Sleepy Classes IAS
Awakening Toppers

Check Your AIR

Write Prelims 2023 Before Prelims 2023

All India (Free)

Prelims Mock Test

2023

Full-Length Test

1800-890-3043 sleepy.classes@gmail.com www.sleepyclasses.com
Address: Sleepy Classes, E-42, Phase-8, Industrial Area, Mohali, Punjab, India.

Sleepy Classes IAS
Awakening Toppers

UNLOCK YOUR POTENTIAL WITH SLEEPY CLASSES

10% OFF

on **All UPSC Courses for 2023 & 2024**

Use Coupon Code **IASTOPPER**



For more inquiries
1800-890-3043

info@sleepyclasses.com
/SleepyClassesIAS

Sleepy Classes IAS
Awakening Toppers

संभव

PRELIMS CRASH COURSE 2023

Full coverage of Syllabus **with Mentorship**
for UPSC CSE 2023

- Daily Live Classes
- Static Concepts + Current Affairs
- 4000+ MCQs for Practice
- 8 Full-length Tests
- Personal 1:1 Mentorship
- Telegram Group

Bonus: Special CSAT Masterclass

₹5,999/- **ENROL NOW**

For more inquiries
1800-890-3043

info@sleepyclasses.com
/SleepyClassesIAS

Sleepy Classes IAS
Awakening Toppers

YouTube

App

Prelims 2023 Test Series

- Complete Prelims Test Series - 30 Tests
- Complete GS Static for rapid revision

Scan Here & Learn More

Test No - .....

Topic- .....

Syllabus- .....

OMR ANSWER SHEET

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

Questions

1. Which of the following factors reflect unity in diversity in India?

1. Pali and Sanskrit terms appear in the earliest Tamil texts and Dravidian terms too are to be found in the Indo-Aryan languages.
2. All the religions of India Hinduism, Jainism, and Buddhism intermingled and interacted with each other.

Select the correct answer using the code given below:

A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

2. Consider the following statements regarding to administrative system of Gupta:

1. Kingship was hereditary.
2. The throne always went to the eldest son.
3. The Guptas granted gifts to the Brahmanas.

Which of the statements given above is/are incorrect?

A. 1 and 2 only
B. 2 only
C. 1 and 3 only
D. 1, 2 and 3

3. Which of the following Paleolithic sites are found in India?

1. Adamgarh
2. Bhimbetka
3. Renigunta
4. Budha Pushkar

Select the correct option from below:

A. 1 and 2
B. 1, 2 and 3
C. 1, 3 and 4
D. 1, 2, 3 and 4

4. Which one of the following kingdoms practised coparcenary inheritance?

A. Mughal Empire
B. Gupta Empire
C. Rashtrakutas
D. Chola Empire

5. Ashoka's Dhamma signifies a general code of conduct, which of the following are its prominent features?

1. Treating all creatures with compassion.
2. Prohibition of festive gatherings.
3. Being gentle with slaves and servants.
4. Conquest through Dhamma.

Select the correct answer using the code given below:

A. 1 and 4 only
B. 2, 3 and 4 only
C. 1, 2 and 3 only
D. 1, 2, 3 and 4 only

6. With reference to various philosophical traditions in India, consider the following statements:

1. Advaita philosophy proposes that there is a oneness of the individual soul and the Supreme God which is the Ultimate Reality.
2. According to the doctrine of Advaita, the world is an illusion.

Which of the statements given above is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

7. Which one of the following travellers wrote "Travels in the Mughal empire" book?

A. Nicolo de Conti
B. Athanasius Nikitin
C. Abdur Razzaq
D. Francois Bernier

8. What are the economic impacts of British economic policies during colonial rule?

1. The flourishing of Urban Handicrafts.
2. Commercialisation of agriculture.
3. Emergence of the managing agency system.
4. Increasing Pressure on Agriculture.

Select the correct answer using the code given below.

A. 1 and 2 only
B. 2, 3 and 4 only
C. 1, 2, 3 and 4
D. 1 and 3 only

9. Consider the following pairs:

Land Revenue system	Associated Areas System
Permanent Settlement:	Madras and Bombay
Mahalwari System:	Bengal and Bihar
Ryotwari Settlement:	North-West Provinces and Punjab

Which of the pairs given above is/are not correctly matched?

A. 3 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

10. Arrange the following events in chronological order of their occurrences.

1. Third Battle of Panipat
2. Battle of Buxar
3. Nadir Shah's invasion of Delhi
4. Death of Tipu Sultan

Select the correct answer using the code given below.

A. 3-1-2-4
B. 2-4-3-1
C. 1-3-2-4
D. 4-3-2-1

11. Which of the following personalities propounded the "safety-valve" theory to explain the formation of Indian National Congress?

A. Lala Lajpat Rai

B. R.P. Dutt

C. Bipan Chandra

D. Dadabhai Nouroji

12. Consider the following statements about the Jallianwala bagh massacre:

1. At Jallianwala bagh, people gathered to demonstrate against the arrest of Kitchlu and Satyapal.
2. Rabindranath Tagore returned his Knighthood to British government as a token of protest against Jallianwala bagh massacre.
3. Sir Shankar Nair resigned from the Viceroy's Executive Council as a protest against the Jallianwala bagh massacre.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

13. Match the following.

Parallel Government during Quit India Movement	**Established by**
Ballia, UP	i) YB Chavan
Satara, Maharashtra	ii) Lakshman Nayak
Talcher, Orissa	iii) Chittu Pande

Choose the correct answer

A. 1-i, 2-ii, 3-iii

B. 1-ii, 2-i, 3-iii

C. 1-iii, 2-ii, 3-i

D. 1-iii, 2-i, 3-ii

14. Which of the following is least likely to be a cause of famine of 1943?

A. Rice imports from Burma and South-East Asia had been stopped.

B. Gross mismanagement and deliberate profiteering by certain traders.

C. The need to feed a vast army.

D. Lack of sufficient production due to draught.

15. Which of the following was/were the demands of the Nehru Report of 1928?

1. It demanded complete independence for India.
2. There would be a reserved seat for Muslims at the Centre.
3. It recommended universal adult suffrage and dissociation of state from religion.

Select the correct answer using the code given below:

A. 1 and 2 only

B. 2 only

C. 2 and 3 only

D. 1, 2 and 3

16. 73rd constitutional amendment act has identified separately the compulsory and voluntary provisions under part IX of the constitution. Which of the following is/are voluntary provisions?

1. Organisation of Gram Sabha in a village or group of villages.
2. Direct elections to the post of chairperson of panchayats at the intermediate and district levels.
3. Providing reservation of seats (both members and chairperson) for backward classes in panchayats at any level.
4. Granting financial powers to the panchayats, that is, authorising them to levy, collect, and appropriate taxes, duties, tolls, and fees.

Select the correct answer using the code given below.

A. 1 and 2 only
B. 3 and 4 only
C. 1, 2 and 3 only
D. 1, 2, 3 and 4

17. Consider the following statements with reference to Reservation of seats in Municipalities:

1. One-third of the total number of seats are reserved for the scheduled castes and the scheduled tribes in every municipality
2. Not less than one-third of the total number of seats are reserved for women which does not include the scheduled castes and the scheduled tribe's population
3. The state legislature may provide for the manner of reservation of offices of chairpersons in the municipalities for SCs, STs and women.

Which of the statements given above is/are correct?

A. 1 only
B. 1 and 2 only
C. 3 only
D. 2 and 3 only

18. Consider the following statements:

1. The Centre provides the Post Devolution Revenue Deficit (PDRD) Grant to the States under Article 275 of the Indian Constitution.
2. Statutory Grants are given by the President out of the Consolidated Fund of India
3. All the states are granted similar Statutory Grants.

Which of the statements given above is/are correct?

A. 1 only
B. 2 and 3 only
C. 3 only
D. 1 and 2 only

19. Article 143 of the Constitution authorises the President to seek the opinion of the Supreme Court on any question of law or fact of public importance which is likely to arise. Consider the following about it.

1. The opinion expressed by the Supreme Court in this case is only advisory and not a judicial pronouncement.
2. The President can delegate this authority to the Parliament so it be that the house

requires expert comment on a matter of constitutional law.

Which of the above statements is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2
D. None

20. Consider the following statements regarding to National Human Rights Commission:

1. National Human Rights Commission (NHRC) is an independent Constitutional body.
2. It can suo-moto seek a report from the government with regards to violations of Human Rights by the Armed Forces.
3. The government is required to inform about the action taken on the recommendations of NHRC, within six months.

Select the correct answer using the code given below.

A. 1 and 2 only
B. 2 only
C. 1 and 2 only
D. 1, 2 and 3

21. Consider the following statements regarding to electronic voting machine (EVM):

1. EVMs require high voltage electricity.
2. EVMs were first used in Kerala.
3. Use of EVMs in an election is legal.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

22. Consider the following statements:

1. The Constitution of India conceives 'minority' as an open category to protect the interests of various religious, linguistic and culturally distinctive groups.
2. The minority status is to be essentially decided at the state/ union territory level.
3. The National Commission for Minorities Act (1992) offers a definition of the term 'religious minority' only.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 only
C. 1 and 2 only
D. 1, 2 and 3

23. National Initiative for Promoting Upskilling of Nirman (NIPUN) Initiative was launched by which ministry ?

A. Ministry of skill development and entrepreneurship
B. Ministry of Housing & Urban Affairs
C. Ministry of social justice and empowerment
D. Ministry of commerce and industry

24. Which of the following statement is *incorrect* with reference to difference between chargesheet and FIR?

A. The term, 'chargesheet' is defined under CrPC but First Information Report (FIR), has not been defined in either the Indian Penal Code (IPC) or the CrPC.

B. The chargesheet is the final report filed towards the end of an investigation

C. An FIR decides a person's guilt

D. None of the above

25. Consider the following statements about Reasonable accommodation

1. 'Reasonable accommodation' is a principle that promotes equality
2. Its use is primarily in the disability rights sector.
3. It captures the positive obligation of the State

Which of the above statements is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

26. Consider the following statements with reference to the 'whip':

1. A whip is a written directive requiring party members to be present for crucial votes or to vote a certain way only.
2. To issue whips, parties designate a senior member from among their Parliamentary delegations.
3. In India, all parties can issue whips to their members.

Which of the above is/are correct?

A. 1 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

27. Consider the following statements:

1. The United Kingdom (UK) and the Commonwealth countries, including India, are common law countries.
2. In the UK, Puisne judges are judges other than those holding distinct titles.

Which of the above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

28. Consider the following statements with reference to Hate Speech in India:

1. Responsible speech is the essence of the liberty granted under Article 21 of the Constitution.
2. Article 19(2) of the Constitution guarantees freedom of speech and expression to all citizens of India.
3. Hate speech has not been defined in any law in India.

Which of the above is/are correct?

A. 1 and 2 only

B. 3 only

C. 2 only

D. 1, 2 and 3

29. Which of the following statements is *incorrect* with reference to Parliamentary Privileges?

A. Parliamentary Privileges are defined in Article 105 of the Indian Constitution.

B. Under these privileges, the members of Parliament are exempted from any civil liability and criminal liability

C. The privileges are claimed only when the person is a member of the house.

D. None of the above

30. As per the ECI's Political Parties and Election Symbols, 2019 handbook,a political party would be considered a national party if:

1. It is 'recognised' in four or more states
2. If its candidates have secured at least 6% of total valid votes inat least 4 states (in latest Lok Sabha or Assembly elections) and the party has at least 4 MPs in the last LS polls
3. If it has won at least 2% of the total seats in the LS from at least 3 states.

Select the correct code:

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

31. With the reference to the Human developmental Index, consider the following statements:

1. India's HDI value has been steadily increasing and moving towards the world average since 1990.
2. India's HDI value continues to exceed South Asia's average human development.
3. India's Gender Inequality Index (GII) is ranked 140 in 2021.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 only

C. 1 and 3 only

D. 1, 2 and 3

32. Which of the following skill development schemes implemented under the Skill India Mission:

1. National Urban Livelihood Mission.
2. Pradhan Mantri Kaushal Vikas Yojana.
3. Jan Shikshan Sansthan.
4. National Apprenticeship Promotion Scheme.

Select the correct answer using the code given below:

A. 1 and 3 only

B. 2, 3 and 4 only

C. 1, 2 and 4 only

D. 1, 2, 3 and 4

33. With reference to the Mahatma Gandhi National Rural Employment Guarantee Scheme, consider the following statements:

1. The MGNREGA provides at least 100 days of guaranteed wage employment in a

financial year only to the poor and vulnerable households.

2. In case employment is not provided within 15 days from the date of registration of the demand for work the worker is entitled to a monthly unemployment allowance.

Which of the statements given above is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

34. Consider the following statements with reference to Sovereign Green Bonds:

1. These are Green bonds issued by multilateral organisations only to exclusively fund projects that have positive environmental
2. Proceeds from these bonds are earmarked for green projects.

Which of the above is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

35. Which of the following statement is correct with reference to he Atal Vayo Abhyuday Yojana?

A. A scheme for the welfare of senior citizens
B. A scheme for the development of rural youth
C. A scheme for the development of infrastructure in rural areas
D. A scheme for the promotion of entrepreneurship among the youth

36. Consider the following statements with reference to National Action Plan for Mechanized Sanitation Ecosystem(NAMASTE):

1. It is a joint project of the Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs(MoHUA).
2. Aim is to eradicate unsafe sewer and septic tank cleaning practices.
3. The scheme will replace the Self-Employment Scheme for the Rehabilitation of Manual Scavengers (SRMS)

Which of the above is/are correct?

A. 1 only
B. 2 only
C. 1 and 3 only
D. 1, 2 and 3

37. With reference to the Rashtriya Gram Swaraj Abhiyan (RGSA), consider the following statements:

1. Rashtriya Gram Swaraj Abhiyan (RGSA) was approved by the Union Cabinet in April 2022.
2. The scheme extends to all states and UTs including non-Part IX of the Constitution of India areas where Panchayats do not exist.
3. The Scheme strengthen the capacities of institutions for rural local governance to become more responsive towards local development needs.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 1 and 2 only
C. 2 and 3 only
D. 1, 2 and 3

38. Consider the following statements regarding to organic and Natural farming in India:

1. India's organic farmers, the highest in the world, and about 59.1 lakh ha area was brought under organic farming by 2021-22.
2. Assam became the first State in the world to become fully organic
3. Bhartiya Prakratik Krishi Paddhati (BPKP) encourages all forms of ecological farming, including Zero-Budget Natural Farming (ZBNF).

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

39. With reference to the Hallmarking, consider the following statements:

1. Hallmarks are a guarantee of the purity or fineness of precious metal articles.
2. Hallmarking obligates manufacturers to maintain legal standards of fineness.
3. The Bureau of Indian Standards (BIS) operates the gold and silver hallmarking scheme in India.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 and 3 only
C. 1 and 2 only
D. 1, 2 and 3

40. With reference to the National Green Tribunal, consider the following statements:

1. The National Green Tribunal is bound by the procedure laid down under the Code of Civil Procedure.
2. It was established for the effective and expeditious disposal of cases relating to environmental protection.
3. Appeal against any order of the National Green Tribunal shall lie to the Supreme Court.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 3 only
C. 2 and 3 only
D. 1, 2 and 3

41. Consider the following statements regarding seaweeds

1. Seaweeds are macroscopic algae which grow in the marine and shallow coastal waters.
2. Seaweeds have been termed as the 'Medical Food of the 21st Century'.
3. Multipurpose Seaweed Park is to established in Kerala.

Which of the statement is/are correct?

A. 1 and 2 only

B. 2 only

C. 1 and 3 only

D. 3 only

42. Consider the following statements regarding decomposition:

1. Decomposers are autotrophs.
2. Decomposition is largely an oxygen-requiring process.
3. Decomposition rate is slower if detritus is rich in lignin and chitin.

Which of the statement given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. All of the above

43. Consider the following pairs with regards to various mechanisms used to maintain Homeostasis:

Mechanism	Performed by
Regulators	All Birds
Conformers	All Plants
Suspend	Zooplankton

Which of the pairs given above is/are correct?

A. 1 and 2 only

B. 3 only

C. 1 and 3 only

D. All of the above

44. Consider the following pairs:

International Declaration	Objective
1. Gandhinagar Declaration	ecological connectivity
2. St. Petersburg Declaration	Conservation of Snow leopard
3. Bishkek Declaration	Doubling the Tiger Population

Which of the pairs given above is/are correctly matched?

A. 1 only

B. 3 only

C. 1 and 3 only

D. 1, 2 and 3

45. Which of the following are the International initiatives of World Wildlife Fund for Nature (WWF)

1. World Environment Day
2. Earth Overshoot Day
3. Debt for Nature swap
4. Earth Hour

Which of the options given above is/are correct?

A. 1 and 2 only

B. 1, 2 and 3 only

C. 2, 3 and 4 only

D. 3 and 4 only

46. It is the oldest park in Assam covering an area of 430 sq km along the river Brahmaputra on the North and the Karbi Anglong hills on the South.

National Highway 37 passes through the parking area. It is a world heritage site that is famous for the Great Indian one-horned rhinoceros, this is the best description of:

A. Orang National Park
B. Kaziranga National Park
C. Nameri National Park
D. Dibru Saikhowa, National park

47. In the context of The National Adaptation Fund for Climate Change (NAFCC), consider the following statements:

1. The National Adaptation Fund for Climate Change (NAFCC) is a Central Sector Scheme.
2. The Reserve Bank of India is the National Implementing Entity (NIE) for NAFCC.
3. The NAFCC projects implemented in the states of Kerala, Tamil Nadu and Andhra Pradesh.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

48. Which of the following are the reasons/factors for exposure to Particulate Matter (PM) pollution?

1. Cigarette smoke
2. Burning of fossil fuel
3. Pulverised cement
4. Dust storms
5. Sandblasting

Select the correct answer using the code given below.

A. 1, 2 and 3 only
B. 2 and 4 only
C. 1, 3 and 4 only
D. 1, 2, 3, 4 and 5

49. With reference to the Similipal Biosphere Reserve, consider the following statements:

1. The Park is part of the Mayurbhanj Elephant Reserve.
2. It is the home to the Bengal tiger, Asian elephant, gaur, and chausingha.
3. The park was declared a biosphere reserve by the Government of India in 2016.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 and 3 only
C. 1, 2 and 3
D. 1 and 2 only

50. It is located in the southern region of the Western Ghats in Tamil Nadu and Kerala. It was declared as a Sanctuary in 1950 and declared as Tiger Reserve in 197. Mullaperiyar Dam is located in it. The vegetation comprises of Tropical evergreen forests, semi- evergreen forests, Moist deciduous Forests, Transitional fringe ever green forests, grass lands and eucalyptus plantations, this is the best discription of:

A. The Periyar Tiger Reserve

B. Eravikulam National Park

C. Silent Valley National Park

D. Mathikettan Shola National Park

51. With reference to the Arsenic pollution, consider the following statements:

1. Arsenic is a natural semi-metallic chemical component of the earth's mantle.
2. More than 90% of arsenic pollution is inferred to be geogenic.
3. Arsenic poisoning is caused by the ingestion, absorption, or inhalation of dangerous amounts of arsenic.

Which of the statements given above is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3

52. With reference to the Spotted deer, consider the following statements:

1. It lives in grasslands and forests in India only.
2. It has a prolonged mating season and males do not have synchronized antler cycles.
3. It is the State animal of Telangana.

Which of the statements given above is/are correct?

A. 1 only

B. 2 and 3 only

C. 2 only

D. 1, 2 and 3

53. With reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), consider the following statements:

1. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
2. It is not legally binding on the Parties and it does not take the place of national laws.
3. It prohibits international trade in specimens of Appendix I species except when the purpose of the import is not commercial, for instance for scientific research.

Which of the statements given above is/are correct?

A. 1 and 3 only

B. 2 only

C. 1 and 2 only

D. 1, 2 and 3

54. With reference to the United Nations Convention to Combat Desertification (UNCCD), consider the following statements:

1. It is the legally binding international agreement linking environment and development to sustainable land management.
2. The UNCCD is encouraging the participation of local people in combating desertification and land degradation.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

55. Consider the following pairs:

National Park/ Wildlife Sanctuary	Location
1. Rajamala Eravikulam National Park	Kerala
2. Ramgarh Vishdhari Wildlife Sanctuary	Gujrat
3. The Periyar Tiger Reserve	Karnataka

Which of the pairs given above is/are correctly matched?

A. Only one pair
B. Only two pair
C. All three pairs
D. None of the pairs

56. With reference to International Energy Agency (IEA), consider the following statements:

1. The IEA primarily aims to improve the energy security of non-OPEC countries by responding to physical disruptions in the supply of oil and serving as an information source about the international energy market.
2. The Nuclear Energy Agency is a part of the IEA which focuses on improving the sustainable use of nuclear energy for peaceful purposes.
3. India is a member of both the International Energy Agency and the Nuclear Energy Agency.

Which of the statements given above is/are correct?

A. 1 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

57. The Joint Comprehensive Plan of Action (JCPOA) was the result of prolonged negotiations from 2013 and 2015 between which of the following countries?

1. China
2. Japan
3. France
4. Germany
5. United Kingdom

Select the correct answer code:

A. 1, 2, 4, 5
B. 2, 3, 4, 5
C. 1, 3, 4, 5
D. 3, 4, 5

58. Who among the following released 'World social report' with the theme "Leaving No One Behind in an Aging World"?

A. United Nations development program (UNDP)
B. United Nations Department of Economic and Social Affairs (UN DESA)
C. United Nations Educational, Scientific and Cultural Organization (UNESCO)
D. United Nations Social Development Network (UNSDN)

59. Consider the following statements regarding North Atlantic Treaty Organization (NATO).

1. NATO membership is open to any country that is willing to accept the terms of the military alliance.
2. The Membership Action Plan (MAP) of NATO is a military code that prohibits attack on member countries by any of the NATO members.

Which of the above statements is/are *incorrect*?

A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

60. Consider the following statements.

1. G20 is a major international grouping with its members accounting for more than 80% of global GDP.
2. India was not a member of the G20 during its inception, but joined later.
3. Till now India has never hosted the G20 Leaders' Summit.

Which of the above statements is/are correct?

