

1. Which one of the following is the first and the oldest Government-owned coal mining company in India ?
- (a) Neyveli Lignite Corporation
 - (b) Singareni Collieries Company Limited
 - (c) Coal India Limited
 - (d) Mahanadi Coalfields Limited ✓

2. Which one of the following is a tributary of Barak River in Manipur ?
- (a) Dhaleswari
 - (b) Subansiri
 - (c) Dhansiri
 - (d) Manas

3. Which types of vegetation will you find on the way as you travel from Bikaner to Konark by road by shortest distance ?
- (a) Tropical thorny, Desert, Moist deciduous, Mangrove ✓
 - (b) Desert, Tropical thorny, Moist deciduous, Mangrove ✓
 - (c) Moist deciduous, Tropical thorny, Mangrove, Desert
 - (d) Desert, Tropical thorny, Mangrove, Moist deciduous

4. Consider the following statements about Karewas :
1. These are the lacustrine deposits of Pleistocene period.
 2. These are found along the lower slopes of Pir Panjal.
 3. Karewas are well known for the cultivation of saffron, almond and walnut.
- How many of the above statements is/are correct ?
- (a) 1
 - (b) 2 ✓
 - (c) 3
 - (d) None

5. Consider the following statements about an Indian State :
1. It is well known globally for its variety of rocks and minerals.
 2. It has the largest deposits of Chrysotile Asbestos in the country.
 3. The Neelam Sanjiva Reddy Sagar Hydel Project is located in this State.

Identify the State from the following :

- (a) Jharkhand
- (b) Rajasthan
- (c) Andhra Pradesh
- (d) Chhattisgarh

6. During 2020 – 21, when India was passing through the adverse effects of COVID-19, which one of the following sectors witnessed positive growth ?
- (a) Mining and quarrying
 - (b) Electricity, gas, water supply and other utility services ✓
 - (c) Financial, real estate and professional services
 - (d) Public administration, defence and other services

7. Which one of the following statements about a borrower from a Microfinance Company is **not** correct ?
- (a) The borrower should not have annual income beyond a limit.
 - (b) The borrower should not seek loan amount beyond a limit.
 - (c) The borrower should not refuse to offer a collateral.
 - (d) The borrower should not refuse to pay any rate of interest offered.

8. Which one of the following statements about Non-Banking Financial Companies (NBFCs) is **not** correct ?
- NBFCs cannot accept demand deposits.
 - NBFCs cannot give loans.
 - NBFCs cannot issue cheques drawn on themselves.
 - NBFCs cannot offer deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation.
9. The Department for Promotion of Industry and Internal Trade (DPIIT) has revised the base year index of Eight Core Industries having a combined weight of about 40.27 percent in the Index of Industrial Production. Which one of the following is **not** one of the Eight Core Industries ?
- Coal
 - Refinery products
 - Rubber products
 - Cement
10. Consider the following statements about the Micro, Small and Medium Enterprises (MSMEs) :
- The MSMEs comprise a dynamic sector of the Indian economy providing large employment opportunities.
 - MSMEs require low capital cost and help industrialization of backward regions.
 - MSMEs contribute enormously to socio-economic development.
- How many of the above statements is/are correct ?
- None
 - 1
 - 2
 - 3
11. Stinging hair of nettle leaves inject fluid in the human body causing burning pain. The fluid is
- Methanoic acid
 - Tartaric acid
 - Hydrochloric acid
 - Sulphuric acid
12. Milk of Magnesia is used when people suffer from indigestion of food. It is a
- Strong base
 - Mild base
 - Strong acid
 - Mild acid
13. Which one of the following pairs of metals are very good conductors of heat ?
- Silver and Copper
 - Silver and Lead
 - Copper and Mercury
 - Lead and Mercury
14. School bells are made of metals because metals are
- Malleable
 - Sonorous
 - Ductile
 - Lustrous

15. Consider the following statements about Tincture of Iodine :

1. It is an antiseptic solution.
2. Iodine is kept in alcohol-water mixture.
3. Concentration of iodine is very low.

How many of the above statements is/are correct ?

