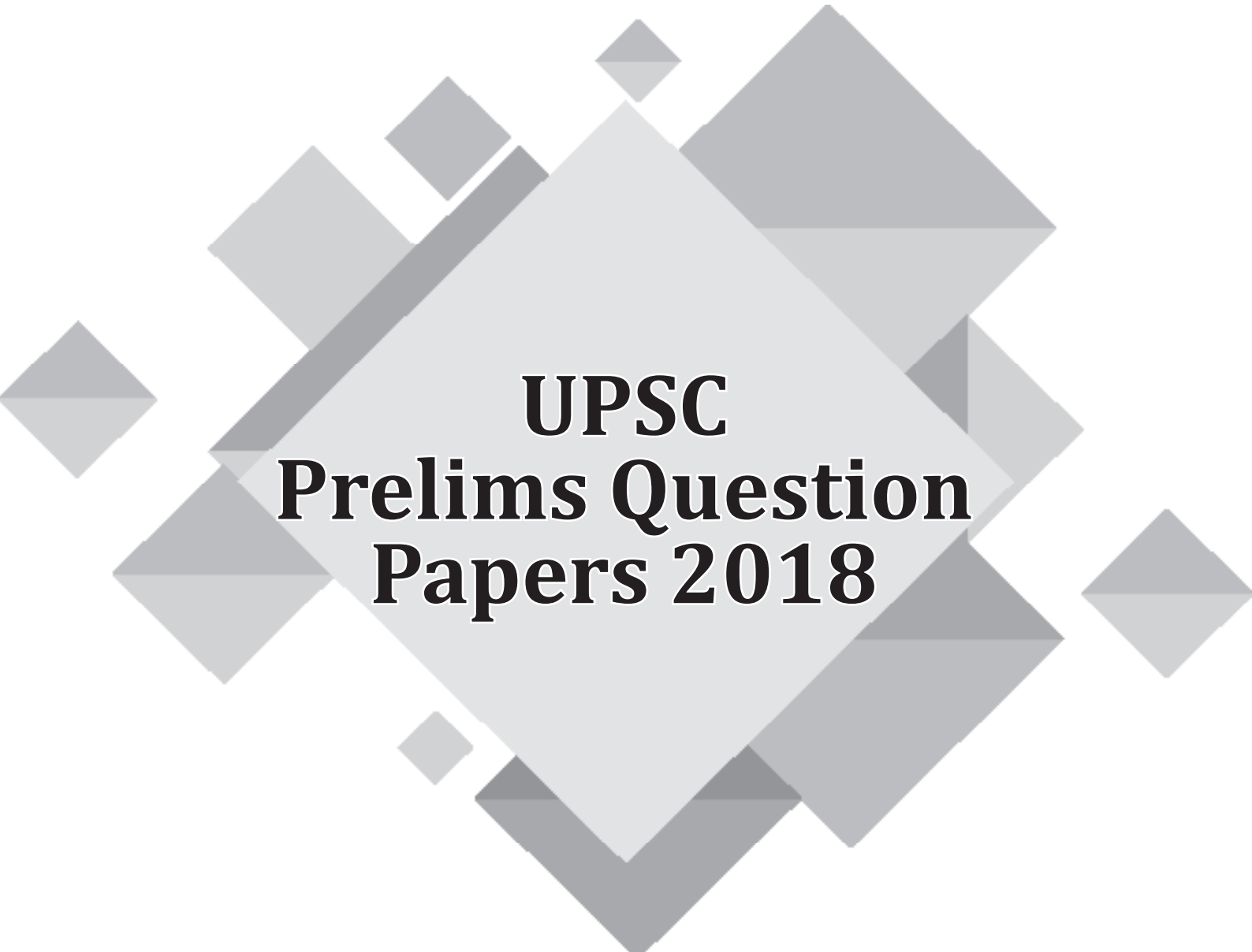


**UPSC, CSE  
(Prelims)**

**UPSC CSE (P)  
Question Papers  
(2018)**



# UPSC Prelims Question Papers 2018

1

# GENERAL STUDIES - I (PRELIMS) - 2018 (A)

**1. Consider the following statements :**

- (1) In the first Lok Sabha, the single largest party in the opposition was the Swatantra Party.
- (2) In the Lok Sabha, a "Leader of the Opposition" was recognised for the first time in 1969.
- (3) In the Lok Sabha, if a party does not have a minimum of 75 members, its leader cannot be recognised as the Leader of the Opposition.

**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

**2. Which of the following leaf modifications occur(s) in the desert areas to inhibit water loss?**

- (1) Hard and waxy leaves
- (2) Tiny leaves
- (3) Thorns instead of leaves

**Select the correct answer using the code given below :**

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

**3. As per the NSSO 70th Round "Situation Assessment Survey of Agricultural Households", consider the following statements :**

- (1) Rajasthan has the highest percentage share of agricultural households among its rural households.
- (2) Out of the total agricultural households in the country, a little over 60 percent belong to OBCs.
- (3) In Kerala, a little over 60 percent of agricultural households reported to have received maximum income from sources other than agricultural activities.

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

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

**4. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)?**

- (1) The NGT has been established by an Act whereas the CPCB has been created by an executive order of the Government.
- (2) The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air in the country.

**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

**5. Consider the following statements :**

- (1) The Parliament of India can place a particular law in the Ninth Schedule of the Constitution of India.
- (2) The validity of a law placed in the Ninth Schedule cannot be examined by any court and no judgement can be made on it.

**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

**6. Which one of the following best describes the term "Merchant Discount Rate" sometimes seen in news?**

- (a) The incentive given by a bank to a merchant for accepting payments through debit cards pertaining to that bank.
- (b) The amount paid back by banks to their customers when they use debit cards for financial transactions for purchasing goods or services.
- (c) The charge to a merchant by a bank for accepting payments from his customers through the bank's debit cards.
- (d) The incentive given by the Government to merchants for promoting digital payments by their customers through Point of Sale (POS) machines and debit cards.

**7. What is/are the consequence/consequences of a country becoming the member of the "Nuclear Suppliers Group"?**

- (1) It will have access to the latest and most efficient nuclear technologies.
- (2) It automatically becomes a member of "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)".

**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

**8. With reference to India's decision to levy an equalization tax of 6% on online advertisement services offered by non-resident entities, which of the following statements is/are correct?**

- (1) It is introduced as a part of the Income Tax Act.
- (2) Non-resident entities that offer advertisement services in India can claim a tax credit in their home country under the "Double Taxation Avoidance Agreements".

**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

**9. Consider the following statements :**

- (1) The Fiscal Responsibility and Budget Management (FRBM) Review Committee Report has recommended a debt to GDP ratio of 60% for the general (combined) government by 2023, comprising 40% for the Central Government and 20% for the State Governments.
- (2) The Central Government has domestic liabilities of 21% of GDP as compared to that of 49% of GDP of the State Governments.
- (3) As per the Constitution of India, it is mandatory for a State to take the Central

Government's consent for raising any loan if the former owes any outstanding liabilities to the latter

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

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

**10. Consider the following statements :**

- (1) The quantity of imported edible oils is more than the domestic production of edible oils in the last five years.  
(2) The Government does not impose any customs duty on all the imported edible oils as a special case.

**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

**11. He wrote biographies of Mazzini, Garibaldi, Shivaji and Shrikrishna; stayed in America for some time, and was also elected to the Central Assembly. He was**

- (a) Aurobindo Ghosh                                      (b) Bipin Chandra Pal  
(c) Lala Lajpat Rai                                      (d) Motilal Nehru

**12. Consider the following statements :**

- (1) Aadhaar card can be used as a proof of citizenship or domicile.  
(2) Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.

**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

**13. Which of the following has/have shrunk immensely/dried up in the recent past due to human activities?**

- (1) Aral Sea                      (2) Black Sea                      (3) Lake Baikal

**Select the correct answer using the code given below :**

- (a) 1 only                      (b) 2 and 3                      (c) 2 only                      (d) 1 and 3

**14. "Rule of Law Index" is released by which of the following ?**

- (a) Amnesty International  
(b) International Court of Justice  
(c) The Office of UN Commissioner for Human Rights  
(d) World Justice Project

**15. Which one of the following links all the ATMs in India ?**

- (a) Indian Banks' Association                                      (b) National Securities Depository Limited  
(c) National Payments Corporation of India                      (d) Reserve Bank of India

**16. Consider the following statements :**

- (1) Capital Adequacy Ratio (CAR) is the amount that banks have to maintain in the form of their own funds to offset any loss that banks incur if the account-holders fail to repay dues.  
(2) CAR is decided by each individual bank.

**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

17. **The identity platform 'Aadhaar' provides open "Application Programming Interfaces (APIs)". What does it imply ?**

- (1) It can be integrated into any electronic device.  
(2) Online authentication using iris is possible.

**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

18. **Very recently, in which of the following countries have lakhs of people either suffered from severe famine/acute malnutrition or died due to starvation caused by war/ethnic conflicts ?**

- (a) Angola and Zambia                      (b) Morocco and Tunisia  
(c) Venezuela and Colombia                      (d) Yemen and South Sudan

19. **Regarding Wood's Dispatch, which of the following statements are true ?**

- (1) Grants-in-Aid system was introduced.  
(2) Establishment of universities was recommended.  
(3) English as a medium of instruction at all levels of education was recommended.

**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

20. **With reference to the Parliament of India, which of the following Parliamentary Committees scrutinizes and reports to the House whether the powers to make regulations, rules, sub-rules, by-laws, etc. conferred by the Constitution or delegated by the Parliament are being properly exercised by the Executive within the scope of such delegation?**

- (a) Committee on Government Assurances                      (b) Committee on Subordinate Legislation  
(c) Rules Committee                      (d) Business Advisory Committee

21. **Consider the following statements :**

- (1) As per the Right to Education (RTE) Act, to be eligible for appointment as a teacher in a State, a person would be required to possess the minimum qualification laid down by the concerned State Council of Teacher Education.  
(2) As per the RTE Act, for teaching primary classes, a candidate is required to pass a Teacher Eligibility Test conducted in accordance with the National Council of Teacher Education guidelines.  
(3) In India, more than 90% of teacher education institutions are directly under the State Governments.