A. 1, 3
B. 1, 2
C. 1 only
D. 1, 2, 3

61. With reference to the Indian Economy, consider the following statements:

1. Repo rate provides overnight liquidity to banks against the collateral of the government.
2. Repo rate serves as a key benchmark for the lenders to in turn price the loans they offer to their borrowers.
3. When the repo rate is increased, banks may find an incentive to sell securities back to the government in return for cash.

Which of the statements given above is/are correct?

A. 1 only
B. 3 only
C. 1 and 2 only
D. 1, 2 and 3

62. In the context of the surety bond, consider the following statements:

1. Surety bonds are mainly aimed at infrastructure development, mainly to reduce indirect cost for suppliers.
2. Surety bond is provided by the insurance company on behalf of the contractor to the entity which is awarding the project.
3. Surety bonds protect the beneficiary against acts or events that impair the underlying obligations of the principal.

Which of the statements given above is/are correct?

A. 1 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

63. With reference to the Scheduled Banks in India, consider the following statements:

1. Scheduled Banks included in the Second Schedule of The Banking Regulation Act, 1949.
2. Scheduled Banks becomes eligible for debts/loans at the bank rate from the RBI.
3. Airtel Payments Bank is the Scheduled Bank and can provide ATM and debit cards.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

64. With reference to Outright Open Market Operations (OMO), consider the following statements:

1. Outright OMO are conducted with a promise to buy/sell the securities at a later stage.
2. In the repurchase agreement the central bank buys the security, the agreement of purchase also has specifications about date and price of the resale of this security.
3. Outright OMO are directed at influencing enduring liquidity, the LAF OMO operations target the temporary liquidity in the system.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 only
C. 2 and 3 only
D. 1, 2 and 3

65. What do you understand about the term 'Beveridge curve'?

A. It states that the lower tax rates boost economic growth and high tax revenue.
B. It displays how household expenditure on a particular good or service varies with change in household income.
C. It shows the relationship between economic growth and inequality.
D. It shows the relationship between the unemployment rate and the job vacancy rate

66. 'Accommodative' monetary policy stance of the RBI means:

A. Interest rate can only move upward
B. Interest rate may move downward anytime
C. Interest rate may move either way – upward or downward
D. RBI purchases longer term securities from the open market

67. Factor cost in the case of calculation of GDP/National income includes

1. Salaries
2. Cost of renting machinery
3. Profit margins of entrepreneurs

4. Transfer Payments
5. Indirect taxes
6. Government subsidies

Select the correct code

A. 1, 2 and 3 only
B. 1, 2, 3 and 6 only
C. 3, 4, 5 and 6 only
D. 1, 2, 3, 4 and 6 only

68. Which of the following is not a Public Good?

A. Education
B. Electricity
C. Infrastructure
D. Lighthouses

69. Consider the following statements regarding to the commercial paper:

1. Commercial Paper (CP) is a secured capital market instrument.
2. They can be issued only by the all-India financial institutions.
3. CP can be issued for maturities maximum of up to one year from the date of the issue.

Which of the statements given above is/are not correct

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

70. With reference to the Offline Small-value e-Payments, consider the following statements:

1. It allows offline payments upto Rs. 2 lakh per transaction, subject to an overall limit of Rs 5 lakh.
2. It can be carried out face-to-face (proximity mode) using any channel/ instrument like cards, wallets and mobile devices.
3. The transactions are offline, alerts (by way of SMS and / or e-mail) will be received by the customer after a time lag.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

71. With reference to the 'AT-1 Bonds' sometimes mentioned in the news, consider the following statements:

1. AT-1 bonds issued to shore up their core capital base to meet the Basel-III norms.
2. AT-1 bonds offer higher returns to investors and compared with other debt products, these instruments have lower risk as well.
3. Investors can return AT-1 bonds to the issuing bank and get the money.

Which of the statements given above is/are correct?

A. 1 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

72. Consider the following statements:

1. Budget financial year 2023-24 envisaged a lower collection of non-tax revenue receipts during the current year relative to Financial year 2021-22.
2. Union Government capital expenditure continuously increasing to GDP ratio in five year.
3. The capital expenditure by the Centre has steadily increased since four years.

Which of the statements given above is/are correct

A. 1 only
B. 2 only
C. 1 and 2 only
D. 1, 2 and 3

73. With reference to the 'SWIFT' sometimes mentioned in the news, consider the following statements:

1. Each participant on the platform is assigned a unique eight-digit SWIFT code.
2. SWIFT is a platform that sends messages and can also hold any securities and currency.
3. SWIFT is owned and controlled by the G20 central banks.

Which of the statements given above is/are correct?

A. 1 only
B. 2 only
C. 1 and 3 only
D. 1, 2 and 3

74. With reference to direct and indirect taxes in India, consider the following statements:

1. The direct tax, the burden can't be shifted by the taxpayer to someone else.
2. Inheritance tax and gift tax are type of indirect tax.
3. The redistribution function of the government budget is achieved through progressive income taxation.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 only
C. 2 and 3 only
D. 1, 2 and 3

75. Consider the following statements regarding to Nidhi Companies:

1. Nidhi companies are a type of non-bank lenders that raise funds exclusively from their members.
2. They are regulated by the Reserve Bank of India for operational matters and deployment of funds.
3. Only individual members are allowed in Nidhi companies, and it cannot give loans to companies.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1, 2 and 3
D. 1 and 3 only

76. This landform is formed when streams flowing from higher levels break into foot slope plains of low gradient. Normally very

coarse load is carried by streams flowing over mountain slopes. This load becomes too heavy for the streams to be carried over gentler gradients and gets deposited at foot slopes.

Above passage is the best description of which of the following landforms:

A. Alluvial Fans
B. River Terraces
C. Deltas
D. Floodplains

77. Consider the following statements with reference to Inversion of temperature:

1. A long winter night with clear skies and still air is ideal situation for inversion of temperature.
2. The inversion takes place in hills and mountains due to air drainage.
3. Over polar areas, temperature inversion is normal throughout the year.

Which of the statement given above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

78. Consider the following statements with reference to Coriolis force:

1. Coriolis force is a caused due to the rotational movement of the earth.
2. The magnitude of Coriolis force is determined by the wind speed only.
3. Coriolis effect is maximum at the poles and zero at the equator.

Which of the above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

79. Consider the following statements regarding to The Inter Tropical Convergence Zone (ITCZ):

1. The Inter Tropical Convergence Zone (ITCZ) is a high pressure zone located at the equator.
2. Due to the shift of ITCZ, the trade winds of the southern hemisphere cross the equator and start blowing from southwest to northeast direction.
3. In winter, the ITCZ moves southward and so the reversal of winds from northeast to south and southwest, takes place.

Which of the statements given above is/are *incorrect?*

A. 1 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

80. Which of the following is/are the difference between basic and acidic lava?

1. Basic lavas are highly fluid and Acidic lavas are highly viscous.
2. Basic lavas are rich in iron and magnesium and Acidic lavas have a

high percentage of Silica.

Select the correct answer using the code given below:

A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

81. With the reference of the features of Tarai region, consider the following statements:

1. Tarai is a narrow tract to the south of Bhabar and running parallel to it.
2. Tarai region is widest in Bihar and the narrowest in the east.
3. The underground streams of the Bhabar belt re-emerge in the Tarai belt.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

82. Consider the following statements with reference to the demographic transition theory:

1. It Explains changes in death, birth rates and population growth with respect to the process of growth and development.
2. First stage is characterized by high death rate and low birth rate
3. India currently passes through stage 3 of demographic transition.

Select the correct code from the options given below:

A. 1 only
B. 1 and 2 only
C. 1 and 3 only
D. 1, 2 and 3

83. Consider the following statements with reference to mineral resources in India.

1. Mica is found mainly in tertiary deposits
2. In Jharkhand high quality Bauxite is obtained
3. Copper is alloyable, malleable and ductile

Which of the statements given above is/are correct?

A. 1 only
B. 2 and 3 only
C. 3 only
D. 1 and 2 only

84. Consider the following statements with reference to drainage patterns:

1. Rivers originating from the Amarkantak is an example of Radial drainage pattern.
2. Rivers in the upper part of the Himalayan region is an example of Centripetal drainage pattern

Which of the statements given above is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2

D. Neither 1 nor 2

85. Consider the following statements with reference to Peaty and Marshy Soil:

1. This soil originates from the areas where adequate drainage is not possible.
2. Over Bengal delta, it is suitable for jute and rice cultivation

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

86. Consider the following statements with reference to Millet crop

1. Millet crop need high temperature for its development
2. Millet are less grown due to less adaptability to different types soil for it's growth
3. Millet are cultivated both as food & fodder

Which of the statements is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. All of the above

87. Consider the following statements with reference to Quaternary Sector:

1. The intellectual side of the economy is said to be represented by the quaternary sector
2. It is also known as the knowledge economy
3. The sector remains unaffected during economic downturns

Which of the above is/are correct?

A. 1 only

B. 2 and 3 only

C. 3 only

D. 1 and 2 only

88. This forest covers vast areas of the country, where rainfall ranges between 70 -100 cm. On the wetter and drier margins, it has a transition.

The above statements are with reference to which of the following?

A. Tropical Evergreen Forests

B. Tropical Deciduous Forests

C. Tropical Thorn Forests

D. Montane Forests

89. Consider the following statements about Volcanoes

1. Most shield volcanoes are formed from fluid, basaltic lava flows.
2. Stratovolcanoes are formed from viscous, sticky lava that does not flow easily.

Which of the above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

90. Which of the following Passes in the Western Ghats is incorrectly matched?

A. Bhor Ghat Pass: connects Mumbai to Pune via Khopoli

B. Palakkad Gap (Pal Ghat): connects: Coimbatore, Tamil Nadu to Palakkad, Kerala

C. Amba Ghat Pass: connects: Ratnagiri district to Kolhapur.

D. Naneghat Pass: connects Mumbai to Nashik

91. What is whole genome sequencing (WGS)?

A. The process of sequencing only a small portion of an organism's genome

B. The process of sequencing the entire genome of an organism

C. The process of comparing the genomes of different organisms

D. The process of editing the genome of an organism

92. With reference to the Lumpy skin disease (LSD) sometimes mentioned in the news, consider the following statements:

1. Lumpy skin disease is a fungal disease of cattle and water buffalo caused by the Mucormycosis fungus.
2. It is spread by mosquitoes, flies by direct contact among the cattle, and through contaminated food and water.
3. There is no treatment for the virus, so prevention by vaccination is the most effective means of control.

Which of the statements given above is /are correct?

A. 1 and 3 only

B. 1 only

C. 2 and 3 only

D. 1, 2 and 3

93. What is a 'Dark sky reserve' recently seen in the news?

A. Reserves of dark matter present in the solar system

B. It is land with distinguished nocturnal environment and starry nights that has been developed responsibly to prevent light pollution.

C. It is the phenomenon of dark skies during winter months in the Arctic region

D. It is the constant present of cloudy atmosphere which makes solar power generation impossible

94. H5N1 virus is sometimes mentioned in the news with reference to which one of the following diseases?

A. Yellow fever

B. Bird flu

C. Dengue

D. Chicken pox

95. Consider the following statements regarding DNA and RNA

1. A nucleic acid containing deoxyribose is called deoxyribonucleic acid (DNA) while that which contains ribose is

called ribonucleic acid (RNA).

2. Both DNA and RNA contain Adenine, Guanine, Thymine and Cytosine.

Which of the statements given above is/are correct?

A. Only 1
B. Only 2
C. Both 1 and 2
D. Neither 1 nor 2

96. Which of the following are the characteristics of Visible Light Communication (VLC)?

1. No electromagnetic interference
2. It can penetrate through walls
3. Higher frequency and bandwidth than radio waves
4. Low power consumption

Select the correct answer using the code given below.

A. 1 and 2 only
B. 2 and 3 only
C. 2 and 4 only
D. 1, 3 and 4 only

97. 'Black Box' is an electronic recording device placed in an aircraft to facilitate the investigation of aviation accidents and incidents. In this context, consider the following statements about the characteristic feature of a Black Box:

1. It gets mounted in the wing region of an aircraft that are more likely to survive after a flight crash.
2. It is made up of Titanium that prevents its damage in any type of crash.
3. It emits ultrasonic sound to trace its location either on land or in water.
4. It is capable to record terabytes of data in a single flight.

Select the correct answer using the code given below.

A. 4 only
B. 1 and 2 only
C. 2 and 3 only
D. 1, 3 and 4 only

98. Which of the following are the benefits of the foodirradiation?

1. Prevention of foodborne illness
2. Control of insects
3. Sterilization

Select the correct answer using the code given below:

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

99. Consider the following statements:

1. Cryogenic engine makes use of liquid Oxygen and liquid Hydrogen at extremely low temperatures as propellants
2. Ramjet engine works most efficiently at hypersonic speeds.
3. Scramjet engines obtain oxygen from the atmosphere by compressing the incoming air.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

100. Recently in news CAR T-cell therapy is a breakthrough technique in medical sciences. It is used to treat which of the following diseases?

A. Cancer

B. Covid-19

C. Diabetes

D. Blindness

Sleepy Classes IAS
Awakening Toppers

UNLOCK YOUR POTENTIAL WITH SLEEPY CLASSES

10% OFF

on **All UPSC Courses for 2023 & 2024**

Use Coupon Code **IASTOPPER**



For more inquiries
1800-890-3043

info@sleepyclasses.com
/SleepyClassesIAS

Answer Keys

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

Answers with Explanations

1. Which of the following factors reflect unity in diversity in India?

1. Pali and Sanskrit terms appear in the earliest Tamil texts and Dravidian terms too are to be found in the Indo-Aryan languages.
2. All the religions of India Hinduism, Jainism, and Buddhism intermingled and interacted with each other.

Select the correct answer using the code given below:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

Explanation

- A remarkable feature of ancient Indian culture has been the commingling of cultural elements from the north and south, and from the east and west. The Aryan elements are equated with the Vedic and Puranic culture of the north and the pre-Aryan with the Dravidian and Tamil culture of the south.

Statement 1 is correct

- Many Munda, Dravidian and other non-Sanskritic terms occur in the Vedic texts ascribed to 1500-500 BC. They indicate ideas, institutions, products, and settlements associated with peninsular and non- Vedic India. Many Pali and Sanskrit terms appear in the earliest Tamil texts called the Sangam literature which is roughly used for the period 300 BC-AD 600. Many Dravidian terms too are to be found in the Indo-Aryan languages.
- The eastern region inhabited by the pre-Aryan tribes made its own contribution. The people of this area spoke the Munda or Kolarian languages.
- Several terms that signify the use of cotton, navigation, digging stick, etc., in the Indo-Aryan languages have been traced to the Munda languages by linguists.

Statement 2 is correct

- Religious diversity: India has since ancient times been a land of several religions. Ancient India saw the birth of Brahmanism or Hinduism, Jainism, and Buddhism, but all these cultures and religions intermingled and interacted.

Reference: Ancient India by RS Sharma [old NCERT]

2. Consider the following statements regarding to administrative system of Gupta:

1. Kingship was hereditary.
2. The throne always went to the eldest son.
3. The Guptas granted gifts to the Brahmanas.

Which of the statements given above is/are incorrect?

A. 1 and 2 only

B. 2 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: B

System of administration in the Gupta's period

Statement 1 is correct

- The Gupta king adopted elated titles such as Parameshvara, maharajadhiraja and paramabhattaraka which signify that they ruled over many lesser kings in their empire.
- The kingship was hereditary, but there was no practice of primogeniture i.e, only the eldest son occupying the throne.

Statement 2 is incorrect

- The throne did not always go to the eldest son, creating uNCERTainties of which the chief and high official took mileage.

Statement 3 is correct

- There was the practice of granting gifts to the Brahmanas who in return expressed gratitude by comparing the king to different gods like Vishnu, Indra and Dhanada.

Reference: India's Ancient History by R.S Sharma.

3. Which of the following Paleolithic sites are found in India?

1. Adamgarh
2. Bhimbetka
3. Renigunta
4. Budha Pushkar

Select the correct option from below:

A. 1 and 2

B. 1, 2 and 3

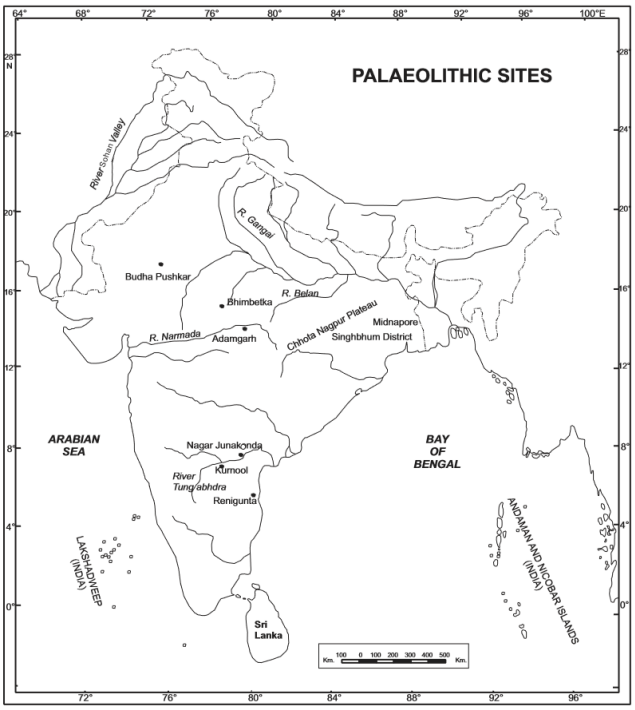
C. 1, 3 and 4

D. 1, 2, 3 and 4

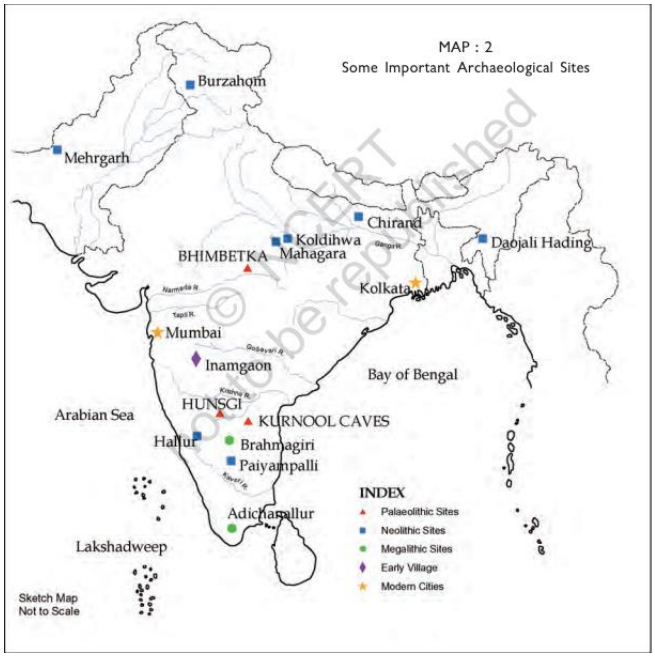
Answer: D

Explanation

All sites belong to Paleolithic period. Adamgarh and Bhimbetka are located in Madhya Pradesh, Renigunta in Andhra Pradesh and Budha Pushkar in Rajasthan.



Map 2.3 Paleolithic Sites



4. Which one of the following kingdoms practised coparcenary inheritance?

A. Mughal Empire

B. Gupta Empire

C. Rashtrakutas

D. Chola Empire

Answer: - A

- The Mughals did not believe in the rule of primogeniture, where the eldest son inherited his father's estate. Instead they followed the Mughal and Timurid custom of coparcenary inheritance, or a division of the inheritance amongst all the sons.

Reference: Class 12th ncert

5. Ashoka's Dhamma signifies a general code of conduct, which of the following are its prominent features?

1. Treating all creatures with compassion.
2. Prohibition of festive gatherings.
3. Being gentle with slaves and servants.
4. Conquest through Dhamma.

Select the correct answer using the code given below:

A. 1 and 4 only

B. 2, 3 and 4 only

C. 1, 2 and 3 only

D. 1, 2, 3 and 4 only

Answer: - D

Ashoka's policy of Dhamma was a way of life, a code of conduct and a set of principles to be adopted and practiced by the people at large.

His principles of Dhamma were clearly stated in his Edicts. The main features of Asoka's Dhamma as mentioned in his various Edicts may be summed as follows:

- Service to father and mother, practice of ahimsa, love of truth, reverence to teachers and good treatment of relatives.
- Prohibition of animal sacrifices and festive gatherings and avoiding expensive and meaningless ceremonies and rituals. (Hence, statement 2 is correct)
- Efficient organization of administration in the direction of social welfare and maintenance of constant contact with people through the system of Dhammayatras.
- Humane treatment of servants by masters and prisoners by government officials. (Hence, statement 3 is correct)
- Consideration and non-violence to animals and courtesy to relations and liberality to Brahmins.
- Tolerance among all the religious sects.
- Treating all creatures with compassion. (Hence, statement 1 is correct)
- Conquest through Dhamma instead of through war. (Hence, statement 4 is correct)

Additional Information:

- The concept of non-violence and other similar ideas of Asoka's Dhamma are identical with the teachings of Buddha. But he did not equate Dhamma with Buddhist teachings. Buddhism remained his personal belief. His Dhamma signifies a general code of conduct.

Reference: Ancient India by RS Sharma [old NCERT] + Class 6th NCERT

6. With reference to various philosophical traditions in India, consider the following statements:

1. Advaita philosophy proposes that there is a oneness of the individual soul and the Supreme God which is the Ultimate Reality.
2. According to the doctrine of Advaita, the world is an illusion.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: - C

Statement 1 is correct

- Shankara was an advocate of Advaita philosophy or the doctrine of the oneness of the individual soul and the Supreme God which is the Ultimate Reality.
- He taught that Brahman, the only or Ultimate Reality, was formless and without any attributes.

Statement 2 is correct

- Advaita considers the world around us to be an illusion or maya, and preaches renunciation of the world and adoption of the path of knowledge to understand the true nature of Brahman and attain salvation.

Reference: NCERT CLASS 7

7. Which one of the following travellers wrote "Travels in the Mughal empire" book?

A. Nicolo de Conti

B. Athanasius Nikitin

C. Abdur Razzaq

D. Francois Bernier

Answer: - D

Francois Bernier

- Travels In The Mogul Empire: A.D. 1656-1668 by Francois Bernier. The book Travels in the Mogul Empire A. D. 1656-68 by Francois Bernier continues to remain as important and popular as it was in 1671, when its English edition was published.
- Bernier's Travels in the Mughal Empire is marked by detailed observations, critical insights and reflection. His account contains discussions trying to place the history of the Mughals within some sort of a universal framework.
- He constantly compared Mughal India with contemporary Europe, generally emphasising the superiority of the latter. His representation of India works on the model of binary opposition, where India is presented as the inverse of Europe. He also ordered the perceived differences hierarchically, so that India appeared to be inferior to the Western world.