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

16. Cl^- is *not* isoelectronic with

- (a) K^+
- (b) Mg^{2+}
- (c) S^{2-}
- (d) P^{3-}

17. In plant cells

- (a) Nucleus does not need a membrane but chloroplasts are surrounded by their own membrane.
- (b) Nucleus and chloroplasts are surrounded separately by their own membrane.
- (c) Nucleus is surrounded by membrane but chloroplasts do not need membrane.
- (d) Both nucleus and chloroplasts are not surrounded by any membrane.

18. Which one of the following statements about starch and glycogen is correct ?

- (a) Both starch and glycogen are found in plant cells.
- (b) Both starch and glycogen are found in animal cells.
- (c) Starch is present in plant cells and glycogen is present in animal cells.
- (d) Both starch and glycogen are present in plant cells as well as animal cells.

19. Which one of the following statements about the process of photosynthesis is correct ?

- (a) Light energy is directly converted to kinetic energy which oxidizes carbon dioxide.
- (b) Light energy is directly converted to chemical energy which causes reduction of water.
- (c) Chlorophyll absorbs the chemical energy of light which causes oxidation of carbon dioxide.
- (d) Chlorophyll absorbs light energy which causes splitting of water molecules and reduction of carbon dioxide.

20. Kwashiorkor, a form of malnutrition, is caused by the deficiency of

- (a) Minerals
- (b) Vitamins
- (c) Fats
- (d) Proteins

21. Which one of the following pairs of enzymes do **not** work at acidic pH?

- (a) Trypsin and Pepsin
- (b) Chymotrypsin and Pepsin
- (c) Trypsin and Amylase
- (d) Pepsin and Amylase

22. Urea is produced by metabolism of

- (a) Proteins
- (b) Carbohydrates ✓
- (c) Lipids
- (d) Both Proteins and Carbohydrates

23. Deficiency of iron causes

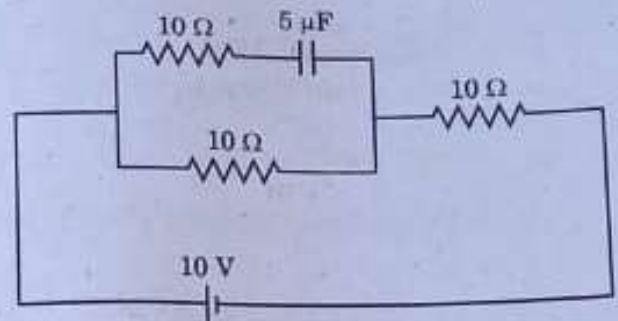
- (a) Anaemia ✓
- (b) Scurvy
- (c) Rickets
- (d) Cholera

24. If an object of mass 10 kg is moving with a uniform speed of 10 m/s, then the linear momentum and the kinetic energy of the object, respectively, are

- (a) 100 N.s and 500 J ✓
- (b) 100 N.s and 1000 J
- (c) 200 N.s and 500 J
- (d) 200 N.s and 1000 J

$100 \times 10 = 1000$
 $\frac{1}{2} \times 10 \times 10^2 = 500$
 100 kg m/sec
 100×10

25. An electrical circuit having combinations of resistances and capacitance is given below. The current, flowing through the circuit will be



- (a) 1 A
- (b) 2 A ✓
- (c) 1.5 A ✓
- (d) 0.5 A

$\frac{1}{6} + \frac{1}{10} = \frac{4}{15}$
 $\frac{15}{4} = 3.75$
 $10 \div 3.75 = 2.67$
 $\frac{10}{1.5} = 6.67$
 $\frac{10}{1.5} = 6.67$

26. The pitch of a sound wave depends upon which one of its following characteristics?

- (a) Speed
- (b) Loudness
- (c) Amplitude ✗
- (d) Frequency ✓

$\frac{10}{10} = 1$
 $\frac{10}{10} = 1$
 $\frac{10}{10} = 1$

27. The device used for measuring electric current in a circuit is called

- (a) Ammeter ✓
- (b) Motor
- (c) Voltmeter
- (d) Generator

28. A metal wire of length l and diameter d has a resistance R . What would be the resistance of another wire of the same metal and of same length but having double the diameter?