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

- (a) 1 and 2                      (b) 2 only                      (c) 1 and 3                      (d) 3 only

22. Consider the following pairs :

Tradition	-	State
(1) Chapchar Kut festival	-	Mizoram
(2) Khongjom Parba ballad	-	Manipur
(3) Thang-Ta dance	-	Sikkim

Which of the pairs given above is/are correct?

- (a) 1 only                      (b) 1 and 2                      (c) 3 only                      (d) 2 and 3

23. Consider the following statements :

- (1) The Food Safety and Standards Act, 2006 replaced the Prevention of Food Adulteration Act, 1954
- (2) The Food Safety and Standards Authority of India (FSSAI) is under the charge of Director General of Health Services in the Union Ministry of Health and Family Welfare.

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

24. The term "two-state solution" is sometimes mentioned in the news in the context of the affairs of

- (a) China                      (b) Israel                      (c) Iraq                      (d) Yemen

25. With reference to the provisions made under the National Food Security Act, 2013, consider the following statements :

- (1) The families coming under the category of 'below poverty line (BPL)' only are eligible to receive subsidised food grains.
- (2) The eldest woman in a household, of age 18 years or above, shall be the head of the household for the purpose of issuance of a ration card.
- (3) Pregnant women and lactating mothers are entitled to a 'take-home ration of 1600 calories per day during pregnancy and for six months thereafter.

Which of the statements given above is/are correct?

- (a) 1 and 2                      (b) 2 only                      (c) 1 and 3                      (d) 3 only

26. India enacted The Geographical Indications of Goods (Registration and Protection) Act, 1999 in order to comply with the obligations to

- (a) ILO                      (b) IMF                      (c) UNCTAD                      (d) WTO

27. Consider the following statements :

- (1) In India, State Governments do not have the power to auction non-coal mines.
- (2) Andhra Pradesh and Jharkhand do not have gold mines.
- (3) Rajasthan has iron ore mines.

Which of the statements given above is/are correct?

- (a) 1 and 2                      (b) 2 only                      (c) 1 and 3                      (d) 3 only

28. With reference to digital payments, consider the following statements :

- (1) BHIM app allows the user to transfer money to anyone with a UPI-enabled bank account.

- (2) While a chip-pin debit card has four factors of authentication, BHIM app has only two factors of authentication.

**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

**29. Among the following cities, which one lies on a longitude closest to that of Delhi ?**

- (a) Bengaluru                      (b) Hyderabad                      (c) Nagpur                      (d) Pune

**30. International Labour Organization's Conventions 138 and 182 are related to**

- (a) Child labour  
(b) Adaptation of agricultural practices to global climate change  
(c) Regulation of food prices and food security  
(d) Gender parity at the workplace

**31. Regarding Money Bill, which of the following statements is not correct?**

- (a) A bill shall be deemed to be a Money Bill if it contains only provisions relating to imposition, abolition, remission, alteration or regulation of any tax.  
(b) A Money Bill has provisions for the custody of the Consolidated Fund of India or the Contingency Fund of India.  
(c) A Money Bill is concerned with the appropriation of moneys out of the Contingency Fund of India.  
(d) A Money Bill deals with the regulation of borrowing of money or giving of any guarantee by the Government of India.

**32. With reference to the election of the President of India, consider the following statements:**

- (1) The value of the vote of each MLA varies from State to State.  
(2) The value of the vote of MPs of the Lok Sabha is more than the value of the vote of MPs of the Rajya Sabha.

**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

**33. In the Indian context, what is the implication of ratifying the 'Additional Protocol with the 'International Atomic Energy Agency (IAEA)'?**

- (a) The civilian nuclear reactors come under IAEA safeguards.  
(b) The military nuclear installations come under the inspection of IAEA.  
(c) The country will have the privilege to buy uranium from the Nuclear Suppliers Group (NSG).  
(d) The country automatically becomes a member of the NSG.

**34. Consider the following countries :**

- (1) Australia                      (2) Canada                      (3) China  
(4) India                      (5) Japan                      (6) USA

**Which of the above are among the 'free-trade partners' of ASEAN?**

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



35. With reference to the "Global Alliance for Climate-Smart Agriculture (GACSA)", which of the following statements is/are correct ?

- (1) GACSA is an outcome of the Climate Summit held in Paris in 2015.
- (2) Membership of GACSA does not create any binding obligations.
- (3) India was instrumental in the creation of GACSA.

Select the correct answer using the code given below :

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

36. Which of the following is/are the aim/aims of "Digital India" Plan of the Government of India ?

- (1) Formation of India's own Internet companies like China did.
- (2) Establish a policy framework to encourage overseas multinational corporations that collect Big Data to build their large data centres within our national geographical boundaries.
- (3) Connect many of our villages to the Internet and bring Wi-Fi to many of our schools, public places and major tourist centres.

Select the correct answer using the code given below :

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

37. Consider the following pairs :

Towns sometimes mentioned in news	Country
-----------------------------------	---------

- |                    |             |
|--------------------|-------------|
| (1) Aleppo         | Syria       |
| (2) Kirkuk         | Yemen       |
| (3) Mosul          | Palestine   |
| (4) Mazar-i-sharif | Afghanistan |

Which of the pairs given above are correctly matched ?

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

38. In the Federation established by The Government of India Act of 1935, residuary powers were given to the

- |                            |                          |
|----------------------------|--------------------------|
| (a) Federal Legislature    | (b) Governor General     |
| (c) Provincial Legislature | (d) Provincial Governors |

39. Consider the following statements :

- (1) The Speaker of the Legislative Assembly shall vacate his/her office if he/she ceases to be a member of the Assembly.
- (2) Whenever the Legislative Assembly is dissolved, the Speaker shall vacate his/her office immediately.

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

40. Which one of the following reflects the most appropriate relationship between law and liberty?

- (a) If there are more laws, there is less liberty.
- (b) If there are no laws, there is no liberty.
- (c) If there is liberty, laws have to be made by the people.
- (d) If laws are changed too often, liberty is in danger.

41. Consider the following statements :

- (1) No criminal proceedings shall be instituted against the Governor of a State in any court during his term of office.
- (2) The emoluments and allowances of the Governor of a State shall not be diminished during his term of office.

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

42. The well-known painting "Bani Thani" belongs to the

- (a) Bundi school
- (b) Jaipur school
- (c) Kangra school
- (d) Kishangarh school

43. What is "Terminal High Altitude Area Defense (THAAD)", sometimes seen in the news?

- (a) An Israeli radar system
- (b) India's indigenous anti-missile programme
- (c) An American anti-missile system
- (d) A defence collaboration between Japan and South Korea

44. With reference to cultural history of India, consider the following statements :

- (1) Most of the Tyagaraja Kritis are devotional songs in praise of Lord Krishna.
- (2) Tyagaraja created several new ragas.
- (3) Annamacharya and Tyagaraja are contemporaries.
- (4) Annamacharya kirtanas are devotional songs in praise of Lord Venkateshwara.

Which of the statements given above are correct?

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

45. Which of the following are regarded as the main features of the "Rule of Law" ?

- (1) Limitation of powers
- (2) Equality before law
- (3) People's responsibility to the Government
- (4) Liberty and civil rights

Select the correct answer using the code given below :

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

46. Which one of the following statements correctly describes the meaning of legal tender money?

- (a) The money which is tendered in courts of law to defray the fee of legal cases
- (b) The money which a creditor is under compulsion to accept in settlement of his claims

- (c) The bank money in the form of cheques, drafts, bills of exchange, etc.
- (d) The metallic money in circulation in a country

47. **If a commodity is provided free to the public by the Government, then**

- (a) the opportunity cost is zero.
- (b) the opportunity cost is ignored.
- (c) the opportunity cost is transferred from the consumers of the product to the tax-paying public.
- (d) the opportunity cost is transferred from the consumers of the product to the Government.

48. **Increase in absolute and per capita real GNP do not connote a higher level of economic development, if**

- (a) industrial output fails to keep pace with agricultural output.
- (b) agricultural output fails to keep pace with industrial output.
- (c) poverty and unemployment increase.
- (d) imports grow faster than exports.

49. **Consider the following statements :**

Human capital formation as a concept is better explained in terms of a process which enables

- (1) individuals of a country to accumulate more capital.
- (2) increasing the knowledge, skill levels and capacities of the people of the country.
- (3) accumulation of tangible wealth.
- (4) accumulation of intangible wealth.

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

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

50. **Despite being a high saving economy, capital formation may not result in significant increase in output due to**

- (a) weak administrative machinery                      (b) illiteracy
- (c) high population density                      (d) high capital-output ratio

51. **After the Santhal Uprising subsided, what was/were the measure/measures taken by the colonial government?**

- (1) The territories called Santhal Paraganas' were created.
- (2) It became illegal for a Santhal to transfer land to a non-Santhal.

**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

52. **Economically, one of the results of the British rule in India in the 19th century was the**

- (a) Increase in the export of Indian increase in handicrafts
- (b) growth in the number of Indian owned factories
- (c) commercialization of Indian agriculture
- (d) rapid increase in the urban population

53. **If the President of India exercises his power as provided under Article 356 of the Constitution in respect of a particular State, then**
- (a) the Assembly of the State automatically dissolved.
  - (b) the powers of the Legislature of that State shall be exercisable by or under the authority of the Parliament.
  - (c) Article 19 is suspended in that State.
  - (d) the President can make laws relating to that State.