Nicolo de Conti

- He was an Italian merchant, scholar, and a traveller who visited the Vijaynagar Kingdom during the time of Dev Raya II. He left an account in the Travels of Nicolo Conti.

Abdur Razzaq

- He was a Persian, Timurid chronicler and a scholar who visited the Vijayanagar Kingdom at the time of Dev Raya II as an ambassador of Shah Rukh, the Timurid dynasty ruler of Persia. He gives an account of the reign of Devaraya II in his Matla as Sadain Wa Majma ul Bahrain

Athanasius Nikitin

- He was the first Russian traveller and merchant who visited India. He described the conditions of the Bahamani kingdom under Muhammad III in his Voyage to India.

Reference: Class 12 Ncert.

8. What are the economic impacts of British economic policies during colonial rule?

1. The flourishing of Urban Handicrafts.
2. Commercialisation of agriculture.
3. Emergence of the managing agency system.
4. Increasing Pressure on Agriculture.

Select the correct answer using the code given below.

A. 1 and 2 only

B. 2, 3 and 4 only

C. 1, 2, 3 and 4

D. 1 and 3 only

Answer: B

Explanation:

- Option B is correct: Between 1793 and 1813, these British manufacturers launched a campaign against the company, its trade monopoly, and the privileges it enjoyed. Ultimately, they succeeded in abolishing the East India Company"s monopoly of Indian trade. With this India became an economic colony of Industrial England.
- The decline of Urban Handicrafts: The consequence of these changes in the composition of India's exports and imports, was a rapid decline in the demand for products of various urban handicrafts which at one time were so famous and in a flourishing condition. Now, these urban handicrafts in India were unable to successfully face the challenge posed by free imports into India of cheap manufactured goods produced on a large scale in factories in England. This resulted in the decline of urban handicrafts in India.
- Commercialization of Agriculture: A large number of commercial crops such as tea, coffee, indigo, opium, cotton, jute, sugarcane, and oilseed were introduced. subsistence farming began gradually to give place to what is known as ' commercialization of agriculture '. Instead of growing all types of crops for home consumption as was the traditional practice, farmers began to produce one or two crops suitable to the region and which could be sold for the highest profit.
- The emergence of the Managing Agency System: The most important among the institutions that came into existence during the second half of the 19th century were the European Managing Agency Houses. Managing Agency House' was the peculiar product of the Indo-British relations during the 19th century. The Managing Agency Houses raised funds in England and India and took responsibility on behalf of the clients (who had retired from service in India after making a lot of money and generally resided in England) to run industries or trading establishments in India.
- Increasing Pressure on Agriculture: Gradually several handicrafts in urban areas declined or in some cases vanished for all practical purposes. The unfortunate men who were traditionally engaged in those handicrafts took mostly to agriculture, claiming a share in the family land, to which they were entitled according to the

Hindu and Muslim laws of succession and inheritance. This sudden swelling in the number of agriculturists resulted in subdivision and fragmentation of agricultural land.

Reference: Spectrum

9. Consider the following pairs:

Land Revenue system	Associated Areas System
Permanent Settlement:	Madras and Bombay
Mahalwari System:	Bengal and Bihar
Ryotwari Settlement:	North-West Provinces and Punjab

Which of the pairs given above is/are not correctly matched?

A. 3 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

Explanation:

- **Pair 1 is not correctly matched**: Permanent Settlement: was introduced in **Bengal and Bihar** in 1793 by Lord Cornwallis through the Permanent Settlement Act. Under the settlement, Zamindars were to give 10/11th of the rental they derived keeping only 1/11th for themselves and the sums to be paid were fixed in perpetuity. It was later extended to Orissa, The Northern districts of Madras, and the Districts of Varanasi.
- **Pair 3 is not correctly matched**: Ryotwari system: The British introduced a new form of revenue settlement in **Madras, Bombay, and Berar regions called the Ryotwari system**. Hence pair 3 is not correctly matched. Under the Ryotwari system, a direct tax contact was established between the ryot (the cultivator) and the state. The cultivator was to be recognized as the owner of his plot of land subject to the payment of land revenue. It was not permanent and was renegotiated periodically after 20 to 30 years.
- **Pair 2 is not correctly matched**: Mahalwari system:It was a modified version of the zamindari settlement introduced in the Gangetic valley, the **northwest Provinces, parts of central India, and Punjab.** Cultivation of land was done on a co-sharing basis and the assessment was fixed for the entire village or estate. The responsibility of paying taxes lay with landlords or heads of families who collectively claimed to be the landlords of the village or the estate.The settlement was also periodically revised.

  Reference: Spectrum

10. Arrange the following events in chronological order of their occurrences.

1. Third Battle of Panipat
2. Battle of Buxar
3. Nadir Shah's invasion of Delhi
4. Death of Tipu Sultan

Select the correct answer using the code given below.

A. 3-1-2-4

B. 2-4-3-1

C. 1-3-2-4

D. 4-3-2-1

Answer: A

Explanation:

- Timelines
  - Nadir Shah's invasion : 1739

- Third Battle of Panipat : 1761
- Battle of Buxar : 1764
- Death of Tipu Sultan : 1799

- Nadir Shah had risen from a shepherd boy to Shah (King) by saving Persia from sure decline and disintegration. In 1729 he won back Herat after defeating the Abdalis and expelling the Ghalzais from Isfahan and central and southern Persia. After long and bitter warfare he compelled Turkey to give back all conquered territory. In 1735, he signed a treaty with Russia receiving back all seized territory. Next year, he deposed the last of the Safavi rulers and made himself the Shah. In the following years, he reconquered the province of Qandahar.
- Nadir Shah was attracted to India by the fabulous wealth for which it was always famous. He entered Indian territory towards the end of 1738, without meeting with any opposition. He attacked Delhi in March 1739. His army easily defeated the Mughals at the Battle of Karnal. The greedy invader took possession of the royal treasury and other royal property, levied tribute on the leading nobles, and plundered the rich of Delhi. His total plunder has been estimated at 70 crores of rupees. He also carried away the famous Koh-i-nur diamond and the jewel-studded Peacock Throne of Shahjahan. He compelled Muhammad Shah to cede to him all the provinces of the Empire west of the river Indus.
- After Muhammad Shah's death in 1748, bitter struggles and even civil war took out among unscrupulous and power-hungry nobles. Furthermore, as a result of the weakening of the north-western defenses, the Empire was devastated by the repeated invasions of Ahmed Shah Abdali, one of Nadir Shah's ablest generals, who had succeeded in establishing his authority over Afghanistan after his master's death. Abdali repeatedly invaded and plundered northern India right down to Delhi and Mathura between 1748 and 1767. In 1761, he defeated the Marathas in the Third Battle of Panipat and thus gave a big blow to their ambition of controlling the Mughal Emperor and thereby dominating the country,
- As a result of the invasions of Nadir Shah and Abdali and the suicidal internal feuds of the Mughal nobility, the Mughal Empire had by 1761 ceased to exist in practice as an all-India Empire. It remained merely as the Kingdom of Delhi. Shah Alam II, who ascended the throne in 1759, spent the initial years as an Emperor wandering from place to place far away from his capital, for he lived in mortal fear of his own wazir. He was a man of some ability and ample courage. But the Empire was by now beyond redemption. In 1764, he joined Mir Qasim of Bengal and Shuja-ud-Daula of Avadh in declaring war upon the English East India Company. Defeated by the British at the Battle of Buxar, he lived for several years at Allahabad as a pensioner of the East India Company.
- NOTE: Tipu Sultan was the ruler of the Kingdom of Mysore based in South India and a pioneer of rocket artillery. He introduced a number of administrative innovations during his rule, including a new coinage system and calendar, and a new land revenue system which initiated the growth of the Mysore silk industry. In the Fourth Anglo-Mysore War, a combined force of British East India Company troops supported by the Marathas & the Nizam of Hyderabad defeated Tipu. He was killed on 4 May 1799 while defending his stronghold of Seringapatam.

Reference: Spectrum

11. Which of the following personalities propounded the "safety-valve" theory to explain the formation of Indian National Congress?

A. Lala Lajpat Rai

B. R.P. Dutt

C. Bipan Chandra

D. Dadabhai Nouroji

Answer: A

Explanation:

- As per Safety Valve theory, AO Hume formed the Congress with the idea that it would prove to be a 'safety valve' for releasing the growing discontent of the Indians. To this end, he convinced Lord Dufferin not to obstruct the formation of the Congress. The extremist leaders like Lala Lajpat Rai believed in the 'safety valve' theory. Even the Marxist historian's 'conspiracy theory' (RP Dutt) was an offspring of the 'safety valve' notion.
- Bipan Chandra observes, the early Congress leaders used Hume as a 'lightning conductor', i.e., as a catalyst to bring together the nationalistic forces even if under the guise of a 'safety valve'.

12. Consider the following statements about the Jallianwala bagh massacre:

1. At Jallianwala bagh, people gathered to demonstrate against the arrest of Kitchlu and Satyapal.
2. Rabindranath Tagore returned his Knighthood to British government as a token of protest against Jallianwala bagh massacre.
3. Sir Shankar Nair resigned from the Viceroy's Executive Council as a protest against the Jallianwala bagh massacre.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

- The Jallianwala Bagh Massacre, also known as the Massacre of Amritsar, occurred on April 13, 1919, when British troops opened fire on a sizable crowd of unarmed Indians in an open area known as the Jallianwala Bagh in Amritsar, Punjab region (now in Punjab state), killing several hundred and injuring many more. Jallianwala is also spelled Jallianwalla. It was a pivotal moment in modern Indian history because it permanently damaged Indo-British ties and paved the way for Mohandas (Mahatma) Gandhi to fully dedicate himself to the cause of Indian nationalism and independence from Britain.
    - The massacre had been planned, and Dyer proudly boasted that he had done it to have a "moral effect" on the populace and that he had resolved to shoot down all men if they continued to gather. He wasn't sorry at all. When he arrived in England, numerous citizens of that country raised money in his honour. Others were horrified by this horrible deed and requested an investigation. It was referred regarded as one of the deadliest massacres in recent history by a British newspaper.
- Rabindra nath Tagore returned his Knighthood to British government as a token of protest against Jallianwala bagh massacre.
- In 1914, he was invited by the Viceroy Lord Hardinge to become a Member of the Viceroy's Executive Council, the highest governing body in British India. He was the only Indian member of the Council. Sir Nair was in the Executive Council when the massacre at Jallianwala Bagh took place, and martial law was imposed in the Punjab. Even in this exalted position, he had not been aware of the horrors that were occurring there as press censorship was so severe in the Punjab. When news trickled down, he was horrified that he was part of a government that had permitted these atrocities and resigned.

13. Match the following.

Parallel Government during Quit India Movement	Established by
Ballia, UP	i) YB Chavan
Satara, Maharashtra	ii) Lakshman Nayak
Talcher, Orissa	iii) Chittu Pande

Choose the correct answer

A. 1-i, 2-ii, 3-iii

B. 1-ii, 2-i, 3-iii

C. 1-iii, 2-ii, 3-i

D. 1-iii, 2-i, 3-ii

Answer: D

Explanation:

Parallel governments were established at many places:

- The first parallel government established in August 1942 in Ballia, East Uttar Pradesh, under the leadership of Chittu Pande, a self-described Gandhian. Though it succeeded in persuading the Collector to hand over power and release all the arrested Congress leaders, the parallel government could not last long, and when the soldiers arrived a week later, they discovered that the leaders had fled.'But he got many Congress leaders released.
- Tamluk (Midnapore, from December 1942 to September 1944)—Jatiya Sarkar undertook cyclone relief work, sanctioned grants to schools, supplied paddy from the rich to the poor, organised Vidyut Vahinis, etc.
- Satara (mid-1943 to 1945)—named "Prati Sarkar", was organised under leaders like Y.B. Chavan, Nana Patil, etc. Village libraries and Nyayadan Mandals were organised,
- There was also some activity in Orissa, Talcher where Lakshman Nayak set up a parallel government.

Hence, option D is correct.

Source: A Brief History of Modern India by Rajiv Ahir (Spectrum)

14. Which of the following is least likely to be a cause of famine of 1943?

A. Rice imports from Burma and South-East Asia had been stopped.

B. Gross mismanagement and deliberate profiteering by certain traders.

C. The need to feed a vast army.

D. Lack of sufficient production due to draught.

Answer: D

- The horror and inconveniences of war were increased by the famine of 1943. The worst-affected areas were south-west Bengal comprising the Tamluk-Contai-Diamond Harbour region, Dacca, Faridpur, Tippera, and Noakhali. Around 1.5 to 3 million people perished in this basically man-made famine, the epidemics (malaria, cholera, and small pox), malnutrition and starvation.

The fundamental causes of the famine were as follows:

- The need to feed a vast army diverted foodstuffs.
- Rice imports from Burma and South-East Asia had been stopped.
- The famine got aggravated by gross mismanagement and deliberate profiteering; rationing methods were belated and were confined to big cities.
- The 1943 Bengal famine, which is estimated to have caused over three million deaths, resulted not from a drought as is widely thought but from the British government's policy failures, say IIT Gandhinagar scientists who have analyzed 150 years of drought data.

- Policy lapses such as prioritizing distribution of vital supplies to the military, civil services and others as well as stopping rice imports and not declaring Bengal famine hit were among the factors that led to the magnitude of the tragedy, historians have maintained.

Hence, option D is correct one.

15. Which of the following was/were the demands of the Nehru Report of 1928?

1. It demanded complete independence for India.
2. There would be a reserved seat for Muslims at the Centre.
3. It recommended universal adult suffrage and dissociation of state from religion.

Select the correct answer using the code given below:

A. 1 and 2 only
B. 2 only
C. 2 and 3 only
D. 1, 2 and 3

Answer: C

Explanation:

- Lord Birkenhead, the Conservative Secretary of State responsible for the appointment of the Simon Commission, had constantly harped on the inability of Indians to formulate a concrete scheme of constitutional reforms. As an answer to Lord Birkenhead's challenge, an All-Parties Conference met in 1928 and appointed a subcommittee under the chairmanship of Motilal Nehru to draft a constitution.

Important recommendations:

- **Statement 1 is not correct:** This report defined Dominion Status as the form of government desired by India.
- It also rejected the principle of separate communal electorates on which previous constitutional reforms had been based.
- **Statement 2 is correct:** Seats would be reserved for Muslims at the Centre and in provinces in which they were in a minority, but not in those where they had a numerical majority.
- **Statement 3 is correct**: The Report also recommended universal adult suffrage, equal rights for women, freedom to form unions, and dissociation of the state from religion in any form. Responsible government at the Centre and in provincial Provincial councils to have a 5-year tenure, headed by a governor acting on the advice of the provincial executive council.

Reference: Spectrum

16. 73rd constitutional amendment act has identified separately the compulsory and voluntary provisions under part IX of the constitution. Which of the following is/are voluntary provisions?

1. Organisation of Gram Sabha in a village or group of villages.
2. Direct elections to the post of chairperson of panchayats at the intermediate and district levels.
3. Providing reservation of seats (both members and chairperson) for backward classes in panchayats at any level.
4. Granting financial powers to the panchayats, that is, authorising them to levy, collect, and appropriate taxes, duties, tolls, and fees.

Select the correct answer using the code given below.

A. 1 and 2 only
B. 3 and 4 only
C. 1, 2 and 3 only

D. 1, 2, 3 and 4

Answer: B

Explanation:

- Under 73rd Constitutional Amendment Act (1992) or part IX of the constitution two types of provisions are compulsory and voluntary.

Compulsory provisions are:

- **Option 1 is incorrect**: Organisation of Gram Sabha in a village or group of villages. Establishment of panchayats at the village, intermediate, and district levels.
- **Option 2 is incorrect**: Direct elections to all seats in panchayats at the village, intermediate, and district levels. Indirect elections to the post of chairperson of panchayats at the intermediate and district levels.
- 21 years to be the minimum age for contesting elections to panchayats
- Reservation of seats (both members and chairpersons) for SCs and STs in panchayats at all three levels.
- Establishment of a state election commission for conducting elections for the panchayats Constitution of a state Finance Commission after every five years to review the financial position of the panchayats.

Voluntary provisions are:

- Giving representation to members of the parliament (both the houses) and the state legislature (both the houses) in the panchayat at different levels falling within their constituencies.
- **Statement 3 is correct**: Providing reservation of seats (both members and chairperson) for backward classes in panchayats at any level.
- Granting powers and authority to the panchayats to enable them to function as institutions of self-government (in brief, making them autonomous bodies)
- Devolution of powers and responsibilities upon panchayats to prepare plans for economic development and social justice; and to perform some or all of the 29 functions listed in the 11th schedule of the constitution.
- **Option 4 is correct**; Granting financial powers to the panchayats, that is, authorising them to levy, collect, and appropriate taxes, duties, tolls, and fees.

Reference: M. Laxmikant

17. Consider the following statements with reference to Reservation of seats in Municipalities:

1. One-third of the total number of seats are reserved for the scheduled castes and the scheduled tribes in every municipality
2. Not less than one-third of the total number of seats are reserved for women which does not include the scheduled castes and the scheduled tribe's population
3. The state legislature may provide for the manner of reservation of offices of chairpersons in the municipalities for SCs, STs and women.

Which of the statements given above is/are correct?

A. 1 only

B. 1 and 2 only

C. 3 only

D. 2 and 3 only

Answer: C

- Statement 1 is incorrect: The 74th Amendment Act, 1992 provides for the reservation of seats for the scheduled castes and the scheduled tribes in every municipality in the proportion of their population to the total population in the municipal area.
- Statement 2 is incorrect: The 74th Amendment Act, 1992 provides for the reservation of not less

than one-third of the total number of seats for women (including the number of seats reserved for women belonging to the SCs and the STs).

- Statement 3 is correct: The state legislature may provide for the manner of reservation of offices of chairpersons in the municipalities for SCs, STs and women.

Additional info:

Reservation of seats

- The Act provides for the reservation of seats for the scheduled castes and the scheduled tribes in every municipality in the proportion of their population to the total population in the municipal area.
- Further, it provides for the reservation of not less than one-third of the total number of seats for women (including the number of seats reserved for women belonging to the SCs and the STs).
- The state legislature may provide for the manner of reservation of offices of chairpersons in the municipalities for SCs, STs and women.
- It may also make any provision for the reservation of seats in any Municipality or offices of chairpersons in municipalities in favour of backward classes.

18. Consider the following statements:

1. The Centre provides the Post Devolution Revenue Deficit (PDRD) Grant to the States under Article 275 of the Indian Constitution.
2. Statutory Grants are given by the President out of the Consolidated Fund of India
3. All the states are granted similar Statutory Grants.

Which of the statements given above is/are correct?

A. 1 only

B. 2 and 3 only

C. 3 only

D. 1 and 2 only

Answer: A

Explanation:

- **Statement 1 is correct:** The Centre provides the Post Devolution Revenue Deficit (PDRD) Grant to the States under Article 275 of the Indian Constitution.
- **Statement 2 is incorrect:** Statutory Grants are given by the Parliament out of the Consolidated Fund of India
- **Statement 3 is incorrect:** Different States may be granted different sums.

Additional Information:

What is the Post Devolution Revenue Deficit (PDRD)?

- The Centre provides the Post Devolution Revenue Deficit (PDRD) Grant to the States under Article 275 of the Indian Constitution. Article 275 provides for the payment of the sums as Parliament may by law provide grants-in aid to the States in need of assistance.
- The grants are paid out of the Consolidated Fund of India in each year, and different sums may be fixed for different States. These grants are to be of the nature of capital and recurring sums as may be necessary.
- Recommendation for Grants:
  - The grants are released as per the recommendations of the Finance Commission in monthly installments to meet the gap in Revenue Accounts of the States post-devolution (of the divisible tax pool of the Centre).
  - The 15th Finance Commission (FC) has recommended post devolution revenue deficit grants amounting to about Rs. 3 trillion over the five-year period ending FY26.

- The eligibility of States to receive this grant and the quantum of grant was decided by the Commission based on the gap between assessment of revenue and expenditure of the State.
- The States who have been recommended for PDRD Grant by the 15th FC during 2022-23 are: Andhra Pradesh, Assam, Himachal Pradesh, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tripura, Uttarakhand and West Bengal.

19. Article 143 of the Constitution authorises the President to seek the opinion of the Supreme Court on any question of law or fact of public importance which is likely to arise. Consider the following about it.

1. The opinion expressed by the Supreme Court in this case is only advisory and not a judicial pronouncement.
2. The President can delegate this authority to the Parliament so it be that the house requires expert comment on a matter of constitutional law.

Which of the above statements is/are correct?

A. 1 only
B. 2 only
C. Both 1 and 2
D. None

Answer: A

Explanation:

Statement 1 is correct:

Two categories are covered by Article 143:

- On any question of law or fact of public importance which has arisen or which is likely to arise.
- On any dispute arising out of any pre-constitution treaty, agreement, covenant, engagement or other similar instruments.
- In the first case, the Supreme Court may tender or may refuse to tender its opinion to the president.
- But, in the second case, the Supreme Court 'must' tender its opinion to the president. In both the cases, the opinion expressed by the Supreme Court is only advisory and not a judicial pronouncement.

20. Consider the following statements regarding to National Human Rights Commission:

1. National Human Rights Commission (NHRC) is an independent Constitutional body.
2. It can suo-moto seek a report from the government with regards to violations of Human Rights by the Armed Forces.
3. The government is required to inform about the action taken on the recommendations of NHRC, within six months.

Select the correct answer using the code given below.

A. 1 and 2 only
B. 2 only
C. 1 and 2 only
D. 1, 2 and 3

Answer: B

Explanation:

- **Statement 1 is not correct**: National Human Rights Commission (NHRC) is an independent statutory body established under the Protection of Human Rights Act, 1993. It is the watchdog of human rights in India i.e. the rights related to life, liberty, equality and dignity of the individual which are guaranteed by the

Constitution as well as international conventions.