- (a) R
- (b) $R/4$ ✓
- (c) $R/2$
- (d) $2R$

$R = \rho \frac{l}{A}$
 $R = \rho \frac{l}{\pi r^2}$
 $R = \rho \frac{l}{\pi (2r)^2}$
 $R = \rho \frac{l}{4\pi r^2}$
 $R = \frac{R}{4}$

29. In India, which one of the following is responsible for the implementation of the Government of India's policy in all matters concerning telecommunications ?

- (a) Digital Communications Commission
- (b) Telecom Regulatory Authority of India ✓
- (c) Telecom Advisory Committee
- (d) Telecommunications Consultants India Limited

30. Consider the following statements about James Webb Space Telescope (JWST) :

- 1. It is the largest observatory ever launched into space.
- 2. It has been developed by NASA in partnership with the European Space Agency and the Canadian Space Agency.

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

31. India has achieved the 10 percent Ethanol blending much ahead of the targeted date. Which one among the following greatly benefits from this ?

- (a) Cassava plantations
- (b) Maize farming
- (c) Sugar industry
- (d) Wine industry

32. Consider the following statements regarding e-RUPI prepaid digital vouchers :

- 1. The maximum amount of e-RUPI is rupees one lakh.
- 2. Beneficiaries can receive e-RUPI without having a bank account.
- 3. To receive e-RUPI on mobile phones, beneficiaries need a smart phone with Internet connection.

Which of the statements given above is/are correct ?

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

33. Recently, India's first green hydrogen-based advanced fuel cell electric vehicle (FCEV) was launched. It has no tailpipe emissions other than

- (a) Hydrogen peroxide ✓
- (b) Nitrogen -
- (c) Oxygen
- (d) Water

34. Which one of the following languages was added to the Eighth Schedule by a Constitutional Amendment in 1967 ?

- (a) Khasi
- (b) Kashmiri
- (c) Sindhi
- (d) Urdu

35. What were *Manigramam* and *Nanadesi* in early medieval India ?

- (a) Cluster of non-revenue paying villages
- (b) Village-level community groups
- (c) Guilds of Indian merchants
- (d) Literary societies in the capital towns

36. The Dutch were defeated by Marthanda Varma of Travancore Kingdom in the battle of
- Wandiwash
 - Rakshasi - Tangadi
 - Pullalur
 - Colachel
37. To which one of the following schools of philosophy did Kumarila Bhatta and Prabhakara belong ?
- Lokayata
 - Madhyamika
 - Purva-Mimamsa
 - Uttara-Mimamsa
38. The *Tolkappiyam* is
- A work of grammar.
 - A Tamil poem in praise of Rajendra Chola.
 - An ancient didactic work in Tamil.
 - A drama composed by a Chera King.
39. On the banks of which one of the following rivers was the ancient Mahishmati located ?
- Sarayu
 - Son
 - Narmada
 - Godavari
40. Which one of the following statements about the Public Accounts Committee (PAC) of the Parliament is **not** correct ?
- It examines the Finance Accounts of the Government of India.
 - Fifteen members of the Committee are elected by the Lok Sabha from amongst its members.
 - The Chairperson of the Committee is elected by its members.
 - In case a member of any other Committee constituted by the Government is elected to the PAC, the Speaker of the Lok Sabha decides whether he should continue to be a member of the former Committee.