54. **Consider the following pairs :**

<b>Craft</b>		<b>Heritage of</b>
(1) Puthukkuli shawls	-	Tamil Nadu
(2) Sujni embroidery	-	Maharashtra
(3) Uppada Jamdani saris	-	Karnataka

**Which of the pairs given above is/are correct?**

- (a) 1 only                      (b) 1 and 2                      (c) 3 only                      (d) 2 and 3

55. **In which of the following areas can GPS technology be used ?**

- (1) Mobile phone operations                      (2) Banking operations
- (3) Controlling the power grids

**Select the correct answer using the code given below :**

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

56. **Consider the following statements :**

- (1) The Reserve Bank of India manages and services Government of India Securities but not any State Government Securities.
- (2) Treasury bills are issued by the Government of India and there are no treasury bills issued by the State Governments.
- (3) Treasury bills offer are issued at a discount from the par value.

**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

57. **Consider the following statements :**

- (1) The Earth's magnetic field has reversed every few hundred thousand years.
- (2) When the Earth was created more than 4000 million years ago, there was 54% oxygen and no carbon dioxide.
- (3) When living organisms originated, they modified the early atmosphere of the Earth.

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

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

58. **The terms WannaCry, Petya and EternalBlue' sometimes mentioned in the news recently are related to**

- (a) Exoplanets                      (b) Cryptocurrency                      (c) Cyber attacks                      (d) Mini satellites

59. **With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following fall under the Conservation Agriculture ?**

- (1) Avoiding the monoculture practices
- (2) Adopting minimum tillage
- (3) Avoiding the cultivation of plantation crops
- (4) Using crop residues to cover soil surface
- (5) Adopting spatial and temporal crop sequencing/crop rotations

**Select the correct answer using the code given below:**

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

60. **The term "sixth mass extinction/sixth extinction" is often mentioned in the news in the context of the discussion of**

- (a) Widespread monoculture practices in agriculture and large-scale commercial farming with indiscriminate use of chemicals in many parts of the world that may result in the loss of good native ecosystems.
- (b) Fears of a possible collision of a meteorite with the Earth in the near future in the manner it happened 65 million years ago that caused the mass extinction of many species including those of dinosaurs.
- (c) Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world which may cause the disappearance of good native crop plants and the loss of food biodiversity.
- (d) Mankind's over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution and global climate change.

61. **With reference to the Indian Regional Navigation Satellite System (IRNSS), consider the following statements :**

- (1) IRNSS has three satellites geostationary and four satellites geosynchronous orbits.
- (2) IRNSS covers entire India and about 5500 km beyond its borders.
- (3) India will have its own satellite navigation system with full global coverage by the middle of 2019.

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

- (a) 1 only      (b) 1 and 2 only      (c) 2 and 3 only      (d) None

62. **Consider the following phenomena :**

- (1) Light is affected by gravity.
- (2) The Universe is constantly expanding.
- (3) Matter warps its surrounding space-time.

**Which of the above is/are the prediction/predictions of Albert Einstein's General Theory of Relativity, often discussed in media ?**

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

**63. With reference to the Genetically Modified mustard (GM mustard) developed in India, consider the following statements :**

- (1) GM mustard has the genes of a soil bacterium that give the plant the property of pest-resistance to a wide variety of pests.
- (2) GM mustard has the genes that allow the plant cross-pollination and hybridization.
- (3) GM mustard has been developed jointly by the IARI and Punjab Agricultural University.

**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

**64. Consider the following pairs :**

**Terms sometimes seen in news**

**Context/Topic**

- |                           |   |                         |
|---------------------------|---|-------------------------|
| (1) Belle II experiment   | - | Artificial Intelligence |
| (2) Blockchain technology | - | Digital/ Cryptocurrency |
| (3) CRISPR-Cas9           | - | Particle Physics        |

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

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

**65. Which of the following statements best describes "carbon fertilization"?**

- (a) Increased plant growth due to increased concentration of carbon dioxide in the atmosphere
- (b) Increased temperature of Earth due to increased concentration of carbon dioxide in the atmosphere
- (c) Increased acidity of oceans as a result of increased concentration of carbon dioxide in the atmosphere
- (d) Adaptation of all living beings on Earth to the climate change brought about by the increased concentration of carbon dioxide in the atmosphere

**66. When the alarm of your smartphone rings in the morning, you wake up and tap it to stop the alarm which causes your geysers to be switched on automatically. The smart mirror in your bathroom shows the day's weather and also indicates the level of water in your overhead tank. After you take some groceries from your refrigerator for making breakfast, it recognises the shortage of stock in it and places an order for the supply of fresh grocery items. When you step out of your house and lock the door, all lights, fans, geysers and AC machines get switched off automatically. On your way to office, your car warns you about traffic congestion ahead and suggests an alternative route, and if you are late for a meeting, it sends a message to your office accordingly.**

**In the context of emerging communication technologies, which one of the following terms best applies to the above scenario ?**

- (a) Border Gateway Protocol      (b) Internet of Things  
(c) Internet Protocol      (d) Virtual Private Network

**67. With reference to solar power production in India, consider the following statements :**

- (1) India is the third largest in the world in the manufacture of silicon wafers used in photovoltaic units.

(2) The solar power tariffs are determined by the Solar Energy Corporation of India.

**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

**68. The staple commodities of export by the English East India Company from Bengal in the middle of the 18th century were**

(a) Raw cotton, oil-seeds and opium                      (b) Sugar, salt, zinc and lead  
(c) Copper, silver, gold, spices and tea                      (d) Cotton, silk, saltpetre and opium

**69. Which one of the following is a very significant aspect of the Champaran Satyagraha ?**

(a) Active all-India participation of lawyers, students and women in the National Movement  
(b) Active involvement of Dalit and Tribal communities of India in the National Movement  
(c) Joining of peasant unrest to India's National Movement  
(d) Drastic decrease in the cultivation of plantation crops and commercial crops

**70. Who among the following were the founders of the "Hind Mazdoor Sabha" established in 1948 ?**

(a) B. Krishna Pillai, E.M.S. Namboodiripad and K.C. George  
(b) Jayaprakash Narayan, Deen Dayal Upadhyay and M.N. Roy  
(c) C.P. Ramaswamy Iyer, K. Kamaraj and Veeresalingam Pantulu  
(d) Ashok Mehta, T.S. Ramanujam and G.G. Mehta

**71. With reference to the religious practices in India, the "Sthanakvasi" sect belongs to**

(a) Buddhism                      (b) Jainism                      (c) Vaishnavism                      (d) Shaivism

**72. With reference to the cultural history of India, consider the following statements :**

(1) White marble was used in making Buland Darwaza and Khankah at Fatehpur Sikri.  
(2) Red sandstone and marble were used in making Bara Imambara and Rumi Darwaza at Lucknow.

**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

**73. Which one of the following foreign travellers elaborately discussed about diamonds and diamond mines of India?**

(a) Francois Bernier                      (b) Jean-Baptiste Tavernier  
(c) Jean de Thevenot                      (d) Abbe Barthelemy Carre

**74. With reference to Indian history, who among the following is a future Buddha, yet to come to save the world ?**

(a) Avalokiteshvara                      (b) Lokeshvara                      (c) Maitreya                      (d) Padmapani

**75. Which one of the following statements does not apply to the system of Subsidiary Alliance introduced by Lord Wellesley?**

(a) To maintain a large standing army at other's expense  
(b) To keep India safe from Napoleonic danger  
(c) To secure a fixed income for the Company

(d) To establish British paramountcy over the Indian States

76. Which of the following led to the introduction of English Education in India ?

- (1) Charter Act of 1813
- (2) General Committee of Public Instruction, 1823
- (3) Orientalist and Anglicist Controversy

Select the correct answer using the code given below:

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

77. Which one of the following is an artificial lake?

- (a) Kodaikanal (Tamil Nadu)
- (b) Kolleru (Andhra Pradesh)
- (c) Nainital (Uttarakhand)
- (d) Renuka (Himachal Pradesh)

78. With reference to Pradhan Mantri Kaushal Vikas Yojana, consider the following statements :

- (1) It is the flagship scheme of the Ministry of Labour and Employment.
- (2) It, among other things, will also impart training in soft skills, entrepreneurship, financial and digital literacy.
- (3) It aims to align the competencies of the unregulated workforce of the country to the National Skill Qualification Framework.

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

79. In 1920, which of the following changed its name to "Swarajya Sabha"?

- (a) All India Home Rule League
- (b) Hindu Mahasabha
- (c) South Indian Liberal Federation
- (d) The Servants of India Society

80. Which among the following events happened earliest ?

- (a) Swami Dayanand established Arya Samaj.
- (b) Dinabandhu Mitra wrote Neeldarpan.
- (c) Bankim Chandra Chattopadhyay wrote Anandmath.
- (d) Satyendranath Tagore became the first Indian to succeed in the Indian Civil Services Examination.

81. Which of the following is/are the possible consequence/s of heavy sand mining in riverbeds?

- (1) Decreased salinity in the river
- (2) Pollution of groundwater
- (3) Lowering of the water-table

Select the correct answer using the code given below :

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

82. With reference to agricultural soils, consider the following statements :

- (1) A high content of organic matter in soil drastically reduces its water holding capacity.
- (2) Soil does not play any role in the sulphur cycle.



- (3) Irrigation over a period of time can contribute to the salinization of some agricultural lands.

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

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

**83. The Partnership for Action on Green Economy (PAGE), a UN mechanism to assist countries transition towards greener and more inclusive economies, emerged at**

- (a) The Earth Summit on Sustainable Development 2002, Johannesburg  
(b) The United Nations Conference on Sustainable Development 2012, Rio de Janeiro  
(c) The United Nations Framework Convention on Climate Change 2015, Paris  
(d) The World Sustainable Development Summit 2016, New Delhi

**84. "3D printing" has applications in which of the following ?**

- (1) Preparation of confectionery items (2) Manufacture of bionic ears  
(3) Automotive industry (4) Reconstructive surgeries  
(5) Data processing technologies

**Select the correct answer using the code given below :**

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

**85. Consider the following statements :**

- (1) The Barren Island volcano is an active volcano located in the Indian territory.  
(2) Barren Island lies about 140 km east of Great Nicobar.  
(3) The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.