Composition of NHRC:

- Chairperson- Who has been Chief Justice of the Supreme Court, or a Judge of the Supreme Court
- Two members having knowledge of human rights to be appointed as members of the NHRC.
- Chairpersons of various commissions such as
  - The National Commission for Scheduled Castes
  - The National Commission for Scheduled Tribes
  - The National Commission for Women
  - The National Commission for Backward Classes
  - The National Commission for the Protection of Child Rights
  - The Chief Commissioner for Persons with Disabilities.

- **Statement 2 is correct**: The NHRC either suo moto or after receiving a petition may seek a report from the central government with regards to violations of Human Rights by the Armed Forces. After the receipt of the report, it may either not proceed with the case or as the case may make its recommendation to that government.
- **Statement 3 is not correct**: The government shall inform the commission of the action taken on the recommendations within the period of three months or such further time as the commission may allow.
  - After that commission shall publish the report on recommendations given to the government and action taken by the government on the recommendations.

Reference: M. Laxmikant

21. Consider the following statements regarding to electronic voting machine (EVM):

1. EVMs require high voltage electricity.
2. EVMs were first used in Kerala.
3. Use of EVMs in an election is legal.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: B

Explanation:

- **Statement 1 is not correct**: EVM is a microcontroller-based portable instrument designed to modernise the election procedure of conducting elections. EVM consists of two Units – a Control Unit and a Balloting Unit. These units are joined together by a cable. EVMs do not require electricity.
- EVMs run on an ordinary battery assembled by Election Commission (EC) in collaboration with two Public Sector undertakings o Bharat Electronics Ltd (BEL)., Bangalore (Ministry of Defence),
  - Electronic Corporation of India Ltd (ECIL)., Hyderabad (Department of Atomic Energy).
- **Statement 2 is correct**: EVMs were first used in Paravur Assembly Constituency of Kerala in the year 1982. EVMs can cater to a maximum of 64 candidates (including NOTA). There is provision for 16 candidates in one Balloting Unit. The arrangement of names of candidates in the ballot paper is in alphabetical order, first candidates from national political parties' figures and then from other state registered parties.
- **Statement 3 is correct**: Use of EVMs in an

election is legal. In 1988, a new Section 61A was inserted in the Representation of the People Act, 1951 empowering ECI to use electronic voting machines. An EVM being used by ECI can record a maximum of 2,000 votes.

Additional Information:

Concerns raised against EVMs

- Susceptibility to fraud: many software programmers have claimed that EVMs are vulnerable to malicious programming and if it gets affected then any hacker can hack the machine and can tamper the vote counts easily.
- Global precedence: German constitutional court ruling (2009) forced the country to scrap EVMs and return to paper ballot. Other technologically advanced nations such as the Netherlands and Ireland have also abandoned EVMs.
- Lack of secrecy: With the paper ballot, ballots from all the booths were mixed up before counting so that the candidates could not get any idea about which booths voted for or against them. In the case of EVMs, the candidates know how they fared in each booth, and this knowledge can be misused by a candidate.
- Storage and Counting concerns: EVMs are stored in a decentralised manner in different locations. Security experts say that voting machines must remain in a secure environment throughout their life cycle.

22. Consider the following statements:

1. The Constitution of India conceives 'minority' as an open category to protect the interests of various religious, linguistic and culturally distinctive groups.
2. The minority status is to be essentially decided at the state/ union territory level.
3. The National Commission for Minorities Act (1992) offers a definition of the term 'religious minority' only.

Which of the statements given above is/are correct?

A. 1 and 3 only

B. 2 only

C. 1 and 2 only

D. 1, 2 and 3

Answer: B

Explanation:

About minorities and related constitutional provisions: A special Sub-Committee of the United Nations Human Rights Commission in 1946 defined the 'minority' as those "non-dominant groups in a population which possess a wish to preserve stable ethnic, religious and linguistic traditions or characteristics markedly different from those of the rest of the population."

- **Statement 1 is not correct**: The Constitution of India uses the word 'minority' or its plural form in some Articles 29 to 30 and 350A to 350 B – but does not define it anywhere. It conceives 'minority' as an open category to protect the interests of various religious, linguistic and culturally distinctive groups.
  - Article 29 has the word "minorities" in its marginal heading but speaks of "any sections of citizens". The Supreme Court held that the scope of this article is not necessarily restricted to minorities only, as words 'section of citizens' in the Article include minorities as well as the majority.
  - Article 30 speaks specifically of two categories of minorities – religious and linguistic Together, these two articles confer four distinct rights on minorities (Refer infographic).
    - The remaining two Articles (350A and 350B) relate to linguistic minorities

only. Article 350A: Facilities for instruction in mother tongue at primary stage.

- Article 350 B: Special Officer for linguistic minorities.

- Other constitutional safeguards that have a bearing on the status and rights of minorities are:
  - Freedom of conscience and free profession, practice and propagation of religion (article 25);
  - Freedom to manage religious affairs (article 26);
  - Freedom as to payment of taxes for promotion of any particular religion (article 27);
  - Freedom as to attendance at religious instruction or religious worship in certain educational institutions (article 28);
  - Special provision relating to language spoken by a section of the population of a State (article 347);
  - Language to be used in representations for redress of grievances (article 350);

Identification of minorities:

- **Statement 2 is correct**: Linguistic minorities: Since there is no majority at the national level and the minority status is to be essentially decided at the State/Union Territory level.
  - Religious minorities: As regards religious minorities at the national level in India, all those who profess a religion other than Hinduism are considered minorities.
- **Statement 3 is not correct**: The National Commission for Minorities Act (1992) also does not offer a definition of the term 'religious minority'. Instead, it is the central government that is empowered to notify a few communities as "minority" for the purpose of this Act.
  - Following this mandate, the Central government notified five religious' communities: Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis) as national religious minorities in October 1993. This list was amended in 2014 when Jains were also notified as a national minority.
- A national level minority shall have the status of a minority in the entire country irrespective of its local population. This will be so even in a state, region or district where such a minority is factually not a minority in numerical terms.

Reference: M. Laxmikant

23. National Initiative for Promoting Upskilling of Nirman (NIPUN) Initiative was launched by which ministry ?

A. Ministry of skill development and entrepreneurship

B. Ministry of Housing & Urban Affairs

C. Ministry of social justice and empowerment

D. Ministry of commerce and industry

Answer: B

Explanation

- The project NIPUN is an initiative of the Ministry of Housing & Urban Affairs (MoHUA) under its flagship scheme of the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)
- Help to train over 1 lakh construction workers, through fresh skilling and upskilling programmes and provides them with work opportunities in foreign countries also
- This initiative will enable Nirman workers to be more proficient and skilled while making them adopt future trends in the construction industry by increasing their capabilities and diversifying their skill sets.
- This initiative is expected to expand

horizontally across the industry.

- The National Skill Development Corporation (NSDC) under the Ministry of Skill Development & Entrepreneurship (MSDE) will be the Implementation Partner for the project NIPUN.
- NSDC will be responsible for the overall execution of training, monitoring and candidate tracking.

24. Which of the following statement is *incorrect* with reference to difference between chargesheet and FIR?

A. The term, 'chargesheet' is defined under CrPC but First Information Report (FIR), has not been defined in either the Indian Penal Code (IPC) or the CrPC.

B. The chargesheet is the final report filed towards the end of an investigation

C. An FIR decides a person's guilt

D. None of the above

Answer: C

Statement 3 is incorrect: An FIR does not decide a person's guilt

How is a Chargesheet Different from an FIR?

Provision:

The term, 'chargesheet' is defined under Section 173 of the CrPC but First Information Report (FIR), has not been defined in either the Indian Penal Code (IPC) or the CrPC. Instead, it finds a place under the police regulations/ rules under Section 154 of CrPC, which deals with 'Information in Cognizable Cases'.

Time of Filing:

While the chargesheet is the final report filed towards the end of an investigation, an FIR is filed at the 'first' instance' that the police are informed of a cognizable offense (offence for which one can be arrested without a warrant; such as rape, murder, kidnapping).

Determination of Guilt:

An FIR does not decide a person's guilt but a chargesheet is complete with evidence and is often used during the trial to prove the offenses the accused is charged with.

Terms & Conditions:

After filing an FIR, the investigation takes place. Under Section 169 of the CrPC, the police can only forward the case to the Magistrate if they have sufficient evidence, otherwise, the accused is released from custody.

According to Section 154 (3) of the CrPC, if any person is aggrieved by the refusal of authorities to file an FIR, they can send the complaint to the Superintendent of Police, who will either investigate himself or direct it to their subordinate.

A chargesheet is filed by the police or law-enforcement/ investigative agency only after they have gathered sufficient evidence against the accused in respect of the offenses mentioned in the FIR, otherwise, a 'cancellation report' or 'untraced report' can be filed when due to lack of evidence.

25. Consider the following statements about Reasonable accommodation

1. 'Reasonable accommodation' is a principle that promotes equality
2. Its use is primarily in the disability rights sector.
3. It captures the positive obligation of the State

Which of the above statements is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

Statement 1 is correct: 'Reasonable accommodation' is a principle that promotes equality, enables the grant of positive rights and prevents discrimination based on disability, health condition or personal belief.

Statement 2 is correct: Its use is primarily in the disability rights sector.

Statement 3 is correct: It captures the positive obligation of the State and private parties to provide additional support to persons with disabilities to facilitate their full and effective participation in society.

26. Consider the following statements with reference to the 'whip':

1. A whip is a written directive requiring party members to be present for crucial votes or to vote a certain way only.
2. To issue whips, parties designate a senior member from among their Parliamentary delegations.
3. In India, all parties can issue whips to their members.

Which of the above is/are correct?

A. 1 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

Statement 1 is correct: In parliamentary jargon, a whip is a written directive requiring party members to be present for crucial votes or to vote a certain way only. The phrase comes from the traditional British method of "whipping in" legislators to toe the party line.

Statement 2 is correct: To issue whips, parties designate a senior member from among their Parliamentary delegations. This member is called a chief whip, and he/ she is assisted by additional whips.

Statement 3 is correct: In India, all parties can issue whips to their members.

27. Consider the following statements:

1. The United Kingdom (UK) and the Commonwealth countries, including India, are common law countries.
2. In the UK, Puisne judges are judges other than those holding distinct titles.

Which of the above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

Statement 1 is correct: Common law is the body of law created by judges through their written opinions, rather than through statutes or constitutions (statutory law).

- Common law, which is used interchangeably with 'case law', is based on judicial precedent.
- The United Kingdom (UK) and the Commonwealth countries, including India, are common law countries.

Statement 2 is correct: In the UK, Puisne judges are judges other than those holding distinct titles.

28. Consider the following statements with reference to Hate Speech in India:

1. Responsible speech is the essence of the liberty granted under Article 21 of the Constitution.
2. Article 19(2) of the Constitution guarantees freedom of speech and expression to all citizens of India.
3. Hate speech has not been defined in any law in India.

Which of the above is/are correct?

A. 1 and 2 only
B. 3 only
C. 2 only
D. 1, 2 and 3

Answer: D

Statement 1 is correct: Responsible speech is the essence of the liberty granted under Article 21 of the Constitution.

Statement 2 is correct: Article 19(2) of the Constitution guarantees freedom of speech and expression to all citizens of India.

Statement 3 is correct: Hate speech has not been defined in any law in India.

29. Which of the following statements is *incorrect* with reference to Parliamentary Privileges?

A. Parliamentary Privileges are defined in Article 105 of the Indian Constitution.
B. Under these privileges, the members of Parliament are exempted from any civil liability and criminal liability
C. The privileges are claimed only when the person is a member of the house.
D. None of the above

Answer: B

Statement 1 is correct: Parliamentary Privileges are defined in Article 105 of the Indian Constitution.

Statement 2 is incorrect: Under these privileges, the members of Parliament are exempted from any civil liability (but not criminal liability) for any statement made or act done in the course of their duties.

Statement 3 is correct: The privileges are claimed only when the person is a member of the house.

30. As per the ECI's Political Parties and Election Symbols, 2019 handbook,a political party would be considered a national party if:

1. It is 'recognised' in four or more states
2. If its candidates have secured at least 6% of total valid votes inat least 4 states (in latest Lok Sabha or Assembly elections) and the party has at least 4 MPs in the last LS polls
3. If it has won at least 2% of the total seats in the LS from at least 3 states.

Select the correct code:

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: D

As per the ECI's Political Parties and Election Symbols, 2019 handbook,a political party would be considered a national party if:

- It is 'recognised' in four or more states; or
- If its candidates have secured at least 6% of total valid votes inat least 4 states (in latest

Lok Sabha or Assembly elections) and the party has at least 4 MPs in the last LS polls; or

- If it haswon at least 2% of the total seats in the LS from at least 3 states.

31. With the reference to the Human developmental Index, consider the following statements:

1. India's HDI value has been steadily increasing and moving towards the world average since 1990.
2. India's HDI value continues to exceed South Asia's average human development.
3. India's Gender Inequality Index (GII) is ranked 140 in 2021.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: A

Explanation:

- Human Development' is the key enabler for upward social mobility. The challenges posed by the aftermath of the peak of the Covid-19 pandemic in 2020 and 2021 and the ensuing Russia-Ukraine conflict in 2022 have impacted the development trajectory of India and the world. In the wake of these developments, there was a global decline in human development.
- **Statement 1 is correct:** According to the United Nations Development Programme (UNDP) report, 90 percent of countries have registered a reduction in their Human Development Index (HDI) value in 2020 or 2021, indicating that human development across the world has stalled for the first time in 32 years. India ranked 132 out of 191 countries and territories in the 2021/2022 HDI report.
    - India's HDI value of 0.633 in 2021 places the country in the medium human development category, lower than its value of 0.645 in 2019. However, India's HDI value continues to exceed South Asia's average human development.
- **Statement 2 is correct and statement 3 is not correct:** On the parameter of gender inequality, India's Gender Inequality Index (GII) value is 0.490 in 2021 and is ranked 122. This score is better than that of the South Asian region (value: 0.508) and close to the world average of 0.465.

Reference: Economics survey

32. Which of the following skill development schemes implemented under the Skill India Mission:

1. National Urban Livelihood Mission.
2. Pradhan Mantri Kaushal Vikas Yojana.
3. Jan Shikshan Sansthan.
4. National Apprenticeship Promotion Scheme.

Select the correct answer using the code given below:

A. 1 and 3 only

B. 2, 3 and 4 only

C. 1, 2 and 4 only

D. 1, 2, 3 and 4

Answer: D

Explanation:

- The Skill Indian Mission focuses on skilling, reskilling and up-skilling through short term and long term training programmes. Under the Mission, the government, through more than 20 Central Ministries/Departments, is implementing various skill development schemes across the country. These include Deen Dayal Upadhyaya Grameen Kaushalya Yojna (DDU-GKY), Rural Self Employment Training Institutes (RSETI), Deen Dayal Antyodaya Yojana-National Urban Livelihood Mission (DAY-NULM).
- MSDE is implementing Schemes such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Jan Shikshan Sansthan (JSS), National Apprenticeship Promotion Scheme (NAPS) and Craftsmen Training Scheme (CTS). The advocacy of the programmes is being done through print media, electronic media, and State Governments' campaigns . More and more areas are being aligned with the common framework spanning the skills ecosystem so that the outcomes of the Government skilling programmes are uniform across the skilling ecosystem.

Reference: Economic survey

33. With reference to the Mahatma Gandhi National Rural Employment Guarantee Scheme, consider the following statements:

1. The MGNREGA provides at least 100 days of guaranteed wage employment in a financial year only to the poor and vulnerable households.
2. In case employment is not provided within 15 days from the date of registration of the demand for work the worker is entitled to a monthly unemployment allowance.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: D

Explanation:

Mahatma Gandhi National Rural Employment Guarantee Scheme

- **Statement 1 is not correct:** Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA) aims at enhancing the livelihood security of households in rural areas of the country by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.
- **Statement 2 is not correct:** In case employment is not provided within 15 days from the date of registration of the demand for work or the date from which work has been demanded in case of advance applications,

whichever is later, the worker is entitled to a daily unemployment allowance. A total of 5.6 crore households availed employment and a total of 225.8 crore person-days employment has been generated under the Scheme (until 6 January 2023).

Reference: Economic survey

34. Consider the following statements with reference to Sovereign Green Bonds:

1. These are Green bonds issued by multilateral organisations only to exclusively fund projects that have positive environmental
2. Proceeds from these bonds are earmarked for green projects.

Which of the above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: B

Statement 1 is incorrect: Green bonds are issued by companies, countries and multilateral organisations to exclusively fund projects that have positive environmental or climate benefits and provide investors with fixed income payments.

Statement 2 is correct: Proceeds from these bonds are earmarked for green projects. This is unlike standard bonds, the proceeds of which can be utilized for various purposes at the discretion of the issuer.

35. Which of the following statement is correct with reference to he Atal Vayo Abhyuday Yojana?

A. A scheme for the welfare of senior citizens

B. A scheme for the development of rural youth

C. A scheme for the development of infrastructure in rural areas

D. A scheme for the promotion of entrepreneurship among the youth

Answer: A

What is Atal Vayo Abhyuday Yojana?

Nodal Ministry: Ministry of Social Justice & Empowerment

- Type: Central Sector Scheme
- Aim: To improve the quality of life of the Senior Citizens by providing basic amenities like shelter, food, medical care and entertainment opportunities and by encouraging productive and active ageing through providing support.
- Sub Schemes/Components: 1) Integrated Programme for Senior Citizens (IPSrC), 2) State Action Plan for Senior Citizens(SAPSrC), 3) Rashtriya Vayoshri Yojana(RVY), 4) Senior Able Citizens for Re-employment in Dignity(SACRED), 5) Action Groups Aimed at Social Reconstruction (AGRASR), 6) Senior-care Aging Growth Engine (SAGE)-Silver economy for Senior Citizens, 7) Elderline – National Helpline for Senior Citizen, 8) Channelizing the CSR fund for elderly care and 9) Training and capacity building for senior citizens.

36. Consider the following statements with reference to National Action Plan for Mechanized Sanitation Ecosystem(NAMASTE):

1. It is a joint project of the Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs(MoHUA).
2. Aim is to eradicate unsafe sewer and septic tank cleaning practices.
3. The scheme will replace the Self-Employment Scheme for the Rehabilitation of Manual Scavengers (SRMS)

Which of the above is/are correct?

A. 1 only
B. 2 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: D

Statement 1 is correct: It is a joint project of the Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs(MoHUA).

Statement 2 is correct: Aim is to eradicate unsafe sewer and septic tank cleaning practices.

Statement 3 is correct: The scheme will replace the Self-Employment Scheme for the Rehabilitation of Manual Scavengers (SRMS)

What is the National Action Plan for Mechanized Sanitation Ecosystem(NAMASTE)?

Nodal Ministries: It is a joint project of the Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs(MoHUA).

Aim: To eradicate unsafe sewer and septic tank cleaning practices.

Replaced by: The scheme will replace the Self-Employment Scheme for the Rehabilitation of Manual Scavengers (SRMS), which was started in 2007.

Features of the Scheme: Under the scheme, capital subsidies of up to ₹5 lakh on sanitation machinery costing up to ₹15 lakh will be provided so that workers will be able to own sanitation machines themselves.

Interest subsidies on loans will also be provided where interest rates will be capped between 4-6% for the beneficiaries with the government taking care of the rest of the interest.

In addition, the scheme also provides for training the workers in the use of these machines, during which time a stipend of up to ₹3,000 per month will be provided.

The scheme will also provide for sanitation workers to train for and go into any of the approved lists of alternative occupations in sectors like agriculture, services, electronics assembling, handicrafts and so on.

37. With reference to the Rashtriya Gram Swaraj Abhiyan (RGSA), consider the following statements:

1. Rashtriya Gram Swaraj Abhiyan (RGSA) was approved by the Union Cabinet in April 2022.
2. The scheme extends to all states and UTs including non-Part IX of the Constitution of India areas where Panchayats do not exist.
3. The Scheme strengthen the capacities of institutions for rural local governance to become more responsive towards local development needs.

Which of the statements given above is/are correct?

A. 1 and 3 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: C

Explanation:

- **Statement 1 is not correct**: A CSS of Rashtriya Gram Swaraj Abhiyan (RGSA) was approved by the Union Cabinet in April 2018 for implementation from FY19 to FY22 with the primary aim of strengthening Panchayati Raj Institutions (PRIs) for achieving SDG's with the main thrust on convergence with Mission Antyodaya and emphasis on strengthening PRI's in the 117 Aspirational Districts.
- **Statement 2 is correct:** The scheme extends to all states and UTs including non-Part IX of the Constitution of India areas where Panchayats do not exist. The major focus of the scheme of RGSA was Capacity Building and Training (CB&T) to empower PRIs and to prepare convergent Plans at the respective level of Panchayats. Under the Scheme, not only around 31 lakh elected representatives (ERs) have been capacitated through various modes of training but also functionaries and other stakeholders of Panchayats including SHG members have been provided training for better SHG-PRIs convergence at the grassroots level to create an ecosystem to prepare inclusive village poverty reduction plan.
- **Statement 3 is correct:** The scheme has been revamped and approved in April 2022 for implementation over the period FY23 to FY26. The Scheme has been formulated with the aim to strengthen the capacities of institutions for rural local governance to become more responsive towards local development needs, prepare participatory plans leveraging technology, and efficiently utilise available resources for realising sustainable solutions to local problems linked to SDGs adopting the nine thematic approaches of LSDGs.

38. Consider the following statements regarding to organic and Natural farming in India:

1. India's organic farmers, the highest in the world, and about 59.1 lakh ha area was brought under organic farming by 2021-22.
2. Assam became the first State in the world to become fully organic
3. Bhartiya Prakratik Krishi Paddhati (BPKP) encourages all forms of ecological farming, including Zero-Budget Natural Farming (ZBNF).

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: C

Explanation:

- **Statement 1 is correct:** Organic and natural farming provides chemical fertiliser and pesticide-free food grains and other crops, improves soil health and reduces environmental pollution. India has 44.3 lakh organic farmers, the highest in the world, and about 59.1 lakh ha area was brought under organic farming by 2021-22.

