the basis of the findings and recommendations of the Commission, **Curzon brought in the Indian Universities Act of 1904, which brought all the universities in India under the control of the government.**

19) By the time Gandhiji arrived in India

- 1. He had already forged of technique of Satyagraha in South Africa
- 2. Indian National Congress (INC) was already established in India
- 3. The first Swadeshi movement had already been waged

Select the correct answer code:

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

Solution: d)

**It was in South Africa that Mahatma Gandhi first forged the distinctive techniques of non-violent protest known as satyagraha.**

The India that Mahatma Gandhi came back to in 1915 was rather different from the one that he had left in 1893. Although still a colony of the British, it was far more active in a political sense.

The Indian National Congress now had branches in most major cities and towns. Through the Swadeshi movement of 1905-07 it had greatly broadened its appeal among the middle classes.

20) Ahmadabad Mill Strike 1918 led by Gandhiji was based on the issue of

- a) Inhuman treatment of mill workers by the management
- b) Objection of management on participation of workers in the freedom struggle
- c) Plague Bonus of the previous year to workers



d) Large-scale layoffs of mill workers

Solution: c)

**Ahmedabad Mill Strike (1918)— First Hunger Strike:**

In March 1918, Gandhi intervened in a dispute between cotton mill owners of Ahmedabad and the workers over the issue of discontinuation of the plague bonus.

Gandhi asked the workers to go on a strike and demand a 35 per cent increase in wages. Gandhi advised the workers to remain non-violent while on strike. He himself undertook a fast unto death (his first) to strengthen the workers' resolve. The result was that the strike was successful and the workers got a 35% wage increase.



# INSTA COURSES

Join our Courses & Get Ready for **IAS**



Apply Now at ► [www.instacourses.insightsonindia.com](http://www.instacourses.insightsonindia.com)



## 6. Environment

1) Consider the following statements.

1. The energy pyramid of an ecosystem is always upright and narrows to the top.
2. The biomass in the upper trophic levels is generally very high as compared to the lower trophic levels.

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)

Since each higher trophic level receives only a fraction of energy of the lower trophic levels, the **energy pyramid is narrow at the top**.

But, generally (barring some aquatic ecosystems) **lower trophic levels have higher biomass** as compared to the higher trophic levels.

2) Consider the following statements regarding Mediterranean Forests.

1. Mediterranean Forests are found in only those countries bordering Mediterranean Sea.
2. They have thick barks and wax coated leaves which help them reduce transpiration.
3. Mediterranean Forests are known as 'Orchards of the world' for their fruit cultivation.

Which of the above statements is/are correct?

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

Solution: c)

Mediterranean forests are found in areas around Mediterranean Sea, Central Chile, South-West USA, Australia, Africa. They have thick barks and wax coated leaves which help them reduce transpiration. Due to these characteristics, Mediterranean trees adapt themselves to dry summers. Mediterranean Forests are known as 'Orchards of the world' for their fruit cultivation. People have removed the natural vegetation here in order to cultivate what they want to. So, Citrus fruits such as oranges, figs, olives and grapes are commonly cultivated here.

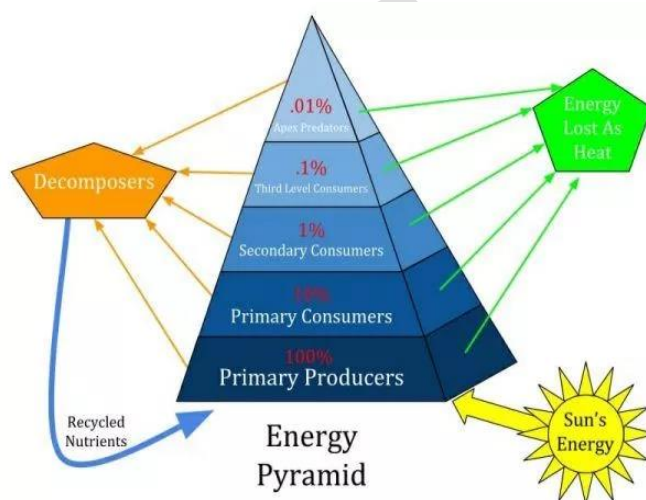
3) Oil spills can be treated with bioremediation by using some species of

1. Archea
2. Plants
3. Bacteria
4. Algae
5. Fungi

Select the correct answer using the codes below.