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

- (a) 1 only (b) 2 and 3 (c) 3 only (d) 1 and 3

**86. Why is a plant called *Prosopis juliflora* often mentioned in news?**

- (a) Its extract is widely used in cosmetics,  
(b) It tends to reduce the biodiversity in the area in which it grows.  
(c) Its extract is used in the synthesis of pesticides.  
(d) None of the above

**87. Consider the following statements :**

- (1) Most of the world's coral reefs are in tropical waters.  
(2) More than one-third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.  
(3) Coral reefs host far more number of animal phyla than those hosted by tropical rainforests.

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

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

**88. "Momentum for Change : Climate Neutral Now" is an initiative launched by**

- (a) The Intergovernmental Panel on Climate Change  
(b) The UNEP Secretariat

- (c) The UNFCCC Secretariat
- (d) The World Meteorological Organization

89. With reference to educational institutions during colonial rule in India, consider the following pairs :

Institution		Founder
(1) Sanskrit College at Benaras	-	William Jones
(2) Calcutta Madarsa	-	Warren Hastings
(3) Fort William College	-	Arthur Wellesley

Which of the pairs given above is/are correct ?

- (a) 1 and 2
- (b) 2 only
- (c) 1 and 3
- (d) 3 only

90. Consider the following pairs :

**Regions sometimes mentioned in news**                      **Country**

- |               |             |
|---------------|-------------|
| (1) Catalonia | Spain       |
| (2) Crimea    | Hungary     |
| (3) Mindanao  | Philippines |
| (4) Oromia    | Nigeria     |

Which of the pairs given above are correctly matched ?

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

91. Consider the following events :

- (1) The first democratically elected communist party government formed in a State in India.
- (2) India's then largest bank, 'Imperial Bank of India', was renamed 'State Bank of India'.
- (3) Air India was nationalised and became the national carrier.
- (4) Goa became a part of independent India.

Which of the following is the correct chronological sequence of the above events?

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

92. Right to Privacy is protected as an intrinsic part of Right to Life and Personal Liberty.

Which of the following in the Constitution of India correctly and appropriately imply the above statement ?

- (a) Article 14 and the provisions under the 42<sup>nd</sup> Amendment to the Constitution
- (b) Article 17 and the Directive Principles of State Policy in Part IV
- (c) Article 21 and the freedoms guaranteed in Part III
- (d) Article 24 and the provisions under the 44<sup>th</sup> Amendment to the Constitution

93. Consider the following:

- |               |             |              |                   |
|---------------|-------------|--------------|-------------------|
| (1) Areca nut | (2) Barley  | (3) Coffee   | (4) Finger millet |
| (5) Groundnut | (6) Sesamum | (7) Turmeric |                   |

The Cabinet Committee on Economic Affairs has announced the Minimum Support Price for which of the above ?

- (a) 1, 2, 3 and 7 only (b) 2, 4, 5 and 6 only  
(c) 1, 3, 4, 5 and 6 only (d) 1, 2, 3, 4, 5, 6 and 7

94. In which one of the following States is Pakhui Wildlife Sanctuary located ?

- (a) Arunachal Pradesh (b) Manipur  
(c) Meghalaya (d) Nagaland

95. With reference to India's satellite launch vehicles, consider the following statements :

- (1) PSLVs launch the satellites useful for Earth resources monitoring whereas GSLVs are designed mainly to launch communication satellites.
- (2) Satellites launched by PSLV appear to remain permanently fixed in the same position in the sky, as viewed from a particular location on Earth.
- (3) GSLV Mk III is a four-staged launch vehicle with the first and third stages using solid rocket motors; and the second and fourth stages using liquid rocket engines.

Which of the statements given above is/are correct ?

- (a) 1 only (b) 2 and 3 (c) 1 and 2 (d) 3 only

96. With reference to the governance of public sector banking in India, consider the following statements :

- (1) Capital infusion into public sector banks by the Government of India has steadily increased in the last decade.
- (2) To put the public sector banks in order, the merger of associate banks with the parent State Bank of India has been affected.

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

97. Consider the following items :

- (1) Cereal grains hulled
- (2) Chicken eggs cooked
- (3) Fish processed and canned
- (4) Newspapers containing advertising material

Which of the above items is/are exempted under GST (Goods and Services Tax)?

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

98. Consider the following statements :

- (1) The definition of "Critical Wildlife Habitat" is incorporated in the Forest Rights Act, 2006.
- (2) For the first time in India, Baigas have been given Habitat Rights.
- (3) Union Ministry of Environment, Forest and Climate Change officially decides and declares Habitat Rights for Primitive and Vulnerable Tribal Groups in any part of India.

Which of the statements given above is/are correct?

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

**99. Consider the following:**

- (1) Birds                      (2) Dust blowing      (3) Rain                      (4) Wind blowing

**Which of the above spread plant diseases ?**

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

**100. With reference to organic farming in India, consider the following statements :**

- (1) "The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.  
(2) "The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.  
(3) Sikkim has become India's first fully organic State.

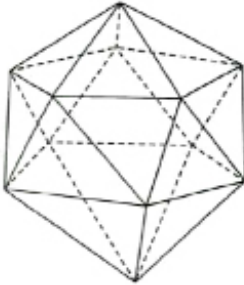
**Which of the statements given above is/are correct?**

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

## 2

# GENERAL STUDIES - II (PRELIMS) - 2018

1. Consider the following three-dimensional figure :



How many triangles does the above figure have?

- (a) 18                      (b) 20                      (c) 22                      (d) 24

2. Consider the following sum :

$$\bullet + 1 \bullet + 2 \bullet + \bullet 3 + \bullet 1 = 21 \bullet$$

In the above sum,  $\bullet$  stands for

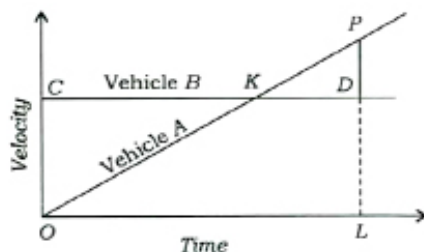
- (a) 4                      (b) 5                      (c) 6                      (d) 8

3. Consider the following pattern of numbers :

8	10	15	13
6	5	7	4
4	6	8	8
6	11	16	?

What is the number at ? in the above pattern?

- (a) 17                      (b) 19                      (c) 21                      (d) 23
4. How many diagonals can be drawn by joining the vertices of an octagon?
- (a) 20                      (b) 24                      (c) 28                      (d) 64
5. The figure drawn below gives the velocity graphs of two vehicles A and B. The straight line OKP represents the velocity of vehicle A at any instant, whereas the horizontal straight line CKD represents the velocity of vehicle B at any instant. In the figure, D is the point where perpendicular from P meets the horizontal line CKD such that  $PD = \frac{1}{2} LD$  :



**What is the ratio between the distances covered by vehicles A and B in the time interval OL?**

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

**6. A train 200 metres long is moving at the rate of 40 kmph. In how many seconds will it cross a man standing near the railway line?**

- (a) 12                      (b) 15                      (c) 16                      (d) 18

**Directions for the following 4 (four) items :**

**Read the following four passages and answer the items that follow. Your answers to these items should be based on the passages only.**

### PASSAGE-1

Global population was around 1.6 billion in 1990-today it is around 7.2 billion and growing. Recent estimates on population growth predict a global population of 9.6 billion in 2050 and 10.9 billion in 2100. Unlike Europe and North America, where only three to four per cent of population is engaged in agriculture, around 47 per cent of India's population is dependent upon agriculture. Even if India continues to do well in the service sector and the manufacturing sector picks up, it is expected that around 2030 when India overtakes China as the world's most populous country, nearly 42 per cent of India's population will still be predominantly dependent on agriculture.

**7. Which of the following is the most logical and rational inference that can be made from the above passage?**

- (a) Prosperity of agriculture sector is of critical importance to India.  
(b) Indian economy greatly depends on its agriculture.  
(c) India should take strict measures to control its rapid population growth.  
(d) India's farming communities should switch over to other occupations to improve their economic conditions.

### PASSAGE-2

Many pathogens that cause foodborne illnesses are unknown. Food contamination can occur at any stage from farm to plate. Since most cases of food poisoning go unreported, the true extent of global foodborne illnesses is unknown. Improvements in international monitoring have led to greater public awareness, yet the rapid globalization of food production increases consumers' vulnerability by making food harder to regulate and trace. "We have the world on our plates", says an official of WHO.

**8. Which of the following is the most logical corollary to the above passage?**

- (a) With more options for food come more risks.  
(b) Food processing is the source of all foodborne illnesses.  
(c) We should depend on locally produced food only.  
(d) Globalization of food production should be curtailed.

**PASSAGE-3**

I am a scientist, privileged to be somebody who tries to understand nature using the tools of science. But it is also clear that there are some really important questions that science cannot really answer, such as : Why is there something instead of nothing? Why are we here? In those domains, I have found that faith provides a better path to answers. I find it oddly anachronistic that in today's culture there seems to be a widespread presumption that scientific and spiritual views are incompatible.

9. **Which of the following is the most logical and rational inference that can be made from the above passage?**

- (a) It is the faith and not science that can finally solve all the problems of mankind.
- (b) Science and faith can be mutually complementary if their proper domains are understood.
- (c) There are some very fundamental questions which cannot be answered by either science or faith.
- (d) In today's culture, scientific views are given more importance than spiritual views.