- **Statement 2 is not correct:** Sikkim voluntarily adopted going organic, and the process of getting the total cultivable land of 58,168 hectares under organic farming commenced at ground level in 2010. It became the first State in the world to become fully organic, and other States, including Tripura and Uttarakhand, have set similar targets.
- **Statement 3 is correct:** Promotion of natural farming began in 2019-20, when Bhartiya Prakratik Krishi Paddhati (BPKP), a sub-scheme of PKVY, was launched to assist farmers in adopting traditional indigenous practices for encouraging all forms of ecological farming, including Zero-Budget Natural Farming (ZBNF). The scheme focuses on capacity building, training, handholding, and on-field demonstration of natural farming through champion farmers. Under the BPKP, 4.09 lakh ha of land have been brought under Natural farming in 8 States (Andhra Pradesh, Chhattisgarh, Kerala, Himachal Pradesh, Jharkhand, Odisha, Madhya Pradesh and Tamil Nadu).

39. With reference to the Hallmarking, consider the following statements:

1. Hallmarks are a guarantee of the purity or fineness of precious metal articles.
2. Hallmarking obligates manufacturers to maintain legal standards of fineness.
3. The Bureau of Indian Standards (BIS) operates the gold and silver hallmarking scheme in India.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 and 3 only
C. 1 and 2 only
D. 1, 2 and 3

Answer: D

Explanation:

- **Statement 1 is correct:** Hallmarking is the accurate determination and official recording of the proportionate content of precious metals in precious metal articles. Hallmarks are thus a guarantee of the purity or fineness of precious metal articles.
- **Statement 2 is correct:** The principle objectives of Hallmarking are to protect the public against adulteration and to obligate manufacturers to maintain legal standards of fineness.
- **Statement 3 is correct**: The Bureau of Indian Standard (BIS) operates the gold and silver hallmarking scheme in India.
- According to the scheme, BIS-certified jewellers can get their Jewellery hallmarked from any of the BIS-recognized Assaying and Hallmarking Centers (A&HC).
- **Implementation:** First Phase:- In the first phase, gold hallmarking was available only in 256 districts and jewellers with an annual turnover above Rs. 40 lakhs will come under its purview.
    - A certain category of Jewellery items will also be exempted from the mandatory requirement of hallmarking. Jewellery for international exhibitions and Jewellery for government-approved B2B (Business-to-Business) domestic exhibitions will

be exempted from mandatory Hallmarking.

- **Second Phase:** The second phase of the mandatory hallmarking will cover additional three carats of gold Jewellery/artefacts viz.20, 23 and 24 carats. Moreover, 32 new districts have been added under the mandatory hallmarking regime wherein an AHC has been set up post-implementation of the first phase of the mandatory hallmarking order.

40. With reference to the National Green Tribunal, consider the following statements:

1. The National Green Tribunal is bound by the procedure laid down under the Code of Civil Procedure.
2. It was established for the effective and expeditious disposal of cases relating to environmental protection.
3. Appeal against any order of the National Green Tribunal shall lie to the Supreme Court.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 3 only
C. 2 and 3 only
D. 1, 2 and 3

Answer: C

Explanation:

- **Statement 1 is not correct:** The National Green Tribunal was established on October 18, 2010 under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection. The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.
- **Statement 2 is correct:** The Tribunal is mandated to make and endeavour for disposal of applications or appeals within 6 months of the filing of the same.
- **Statement 3 is correct**: Appeal against any order of the Tribunal shall lie to the Supreme Court. New Delhi is the Principal Place of Sitting of the Tribunal and Bhopal, Pune, Kolkata and Chennai shall be the other four places of sitting of the Tribunal.
    - Sanctioned strength: The act allows for up to 40 members (20 expert members and 20 judicial members).
- Chairman: Is the administrative head of the tribunal, also serves as a judicial member and is required to be a serving or retired Chief Justice of a High Court or a judge of the Supreme Court of India.

41. Consider the following statements regarding seaweeds

1. Seaweeds are macroscopic algae which grow in the marine and shallow coastal waters.
2. Seaweeds have been termed as the 'Medical Food of the 21st Century'.
3. Multipurpose Seaweed Park is to established in Kerala.

Which of the statement is/are correct?

A. 1 and 2 only
B. 2 only
C. 1 and 3 only

D. 3 only

Answer: A

- Statement 1 is correct - Seaweeds are macroscopic algae grown in the marine and shallow coastal waters and on rocky shores.
- Seaweeds are abundant along the Tamil Nadu and Gujarat coasts and around Lakshadweep and Andaman & Nicobar Islands. Rich seaweed beds occur around Mumbai, Ratnagiri, Goa, Karwar, Varkala, Vizhinjam and Pulicat in Tamil Nadu, Andhra Pradesh and Chilka in Orissa.
- Statement 2 is correct – Seaweeds are wonder plants of the sea, the new renewable source of food, energy, chemicals and medicines with manifold nutritional, industrial, biomedical, agriculture and personal care applications.
- Seaweeds are termed as the 'Medical Food of the 21st Century' as they are being used as laxatives, for making pharmaceutical capsules, in treatment of goiter, cancer, bone-replacement therapy and in cardiovascular surgeries.
- Statement 3 is incorrect - In Budget 2021-22 to promote seaweed cultivation, Government of India announced that Multipurpose Seaweed Park will be established in Tamil Nadu. India with a 2.2 million sq. km EEZ area and 0.53 sq km continental shelf has enormous scope for seaweed cultivation and development of indigenous seaweed-based industries comprising of value-added products, nutraceuticals, biofuels, bioplastics, etc. which can substantially contribute to the global markets.

Additional Information

- Seaweed is full of vitamins, minerals, & fibre. Many seaweeds contain anti-inflammatory & antimicrobial agents. Certain seaweeds possess powerful cancer-fighting agents. They are effective binding agents (emulsifiers) & are used in commercial goods like toothpaste, fruit jelly, ice cream & popular softeners (emollients) in organic cosmetics & skin-care products.
- The major industrial applications of seaweeds are as a source of agar, agarose and carrageenan used in laboratories, pharmaceuticals, cosmetics, cardboard, paper, paint and processed foods. In India there are 46 seaweed-based industries, 21 for Agar and 25 for Alginate production, but they are not functioning up to their rated capacity, due to short- supply of raw materials.

Reference: Shankar Environment

42. Consider the following statements regarding decomposition:

1. Decomposers are autotrophs.
2. Decomposition is largely an oxygen-requiring process.
3. Decomposition rate is slower if detritus is rich in lignin and chitin.

Which of the statement given above is/are correct?

A. 1 and 2 only

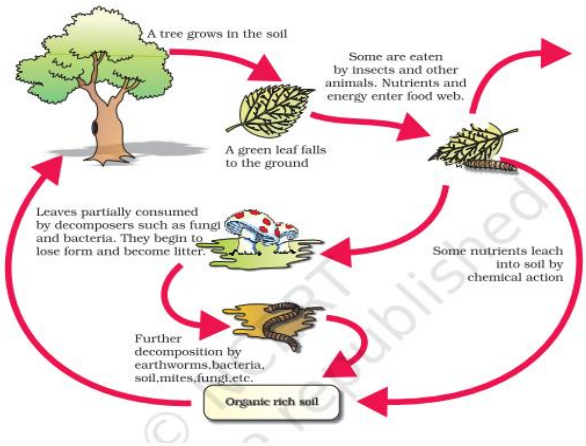
B. 2 and 3 only

C. 1 and 3 only

D. All of the above

Answer: - B

- Decomposition is the process that involves the breakdown of complex organic matter or biomass from the body of dead plants and animals with the help of decomposers into inorganic raw materials such as carbon dioxide, water, and other nutrients.



- Statement 1 is incorrect - Decomposers are Saprotrophs as they obtain energy and nutrients from dead organic substances (detritus). Earthworm and certain soil organisms (such as nematodes, and arthropods) are detritus feeders and help in the decomposition of organic matter and are called detrivores
- Autotrophs, which literally means "self-nourished," are another name for producers. This is due to the fact that producers provide food for themselves.
- They utilize the energy and ingredients available in their abiotic environment to create organic molecules. Plants like grass or tiny bushes are the most basic examples of autotrophs.

Factors Affecting Decomposition

- Litter Quality
  - The rate of decomposition depends on the structural and chemical properties of litter.
  - Statement 3 is correct. In a particular climatic condition, decomposition rate is slower if detritus is rich in lignin and chitin, and quicker, if detritus is rich in nitrogen and water-soluble substances like sugars.
  - Lignin and chitin are chemicals/organic compounds which resist decomposition
- Temperature
  - Temperature regulates the growth and activity of microorganisms. The temperature is different at different elevations. The species diversity and the microorganism count is affected by environmental changes.
- Aeration
  - Statement 2 is correct. Decomposition is largely an oxygen-requiring process. The oxygen present in the pores of the soil helps in the growth of microorganisms. In the water-logged soils, the aerobic microorganisms are absent. Here only anaerobic microorganisms can grow and initiate decomposition.
- Soil pH
  - The presence of cations and anions governs the pH of the soil, which in turn affects microbial growth.
- Inorganic Chemicals
  - After decomposition, the elements like potassium, sodium, calcium, magnesium are released into the soil. Some of these are used by the microorganisms for their growth. Thus, it affects the rate of decomposition.
- Moisture
  - The water present in the soil is responsible for various physiological processes of microorganisms present in the soil. The growth of microorganisms is thus governed by the presence of moisture in the soil.

Warm and moist environment favour decomposition whereas low temperature and anaerobiosis inhibit decomposition resulting in a buildup of organic materials (soils become acidic like in taiga).

Additional Information:



The various processes involved in decomposition are as follows:

- Fragmentation- It involves the breakdown of detritus into smaller pieces by the action of detritivores such as earthworms.
- Leaching- It is a process where the water soluble nutrients go down into the soil layers and get locked as unavailable salts.
- Catabolism- It is a process in which bacteria and fungi degrade detritus through various enzymes into smaller pieces.
- Humification- The next step is humification which leads to the formation of a dark-coloured colloidal substance called humus, which acts as reservoir of nutrients for plants.
- Mineralization- The humus is further degraded by the action of microbes, which finally leads to the release of inorganic nutrients into the soil. This process of releasing inorganic nutrients from the humus is known as mineralization.

Reference: Shankar Environment

43. Consider the following pairs with regards to various mechanisms used to maintain Homeostasis:

Mechanism	Performed by
Regulators	All Birds
Conformers	All Plants
Suspend	Zooplankton

Which of the pairs given above is/are correct?

A. 1 and 2 only

B. 3 only

C. 1 and 3 only

D. All of the above

Answer: - C

- Homeostasis is the maintenance of stable equilibrium, especially through physiological (through bodily part functions). Organisms try to maintain the constancy of its internal environment despite varying external environmental conditions that tend to upset their homeostasis.
- Mechanisms used to maintain homestasis
  - Regulate - Some organisms are able to maintain homeostasis by physiological (sometimes behavioural also) means which ensures constant body temperature, constant osmotic concentration, etc.
    - All birds and mammals, and a very few lower vertebrate and invertebrate species are indeed capable of such regulation (thermoregulation and osmoregulation).
  - Conformers - An overwhelming majority of animals and nearly all plants cannot maintain a constant internal environment. Their body temperature changes with the ambient temperature. In aquatic animals, the osmotic concentration of the body fluids changes with that of the ambient water osmotic concentration. These animals and plants are simply conformers
  - Suspend - Some organism suspend

or reduce their metabolic activity and go into a state of 'dormancy' to tackle unfavourable environmental conditions.

- Example: bears going into hibernation during winter is to 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
- In bacteria, fungi and lower plants, various kinds of thick-walled spores are formed which help them to survive unfavourable conditions – these germinate on the availability of suitable environment.
- In higher plants, seeds and some other vegetative reproductive structures serve as means to tide over periods of stress besides helping in dispersal.

- Migrate - The organism can move away temporarily from the stressful habitat to a more hospitable area and return when a stressful period is over.
  - Every winter the famous Keoladeo National Park (Bhartpur) in Rajasthan hosts thousands of migratory birds coming from Siberia and other extremely cold northern regions.

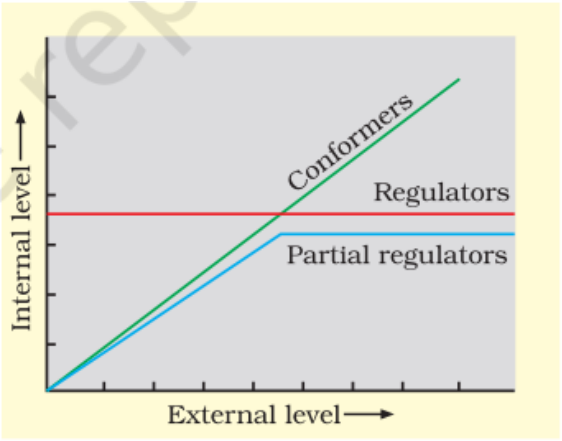


Figure 13.3 Diagrammatic representation of organismic response

Reference: Shankar Environment

44. Consider the following pairs:

International Declaration	Objective
1. Gandhinagar Declaration	ecological connectivity
2. St. Petersburg Declaration	Conservation of Snow leopard
3. Bishkek Declaration	Doubling the Tiger Population

Which of the pairs given above is/are correctly matched?

A. 1 only

B. 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: - A

Explanation

- Gandhinagar Declaration: adopted by all parties to Convention of migratory species(CMS). It underscores the importance of migratory species. It calls for migratory species

and the concept of 'ecological connectivity'.

- St. Petersburg Declaration: Doubling the Tiger Population (T*2 Program). An initiative by Global Tiger Recovery Program (GTRP)
- Bishkek Declaration: it wanted the members of the Global Snow Leopard & Ecosystem Program (GSLESP) to work together to identify & secure at least 20 snow leopard landscapes across the cat's range by 2020 or, in short "Secure 20 by 2020"

Reference: Shankar Environment

45. Which of the following are the International initiatives of World Wildlife Fund for Nature (WWF)

1. World Environment Day
2. Earth Overshoot Day
3. Debt for Nature swap
4. Earth Hour

Which of the options given above is/are correct?

A. 1 and 2 only
B. 1, 2 and 3 only
C. 2, 3 and 4 only
D. 3 and 4 only

Answer: C

- World Wide Fund for Nature is an NGO established in 1961 and is headquartered at Gland, Switzerland. It was formerly named the World Wildlife Fund.
- It works in the field of wilderness preservation, and the reduction of human impact on the environment.
- WWF aims to "stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature."
- Initiatives by WWF includes
  - The Wildlife Trade Monitoring Network (TRAFFIC, an NGO) is a joint programme of WWF and IUCN
  - Earth Hour is a worldwide movement organized by the WWF. It encourages people worldwide to switch off the lights from 8.30 pm to 9.30 pm as per their local time. It was started in 2007 and is held every year on the last Saturday of March.
  - Earth Overshoot Day - Earth Overshoot Day marks the date when humanity has exhausted nature's budget for the year. For the rest of the year, we are maintaining our ecological deficit by drawing down local resource stocks and accumulating carbon dioxide in the atmosphere. We are operating in overshoot
    - By Global Footprint Network (NGO) in 2006 and WWF joined in 2007
  - Debt For Nature Swap
  - Third Pole GeoLab - app to track snow leopard
  - Health Grown- eco brand for farming
  - Marine Stewardship Council - for sustainable fishing
  - Living planet report
- World Environment Day is initiative of UNEP. Thus option 1 is incorrect

Reference: Sleepy class notes and Shankar Environment.

46. It is the oldest park in Assam covering an area of 430 sq km along the river Brahmaputra on the North and the Karbi Anglong hills on the South. National Highway 37 passes through the parking area. It is a world heritage site that is famous for the Great Indian one-horned rhinoceros, this is the best description of:

A. Orang National Park

B. Kaziranga National Park

C. Nameri National Park

D. Dibru Saikhowa, National park

Answer: B

Explanation:

Kaziranga National Park lies partly in Golaghat District and partly in the Nagaon District of Assam. It is the oldest park in Assam covering an area of 430 sq km along the river Brahmaputra on the North and the Karbi Anglong hills on the South.

National Highway 37 passes through the parking area. It is a world heritage site that is famous for the Great Indian one-horned rhinoceros.

It was declared a National Park in 1974. It is recognized as an Important Bird Area by BirdLife International for the conservation of avifaunal species.

Biodiversity: The landscape of Kaziranga is of sheer forest, tall elephant grass, rugged reeds, marshes & shallow pools. It is inhabited by the world's largest population of one-horned rhinoceroses, as well as many mammals, including tigers, elephants, panthers and bears, and thousands of birds.

47. In the context of The National Adaptation Fund for Climate Change (NAFCC), consider the following statements:

1. The National Adaptation Fund for Climate Change (NAFCC) is a Central Sector Scheme.
2. The Reserve Bank of India is the National Implementing Entity (NIE) for NAFCC.
3. The NAFCC projects implemented in the states of Kerala, Tamil Nadu and Andhra Pradesh.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 1 and 3 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: B

Explanation:

Statement 1 is correct: National Adaptation Fund for Climate Change (NAFCC) is a Central Sector Scheme which was set up in the year 2015-16. It aims to meet the cost of adaptation to climate change for the State and Union Territories of India that are particularly vulnerable to the adverse effects of climate change.

Statement 2 is not correct: The NAFCC is implemented in project mode and till date, 30 projects are sanctioned in 27 States and UTs. **National Bank for Agriculture and Rural Development (NABARD) is the National Implementing Entity (NIE) for NAFCC.** The projects related to adaptation in sectors such as agriculture, animal husbandry, water, forestry, tourism etc. are eligible for funding under NAFCC.

Statement 3 is correct: The NAFCC projects implemented in the states of Kerala, Tamil Nadu and Andhra Pradesh include activities relating to coastal areas. NAFCC Outcome Framework:- Fund level outcome parameters will consist of the following:

- Reduced key risks and adverse impacts of climate change in water and agriculture sectors.
- Maximised multi-sectoral, cross-sectoral benefits/co-benefits to meet the challenges of water and food security.

- Human development, poverty alleviation, livelihood security and enhanced awareness of community.
- Strengthened institutional & individual capacity to reduce risks associated with climate-induced socioeconomic and environmental losses.

48. Which of the following are the reasons/factors for exposure to Particulate Matter (PM) pollution?

1. Cigarette smoke
2. Burning of fossil fuel
3. Pulverised cement
4. Dust storms
5. Sandblasting

Select the correct answer using the code given below.

A. 1, 2 and 3 only
B. 2 and 4 only
C. 1, 3 and 4 only
D. 1, 2, 3, 4 and 5

Answer: D

Explanation:

- Particulate pollutants are the minute solid particles or liquid droplets in the air. These are present in vehicle emissions, smoke particles from fires, dust particles, and ash from industries. Particulates in the atmosphere may be viable or non-viable.
- The viable particulates e.g., bacteria, fungi, moulds, algae, etc., are minute living organisms that are dispersed in the atmosphere. Human beings are allergic to some of the fungi found in the air. They can also cause plant diseases.
- Non-viable particulates may be classified according to their nature and size as follows: Smoke particulates consist of a solid or mixture of solid and liquid particles formed during the combustion of organic matter. Examples are cigarette smoke, smoke from the burning of fossil fuel, garbage, and dry leaves, oil smoke, etc.
- Dust is composed of fine solid particles (over 1µm in diameter), produced during the crushing, grinding, and attribution of solid materials. Sand from sandblasting, sawdust from woodworks, pulverised coal, cement, and fly ash from factories, dust storms, etc., are some typical examples of this type of particulate emission.
- Mists are produced by particles of spray liquids and by condensation of vapours in air. Examples are sulphuric acid mist and herbicides and insecticides that miss their targets and travel through air and form mists.
- Fumes are generally obtained by the condensation of vapours during sublimation, distillation, boiling, and several other chemical reactions. Generally, organic solvents, metals, and metallic oxides form fume particles.

Reference: Shankar ias

49. With reference to the Similipal Biosphere Reserve, consider the following statements:

1. The Park is part of the Mayurbhanj Elephant Reserve.

2. It is the home to the Bengal tiger, Asian elephant, gaur, and chausingha.
3. The park was declared a biosphere reserve by the Government of India in 2016.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 and 3 only
C. 1, 2 and 3
D. 1 and 2 only

Answer: D

Explanation:

- **Statement 1 is correct:** Similipal Biosphere Reserve is situated in the northern part of Odisha's Mayurbhanj district. Geographically, it lies in the eastern end of the eastern ghat. The park derives its name from 'Simul' which are red silk cotton trees growing in the area.
- The Park is part of the Mayurbhanj Elephant Reserve. It includes three Similipal Tiger Reserve, Hadagarh Wildlife Sanctuary, and Kuldiha Wildlife Sanctuary.
- **Statement 2 is correct:** The park has a high biodiversity with about 94 species of orchids and 3,000 species of plants. Among them, Sal is a dominant tree species in the park. The park is home to the Bengal tiger, Asian elephant, gaur, and chausingha. It is also home to some beautiful waterfalls like Joranda and Barehipani Falls.
- **Statement 3 is not correct:** The park was declared a biosphere reserve by the Government of India in 1994. It has been a part of the UNESCO World Network of Biosphere Reserves since 2009.

Reference: Shankar IAS.

50. It is located in the southern region of the Western Ghats in Tamil Nadu and Kerala. It was declared as a Sanctuary in 1950 and declared as Tiger Reserve in 197. Mullaperiyar Dam is located in it. The vegetation comprises of Tropical evergreen forests, semi- evergreen forests, Moist deciduous Forests, Transitional fringe ever green forests, grass lands and eucalyptus plantations, this is the best discription of:

A. The Periyar Tiger Reserve
B. Eravikulam National Park
C. Silent Valley National Park
D. Mathikettan Shola National Park

Answer: A

Explanation:

- The Periyar Tiger Reserve (PTR) in Thekkady located in the southern region of the Western Ghats in Tamil Nadu and Kerala. This spectacular stretch of greenery gets its name from the River Periyar which has its origin deep inside the reserve. It was declared as a Sanctuary in 1950 and declared as Tiger Reserve in 1978.
- The terrain is Hilly and undulating. Two major rivers namely Periyar and Pamba drain the area. Mullaperiyar Dam is located within the PTR. The vegetation comprises of Tropical evergreen forests, semi-evergreen forests, Moist deciduous Forests, Transitional fringe ever green forests, grass lands and eucalyptus plantations.
- In addition to Tiger, Periyar is an important elephant habitat. Gaur, sambar deer, leopard, sloth bear, wild dog, Lion tailed monkey, Nilgiri langur, barking deer and

Nilgiri tahr are found here. Tribes:: Paliyans, Mannans, Malayarayans, Mala Pandarams, Uralis and Ulladans.