41. Consider the following :

- M.A. Ayyangar
- G.S. Dhillon
- Balram Jakhar
- P.A. Sangma

How many of them were the Speaker of the Lok Sabha ?

- 1
- 2
- 3
- 4

42. Consider the following pairs of Schedule and Content of the Constitution of India :

- First Schedule : Forms of Oaths or Affirmations
- Third Schedule : Allocation of seats in the Council of States
- Fifth Schedule : Provisions related to the administration of Scheduled Areas and Scheduled Tribes
- Ninth Schedule : Provisions related to the administration of tribal areas in certain States

How many of the above pairs is/are correctly matched ?

- 1
- 2
- 3
- 4

43. Which one of the following statements is correct ?

- (a) Under Article 21A of the Constitution of India, the State shall provide free and compulsory education to all children up to the age of eleven years.
- (b) Every religious denomination has got absolute power under Article 26 of the Constitution of India to manage its own affairs in matters of religion.
- (c) Only religious and linguistic minorities find mention in Article 30 of the Constitution of India in reference to the right to establish educational institutions of their choice.
- (d) Parliament cannot empower, even by law, any court other than the Supreme Court of India the power to issue writs within local limits of its jurisdiction.

44. Which one of the following do *not* influence the ocean currents ?

- (a) Heating by solar energy
- (b) Wind
- (c) Gravitational pull by Sun and Moon
- (d) Coriolis force

45. Which one of the following sedimentary rocks has *not* been formed mechanically ?

- (a) Sandstone
- (b) Conglomerate
- (c) Loess
- (d) Geysrites

46. Which of the following statements about inversion of temperature is/are correct ?

- 1. Temperature increases with increasing altitude.
- 2. A long winter night with clear skies is an ideal situation.
- 3. It is a short term phenomenon and is common all over the globe except at the poles.

Select the correct answer using the code given below :

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

47. In which one of the following States/UT, is the Lake Tsomgo located ?

- (a) Ladakh
- (b) Himachal Pradesh
- (c) Sikkim
- (d) Uttarakhand

48. Which of the following statements about the coasts of India is/are correct ?

- 1. The West Coast of India is a high rocky, retreating coast.
- 2. The West Coast of India is dominated by erosional landforms.
- 3. The East Coast of India, however, is a low sedimentary coast exhibiting depositional forms.

Select the correct answer using the code given below :

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

49. Which one of the following States/UTs has the largest area under Coral Reefs in India ?

- (a) Gujarat
- (b) Tamil Nadu
- (c) Andaman and Nicobar Islands
- (d) Lakshadweep ✓

50. Which one of the following is considered as an agency function of commercial banks in India ?

- (a) Acceptance of deposits
- (b) Investment of surplus funds
- (c) Acceptance of income tax payments
- (d) Providing overdraft facilities

51. Which one of the following forms of money supply is considered as the most widely used in the Indian monetary system ?

- (a) M1
- (b) M2
- (c) M3
- (d) M4

52. Which one of the following is the first State in India to have 100 percent households with tap water connection ?

- (a) Gujarat
- (b) Goa ✓
- (c) Delhi ✓
- (d) Andhra Pradesh

53. Which one of the following Labour Codes notified by the Government of India incorporated various provisions of the Central Labour Acts such as the Factories Act, 1948 and Plantations Labour Act, 1951 ?

- (a) The Occupational Safety, Health and Working Conditions Code, 2020
- (b) The Industrial Relations Code, 2020
- (c) The Code on Wages, 2019
- (d) The Code on Social Security, 2020

54. If you were to browse a table of a recent period showing life expectancy at birth for all categories of rural-urban and male-female divisions for all States of India, you are *not* likely to observe that

1. Urban life expectancy is higher than the rural one.
2. Male life expectancy is higher than the female one.

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

55. Consider the following statements :

The Government is promoting the 'Kisan Drone' for

1. Spraying weedicides.
2. Digitisation of land records.
3. Crop assessment.

Which of the statements given above is/are correct ?

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