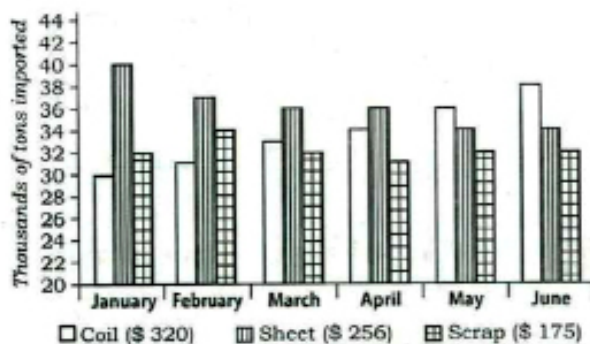
**PASSAGE - 4**

Though I have discarded much of past tradition and custom, and am anxious that India should rid herself of all shackles that bind and contain her and divide her people, and suppress vast numbers of them, and prevent the free development of the body and the spirit; though I seek all this, yet I do not wish to cut myself off from that past completely. I am proud of that great inheritance that has been and is, ours and I am conscious that I too, like all of us, am a link in that unbroken chain which goes back to the dawn of history in the immemorial past of India.

10. **The author wants India to rid herself of certain past bonds because**

- (a) He is not able to see the relevance of the past
- (b) There is not much to be proud of
- (c) He is not interested in the history of India
- (d) They obstruct her physical and spiritual growth

**Directions for the following 3 (three) items :**

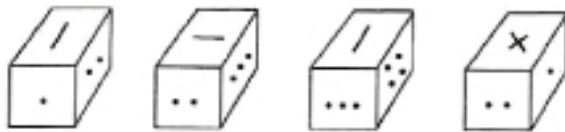


The following three items are based on the graph given below which shows imports of three different types of steel over a period of six months of a year. Study the graph and answer the three items that follow. The figures in the brackets indicate the average cost per ton over six months period.

11. By how much (measured in thousands of tons) did the import of sheet steel exceed the import of coil steel in the first three months of the year?  
(a) 11 (b) 15 (c) 19 (d) 23
12. What was the approximate total value (in \$) of sheet steel imported over the six months period?  
(a) 45,555 (b) 50,555  
(c) 55,550 (d) 65,750
13. What was the approximate ratio of sheet steel and scrap steel imports in the first three months of the year?  
(a) 1:1 (b) 1.2:1 (c) 1:4:1 (d) 1.6:1

**Directions for the following 3 (three) items:**

Rotated positions of a single solid are shown below. The various faces of the solid are marked with different symbols like dots, cross and line. Answer the three items that follow the given figures.



14. What is the symbol on the face opposite to that containing a single dot?  
(a) Four dots (b) Three dots (c) Two dots (d) Cross
15. What is the symbol on the face opposite to that containing two dots?  
(a) Single dot (b) Three dots (c) Four dots (d) Line
16. What is the symbol on the face opposite to that containing the cross?  
(a) Single dot (b) Two dots (c) Line (d) Four dots

**Directions for the following 4 (four) items:**

Read the following passage and answer the four items that follow. Your answers to these items should be based on the passage only.

**PASSAGE**

It is no longer enough for us to talk about providing for universal access to education. Making available schooling facilities is an essential prerequisite, but is insufficient to ensure that all children attend school and participate in the learning process. The school may be there, but children may not attend or they may drop out after a few months. Through school and social mapping, we must address the entire gamut of social, economic, cultural and indeed linguistic and pedagogic issues, factors that prevent children from weaker sections and disadvantaged groups, as also girls, from regularly attending and complementing elementary education. The focus must be on the poorest and most vulnerable since these groups are the most disempowered and at the greatest risk of violation or denial of their right to education.

The right to education goes beyond free and compulsory education to include quality education for all. Quality is an integral part of the right to education. If the education process lacks quality, children



are being denied their right. The Right of Children to Free and Compulsory Education Act lays down that the curriculum should provide for learning through activities, exploration and discovery. This places an obligation on us to change our perception of children as passive receivers of knowledge, and to move beyond the convention of using textbooks as the basis of examinations. The teaching-learning process must become stress-free; and a massive programme for curricular reform should be initiated to provide for a child-friendly learning system, that is more relevant and empowering. Teacher accountability systems and processes must ensure that children are learning, and that their right to learn in a child-friendly environment is not violated. Testing and assessment systems must be reexamined and redesigned to ensure that these do not force children to struggle between school and tuition centres, and bypass childhood.

**17. According to the passage, which of the following is/are of paramount importance under the Right to Education?**

1. Sending of children to school by all parents
2. Provision of adequate physical infrastructure in schools
3. Curricular reforms for developing child-friendly learning system

**Select the correct answer using the code given below.**

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

**18. With reference to the above passage, the following assumptions have been made :**

1. The Right to Education guarantees teachers' accountability for the learning process of children.
2. The Right to Education guarantees 100% enrolment of children in the schools.
3. The Right to Education intends to take full advantage of demographic dividend.

**Which of the above assumptions is/are valid?**

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

**19. According to the passage, which one of the following is critical in bringing quality in education?**

- (a) Ensuring regular attendance of children as well as teachers in school
- (b) Giving pecuniary benefits teachers to motivate them
- (c) Understanding the socio-cultural background of children
- (d) Inculcating learning activities and discovery

**20. What is the essential message in this passage?**

- (a) The Right to Education now is a Fundamental Right.
- (b) The Right to Education enables the children of poor and weaker sections of the society to attend schools.
- (c) The Right to Free and Compulsory Education should include quality education for all.
- (d) The Government as well as parents should ensure that all children attend schools.

**21. If LSJXVC is the code for MUMBAI, the code for DELHI is**

- (a) CCIDD                      (b) CDKGH                      (c) CCJFG                      (d) CCIFE

22. If RAMON is written as 12345 and DINESH as 675849, then HAMAM will be written as  
(a) 92233 (b) 92323 (c) 93322 (d) 93232
23. If X is between -3 and -1, and Y is between -1 and 1, then  $x^2 - y^2$  is in between which of the following?  
(a) -9 and 1 (b) -9 and -1 (c) 0 and 8 (d) 0 and 9
24. X and Y are natural numbers other than 1, and Y is greater than X. Which of the following represents the largest number?  
(a) XY (b) X/Y (c) Y/X (d) (X+Y) / XY

**Directions for the following 2 (two) items :**

Read the following information and answer the two items that follow. The plan of an office block for six officers A, B, C, D, E and F is as follows : Both B and C occupy offices to the right of the corridor (as one enters the office block) and A occupies on the left of the corridor. E and F occupy offices on opposite sides of the corridor but their offices do not face each other. The offices of C and D face each other. E does not have a corner office. F's office is further down the corridor than A's, but on the same side.

25. If E sits in his office and faces the corridor, whose office is to his left?  
(a) A (b) B (c) C (d) D
26. Who is/are F's immediate neighbour/ neighbours?  
(a) A only (b) A and D (c) C only (d) B and C

**Directions for the following 7 (seven) items:**

Read the following four passages and answer the items that follow. Your answers to these items should be based on the passages only.

**PASSAGE-1**

'Desertification' is a term used to explain a process of decline in the biological productivity of an ecosystem, leading to total loss of productivity. While this phenomenon is often linked to the arid, semi-arid and sub-humid ecosystems, even in the humid tropics, the impact could be most dramatic. Impoverishment of human-impacted terrestrial ecosystems may exhibit itself in a variety of ways : accelerated erosion as in the mountain regions of the country, salinization of land as in the semi-arid and arid 'green revolution' areas of the country, e.g., Haryana and western Uttar Pradesh, and site quality decline-a common phenomenon due to general decline in tree cover and monotonous monoculture of rice/wheat across the Indian plains. A major consequence of deforestation is that it relates to adverse alterations in the hydrology and related soil and nutrient losses. The consequences of deforestation invariably arise out of site degradation through erosive losses. Tropical Asia, Africa and South America have the highest levels of erosion. The already high rates for the tropics are increasing at an alarming rate (e.g., through the major river systems-Ganga and Brahmaputra, in the Indian context), due to deforestation and ill-suited land management practices subsequent to forest clearing. In the mountain context, the declining moisture retention of the mountain soils, drying up of the underground springs and smaller rivers in the Himalayan region could be attributed to

drastic changes in the forest cover. An indirect consequence is drastic alteration in the upland lowland interaction, mediated through water. The current concern the tea planter of Assam has is about the damage to tea plantations due to frequent inundation along the flood-plains of Brahmaputra, and the damage to tea plantation and the consequent loss in tea productivity is due to rising level of the river bottom because of siltation and the changing course of the river system. The ultimate consequences of site desertification are soil degradation, alteration in available water and its quality, and the consequent decline in food, fodder and fuel wood yields essential for the economic well-being of rural communities.

**27. According to the passage, which of the following are the consequences of decline in forest cover?**

1. Loss of topsoil
2. Loss of smaller rivers
3. Adverse effect on agricultural production
4. Declining of groundwater

**Select the correct answer using the code given below.**

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

**28. Which of the following is/are the correct inference/inferences that can be made from the passage?**

1. Deforestation can cause changes in the course of rivers.
2. Salinization of land takes place due to human activities only.
3. Intense monoculture practice in plains is a major reason for desertification in Tropical Asia, Africa and South America.

**Select the correct answer using the code given below.**

- (a) 1 only (b) 1 and 2 only (c) 2 and 3 only  
(d) None of the above is a correct inference

**29. With reference to desertification', as described in the passage, the following assumptions have been made :**

1. Desertification is a phenomenon in tropical areas only.
2. Deforestation invariably leads to floods and desertification.

**Which of the above assumptions is/are valid?**

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

## PASSAGE-2

A diversity of natural assets will be needed to cope with climate change and ensure productive agriculture, forestry, and fisheries. For example, crop varieties are needed that perform well under drought, heat, and enhanced CO<sub>2</sub>. But the private sector and farmer-led process of choosing crops favours homogeneity adapted to past or current conditions, not varieties capable of producing consistently high yields in warmer, wetter, or drier conditions. Accelerated breeding programmes are needed to conserve a wider pool of genetic resources of existing crops, breeds, and their wild

relatives. Relatively intact ecosystems, such as forested catchments, mangroves, wetlands, can buffer the impacts of climate change. Under a changing climate, these ecosystems are themselves at risk, and management approaches will need to be more proactive and adaptive. Connections between natural areas, such as migration corridors, may be needed to facilitate species movements to keep up with the change in climate.