51. With reference to the Arsenic pollution, consider the following statements:

1. Arsenic is a natural semi-metallic chemical component of the earth's mantle.
2. More than 90% of arsenic pollution is inferred to be geogenic.
3. Arsenic poisoning is caused by the ingestion, absorption, or inhalation of dangerous amounts of arsenic.

Which of the statements given above is/are correct?

A. 1 only
B. 1 and 2 only
C. 2 and 3 only
D. 1, 2 and 3

Answer: C

Explanation:

- **Statement 1 is not correct:** Arsenic is a natural semi-metallic chemical component of the earth's crust. It is widely distributed throughout the environment in the air, water and land. Inorganic arsenic compounds are more harmful than organic ones.
- **Statement 2 is correct**: More than 90% of arsenic pollution is inferred to be geogenic. Alluvial sediments are the major source for arsenic contamination in groundwater and there is a relation with plate tectonic processes, mountain building, erosion and sedimentation.
    - The groundwater extracted from unconsolidated sedimentary aquifers, particularly those which are located within the younger orogenic belts of the world, are the worst affected.
- **Statement 3 is correct:** Arsenic poisoning is caused by the ingestion, absorption, or inhalation of dangerous amounts of arsenic. Long-term exposure to arsenic-contaminated groundwater results in severe health issues like skin, lung, kidney and bladder cancer; coronary heart disease; bronchiectasis; hyperkeratosis and arsenicosis.
- The corrective measures available include:- Substituting high-arsenic sources, such as groundwater, with low-arsenic, microbiologically safe sources such as rain water and treated surface water.
    - Removing arsenic from groundwater using filters,
    - Exploring deeper or alternative aquifers,
    - Treatment of the aquifer itself,
    - Dilution method by artificial recharge to groundwater,
    - Conjunctive use, and
    - Installation of nano-filter, among other procedures.

52. With reference to the Spotted deer, consider the following statements:

1. It lives in grasslands and forests in India only.
2. It has a prolonged mating season and males do not have synchronized antler cycles.

3. It is the State animal of Telangana.

Which of the statements given above is/are correct?

A. 1 only

B. 2 and 3 only

C. 2 only

D. 1, 2 and 3

Answer: B

Explanation:

- Spotted deer (Axis axis), or Axis Deer or chital, is the most common deer species in Indian forests. It lives in grasslands and forests in India and Sri Lanka. The deer's golden-rufus coloring is speckled with white spots, and it has a white underbelly.
- Its curved, 3-pronged antlers extend nearly 3 feet and shed each year. Spotted deer have a prolonged mating season, as the perpetually warm climate allows females to remain fertile and to give birth to fawns any time of year.
- Due to these tropical conditions, males do not have synchronized antler cycles. They primarily eat grasses and vegetation but will also ingest their shed antlers as a source of nutrients. It is the State animal of Telangana. IUCN Status is the Least Concern.

53. With reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), consider the following statements:

1. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
2. It is not legally binding on the Parties and it does not take the place of national laws.
3. It prohibits international trade in specimens of Appendix I species except when the purpose of the import is not commercial, for instance for scientific research.

Which of the statements given above is/are correct?

A. 1 and 3 only

B. 2 only

C. 1 and 2 only

D. 1, 2 and 3

Answer: A

Explanation:

- **Statement 1 is correct:** The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement between Governments. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
    - CITES was drafted as a result of a resolution adopted in 1963 at a meeting of members of the International Union for Conservation of Nature (IUCN).
- CITES entered into force in July 1975. Currently, there are 183 Parties (including countries or regional economic integration organizations).
- **Statement 2 is not correct:** The CITES Secretariat is administered by UNEP (The United Nations Environment Programme) and is located in Geneva, Switzerland. CITES is legally binding on the Parties, it does not take the place of national laws. It

provides a framework to be respected by each Party, which has to adopt its domestic legislation to ensure that CITES is implemented at the national level.

- **Statement 3 is correct:** Appendix I: Lists species that are the most endangered among CITES-listed animals and plants. They are threatened with extinction and CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial, for instance for scientific research.
    - Appendix II: It lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled.
- Appendix III: It is a list of species included at the request of a Party that already regulates trade in the species and that needs the cooperation of other countries to prevent unsustainable or illegal exploitation.
- International trade in specimens of species listed in this Appendix is allowed only on presentation of the appropriate permits or certificates.

54. With reference to the United Nations Convention to Combat Desertification (UNCCD), consider the following statements:

1. It is the legally binding international agreement linking environment and development to sustainable land management.
2. The UNCCD is encouraging the participation of local people in combating desertification and land degradation.

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

Explanation:

- **Statement 1 is correct:** The United Nations Convention to Combat Desertification (UNCCD) was established in 1994. It is the sole legally binding international agreement linking environment and development to sustainable land management. The Convention specifically addresses the arid, semi-arid and dry sub-humid areas, known as the dryland, where some of the most vulnerable ecosystems and peoples can be found.
- **Statement 2 is correct:** The Convention's 197 parties work together to improve the living conditions for people in drylands, to maintain and restore land and soil productivity, and to mitigate the effects of drought. The UNCCD is particularly committed to a bottom-up approach, encouraging the participation of local people in combating desertification and land degradation.

55. Consider the following pairs:

National Park/ Wildlife Sanctuary	Location
1. Rajamala Eravikulam National Park	Kerala

2. Ramgarh Vishdhari Wildlife Sanctuary	Gujrat
3. The Periyar Tiger Reserve	Karnataka

Which of the pairs given above is/are correctly matched?

A. Only one pair

B. Only two pair

C. All three pairs

D. None of the pairs

Answer: A

Explanation:

- **Pair 1 is correctly matched**: Rajamala is among the finest Hill Stations in Idukki, Kerala. Rajamala hills houses the Eravikulam National Park. The Eravikulam National Park is situated in the Kannan Devan Hills of the southern Western Ghats with an area of 97 sq. km.
- The Eravikulam National Park has the highest density and largest surviving population of Nilgiri tahr, the endangered mountain goat. The park is built mainly with the aim of conserving Nilgiri tahr. Every twelve years, this place will be carpeted with blue due to the mass flowering of Neelakurinji flowers.
- **Pair 2 is not correctly matched**: Ramgarh Vishdhari Wildlife Sanctuary is located mostly in Bundi district and in part in Bhilwara and Kota districts in Rajasthan. The Government of Rajasthan declared it a sanctuary in 1982 under Section 5 of the Rajasthan Wildlife and Bird Protection Act, 1951.
- Ramgarh Vishdhari Wildlife Sanctuary will be India's 52nd tiger reserve and Rajasthan's fourth after Ranthambore, Sariska and Mukundra. According to the "Status of Tigers in India" report released in 2019, there are 2,967 tigers in 20 states across the country.
- **Pair 3 is not correctly matched:** The Periyar Tiger Reserve (PTR) in Thekkady is located in the southern region of the Western Ghats in Tamil Nadu and Kerala. This spectacular stretch of greenery gets its name from the River Periyar which has its origin deep inside the reserve.
- It was declared ~~as~~ a Sanctuary in 1950 and declared ~~as~~ a Tiger Reserve in 1978.

  The terrain is Hilly and undulating. Two major rivers namely Periyar and Pamba drain the area. Mullaperiyar Dam is located within the PTR.
- The vegetation comprises Tropical evergreen forests, semi-evergreen forests, Moist deciduous Forests, Transitional fringe evergreen forests, grasslands and eucalyptus plantations.

Reference: Shankar IAS.

56. With reference to International Energy Agency (IEA), consider the following statements:

1. The IEA primarily aims to improve the energy security of non-OPEC countries by responding to physical disruptions in the supply of oil and serving as an information source about the international energy market.
2. The Nuclear Energy Agency is a part of the IEA which focuses on improving the sustainable use of nuclear energy for peaceful purposes.

3. India is a member of both the International Energy Agency and the Nuclear Energy Agency.

Which of the statements given above is/are correct?

A. 1 only

B. 1 and 3 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: A

The International Energy Agency is a Paris-based autonomous intergovernmental organization established in the framework of the Organisation for Economic Cooperation and Development (OECD) in 1974 in the wake of the 1973 oil crisis to improve the energy security of non-OPEC countries. The IEA was initially dedicated to responding to physical disruptions in the supply of oil, as well as serving as an information source on statistics about the international oil market and other energy sectors. It is best known for the publication of its annual World Energy Outlook. **So, Statement 1 is correct.**

The Nuclear Energy Agency (NEA) is an intergovernmental agency that is organized under the Organisation for the Economic Co-operation and Development (OECD) and it is not part of the IEA. The mission of the NEA is to "assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for the safe, environmentally friendly and economical use of nuclear energy for peaceful purposes. **So, Statement 2 is not correct.**

India is not a member country of both the IEA and NEA. But India is an associate country to the IEA. **So, Statement 3 is not correct.**

57. The Joint Comprehensive Plan of Action (JCPOA) was the result of prolonged negotiations from 2013 and 2015 between which of the following countries?

1. China
2. Japan
3. France
4. Germany
5. United Kingdom

Select the correct answer code:

A. 1, 2, 4, 5

B. 2, 3, 4, 5

C. 1, 3, 4, 5

D. 3, 4, 5

Answer: C

The JCPOA was the result of prolonged negotiations from 2013 and 2015 between Iran and P5+1 (China, France, Germany, Russia, the United Kingdom, the United States). It happened due to the talks between the US (then President Barack Obama) and Iran, quietly brokered by Oman, in an attempt to repair the accumulated mistrust since the 1979 Islamic revolution.

Post Trump presidency, USA pulled out of the deal and made it dysfunctional. Recently, the US has restored sanctions waivers to Iran to allow international nuclear cooperation projects, as indirect American-Iranian talks on reviving the 2015 international nuclear deal.

58. Who among the following released 'World social report' with the theme "Leaving No One Behind in an Aging World"?

A. United Nations development program (UNDP)

B. United Nations Department of Economic and Social Affairs (UN DESA)

C. United Nations Educational, Scientific and Cultural Organization (UNESCO)

D. United Nations Social Development Network (UNSDN)

Answer: B

Explanation:

The United Nations Department of Economic and Social Affairs (UN DESA) published the World Social Report 2023, with the theme "Leaving No One Behind in an Aging World". Hence, option B is correct.

Rooted in the UN Charter and guided by the transformative 2030 SDGs, the UN DESA (New York City, 1948) upholds the development pillar of the UN. UN DESA helps countries make informed decisions by providing information through publicat ions and databases and international deliberat ions at the UN General Assembly, ECOSOC, etc. The World Social Report (since 1997 and previously Report on the World Social Situation) has served as a background document for policy analysis of socio-economic trends.

59. Consider the following statements regarding North Atlantic Treaty Organization (NATO).

1. NATO membership is open to any country that is willing to accept the terms of the military alliance.
2. The Membership Action Plan (MAP) of NATO is a military code that prohibits attack on member countries by any of the NATO members.

Which of the above statements is/are *incorrect*?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

NATO membership is open to "any other European state in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area."

The Membership Action Plan (MAP) is a NATO programme of advice, assistance and practical support tailored to the individual needs of countries wishing to join the Alliance.

60. Consider the following statements.

1. G20 is a major international grouping with its members accounting for more than 80% of global GDP.
2. India was not a member of the G20 during its inception, but joined later.
3. Till now India has never hosted the G20 Leaders' Summit.

Which of the above statements is/are correct?

A. 1, 3

B. 1, 2

C. 1 only

D. 1, 2, 3

Answer: A

G20 is a major international grouping that brings together 19 of the world's major economies and the European Union, with its members accounting for more than 80% of global GDP, 75% of global trade and 60% of global population.

Prime Minister Narendra Modi has been leading India's representation at G20 Summits since 2014.

India has been a member of the G20 since its inception in 1999. India will be holding the G20

Presidency from 1 December 2022 and will convene the G20 Leaders' Summit in 2023 for the first time.

61. With reference to the Indian Economy, consider the following statements:

1. Repo rate provides overnight liquidity to banks against the collateral of the government.
2. Repo rate serves as a key benchmark for the lenders to in turn price the loans they offer to their borrowers.
3. When the repo rate is increased, banks may find an incentive to sell securities back to the government in return for cash.

Which of the statements given above is/are correct?

A. 1 only
B. 3 only
C. 1 and 2 only
D. 1, 2 and 3

Answer: C

Explanation: Repo Rate is the rate at which the Reserve Bank of India (RBI) lends money to commercial banks or financial institutions in India against government securities.

The central bank in India i.e. the Reserve Bank of India (RBI) uses repo rate to regulate liquidity in the economy. In banking, repo rate is related to 'repurchase option' or 'repurchase agreement'.

When there is a shortage of funds, commercial banks borrow money from the central bank which is repaid according to the repo rate applicable. The central bank provides these short terms loans against securities such as treasury bills or government bonds.

This monetary policy is used by the central bank to control inflation or increase the liquidity of banks. The government increases the repo rate when they need to control prices and restrict borrowings.

On the other hand, the repo rate is decreased when there is a need to infuse more money into the market and support economic growth. An increase in repo rate means commercial banks have to pay more interest for the money lent to them and therefore, a change in repo rate eventually affects public borrowings such as home loan, EMIs, etc.

A decrease in repo rates encourages banks to sell securities back to the government in return for cash. This increases the money supply available to the general economy. Conversely, by increasing repo rates, central banks can effectively decrease the money supply by discouraging banks from reselling these securities.

62. In the context of the surety bond, consider the following statements:

1. Surety bonds are mainly aimed at infrastructure development, mainly to reduce indirect cost for suppliers.
2. Surety bond is provided by the insurance company on behalf of the contractor to the entity which is awarding the project.
3. Surety bonds protect the beneficiary against acts or events that impair the underlying obligations of the principal.

Which of the statements given above is/are correct?

A. 1 only

B. 1 and 3 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: D

Explanation:

The surety bond is a legally binding contract entered into by three parties: the principal, the obligee and the surety. The obligee, usually a government entity, requires the principal, typically a business owner or contractor, to obtain a surety bond as a guarantee against future work performance.

Statement 1 is correct: Surety bonds are mainly aimed at infrastructure development, mainly to reduce indirect cost for suppliers and work-contractors thereby diversifying their options and acting as a substitute for bank guarantee.

Statement 2 is correct: Surety bond is provided by the insurance company on behalf of the contractor to the entity which is awarding the project.

Statement 3 is correct: Surety bonds protect the beneficiary against acts or events that impair the underlying obligations of the principal. They guarantee the performance of a variety of obligations, from construction or service contracts to licensing and commercial undertakings.

63. With reference to the Scheduled Banks in India, consider the following statements:

1. Scheduled Banks included in the Second Schedule of The Banking Regulation Act, 1949.
2. Scheduled Banks becomes eligible for debts/loans at the bank rate from the RBI.
3. Airtel Payments Bank is the Scheduled Bank and can provide ATM and debit cards.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: B

Explanation:

- Statement 1 is not correct: Scheduled Banks in India refer to those banks which have been included in the Second Schedule of Reserve Bank of India Act, 1934. The bank's paid-up capital and raised funds must be at least Rs5 lakh to qualify as a scheduled bank.
- They must, however, meet certain requirements, such as maintaining an average daily CRR (Cash Reserve Ratio) balance with the central bank at the rates set by it.
- Scheduled banks are banks have certain privileges and benefits, such as:
    - The ability to obtain a refinancing facility from the central bank.
    - Access to currency storage facilities.
    - Membership in the clearinghouse is automatic.

- Payments bank:- The Reserve Bank of India (RBI) has announced the inclusion of Airtel Payments Bank Ltd. in the Second Schedule to the Reserve Bank of India Act, 1934. Payments banks can provide ATM and debit cards, as well as online and mobile banking.
- Payment banks were established to promote financial inclusion by offering; 'modest savings accounts and payments/remittance services to migratory labour workforce, low-income households, small enterprises, other unorganised sector entities, and other users.'
- These banks can accept a restricted deposit, which is now capped at Rs 200,000 per person but could be raised in the future. These banks are unable to provide loans or credit cards. Banks of this type can handle both current and savings accounts.

64. With reference to Outright Open Market Operations (OMO), consider the following statements:

1. Outright OMO are conducted with a promise to buy/sell the securities at a later stage.
2. In the repurchase agreement the central bank buys the security, the agreement of purchase also has specifications about date and price of the resale of this security.
3. Outright OMO are directed at influencing enduring liquidity, the LAF OMO operations target the temporary liquidity in the system.

Which of the statements given above is/are correct?

A. 1 and 3 only

B. 2 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: C

Explanation:

The RBI is authorised to deal in Government securities under Section 17(8) of the Reserve Bank of India Act, 1934 through open market operations. There are two types of open market operations: outright and repo.

Statement 1 is not correct: Outright open market operations: They are permanent in nature: when the central bank buys these securities (thus injecting money into the system), it is without any promise to sell them later. Similarly, when the central bank sells these securities (thus withdrawing money from the system), it is without any promise to buy them later. As a result, the injection/absorption of money is of permanent nature.

Statement 2 is correct: Repo open market operations: When the central bank buys the security, the agreement of purchase also has specifications about date and price of the resale of this security. This type of agreement is called a repurchase agreement or repo. The interest rate at which the money is lent in this way is called the repo rate.

Similarly, instead of an outright sale of securities the central bank may sell the securities through an agreement which has a specification about the date and price at which it will be repurchased. This type of agreement is called a reverse repurchase

agreement or reverse repo. The rate at which the money is withdrawn in this manner is called the reverse repo rate.

Statement 3 is correct: Open market operations via Repo and Reverse Repo operations are conducted under Liquidity Adjustment Facility. While the outright OMO are directed at influencing enduring (long term) liquidity, the LAF OMO operations target the temporary liquidity in the system.

65. What do you understand about the term 'Beveridge curve'?

A. It states that the lower tax rates boost economic growth and high tax revenue.

B. It displays how household expenditure on a particular good or service varies with change in household income.

C. It shows the relationship between economic growth and inequality.

D. It shows the relationship between the unemployment rate and the job vacancy rate

Answer: D

Option D is correct

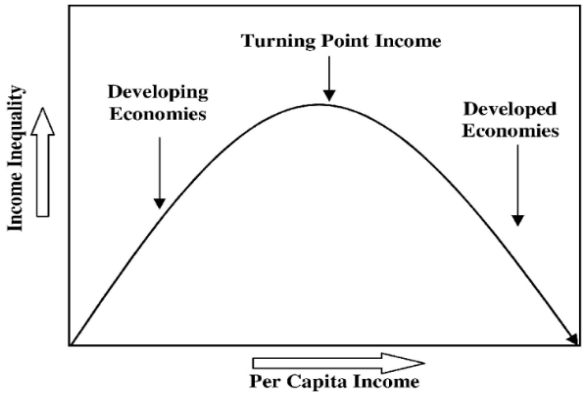
- A Beveridge curve, or UV curve, is a graphical representation of the relationship between unemployment and the job vacancy rate, the number of unfilled jobs expressed as a proportion of the labour force. It typically has vacancies on the vertical axis and unemployment on the horizontal. The curve, named after William Beveridge, is hyperbolic-shaped and slopes downward, as a higher rate of unemployment normally occurs with a lower rate of vacancies.
- If it moves outward over time, a given level of vacancies would be associated with higher and higher levels of unemployment, which would imply decreasing efficiency in the labour market. Inefficient labour markets are caused by mismatches between available jobs and the unemployed and an immobile labour force.

Option A is incorrect

- The **Laffer Curve** is a theory that states **lower tax rates boost economic growth** and high tax revenue. If taxes are too high along the Laffer Curve, then they will discourage the taxed activities, such as work and investment, enough to actually reduce total tax revenue. In this case, cutting tax rates will both stimulate economy and increase tax revenue.

Option B is *incorrect*

- Engel Curve displays how household expenditure on a particular good or service varies with change in household income. E.g. As income of a household increases its expenditure of food as a percentage decline. AT the same time, its expenditure on status goods increases.



Option C is in*correct*

- Kuznets Curve shows the relationship between economic growth and inequality.
- It is inverted U shaped meaning that as initially economic growth leads to greater inequality, followed later by the reduction of inequality.



Reference: Ramesh Singh

66. 'Accommodative' monetary policy stance of the RBI means:

A. Interest rate can only move upward
B. Interest rate may move downward anytime
C. Interest rate may move either way – upward or downward
D. RBI purchases longer term securities from the open market

Answer: - B

- Recently the Monetary Policy Committee (MPof the Reserve Bank of India's (RBI) noted that the central bank's accommodative policy stance may fail to comply with the Inflation target (upper limit of 6%).
- An accommodative stance indicates a willingness on the part of the central bank to expand money supply and cut interest rates. The MPC fixes the benchmark interest rate or the base or reference rate that is used to set other interest rates in India.

Monetary Policy stances of the RBI

RBI generally provides three main types of forward guidance/policy stance to markets:

- Accommodative (in other words, the central bank is telling the market to expect a rate cut anytime i.e. interest rates may decrease to inject more funds in to financial system .. therefore known as expansionary stance), **Option B is correct.**
- Tight/Calibrated (to indicate an impending rate hikes i.e. interest rates can move only upward), **Option A is incorrect.**
- Neutral (means anything can happen anytime i.e. interest rates may move either way – upward or downward). **Option C is incorrect.**
- Quantitative Easing (QE): It is a policy under which the RBI purchases longer-term securities from the open market and injects money in the economy, thereby increasing the money supply to encourage lending and investment and ultimately promote economic growth. It is the last resort which is used by RBI to stimulate spending in an economy when interest rates fail to work. **Option D is incorrect.**

Reference: Ramesh Singh

67. Factor cost in the case of calculation of GDP/National income includes

1. Salaries
2. Cost of renting machinery

3. Profit margins of entrepreneurs
4. Transfer Payments
5. Indirect taxes
6. Government subsidies

Select the correct code

A. 1, 2 and 3 only
B. 1, 2, 3 and 6 only
C. 3, 4, 5 and 6 only
D. 1, 2, 3, 4 and 6 only

Answer: - B

Explanation

- Gross Domestic Product (GDP) by income method is sum total of factor incomes/cost. While measuring GDP, we must include only those income flows that originate with the production of goods and services within the particular time period.
- Factor cost (FC)- It refers to the cost of factors of production that is incurred by a firm when producing goods and services.