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

Solution: d)



Bioremediation refers to the use of specific microorganisms or plants to metabolize and remove harmful substances. These organisms are known for their biochemical and physical affinity to hydrocarbons among other pollutants. Various types of bacteria, archaea, algae, fungi, and some species of plants are all able to break down specific toxic waste products into safer constituents.

- 4) The higher the amount of biological oxygen demand (BOD) in a certain segment of water
1. The greater the amount of organic matter available for oxygen consuming bacteria.
  2. Higher could be the level of pollution in the water

Select the correct answer code:

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

Solution: c)

Biochemical Oxygen Demand or Biological Oxygen Demand, is a measurement of the amount of dissolved oxygen (DO) that is used by aerobic microorganisms when decomposing organic matter in water. Biochemical Oxygen Demand is an important water quality parameter because it provides an index to assess the effect discharged wastewater will have on the receiving environment. **The higher the BOD value, the greater the amount of organic matter or "food" (read nutrients) available for oxygen consuming bacteria.**

- 5) Consider the following statements regarding ocean acidification.
1. It largely occurs due to the high absorption of nitrogenous based acidic compounds.
  2. Introduction of sea grasses can reduce the impact of acidification.

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)

Ocean acidification refers to a reduction in the pH of the ocean over an extended period of time, caused **primarily by uptake of carbon dioxide (CO<sub>2</sub>) from the atmosphere.** Nitrogenous compounds contribute fraction to ocean acidification.

Sea grass has ability to control ocean acidification.

- 6) Arrange the following ecosystems in the decreasing order of biomass productivity (g per metre square per year).

1. Coral reefs
2. Open ocean
3. Tropical rainforest
4. Deserts

Select the correct answer code:

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

Solution: b)

Producer	Biomass productivity (gC/m <sup>2</sup> /yr)
Swamps and Marshes	2,500
Tropical rainforests	2,000
Coral reefs	2,000
Algal beds	2,000
River estuaries	1,800
Temperate forests	1,250
Cultivated lands	650
Tundras	140
Open ocean	125
Deserts	3

7) Which of the following are the harmful environmental effects of Oxides of Nitrogen?

1. It damage the leaves of plants and retard the rate of photosynthesis.
2. It is toxic to living tissues also.
3. It is harmful to various textile fibres and metals.

Select the correct answer code:

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

Solution: d)

The irritant red haze in the traffic and congested places is due to oxides of nitrogen. Higher concentrations of NO<sub>2</sub> damage the leaves of plants and retard the rate of photosynthesis. Nitrogen dioxide is a lung irritant that can lead to an acute respiratory disease in children. It is toxic to living tissues also. Nitrogen dioxide is also harmful to various textile fibres and metals.

8) Which of the following are Tropical Grasslands?

1. Savanna
2. Campos
3. Prairie
4. Llanos
5. Steppe

Select the correct answer code:

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

Solution: b)

Grasslands are known by different names in different regions.

**Tropical Grasslands are:**

- East Africa- Savanna
- Brazil- Campos
- Venezuela- Llanos

**Temperate Grasslands are:**

- Argentina- Pampas

- N. America- Prairie
- S. Africa- Veld
- C. Asia- Steppe
- Australia- Down

9) Consider the following statements.

1. Fungi cannot be used in the bioremediation of radioactively polluted sites.
2. Fungi can act as bio-fertilizers by actively competing for nutrients and space with pathogenic microorganisms.

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)

In agriculture, fungi are useful if they actively compete for nutrients and space with pathogenic microorganisms such as bacteria or other fungi. For example, certain fungi may be used to eliminate or suppress the growth of harmful plant pathogens, such as insects, mites, weeds, nematodes.