**30. With reference to the above passage, which of the following would assist us in coping with the climate change?**

1. Conservation of natural water sources
2. Conservation of wider gene pool
3. Existing crop management practices
4. Migration corridors

**Select the correct answer using the code given below.**

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

**31. With reference to the above passage, the following assumptions have been made :**

1. Diversification of livelihoods acts as a coping strategy for climate change.
2. Adoption of monocropping practice leads to the extinction of plant varieties and their wild relatives.

**Which of the above assumptions is/are valid?**

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

### **PASSAGE-3**

Today, the top environmental challenge is a combination of people and their aspirations. If the aspirations are more like the frugal ones we had after the Second World War, a lot more is possible than if we view the planet as a giant shopping mall. We need to get beyond the fascination with glitter and understand that the planet works as a biological system.

**32. Which of the following is the most crucial and logical inference that can be made from the above passage?**

- (a) The Earth can meet only the basic needs of humans for food, clothing and shelter.
- (b) The only way to meet environmental challenge is to limit human population.
- (c) Reducing our consumerism is very much in our own interest.
- (d) Knowledge of biological systems can only help us save this planet.

### **PASSAGE-4**

Some people believe that leadership is a quality which you have at birth or not at all. This theory is false, for the art of leadership can be acquired and can indeed be taught. This discovery is made in time of war and the results achieved can surprise even the instructors. Faced with the alternatives of going left or right, every soldier soon grasps that a prompt decision either way is better than an endless discussion. A firm choice of direction has an even chance of being right while to do nothing will be almost certainly wrong.

**33. The author of the passage holds the view that**

- (a) Leadership can be taught through war experience only

- (b) Leadership can be acquired as well as taught  
(c) The results of training show that more people acquire leadership than are expected  
(d) Despite rigorous instruction, very few leaders are produced
34. A number consists of three digits of which the middle one is zero and their sum is 4. If the number formed by interchanging the first and last digits is greater than the number itself by 198, then the difference between the first and last digits is  
(a) 1 (b) 2 (c) 3 (d) 4
35. A solid cube of 3 cm side, painted on all its faces, is cut up into small cubes of 1 cm side. How many of the small cubes will have exactly two painted faces?  
(a) 12 (b) 8 (c) 6 (d) 4
36. While writing all the numbers from 700 to 1000, how many numbers occur in which the digit at hundred's place is greater than the digit at ten's place, and the digit at ten's place is greater than the digit at unit's place?  
(a) 61 (b) 64 (c) 85 (d) 91
37. If  $\text{Pen} < \text{Pencil}$ ,  $\text{Pencil} < \text{Book}$  and  $\text{Book} > \text{Cap}$ , then which one of the following is always true?  
(a)  $\text{Pen} > \text{Cap}$  (b)  $\text{Pen} < \text{Book}$  (c)  $\text{Pencil} = \text{Cap}$  (d)  $\text{Pencil} > \text{Cap}$
38. A bookseller sold 'a' number of Geography textbooks at the rate of ₹ x per book, 'a + 2' number of History textbooks at the rate of ₹ (x + 2) per book and 'a-2' number of Mathematics textbooks at the rate of ₹ (x - 2) per book. What is his total sale in ₹?  
(a)  $3x + 3a$  (b)  $3ax + 8$  (c)  $9ax$  (d)  $x^3a^3$
39. A bag contains 15 red balls and 20 black balls. Each ball is numbered either 1 or 2 or 3. 20% of the red balls are numbered 1 and 40% of them are numbered 3. Similarly, among the black balls, 45% are numbered 2 and 30% are numbered 3. A boy picks a ball at random. He wins if the ball is red and numbered 3 or if it is black and numbered 1 or 2. What are the chances of his winning?  
(a)  $\frac{1}{2}$  (b)  $\frac{4}{7}$  (c)  $\frac{5}{9}$  (d)  $\frac{12}{13}$
40. Two persons, A and B are running on a circular track. At the start, B is ahead of A and their positions make an angle of  $30^\circ$  at the centre of the circle. When A reaches the point diametrically opposite to his starting point, he meets B. What is the ratio of speeds of A and B, if they are running with uniform speeds?  
(a) 6:5 (b) 4:3 (c) 6:1 (d) 4:2
41. A student has to get 40% marks to pass in an examination. Suppose he gets 30 marks and fails by 30 marks, then what are the maximum marks in the examination?  
(a) 100 (b) 120 (c) 150 (d) 300
42. 19 boys turn out for playing hockey. Of these, 11 are wearing hockey shirts and 14 are wearing hockey pants. There are no boys without shirts and/or pants. What is the number of boys wearing full uniform?

(a) 3

(b) 5

(c) 6

(d) 8

**Directions for the following 6 (six) items :**

**Read the information given below and answer the six items that follow.**

A, B, C and D are students. They are studying in four different cities, viz., P, Q, R and S (not necessarily in that order). They are studying in Science college, Arts college, Commerce college and Engineering college (not necessarily in that order), which are situated in four different States, viz., Gujarat, Rajasthan, Assam and Kerala (not necessarily in that order). Further, it is given that

- (i) D is studying in Assam
- (ii) Arts college is located in city S which is in Rajasthan
- (iii) A is studying in Commerce college
- (iv) B is studying in city Q
- (v) Science college is located in Kerala

**43. A is studying in**

- (a) Rajasthan      (b) Gujarat      (c) City Q      (d) Kerala

**44. Science college is located in**

- (a) City Q      (b) City S      (c) City R      (d) City P

**45. C is studying in**

- (a) Science college      (b) Rajasthan      (c) Gujarat      (d) City Q

**46. Which one of the following statements is correct?**

- (a) D is not studying in city S.      (b) A is studying in Science college.  
(c) A is studying in Kerala.      (d) Engineering college is located in Gujarat.

**47. Which one of the following statements is correct regarding Engineering college?**

- (a) C is studying there.      (b) B is studying there.  
(c) It is located in Gujarat      (d) D is studying there.

**48. Which one of the following statements is correct?**

- (a) Engineering college is located in Assam.  
(b) City Q is situated in Assam.  
(c) C is studying in Kerala.  
(d) B is studying in Gujarat.

**Directions for the following 8 (eight) items:**

**Read the following eight passages and answer the items that follow. Your answers to these items should be based on the passages only.**

### PASSAGE-1

All actions to address climate change ultimately involve costs. Funding is vital in order for countries like India to design and implement adaptation and mitigation plans and projects. The problem is more severe for developing countries like India, which would be one of the hardest hit by climate change, given its need to finance development. Most countries do indeed treat climate change as real threat and are striving to address it in a more comprehensive and integrated manner with the limited

resources at their disposal,

**49. With reference to the above passage, the following assumptions have been made :**

1. Climate change is not a challenge for developed countries.
2. Climate change is a complex policy issue and also a development issue for many countries.
3. Ways and means of finance must be found to enable developing countries to enhance their adaptive capacity.

**Which of the above assumptions is/are valid?**

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

### PASSAGE-2

Cooking with biomass and coal in India is now recognized to cause major health problems, with women and children in poor populations facing the greatest risk. There are more than 10 lakh premature deaths each year from household air pollution due to polluting cooking fuels with another 1.5 lakh due to their contribution to general outdoor air pollution in the country. Although the fraction of the Indian population using clean cooking fuels, such as LPG, natural gas and electricity, is slowly rising, the number using polluting solid fuels as their primary cooking fuel has remained static for nearly 30 years at about 70 crore.

**50. Which of the following is the most crucial and logical inference that can be made from the above passage?**

- (a) Rural people are giving up the use of polluting solid fuels due to their increasing awareness of health hazards.
- (b) Subsidizing the use of clean cooking fuels will solve the problem of India's indoor air pollution.
- (c) India should increase its import of natural gas and produce more electricity.
- (d) Access to cooking gas can reduce premature deaths in poor households.

### PASSAGE-3

Scientific knowledge has its dangers, but so has every great thing. Over and beyond the dangers with which it threatens the present, it opens up as nothing else can, the vision of a possible happy world; a world without poverty, without war, with little illness. Science, whatever unpleasant consequences it may have by the way, is in its very nature a liberator.

**51. Which one of the following is the most important implication of the passage?**

- (a) A happy world is a dream of science.
- (b) Science only can build a happy world, but it is also the only major threat.
- (c) A happy world is not possible without science.
- (d) A happy world is not at all possible with or without science.

### PASSAGE - 4

The Arctic's vast reserves of fossil fuel, fish and minerals are now accessible for a longer period in

a year. But unlike Antarctica, which is protected from exploitation by the Antarctic Treaty framed during the Cold War and is not subject to territorial claims by any country, there is no legal regime protecting the Arctic from industrialization, especially at a time when the world craves for more and more resources. The distinct possibility of ice-free summer has prompted countries with Arctic coastline to scramble for great chunks of the melting ocean.

**52. Which one of the following is the most important implication of the passage?**

- (a) India can have territorial claims in the Arctic territory and free access to its resources.
- (b) Melting of summer ice in the Arctic leads to changes in the geopolitics.
- (c) The Arctic region will solve the world's future problem of resource crunch.
- (d) The Arctic region has more resources than Antarctica

### **PASSAGE-5**

Being a member of the WTO, India is bound by the agreements that have been signed and ratified by its members, including itself. According to Article 6 of the Agriculture Agreement, providing minimum support prices for agricultural products is considered distorting and is subject to limits. The subsidy arising from minimal supports' cannot exceed 10 per cent of the value of agricultural production for developing countries. PDS in India entails minimum support prices and public stockholding of food grains. It is possible that, in some years, the subsidy to producers will exceed 10 per cent of the value of agricultural production.

**53. What is the crucial message conveyed by the above passage?**

- (a) India should revise its PDS.
- (b) India should not be a member of WTO.
- (c) For India, food security collides with trade.
- (d) India provides food security to its poor.