Factor Cost = Market Price - Net Indirect Taxes where Net Indirect Taxes = Indirect Taxes - Subsidies

Components of FC are:

- paying the salaries and wages,
- cost of renting machinery and obtaining capital,
- interest of land
- profit margins to entrepreneur.
- The FC does not include indirect taxes like GST that are paid to the government since payment of taxes is not directly related to the production process, but subsidies received are included in the FC as these are direct inputs into the production.
- Transfer payments are not included under Factor Income because it is not connected with any productive activity and there is no value addition. Factor income is an earned income, i.e. it is an earning concept. As against, Transfer income is an unearned income, it is only received but not earned by the recipient.

Reference: Indian economy by Ramesh Singh + NCERT

68. Which of the following is not a Public Good?

A. Education
B. Electricity
C. Infrastructure
D. Lighthouses

Answer: B

Explanation:

What are Public Goods?

- Public good is a term in economics which refers to the good (commodity) that is available for use for everybody and one person's usage of it does not diminish or exhaust its availability to others. It is considered non-excludable and non-rivalrous. Public goods are provided as a whole to the society by the government and the consumption of these goods by an individual doesn't reduce its availability or doesn't exclude others from consuming it. Therefore, public goods are non-rivalry and non-excludability.
- Examples of public goods are education, infrastructure, lighthouses, flood control

systems, knowledge, fresh air, national security, official statistics, etc. The public good is different from the common good in that common good, though non-excludable, tends to be semi-rivalrous in nature. Examples of common goods would be timber, coal, etc. Public goods are useful for the population as a whole.

69. Consider the following statements regarding to the commercial paper:

1. Commercial Paper (CP) is a secured capital market instrument.
2. They can be issued only by the all-India financial institutions.
3. CP can be issued for maturities maximum of up to one year from the date of the issue.

Which of the statements given above is/are not correct

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: A

Explanation:

Statement 1 is not correct: Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note.

Statement 2 is not correct: Corporates, primary dealers (PDs), and the all-India financial institutions (FIs) that have been permitted to raise short-term resources under the umbrella limit fixed by the Reserve Bank of India are eligible to issue CP.

Statement 3 is correct: CP can be issued for maturities between a minimum of 7 days and a maximum of up to one year from the date of the issue.

- Corporates that enjoy a high rating can diversify their sources of short term m borrowings using CPs.Investors get an additional instrument. It is typically issued by large banks or corporations to cover short- term receivables and meet short-term financial obligations, such as funding for a new project.

  They can be issued in denominations of ₹ 5 lakh or multiples thereof.

Reference: Ramesh Singh.

70. With reference to the Offline Small-value e-Payments, consider the following statements:

1. It allows offline payments upto Rs. 2 lakh per transaction, subject to an overall limit of Rs 5 lakh.
2. It can be carried out face-to-face (proximity mode) using any channel/ instrument like cards, wallets and mobile devices.
3. The transactions are offline, alerts (by way of SMS and / or e-mail) will be received by the customer after a time lag.

Which of the statements given above is/are correct?

A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

Answer: C

Explanation:

The Reserve Bank of India (RBI) has come out with the framework for facilitating small-value digital payments in offline mode.

Statement 1 is not correct: It promotes digital payments in semi-urban and rural areas, this framework allows offline payments upto Rs. 200 per transaction, subject to an overall limit of Rs 2,000.

Statement 2 is correct: An offline digital payment doesn't require Internet or telecom connectivity. Under the new framework, offline payments can be carried out face-to-face (proximity mode) using any channel/ instrument like cards, wallets and mobile devices.

Statement 3 is correct: Such transactions wouldn't require an Additional Factor of Authentication. Since the transactions are offline, alerts (by way of SMS and / or e-mail) will be received by the customer after a time lag.

The RBI said the framework took effect 'immediately'. It also said that authorised Payment System Operators (PSOs) and Payment System Participants (PSPs) looking to facilitate small value offline digital payments have to comply with the new guidelines.

- **Significance:-** Today, the active base of digital payment users is around 120 to 150 million customers but we need it.

71. With reference to the 'AT-1 Bonds' sometimes mentioned in the news, consider the following statements:

1. AT-1 bonds issued to shore up their core capital base to meet the Basel-III norms.
2. AT-1 bonds offer higher returns to investors and compared with other debt products, these instruments have lower risk as well.
3. Investors can return AT-1 bonds to the issuing bank and get the money.

Which of the statements given above is/are correct?

A. 1 only

B. 1 and 3 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: A

Explanation:

Statement 1 is correct: AT-1 bonds are a type of unsecured, perpetual bonds that banks issue to shore up their core capital base to meet the Basel-III norms.

There are two routes through which these bonds can be acquired.

- Initial private placement offers of AT-1 bonds by banks seeking to raise money.
- Secondary market buys of already-traded AT-1 bonds.

Statement 2 is not correct: Returns and Risk:- These bonds offer higher returns to investors but compared with other debt products, these instruments carry a higher risk as well. AT1 bonds are subordinate to all other debt and only senior to common equity. Mutual funds (MFs) are among the largest investors in AT1 Bonds. These bonds have a call option, which can be used by the banks to buy these bonds back from investors.

Statement 3 is not correct: Investors cannot return these bonds to the issuing bank and get the money. This means there is no put option available to its holders. Banks issuing AT-1 bonds can skip interest payouts for a particular year or even reduce the bond's face value, provided their capital ratios fall below certain threshold levels.

If the RBI feels that a bank is on the brink of collapse and needs a rescue, it can simply ask the

bank to cancel its outstanding AT-1 bonds without consulting its investors.

72. Consider the following statements:

1. Budget financial year 2023-24 envisaged a lower collection of non-tax revenue receipts during the current year relative to Financial year 2021-22.
2. Union Government capital expenditure continuously increasing to GDP ratio in five year.
3. The capital expenditure by the Centre has steadily increased since four years.

Which of the statements given above is/are correct

A. 1 only
B. 2 only
C. 1 and 2 only
D. 1, 2 and 3

Answer: D

Explanation:

Statement 1 is correct: The non-tax revenue to the Centre mainly includes interest receipts on loans to States and Union Territories, dividends and profits from Public Sector Enterprises and the Reserve Bank of India, and external grants and receipts for services the Union Government provides. Budget FY23 envisaged a lower collection of non-tax revenue receipts during the current year relative to FY22 (around 22.5 per cent lower than FY22 PA. Of the budgeted amount, 73.5 per cent has been collected up to November 2022.

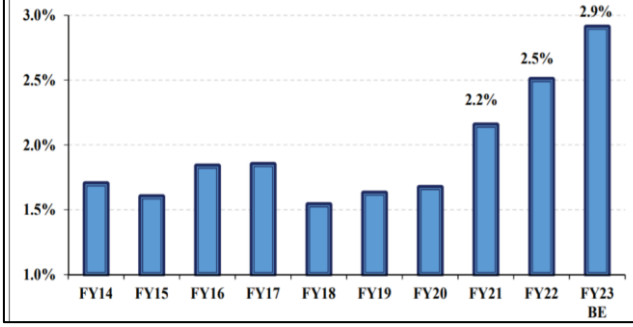
Table III.3: Trends in Non-tax Revenue of Union Government

	FY18	FY19	FY20	FY21	FY22 PA	FY23 BE	Apr-Nov 2022
							₹ lakh crore
Interest receipts	0.14	0.12	0.12	0.17	0.22	0.18	0.17
Dividends & Profits	0.91	1.13	1.86	0.97	1.61	1.14	0.68
External Grants	0.04	0.01	0.00	0.02	0.01	0.01	0.01
Others	0.84	1.07	1.27	0.90	1.64	1.34	1.12
Non-tax Revenue	1.93	2.36	3.27	2.08	3.48	2.70	1.98

Statement 2 is correct: The total expenditure of the Union Government in FY21 rose to 17.7 per cent of GDP, higher than the previous 5-year average of 12.8 per cent of GDP. The government adopted a pragmatic approach of increasing its expenditure in a calibrated way. Upon ensuring the basic safety nets for the vulnerable, the emphasis of the Government expenditure shifted to productive domestic capital expenditure.

Statement 3 is correct: The capital expenditure by the Centre has steadily increased from a long-term average of 1.7 per cent of GDP (FY09 to FY20) to 2.5 per cent of GDP in FY22 PA. It is further budgeted to increase to 2.9 per cent of GDP in FY23. This highlights an improvement in the quality of Government expenditure over the years.

Figure III.7: Increasing Union Government capital expenditure to GDP ratio



Reference: Economics survey.

73. With reference to the 'SWIFT' sometimes mentioned in the news, consider the following statements:

1. Each participant on the platform is assigned a unique eight-digit SWIFT code.

2. SWIFT is a platform that sends messages and can also hold any securities and currency.
3. SWIFT is owned and controlled by the G20 central banks.

Which of the statements given above is/are correct?

A. 1 only
B. 2 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: A

Explanation:

- SWIFT is a messaging network used by banks and financial institutions globally for quick and faultless exchange of information pertaining to financial transactions. The network connects more than 11,000 banking and securities organisations in over 200 countries and territories. Headquartered in Brussels, Belgium.
- **Statement 1 is correct**: Each participant on the platform is assigned a unique eight-digit SWIFT code or a bank identification code(BIC). (If a person, say, in India with a SBI account wants to send money to someone with an HSBC account in London, the payee would have to submit to his bank the London-based beneficiary's account number along with the eight-digit SWIFT code of the latter's bank. Citibank would then send a SWIFT message to HSBC. Once that is received and approved, the money would be credited to the required account).
- **Statement 2 is not correct**: SWIFT is merely a platform that sends messages and does not hold any securities or money. It facilitates standardised and reliable communication to facilitate the transaction.
- **Statement 3 is not correct**: SWIFT is owned and controlled by its shareholders(financial institutions) representing approximately 3,500 firms from across the world. SWIFT is overseen by the G-10 central banks (Belgium, Canada, France, Germany, Italy, Japan, The Netherlands, United Kingdom, United States, Switzerland, and Sweden) as well as the European Central Bank (ECB), with its lead overseer being the National Bank of Belgium.
    - If a country is excluded from SWIFT, its foreign funding would take a hit, making it entirely reliant on domestic investors. This is particularly troublesome when institutional investors are constantly seeking new markets in newer territories.

74. With reference to direct and indirect taxes in India, consider the following statements:

1. The direct tax, the burden can't be shifted by the taxpayer to someone else.
2. Inheritance tax and gift tax are type of indirect tax.
3. The redistribution function of the government budget is achieved through progressive income taxation.

Which of the statements given above is/are correct?

A. 1 and 3 only
B. 2 only
C. 2 and 3 only

D. 1, 2 and 3

Answer: A

Explanation:

- **Statement 1 is correct**: Direct tax is charged on income, salary or profits of an individual or corporates. In the case of direct tax, the burden can't be shifted by the taxpayer to someone else.
- **Statement 2 is not correct:** These are largely taxes on income or wealth. Income-tax, corporate tax, property tax, inheritance tax and gift tax are examples of direct tax.
    - The Central Board of Direct Taxes deals with matters related to levying and collecting Direct Taxes and formulation of various policies related to direct taxes.
- Indirect tax is a levy where the incidence and impact of taxation do not fall on the same entity. The burden of tax can be shifted by the taxpayer to someone else.
- Indirect tax has the effect to raising prices of products on which they are imposed. Customs duty, import duty, central excise, service tax and value added tax are examples of indirect tax. The government sector affects the personal disposable income of households by making transfers and collecting taxes.
- **Statement 3 is correct:** It is through this that the government can change the distribution of income and bring about a distribution that is considered 'fair' by society. This is the redistribution function. The redistribution objective is sought to be achieved through progressive income taxation, in which higher the income, higher is the tax rate.

Reference: Ramesh Singh.

75. Consider the following statements regarding to Nidhi Companies:

1. Nidhi companies are a type of non-bank lenders that raise funds exclusively from their members.
2. They are regulated by the Reserve Bank of India for operational matters and deployment of funds.
3. Only individual members are allowed in Nidhi companies, and it cannot give loans to companies.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1, 2 and 3

D. 1 and 3 only

Answer: D

Explanation:

- **Statement 1 is correct:** Nidhi companies are a type of non-bank lenders that raise funds exclusively from their members and give loans to them to improve their governance and protect the public interest.
- **Statement 2 is not correct:** They are regulated by the Reserve Bank of India (RBI) for deposit-taking and by the Department of Company Affairs (DCA) for operational matters and deployment of funds. To become a Nidhi company, the entity has to first register as a public limited company which has more disclosure requirements than a private limited company.

- **Statement 3 is correct**: Only individual members are allowed in Nidhi companies, and it cannot give loans to companies.

Reference: **Ramesh Singh.**

76. This landform is formed when streams flowing from higher levels break into foot slope plains of low gradient. Normally very coarse load is carried by streams flowing over mountain slopes. This load becomes too heavy for the streams to be carried over gentler gradients and gets deposited at foot slopes.

Above passage is the best description of which of the following landforms:

A. Alluvial Fans

B. River Terraces

C. Deltas

D. Floodplains

Answer: A

Explanation

- **Alluvial Fans** are formed when streams flowing from higher levels break into foot slope plains of low gradient. Normally a very coarse load is carried by streams flowing over mountain slopes. This load becomes too heavy for the streams to be carried over gentler gradients and gets dumped and spread as a broad low to high cone shaped deposit called alluvial fan.
- Usually, the streams which flow over fans are not confined to their original channels for long and shift their position across the fan forming many channels called distributaries. Alluvial fans in humid areas show normally low cones with gentle slope from head to toe and they appear as high cones with steep slope in arid and semi-arid climates.

77. Consider the following statements with reference to Inversion of temperature:

1. A long winter night with clear skies and still air is ideal situation for inversion of temperature.
2. The inversion takes place in hills and mountains due to air drainage.
3. Over polar areas, temperature inversion is normal throughout the year.

Which of the statement given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

Explanation

Normally, temperature decreases with increase in elevation. It is called normal lapse rate. At times, the situations is reversed and the normal lapse rate is inverted. It is called Inversion of temperature. Inversion is usually of short duration but quite common nonetheless.

Statement 1 is correct.

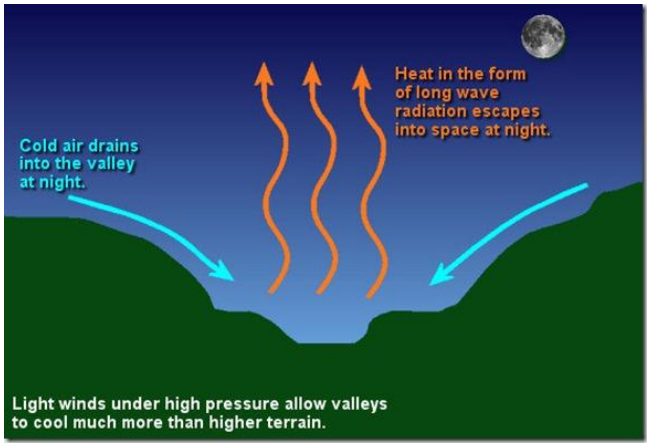
- A long winter night with clear skies and still air is ideal situation for inversion

Statement 2 is correct.

- The inversion takes place in hills and mountains due to air drainage. Cold air at the hills and mountains, produced during night, flows under the influence of gravity. Being heavy and dense, the cold air acts almost like water and moves down the slope to pile up deeply in pockets and valley bottoms with warm air above. This is called air drainage. It protects plants from frost damages.

Statement 3 is correct.

- Over polar areas, temperature inversion is normal throughout the year.



Source: ncert world physical geog.

78. Consider the following statements with reference to Coriolis force:

1. Coriolis force is a caused due to the rotational movement of the earth.
2. The magnitude of Coriolis force is determined by the wind speed only.
3. Coriolis effect is maximum at the poles and zero at the equator.

Which of the above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: C

Explanation

What is Coriolis Force?

Coriolis force is the invisible force that appears to deflect the objects. The Coriolis force is determined by the object's rate of rotation and mass of the object.

Characteristics of Coriolis Effect

- Coriolis force is a fictitious force resulting from the rotational movement of the earth.
- Coriolis effect is effective on objects that are in motion such as wind, aircraft, ballistic and flying birds.
- Coriolis effect only affects the wind direction and not the wind speed as it deflects the wind direction from the expected path.
- The magnitude of Coriolis force is determined by wind speed, mass of air and the angle of latitude. The higher the wind speed, mas of air and angle of latitude, then greater the value of coriolis force and greater the deflection.
- Coriolis effect is maximum at the poles and zero at the equator.
- Coriolis force always acts in a direction that is perpendicular to the moving object's axi.

Sources: ncert world physical geography.

79. Consider the following statements regarding to The Inter Tropical Convergence Zone (ITCZ):

1. The Inter Tropical Convergence Zone (ITCZ) is a high pressure zone located at the equator.
2. Due to the shift of ITCZ, the trade winds of the southern hemisphere cross the equator and start blowing from southwest to northeast direction.
3. In winter, the ITCZ moves southward and so the reversal of winds from northeast to south and southwest, takes place.

Which of the statements given above is/are *incorrect?*

A. 1 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: A

Explanation

Statement 1 is *incorrect.*

- The Inter Tropical Convergence Zone (ITCZ) is a low pressure zone located at the equator where trade winds converge, and so, it is a zone where air tends to ascend. In July, the ITCZ is located around 20°N-25°N latitudes (over the Gangetic plain), sometimes called the monsoon trough. This monsoon trough encourages the development of thermal low over north and northwest India.

Statement 2 is correct.

- Due to the shift of ITCZ, the trade winds of the southern hemisphere cross the equator between 40° and 60°E longitudes and start blowing from southwest to northeast due to the Coriolis force.

Statement 3 is correct.

- It becomes the southwest monsoon. In winter, the ITCZ moves southward, and so the reversal of winds from northeast to south and southwest, takes place. They are called northeast monsoons.

Reference: pg 37, chp 4 Indian geog 11.

80. Which of the following is/are the difference between basic and acidic lava?

1. Basic lavas are highly fluid and Acidic lavas are highly viscous.
2. Basic lavas are rich in iron and magnesium and Acidic lavas have a high percentage of Silica.

Select the correct answer using the code given below:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

Explanation

Acid Lavas are highly viscous with a high melting point, they are light coloured of low density and have a high percentage of Silica. They flow slowly and seldom travel far before solidify. The resultant cone is therefore steep sided. The rapid congealing of lava in the vent

obstruct the flow of out-pouring lavas, resulting in loud explosions, throwing out many volcanic bomb. Sometimes the lava are so viscous that they form a spine or plug at the crater like that of Mt. Pelee in Martinique.

Basic lavas are the hottest lavas about 1000°C. and highly fluid. They are dark in coloured like besalt, rich in iron and magnesium but poor in silica. As the pour out of volcanoes, they flow quietly are not very explosive. Due to their high fluidity, they flow readily with speed of 10 to 30 miles per hour. They affect explosive areas, spreading out a thin sheets over great distance before the solidify.

Reference: chp 3 gc leong and ncert physical geography.

81. With the reference of the features of Tarai region, consider the following statements:

1. Tarai is a narrow tract to the south of Bhabar and running parallel to it.
2. Tarai region is widest in Bihar and the narrowest in the east.
3. The underground streams of the Bhabar belt re-emerge in the Tarai belt.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

Explanation

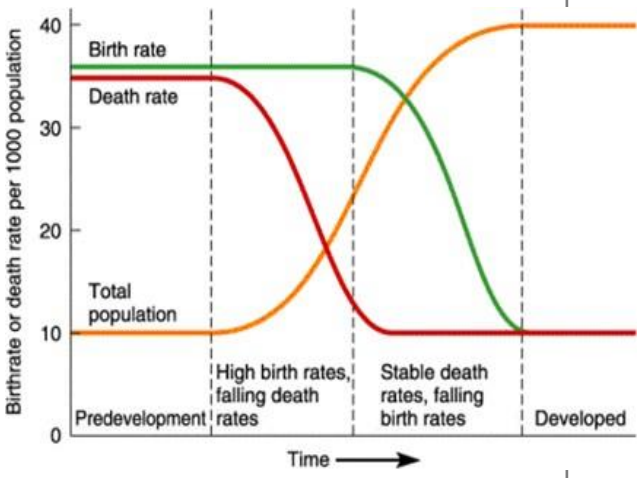
The Terai, sometimes known as the Tarai, is a lowland region in northern India and southern Nepal, located south of the Sivalik Hills and north of the Indo-Gangetic Plain.

Statement 1 is correct.

- Terai is an ill-drained, damp (marshy) and thickly forested narrow tract to the south of Bhabar running parallel to it.

Statement 2 and 3 are correct.

- The Terai region is about 15-30 km wide and it widest along Bihar and eastern UP and the narrowest in the east. The underground streams of the Bhabar belt re-emerge in this belt.
- The Terai is more marked in the eastern part than in the west because the eastern parts receive a comparatively higher amount of rainfall.



- Tarai soils are Nitrogen-rich and have a humus content Most of the Terai land, especially in Punjab, Uttar Pradesh, and Uttarakhand, has been turned into agricultural land which gives good crops of sugarcane, rice, and wheat.

Reference: 11th ncert Indian physical geography.

82. Consider the following statements with reference to the demographic transition theory:

1. It Explains changes in death, birth rates and population growth with respect to the process of growth and development.
2. First stage is characterized by high death rate and low birth rate
3. India currently passes through stage 3 of demographic transition.

Select the correct code from the options given below:

A. 1 only
B. 1 and 2 only
C. 1 and 3 only
D. 1,2 and 3

Answer: C

Demographic Transition Theory

- First stage characterizes by high death and birth rates
- India currently passes through stage 3 of DTT: declining birth rate

So, option C is correct

83. Consider the following statements with reference to mineral resources in India.

1. Mica is found mainly in tertiary deposits
2. In Jharkhand high quality Bauxite is obtained
3. Copper is alloyable, malleable and ductile

Which of the statements given above is/are correct?