**Fungi have been shown to bio mineralize uranium oxides, suggesting they may have application in the bioremediation of radioactively polluted sites.**

10) Which of the following are the key elements that lead to variation in the physical and chemical conditions of different habitats?

1. Temperature
2. Pathogens
3. Soil
4. Predators
5. Competitors
6. Light

Select the correct answer code:

- a) 1, 3, 6
- b) 1, 2, 3, 5, 6
- c) 1, 3, 4, 6
- d) 1, 2, 3, 4, 5, 6

Solution: d)

What are the key elements that lead to so much variation in the physical and chemical conditions of different habitats? The most important ones are temperature, water, light and soil. We must remember that the physico-chemical (abiotic) components alone do not characterise the habitat of an organism completely; the habitat includes biotic components also – pathogens, parasites, predators and competitors – of the organism with which they interact constantly.

11) Which of the following are recognised as the Ramsar sites in India?

1. Harike Lake
2. Wular Lake
3. Keoladeo National Park
4. Chilika Lake

Select the correct answer code:

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

d) 1, 2, 4

Solution: c)

Some of the Ramsar sites in India include  
 Chilika Lake in Odisha  
 Keoladeo National Park in Rajasthan  
 Harike Lake in Punjab  
 Loktak Lake in Manipur  
 Wular Lake in Jammu and Kashmir

[Source](#)

12) Arrange the following ecosystems in decreasing order of net primary productivity

1. Tropical seasonal forest
2. Tropical rain forest
3. Temperate Grassland
4. Woodland and Shrubland

Select the correct answer code:

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

Solution: b)

Net primary productivity, or NPP, is gross primary productivity minus the rate of energy loss to metabolism and maintenance. In other words, it's the rate at which energy is stored as biomass by plants or other primary producers and made available to the consumers in the ecosystem.

Net primary productivity varies among ecosystems and depends on many factors. These include solar energy input, temperature and moisture levels, carbon dioxide levels, nutrient availability, and community interactions. Tropical rain forests receive overall more rainfall than seasonal forests and grasslands. Also, a forest will certainly be more productive than grassland.

13) Consider the following statements regarding Acclimatization.

1. Acclimatization occurs in a short period of time and within the organism's lifetime, whereas adaptation is a development that takes place over many generations.
  2. Humans who migrate permanently to a higher altitude naturally acclimatize to their new environment by developing an increase in the number of red blood cells to increase the oxygen carrying capacity of the blood.
- 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)

Acclimatization is the process in which an individual organism adjusts to a change in its environment (such as a change in altitude, temperature, humidity, photoperiod, or pH), allowing it to maintain performance across a range of environmental conditions. Acclimatization occurs in a short period of time (hours to weeks), and within the organism's lifetime (compared to adaptation, which is a development that takes place over many generations).

Humans who migrate permanently to a higher altitude naturally acclimatize to their new environment by developing an increase in the number of red blood cells to increase the oxygen carrying capacity of the blood, in order to compensate for lower levels of oxygen intake.

14) Consider the following statements.

1. In the aquatic environment, the sediment-characteristics often determine the type of benthic animals that can thrive there.
2. Like humans, plants also have mechanisms to maintain internal temperature.
3. Very small animals are rarely found in polar regions since thermoregulation is energetically expensive for these animals.

Which of the above statements is/are correct?

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

Solution: b)

The mechanisms used by most mammals to regulate their body temperature are similar to the ones that we humans use. We maintain a constant body temperature of 37°C. In summer, when outside temperature is more than our body temperature, we sweat profusely.

The resulting evaporative cooling, similar to what happens with a desert cooler in operation, brings down the body temperature. In winter when the temperature is much lower than 37°C, we start to shiver, a kind of exercise which produces heat and raises the body temperature. **Plants, on the other hand, do not have such mechanisms to maintain internal temperatures.**

Thermoregulation is energetically expensive for many organisms. This is particularly true for small animals like shrews and humming birds. Heat loss or heat gain is a function of surface area. Since small animals have a larger surface area relative to their volume, they tend to lose body heat very fast when it is cold outside; then they have to expend much energy to generate body heat through metabolism. This is the main reason why very small animals are rarely found in polar regions.