### **PASSAGE-6**

India's educational system is modelled on the mass education system that developed in the 19th century in Europe and later spread around the world. The goal of the system is to condition children as 'good' citizens and productive workers. This suited the industrial age that needed the constant supply of a compliant workforce with a narrow set of capabilities. Our educational institutes resemble factories with bells, uniforms and batch-processing of learners, designed to get learners to conform. But, from an economic point of view, the environment today is very different. It is a complex, volatile and globally interconnected world.

**54. With reference to the above passage, the following assumptions have been made :**

1. India continues to be a developing country essentially due to its faulty education system.
2. Today's learners need to acquire new-age skill-sets.
3. A good number of Indians go to some developed countries for education because the educational systems there are a perfect reflection of the societies in which they function.

**Which of the above assumptions is/are valid?**

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



**PASSAGE-7**

The practice of dieting has become an epidemic; everyone is looking out for a way to attain that perfect body. We are all different with respect to our ethnicity, genetics, family history, gender, age, physical and mental and spiritual health status, lifestyles and preferences. Thereby we also differ in what foods we tolerate or are sensitive to. So we really cannot reduce so many complexities into one diet or diet book. This explains the failure of diets across the world in curbing obesity. Unless the reasons for weight gain are well understood and addressed and unless habits are changed permanently, no diet is likely to succeed.

**55. What is the most logical and rational inference that can be made from the above passage?**

- (a) Obesity has become an epidemic all over the world.
- (b) A lot of people are obsessed with attaining a perfect body.
- (c) Obesity is essentially an incurable disease.
- (d) There is no perfect diet or one solution for obesity.

**PASSAGE-8**

Monoculture carries great risks. A single disease or pest can wipe out swathes of the world's food production, an alarming prospect given that its growing and wealthier population will eat 70% more by 2050. The risks are magnified by the changing climate. As the planet warms and monsoon rains intensify, farmlands in Asia will flood. North America will suffer more intense droughts, and crop diseases will spread to new latitudes.

**56. Which of the following is the most logical, rational and crucial message given by the passage?**

- (a) Preserving crop genetic diversity is an insurance against the effects of climate change.
- (b) Despite great risks, monoculture is the only way to ensure food security in the world.
- (c) More and more genetically modified crops only can save the world from impending shortages of food.
- (d) Asia and North America will be worst sufferers from climate change and the consequent shortage of food.

**57. A shopkeeper sells an article at ₹ 40 and gets X% profit. However, when he sells it at ₹ 20, he faces same percentage of loss. What is the original cost of the article?**

- (a) ₹10
- (b) ₹20
- (c) ₹30
- (d) ₹40

**58. There are 24 equally spaced points lying on the circumference of a circle. What is the maximum number of equilateral triangles that can be drawn by taking sets of three points as the vertices?**

- (a) 4
- (b) 6
- (c) 8
- (d) 12

**59. Consider the sequence given below :**

4/12/95, 1/1/96, 29/1/96, 26/2/96, ....

**What is the next term of the series?**

- (a) 24/3/96
- (b) 25/3/96
- (c) 26/3/96
- (d) 27/3/96

60. Twelve equal squares are placed to fit in a rectangle of diagonal 5 cm. There are three rows containing four squares each. No gaps are left between adjacent squares. What is the area of each square?
- (a)  $\frac{5}{7}$  sq cm      (b)  $\frac{7}{5}$  sq cm      (c) 1 sq cm      (d)  $\frac{25}{12}$  sq cm

61. Consider the following graph :



Which one of the following statements is not correct with reference to the graph given above?

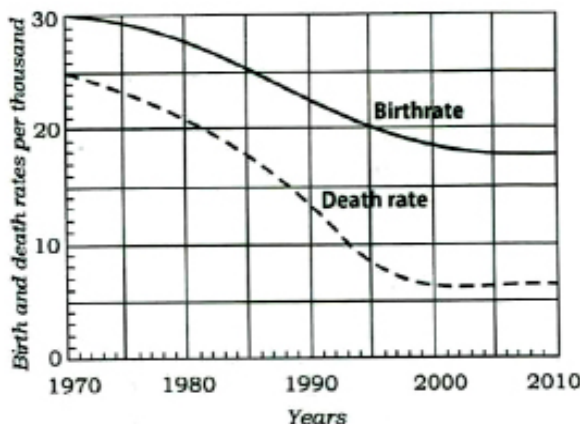
- (a) On 1st June, the actual progress of work was less than expected.  
 (b) The actual rate of progress of work was the greatest during the month of August.  
 (c) The work was actually completed before the expected time.  
 (d) During the period from 1st April to 1st September, at no time was the actual progress more than the expected progress.
62. For a sports meet, a winners' stand comprising three wooden blocks is in the following form :



There are six different colours available to choose from and each of the three wooden blocks is to be painted such that no two of them has the same colour. In how many different ways can the winners' stand be painted?

- (a) 120      (b) 81      (c) 66      (d) 36

Directions for the following 2 (two) items :

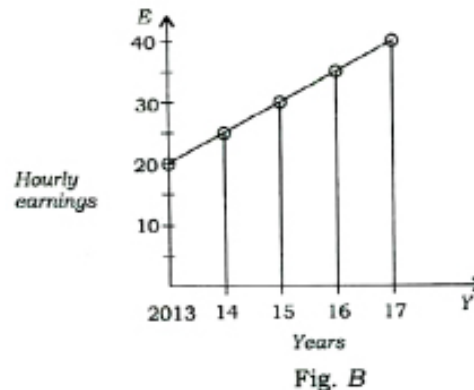
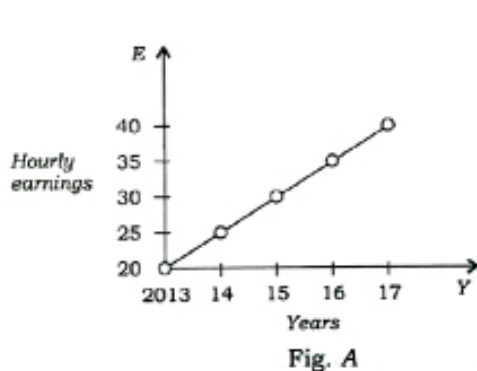


Consider the following graph in which the birth rate and death rate of a country are given, and answer the two items that follow.

63. Looking at the graph, it can be inferred that from 1990 to 2010.
- population growth rate has increased
  - population growth rate has decreased
  - growth rate of population has remained stable
  - population growth rate shows no trend
64. With reference to the above graph, consider the following statements considering 1970 as base year :
- Population has stabilized after 35 years.
  - Population growth rate has stabilized after 35 years.
  - Death rate has fallen by 10% in the first 10 years.
  - Birth rate has stabilized after 35 years.

Which of the above are the most logical and rational statements that can be made from the above graph?

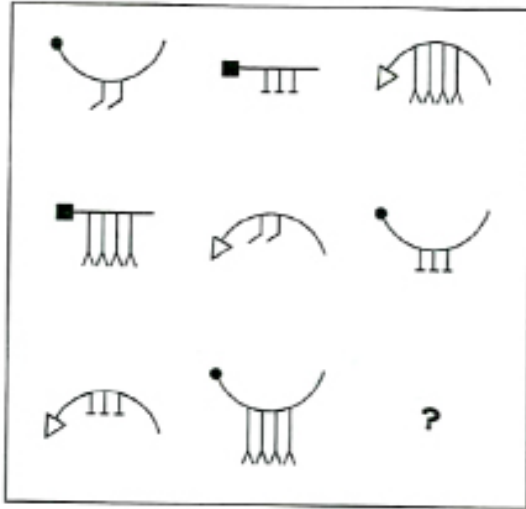
- (a) 1 and 2 only      (b) 1, 2 and 3      (c) 3 and 4      (d) 2 and 4
65. Average hourly earnings per year (E) of the workers in a firm are represented in figures A and B as follows:



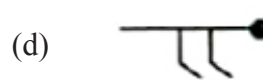
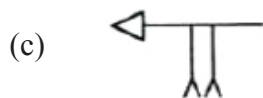
From the figures, it is observed that the

- values of E are different
- ranges (i.e., the difference between the maximum and the minimum) of E are different
- slopes of the graphs are same
- rates of increase of E are different

66. Consider the figures given below



To fit the question mark, the correct answer is



67. Consider the following figures A and B :

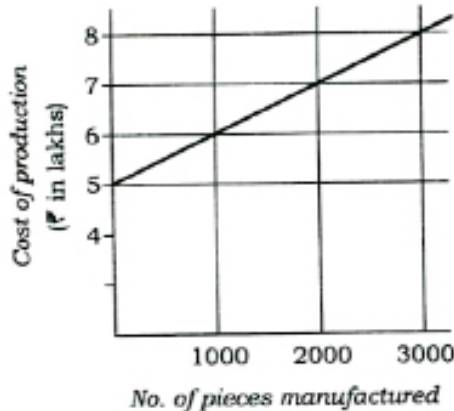


Fig. A

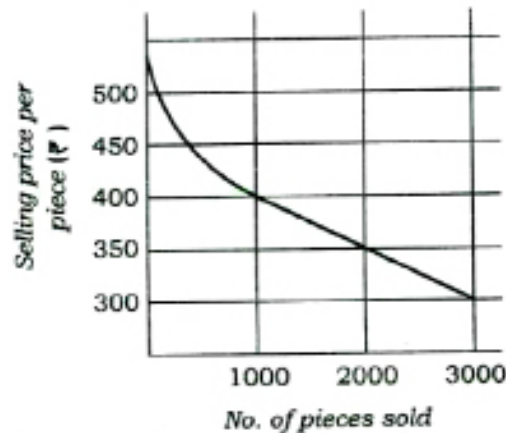


Fig. B

The manufacturing cost and projected sales for a product are shown in the above figures A and B respectively. What is the minimum number of pieces that should be manufactured to avoid a loss?