A. 1 only
B. 2 and 3 only
C. 3 only
D. 1 and 2 only

Answer: C

- Statement 1 is incorrect: Bauxite is found mainly in tertiary deposits
- Statement 2 is incorrect: In Jharkhand high quality Mica is obtained
- Statement 3 is correct: Copper is alloyable, malleable and ductile
- Bauxite is the ore which is used in manufacturing of aluminium. Bauxite is found mainly in tertiary deposits and is associated with laterite rocks occurring extensively either on the plateau or hill ranges of peninsular India and also in the coastal tracts of the country. Odisha happens to be the largest producer of Bauxite. Kalahandi and Sambalpur are the leading producers. The other two areas which have been increasing their production are Bolangir and Koraput. The patlands of Jharkhand in Lohardaga have rich deposits. Gujarat, Chhattisgarh, Madhya Pradesh and Maharashtra are other major producers. Bhavanagar, Jamnagar in Gujarat have the major deposits. Chhattisgarh has bauxite deposits in Amarkantak plateau while Katni-Jabalpur area and Balaghat in M.P. have important deposits of bauxite. Kolaba, Thane, Ratnagiri, Satara, Pune and Kolhapur in Maharashtra are important producers. Tamil Nadu, Karnataka and Goa are minor producers of bauxite.
- Copper is an indispensable metal in the electrical industry for making wires, electric motors, transformers and generators. It is alloyable, malleable and ductile. It is also mixed with gold to provide strength to jewellery. The Copper deposits mainly occur in Singhbhum district in Jharkhand, Balaghat district in Madhya Pradesh and Jhunjhunu and Alwar districts in Rajasthan. Minor producers of

Copper are Agnigundala in Guntur District (Andhra Pradesh), Chitradurg and Hasan districts (Karnataka) and South Arcot district (Tamil Nadu).

- Mica is mainly used in the electrical and electronic industries. It can be split into very thin sheets which are tough and flexible. Mica in India is produced in Jharkhand, Andhra Pradesh, Telanganga and Rajasthan followed by Tamil Nadu, West Bengal and Madhya Pradesh. In Jharkhand high quality mica is obtained in a belt extending over a distance of about 150 km, in length and about 22 km, in width in lower Hazaribagh plateau. In Andhra Pradesh. Nellore district produces the best quality mica. In Rajasthan mica belt extends for about 320 kms from Jaipur to Bhilwara and around Udaipur. Mica deposits also occur in Mysore and Hasan districts of Karanataka, Coimbatore, Tiruchirapalli, Madurai and Kanniyakumari in Tamil Nadu, Alleppey in Kerala, Ratnagiri in Maharashtra, Purulia and Bankura in West Bengal.

84. Consider the following statements with reference to drainage patterns:

1. Rivers originating from the Amarkantak is an example of Radial drainage pattern.
2. Rivers in the upper part of the Himalayan region is an example of Centripetal drainage pattern

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: A

Explanation:

- **Statement 1 is correct:** Rivers originating from the Amarkantak is an example of Radial drainage pattern.
- **Statement 2 is incorrect:** Rivers in the upper part of the Himalayan region is an example of trellis drainage pattern

Additional Information:

- A drainage pattern which looks like tree branches with lots of twigs is known as Dendritic drainage pattern. For example, the rivers of the northern plain.
- Radial drainage patterns form when rivers originate from a hill and flow in all directions. For example, the rivers originating from the Amarkantak.
- Centripetal drainage pattern is formed when rivers discharge their waters from all directions into a lake or a depression. For example, Loktak lake in Manipur.
- Trellis drainage pattern is formed when the primary tributaries of main rivers flow parallel to each other and secondary tributaries join them at right angles. For example, rivers in the upper part of the Himalayan region.

85. Consider the following statements with reference to Peaty and Marshy Soil:

1. This soil originates from the areas where adequate drainage is not possible.
2. Over Bengal delta, it is suitable for jute and rice cultivation

Which of the statements given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

Explanation:

- **Statement 1 is correct:** This soil originates from the areas where adequate drainage is not possible.
- **Statement 2 is correct:** Over Bengal delta, it is suitable for jute and rice cultivation

Additional Information:

Peaty, and Marshy Soil/Bog Soil

This soil originates from the areas where adequate drainage is not possible. It is rich in organic matter and has high salinity. They are deficient in potash and phosphate.

- Characteristics – Dominance of clay and mud which make it heavy
  - Rich in moisture content but at the same time, greater content of salt and every day inundation by high tide has made it infertile soil.
  - No organic activity due to excessive moisture content.
- Distribution – It is characteristic of the delta region of India
  - Besides the delta region, it is also found in
    - Alleppey(Kerala) (known as Karri along the backwaters or Kayals of Kerala)
    - Almora (Uttaranchal)
- Significance – Over Bengal delta, it is suitable for jute and rice, and over Malabar, it is suitable for spices, rubber, big sized rice
- It has to some extent been favorable to the Mangrove forests of India.

86. Consider the following statements with reference to Millet crop

1. Millet crop need high temperature for its development
2. Millet are less grown due to less adaptability to different types soil for it's growth
3. Millet are cultivated both as food & fodder

Which of the statements is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. All of the above

Answer: C

Explanation

- The United Nations General Assembly has declared the year 2023 as the International Year of Millets. This was adopted by a United Nations Resolution for which India took the lead and was supported by over 70 nations. This will help to create awareness throughout the world of the importance of millets, its role in sustainable agriculture, and its benefits as a smart and super food

About Millets Crop

- Millets are a group of highly variable small-seeded grasses, widely grown around the world as cereal crops or grains for human food and as fodder.
- Geographical Conditions required to grow Millets
  - Generally the Millets are grown in tropical as well as sub-tropical upto an altitude of 2,100m.
  - **Statement 1 is correct:** It is a heat loving plant and for its germination the minimum temperature required is 8-10°c.

- A mean temperature range of 26-29°c during the growth is best for proper development and good crop yield.
- It is grown where rainfall ranges from 500-900mm.
- **Statement 2 is incorrect:** Millet has wide adaptability to different soil from very poor to very fertile and can tolerate a certain degree of alkalinity.
- The best soils are alluvial, loamy and sandy soil with good drainage

- Benefits
  - Quantum of water required for raising millets would be much less compared to the requirement of paddy varieties which means it is also a drought resistant crop
  - **Statement 3 is correct:** It is cultivated both as food & fodder, thus providing food/livelihood security to millions
  - millets by the virtue of their nutritious value serve as an excellent tool to combat malnutrition
  - Millets help in mitigating climate change as compared to Paddy or Wheat
- India, Nigeria and China are the largest producers of millets in the world, accounting for more than 55% of the global production
  - Millets are available almost across India. India currently has around 14 million hectares of land under millets cultivation and produces around 14 million tonnes a year with Rajasthan, Maharashtra, and Karnataka leading in millet farming
  - The country grows close to a dozen varieties of millets and widely consumed among them include pearl millet, foxtail millet, sorghum, finger millet, and kodo millet

Source- Geography September Current Affair compilation Sleepy classes

87. Consider the following statements with reference to Quaternary Sector:

1. The intellectual side of the economy is said to be represented by the quaternary sector
2. It is also known as the knowledge economy
3. The sector remains unaffected during economic downturns

Which of the above is/are correct?

A. 1 only
B. 2 and 3 only
C. 3 only
D. 1 and 2 only

Answer: D

Explanation:

Statement 3 is incorrect:

- It remains a highly specialized environment that tends to decline during economic downturns.
- That is, it does not provide you with food but rather focuses indirectly on new methods of planting seeds more successfully

Additional info:

Quaternary Sector

- The quaternary sector includes companies engaged in intellectual activities and pursuits. The quaternary sector typically includes intellectual services such as technological advancement and innovation.
- Research and development that leads to improvements to processes, such as

manufacturing, would fall under this sector.

- The companies and firms within the quaternary sector had been traditionally part of the tertiary sector. However, with the growth of the knowledge-based economy and technological advancements, a separate sector was created.

88. This forest covers vast areas of the country, where rainfall ranges between 70 -100 cm. On the wetter and drier margins, it has a transition.

The above statements are with reference to which of the following?

A. Tropical Evergreen Forests

B. Tropical Deciduous Forests

C. Tropical Thorn Forests

D. Montane Forests

Answer: B

Explanation:

- Tropical deciduous forests are the most common type of forest in India.
- They are also known as monsoon forests and are found throughout the region, receiving rainfall ranging from 200 cm to 70 cm.
- In the dry summer, trees of this forest type shed their leaves for about six to eight weeks.
- These forests are further classified as moist and dry deciduous based on the availability of water. The former is found in areas with rainfall ranging from 200 to 100 cm.

89. Consider the following statements about Volcanoes

1. Most shield volcanoes are formed from fluid, basaltic lava flows.
2. Stratovolcanoes are formed from viscous, sticky lava that does not flow easily.

Which of the above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

Answer: C

Statement 1 is correct: Most shield volcanoes are formed from fluid, basaltic lava flows.

Statement 2 is correct: Stratovolcanoes are formed from viscous, sticky lava that does not flow easily.

Shield volcanoes:

- A volcano produces low viscosity, runny lava, it spreads far from the source and forms a volcano with gentle slopes.
- Most shield volcanoes are formed from fluid, basaltic lava flows.
    - Mauna Kea and Mauna Loa are shield volcanoes. They are the world's largest active volcanoes around the island of Hawai'i.

Stratovolcano:

- Stratovolcanoes have relatively steep sides and are more cone-shaped than shield volcanoes.
- They are formed from viscous, sticky lava that does not flow easily.

90. Which of the following Passes in the Western Ghats is incorrectly matched?

A. Bhor Ghat Pass: connects Mumbai to Pune via Khopoli

B. Palakkad Gap (Pal Ghat): connects: Coimbatore, Tamil Nadu to Palakkad, Kerala

C. Amba Ghat Pass: connects: Ratnagiri district to Kolhapur.

D. Naneghat Pass: connects Mumbai to Nashik

Answer: D

Passes in the Western Ghats

- Thal Ghat Pass (Kasara Ghat): connects Mumbai to Nashik
- Bhor Ghat Pass: connects Mumbai to Pune via Khopoli
- Palakkad Gap (Pal Ghat): connects Coimbatore, Tamil Nadu to Palakkad, Kerala
- Amba Ghat Pass: connects: Ratnagiri district to Kolhapur.
- Naneghat Pass: connects Pune district with Junnar city.
- Amboli Ghat Pass: connects Sawantwadi of Maharashtra to Belgaum of Karnataka.

91. What is whole genome sequencing (WGS)?

A. The process of sequencing only a small portion of an organism's genome

B. The process of sequencing the entire genome of an organism

C. The process of comparing the genomes of different organisms

D. The process of editing the genome of an organism

Answer: B

What is Whole Genome Sequencing?

- All organisms have a unique genetic code, or genome, that is composed of nucleotide bases- Adenine (A), Thymine (T), Cytosine (C) and Guanine (G).
- The unique Deoxyribonucleic Acid (DNA) fingerprint, or pattern can be identified by knowing the sequence of the bases in an organism. Determining the order of bases is called sequencing.
- Whole genome sequencing is a laboratory procedure that determines the order of bases in the genome of an organism in one process.

92. With reference to the Lumpy skin disease (LSD) sometimes mentioned in the news, consider the following statements:

1. Lumpy skin disease is a fungal disease of cattle and water buffalo caused by the Mucormycosis fungus.
2. It is spread by mosquitoes, flies by direct contact among the cattle, and through contaminated food and water.
3. There is no treatment for the virus, so prevention by vaccination is the most effective means of control.

Which of the statements given above is /are correct?

A. 1 and 3 only

B. 1 only

C. 2 and 3 only

D. 1, 2 and 3

Answer: C

Explanation:

- **Statement 1 is not correct**: Lumpy skin disease (LSD) is a viral disease of cattle and water buffalo caused by the poxvirus LSD virus.
- **Statement 2 is correct:** It is spread by mosquitoes, flies, lice, and wasps, by direct contact among the cattle, and through contaminated food and water.
- Main symptoms include Fever in animals, Depression, Characteristic skin nodules all over the body, Marked reduction in milk production, Abortion in pregnant animals, and Difficulty in eating, which sometimes leads to the animal's death.
- **Prevention:** Four tactics to control and prevent LSD are quarantine, vaccination, slaughter campaigns and management strategies. Insecticides can be sprayed to prevent mosquitoes, flies, and lice in animal habitats during the monsoon season.
- **Statement 3 is correct:** There is no treatment for the virus, so prevention by vaccination is the most effective means of control. Secondary infections in the skin may be treated with Non-Steroidal Anti-Inflammatories (NSAIDs) and also antibiotics when appropriate.

93. What is a 'Dark sky reserve' recently seen in the news?

A. Reserves of dark matter present in the solar system

B. It is land with distinguished nocturnal environment and starry nights that has been developed responsibly to prevent light pollution.

C. It is the phenomenon of dark skies during winter months in the Arctic region

D. It is the constant present of cloudy atmosphere which makes solar power generation impossible

Answer: B

Explanation:

A Dark Sky Reserve is public or private land with a distinguished nocturnal environment and starry nights that has been developed responsibly to prevent light pollution. According to the International Dark Sky Association (IDSA) website, these reserves "consist of a core area meeting minimum criteria for sky quality and natural darkness, and a peripheral area that supports dark sky preservation in the core." Hence, option B is correct.

These reserves, it said, are formed through a "partnership of multiple land managers who have recognized the value of the natural nighttime environment through regulations and long-term planning". By the end of 2022, India will establish the country's first Dark Sky Reserve in the cold desert regions of Ladakh.

Individuals or groups can nominate a site for certification to the International Dark Sky Association (IDSA). There are five designated categories, namely International Dark Sky parks, communities, reserves, sanctuaries and Urban Night Sky Places. The certification process is similar to that of a site being awarded the UNESCO World Heritage Site tag or getting recognised as a Biosphere Reserve. Between 2001 and January 2022, there have been 195 sites recognised as

International Dark Sky Places globally, the IDSA said.

Source: September 2022 Monthly CA compilation SleepyClasses.

94. H5N1 virus is sometimes mentioned in the news with reference to which one of the following diseases?

A. Yellow fever
B. Bird flu
C. Dengue
D. Chicken pox

Answer: B

Explanation:

- Avian influenza known informally as avian flu or bird flu refers to "influenza caused by viruses adapted to birds' '. Most avian influenza viruses do not infect humans, however, some, such as A(H5N1) and A(H7N9), have caused serious infections in people.
- The Avian (H5N1) virus subtype, a highly pathogenic virus, first infected humans in 1997 during a poultry epidemic outbreak in Hong Kong SAR, China.
- Types of Influenza Virus: There are four types of influenza viruses: influenza A, B, C, and D.
    - Influenza A and B are the two types of influenza that cause epidemic seasonal infections nearly every year.
    - Avian influenza Type A viruses Type A viruses are classified based on two proteins on their surfaces – Hemagglutinin (HA) and Neuraminidase (NA). There are about 18 HA subtypes and 11 NA subtypes.
    - Several combinations of these two proteins are possible e.g., H5N1, H7N2, H9N6, H17N10, H18N11 etc.
- Influenza C mainly occurs in humans, but has been known to also occur in dogs and pigs. Influenza D is found mainly in cattle. It's not known to infect or cause illness in humans yet.
- Spread: Bird flu viruses do not normally infect humans. However, sporadic human infections with bird flu viruses have occurred.

95. Consider the following statements regarding DNA and RNA

1. A nucleic acid containing deoxyribose is called deoxyribonucleic acid (DNA) while that which contains ribose is called ribonucleic acid (RNA).
2. Both DNA and RNA contain Adenine, Guanine, Thymine and Cytosine.

Which of the statements given above is/are correct?

A. Only 1
B. Only 2
C. Both 1 and 2
D. Neither 1 nor 2

Answer: A

DNA and RNA

Nucleic acids are responsible for the transfer of characters from parents to off springs.

There are two types of nucleic acids - DNA and RNA.

A nucleic acid containing deoxyribose is called

deoxyribonucleic acid (DNA) while that which contains ribose is called ribonucleic acid (RNA).

Both DNA and RNA contain Adenine, Guanine and Cytosine. The fourth baseis Thymine in DNA and Uracil in RNA. Hence, statement 2 is incorrect.

The structure of DNA is a double strand [helix] whereas RNA is a single strand molecule. Hydrogen bonds bind the nitrogenous bases of the two separate polynucleotide strands to make double-stranded DNA. The DNA backbone is resistant to cleavage, and both strands of the double-stranded structure store the same biological information. Biological information is replicated asthe two strands are separated.

Within cells, DNA is organized into long structures called chromosomes. During cell division these chromosomes are duplicated in the process of DNA replication, providing each cell its own complete set of chromosomes. Eukaryotic organisms (animals, plants, fungi, and protists) store most of their DNA inside the cell nucleus and some of their DNA in organelles, such as mitochondria or chloroplasts.

In contrast, prokaryotes (bacteria and archaea) store their DNA only in the cytoplasm.

96. Which of the following are the characteristics of Visible Light Communication (VLC)?

1. No electromagnetic interference
2. It can penetrate through walls
3. Higher frequency and bandwidth than radio waves
4. Low power consumption

Select the correct answer using the code given below.

A. 1 and 2 only

B. 2 and 3 only

C. 2 and 4 only

D. 1, 3 and 4 only

Answer: D

Visible light communication (VLC) is a data communication variant that uses visible light between 400 and 800 THz (780-375 nm). VLC is a subset of optical wireless communications technologies. The characteristics of VLC are as follows, Immune from electromagnetic interference

- It cannot penetrate through walls and it is used in indoor environments/short range.
- It has high bandwidth and frequency when compared to radio waves
- Low powered consumption Non-licensed channels

So, Option (d) is correct.

97. 'Black Box' is an electronic recording device placed in an aircraft to facilitate the investigation of aviation accidents and incidents. In this context, consider the following statements about the characteristic feature of a Black Box:

1. It gets mounted in the wing region of an aircraft that are more likely to survive after a flight crash.
2. It is made up of Titanium that prevents its damage in any type of crash.
3. It emits ultrasonic sound to trace its location either on land or in water.
4. It is capable to record terabytes of data in a single flight.

Select the correct answer using the code given below.

A. 4 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 3 and 4 only

Answer: A

From the security point of view, the black box is generally kept at the back side of the airplane, not on the wing region of an aircraft. So, statement 1 is not correct. This Box is made of Titanium metal and is enclosed in a Titanium box which gives it strength to withstand any shock if it falls in sea or falls from the height. It is extremely rare for a black box to be destroyed. It would take a concentrated fire beyond its design strength, or an impact so high that it would be beyond what it could withstand. Hence, Black box made up of titanium never gets damaged after a crash is not true. **So, statement 2 is not correct.**

When this box is lost anywhere, it keeps on emitting the waves along with a beep sound for about 30 days. This voice can be identified by the investigators from a distance of about 2-3 Kilometers. An interesting fact with regard to Black box is that it can emit waves from the depth of 14000 feet in the sea.it does not emit an ultrasonic sound to trace its location. **So, statement 3 is not correct.**

The black box records all relevant flight data, in addition to conversations in the cockpit. It is also capable to record terabytes of data in a single flight. **So, statement 4 is correct.**

98. Which of the following are the benefits of the foodirradiation?

1. Prevention of foodborne illness
2. Control of insects
3. Sterilization

Select the correct answer using the code given below:

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: D

Food irradiation (the application of ionizing radiation to food)is a technology that improves the safety and extends the shelf life of foods by reducing or eliminating microorganisms and insects. Like pasteurizing milk and canning fruits and vegetables, irradiation can make food safer for the consumer.

- Prevention of Foodborne Illness – to effectively eliminate organisms that cause foodborne illness, suchas Salmonella and Escherichia coli (E. coli).
- Control of Insects – to destroy insects in or on tropical fruits imported into the United States. Irradiation also decreases the need for other pest-control practices thatmay harm the fruit.
- Sterilization – irradiation can be used to sterilize foods, which can then be stored for years without refrigeration.Sterilized foods are useful in hospitals for patients with severely impaired immune systems, such as patients with AIDS or undergoing chemotherapy.

99. Consider the following statements:

1. Cryogenic engine makes use of liquid Oxygen and liquid Hydrogen at extremely low temperatures as propellants
2. Ramjet engine works most efficiently at hypersonic speeds.

3. Scramjet engines obtain oxygen from the atmosphere by compressing the incoming air.

Which of the statements given above is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Answer: C

Statement 1 is correct: Cryogenic engine uses liquid oxygen and liquid hydrogen which takes rocket into the orbit. It is more efficient than solid stage and liquid stage since it generates more thrust and higher specific impulse. It makesuse of Liquid Oxygen (LOX) and Liquid Hydrogen (LH2) as propellants which liquefy at -183 deg C and -253 deg C respectively.

Statement 2 is incorrect: A ramjet is a form of air-breathing jet engine that uses the vehicle's forward motion to compress incoming air for combustion without a rotating compressor. Ramjets work most efficiently at **supersonic** speeds around Mach 3 (three times the speed of sound) andcan operate up to speeds of Mach 6. However, the ramjet efficiency starts to drop when the vehicle reaches hypersonicspeeds.

A scramjet engine is an improvement over the ramjet engine as it efficiently operates at hypersonicspeeds (speed beyond Mach 5) and allows supersonic combustion. Thus, it is known as Supersonic Combustion Ramjet, or Scramjet.

Statement 3 is correct: Scramjet engines obtain oxygen fromthe atmosphere by compressing the incoming air before combustion at hypersonic speed. It uses hydrogen as fuel and the oxygen from the atmospheric air as the oxidizer.

100. Recently in news CAR T-cell therapy is a breakthrough technique in medical sciences. It is used to treat which of the following diseases?

A. Cancer

B. Covid-19

C. Diabetes

D. Blindness

Answer: A

Option A is correct:

- The Chimeric Antigen Receptor T-cell (CAR-T) therapy is used to treat cancer in patients and is a form of immunotherapy. This technique has shown the ability to eradicate very advanced leukemias and lymphomas and to keep the cancer at bay for many years.
- Though this technology has a remarkable therapeutic potential for cancer patients, at present this technology is not available in India. The challenge is to develop this technology in cost-effective manner and make it available for the patients.

Sleepy Classes IAS
Awakening Toppers

Prelims Test Series
for UPSC 2023

- **30** Tests
- **12** Fundamental Tests (including 2 Revision Tests)
- **9** Advanced Tests (including 1 Revision Test)
- **9** Full Length Tests
- **Detailed Video Discussion of Tests** would be done
- Includes **PYQ + Static + Current Affairs** (Jan 1, 2022 onwards)
- Mix of **Conceptual + Factual Questions**

₹3,499/- **ENROL NOW**

For more inquiries
1800-890-3043

info@sleepyclasses.com
/SleepyClassesIAS