15) A substantial increase in atmospheric aerosols is likely to

1. Affect rainfall patterns
2. Cut down the destruction of stratospheric ozone significantly
3. Increase global warming by large proportions

Select the correct answer code:

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

Solution: a)

Aerosols are minute particles suspended in the atmosphere. When these particles are sufficiently large, we notice their presence as they scatter and absorb sunlight. Their scattering of sunlight can reduce visibility (haze) and redden sunrises and sunsets.

Aerosols interact both directly and indirectly with the Earth's radiation budget and climate. As a direct effect, the **aerosols scatter sunlight directly back into space**. As an indirect effect, aerosols in the lower atmosphere can modify the size of cloud particles, changing how the clouds reflect and absorb sunlight, thereby affecting the Earth's energy budget.

Aerosols also can act as sites for chemical reactions to take place (heterogeneous chemistry). The most significant of these reactions are those that lead to the **destruction of stratospheric ozone**. During winter in the polar regions, aerosols grow to form polar stratospheric clouds. The large surface areas of these cloud particles

provide sites for chemical reactions to take place. These reactions lead to the formation of large amounts of reactive chlorine and, ultimately, to the destruction of ozone in the stratosphere.

16) Bioluminescence is the property of a living organism to produce and emit light. Which of the following organisms show the property of bioluminescence?

1. Animals
2. Plants
3. Fungi
4. Bacteria

Select the correct answer code:

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

Solution: d)

Bioluminescence is the property of a living organism to produce and emit light. "Animals, plants, fungi and bacteria show bioluminescence.

17) Consider the following statements regarding Parasitism.

1. Parasitism occurs when two organisms interact, but while one benefits, the other experiences harm.
2. Tapeworm attaching itself to the intestine of a cow is an example of Parasitism.
3. The parasite always kill the host.

Which of the above statements is/are correct?

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

Solution: a)

**A parasite is an organism that lives in or on another living organism, deriving nutrients from it.** In this relationship the parasite benefits, but the organism being fed upon, the host, is harmed. The host is usually weakened by the parasite as it siphons resources the host would normally use to maintain itself. The **parasite, however, is unlikely to kill the host.** This is because the parasite needs the host to complete its reproductive cycle by spreading to another host.

The reproductive cycles of parasites are often very complex, sometimes requiring more than one host species. A tapeworm is a parasite that causes disease in humans when contaminated, undercooked meat such as pork, fish, or beef is consumed. The tapeworm can live inside the intestine of the host for several years, benefiting from the food the host is bringing into its gut by eating. The parasite moves from species to species as it requires two hosts to complete its life cycle.

18) Which of the following are the Biodiversity Hotspots in India?

1. Western Ghats
2. Himalayas
3. Indo-Bhutan region
4. Sundaland

Select the correct answer code:

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



Solution: c)

India has some of the world's most biodiverse regions. It hosts 4 biodiversity hotspots: the **Himalayas, the Western Ghats, the Indo-Burma region and the Sundaland (Includes group of Islands)**.

19) To avoid unfavourable conditions, which of the following enter into diapause, a stage of suspended development.

- a) Zooplankton
- b) Bears
- c) Snails
- d) Fish

Solution: a)

In animals, the organism, if unable to migrate, might avoid the stress by escaping in time. The familiar case of **bears going into hibernation** during winter is an example of escape in time. Some **snails and fish go into aestivation** to avoid summer-related problems-heat and dessication. **Under unfavourable conditions many zooplankton species in lakes and ponds are known to enter diapause, a stage of suspended development.**

20) Ecological balance may be disturbed due to the

- 1. Introduction of new species
- 2. Natural hazards
- 3. Anthropogenic pollution

Select the correct answer code:

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

Solution: d)

Exotic species may disturb the local food chain or create scarcity of competitive resources.

Natural hazards like tsunami or cyclone can uproot coastal mangroves.

In the plants, any disturbance in the native forests such as clearing the forest causes a change in the species distribution.