- (a) 2000                      (b) 2500                      (c) 3000                      (d) 3500

68. A lift has the capacity of 18 adults or 30 children. How many children can board the lift with 12 adults?

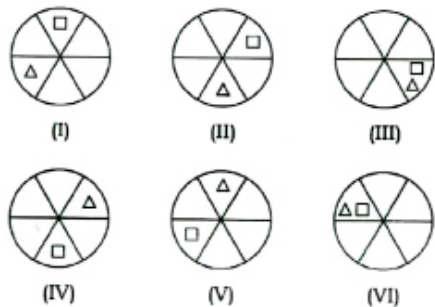
- (a) 6                              (b) 10                              (c) 12                              (d) 15

69. A person bought a refrigerator worth ₹ 22,800 with 12.5% interest compounded yearly. At the end of first year he paid ₹ 8,650 and at the end of second year ₹ 9,125. How much

will he have to pay at the end of third year to clear the debt?

- (a) ₹ 9,990      (b) ₹ 10,000      (c) ₹ 10,590      (d) ₹ 11,250

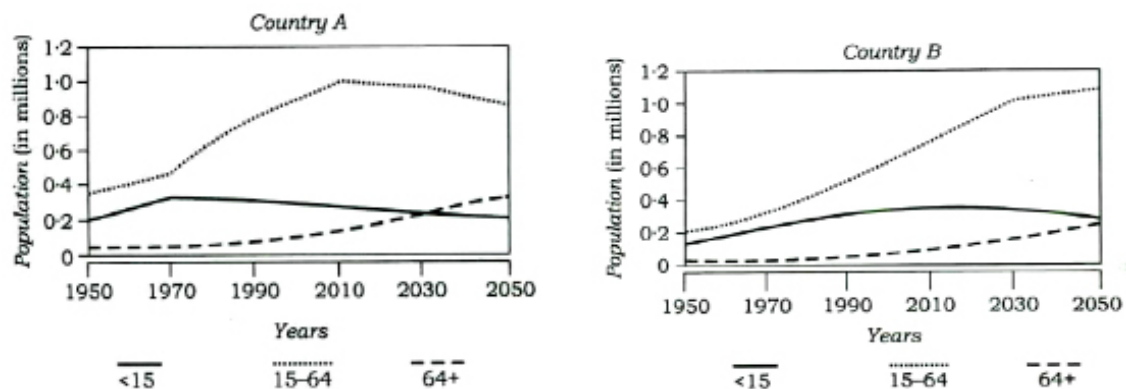
70. Consider the following figures :



In the figures (I) to (VI) above, some parts are shown to change their positions in regular directions. Following the same sequence, which of the figures given below will appear at (VII) stage?



71. Consider the following graphs. The curves in the graphs indicate different age groups in the populations of two countries A and B over a period of few decades:



With reference to the above graphs, which of the following are the most logical and rational inferences that can be made?

- Over the last two and a half decades, the dependency ratio for country B has decreased.
- By the end of next two and a half decades, the dependency ratio of country A will be much less than that of country B.
- In the next two decades, the work force relative to its total population will increase in country B as compared to country A.

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

72. Lakshmi, her brother, her daughter and her son are badminton players. A game of

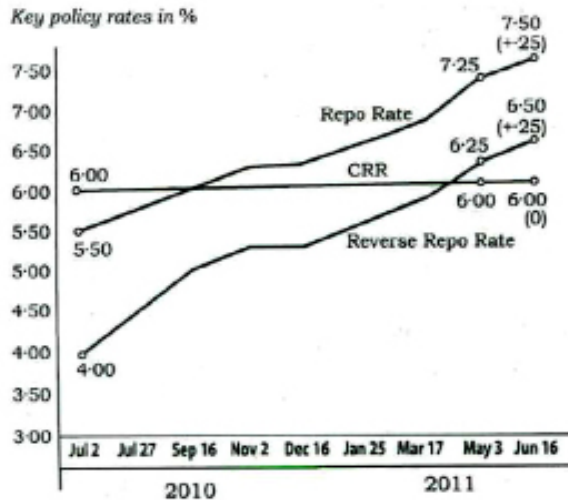
**doubles is about to begin :**

- (i) Lakshmi's brother is directly across the net from her daughter.
- (ii) Her son is diagonally across the net from the worst player's sibling.
- (iii) The best player and the worst player are on the same side of the net.

**Who is the best player?**

- (a) Her brother
- (b) Her daughter
- (c) Her son
- (d) Lakshmi

73. The graph given below indicates the changes in key policy rates made by the Central



**Which one of the following can be the most likely reason for the Central Bank for such an action?**

- (a) Encouraging foreign investment
- (b) Increasing the liquidity
- (c) Encouraging both public and private savings
- (d) Anti-inflationary stance

**Directions for the following 2 (two) items :**

The following table gives the GDP growth rate and Tele-density data of different States of a country in a particular year. Study the table and answer the two items that follow.

States	Per capita income (\$)	GDP growth rate (%)	Tele-density
State 1	704	9.52	70.27
State 2	419	5.31	35.88
State 3	254	10.83	50.07
State 4	545	9.78	5.94
State 5	891	10.8	76.12
State 6	1077	11.69	77.5
State 7	900	8.88	104.86
State 8	395	5.92	6
State 9	720	7.76	82.25
State 10	893	9.55	96.7
State 11	363	4.7	57.7

State 12	966	7.85	63.8
State 13	495	9.37	52.3
State 14	864	5.46	97.9
State 15	497	7.48	62.3
State 16	777	7.03	93.8
State 17	335	5.8	49.9
State 18	599	7.49	47.84

74. With reference to the above table, which of the following is/are the most logical and rational inference/ inferences that can be made?

- Higher per capita income is generally associated with higher Tele-density.
- Higher GDP growth rate always ensures higher per capita income.
- Higher GDP growth rate does not necessarily ensure higher Tele density.

Select the correct answer using the code given below.

- (a) 1 only                      (b) 2 and 3                      (c) 1 and 3                      (d) 3 only

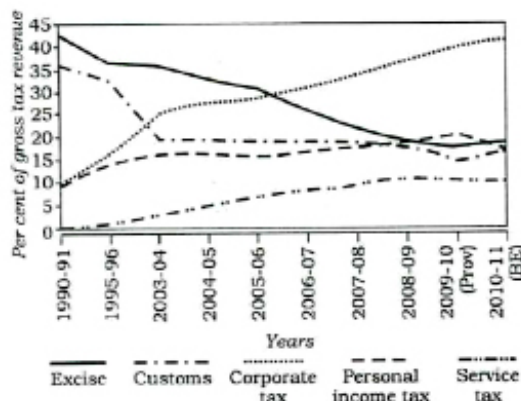
75. With reference to the above table, the following assumptions have been made :

- Nowadays, prosperity of an already high performing State cannot be sustained without making further large investments in its telecom infrastructure.
- Nowadays, a very high Tele-density is the most essential condition for promoting the business and economic growth in a State.

Which of the above assumptions is/are valid?

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

76. The following graph indicates the composition of our tax revenue for a period of two decades :



With reference to the above graph, which of the following is/are the most logical and rational inference/ inferences that can be made?

- During the given period, the revenue from Direct Taxes as percentage of gross tax revenue has increased while that of Indirect Taxes decreased.
- The trend in the revenue from Excise Duty demonstrates that the growth of manufacturing sector has been negative during the given period.

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

77. If  $x - y = 8$ , then which of the following must be true?

1. Both  $x$  and  $y$  must be positive for any value of  $x$  and  $y$ .
2. If  $x$  is positive,  $y$  must be negative for any value of  $x$  and  $y$ .
3. If  $x$  is negative,  $y$  must be positive for any value of  $x$  and  $y$ .

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 nor 3

**Directions for the following 3 (three) items :**

**Read the following two passages and answer the items that follow. Your answers to these items should be based on the passages only.**

### PASSAGE-1

The quest for cheap and plentiful meat has resulted in factory farms where more and more animals are squeezed into smaller lots in cruel and shocking conditions. Such practices have resulted in many of the world's health pandemics such as the avian flu. Worldwide, livestock are increasingly raised in cruel, cramped conditions, where animals spend their short lives under artificial light, pumped full of antibiotics and growth hormones, until the day they are slaughtered. Meat production is water-intensive. 15000 litres of water is needed for every kilogram of meat compared with 3400 litres for rice, 3300 litres for eggs and 255 litres for a kilogram of potatoes.

78. What is the most rational and crucial message given by the passage?

- (a) Mass production of meat through industrial farming is cheap and is suitable for providing protein nutrition to poor countries.
- (b) Meat-producing industry violates the laws against cruelty to animals.
- (c) Mass production of meat through industrial farming is undesirable and should be stopped immediately.
- (d) Environmental cost of meat production is unsustainable when it is produced through industrial farming.

### PASSAGE-2

A male tiger was removed from Pench Tiger Reserve and was relocated in Panna National Park. Later, this tiger trekked toward his home 250 miles away. The trek of this solitary tiger highlights a crisis. Many wildlife reserves exist as islands of fragile habitat in a vast sea of humanity, yet tigers can range over a hundred miles, seeking prey, mates and territory. Nearly a third of India's tigers live outside tiger reserves, a situation that is dangerous for both human and animal. Prey and tigers can only disperse if there are recognized corridors of land between protected areas to allow unmolested passage.

79. Which of the following is the most rational and crucial message given by the passage?



- (a) The conflict between man and wildlife cannot be resolved, no matter what efforts we make.
- (b) Safe wildlife corridors between protected areas is an essential aspect of conservation efforts.
- (c) India needs to declare more protected areas and set up more tiger reserves.
- (d) India's National Parks and Tiger Reserves need to be professionally managed.

**80. With reference to the above passage, the following assumptions have been made :**

1. The strategy of conservation of wildlife by relocating them from one protected area to another is not often successful.
2. India does not have suitable legislation to save the tigers, and its conservation efforts have failed which forced the tigers to live outside protected areas.

**Which of the above assumptions is/are valid?**

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