

Time : 1hr 40 mins

Total Marks : 400

Important Instructions :

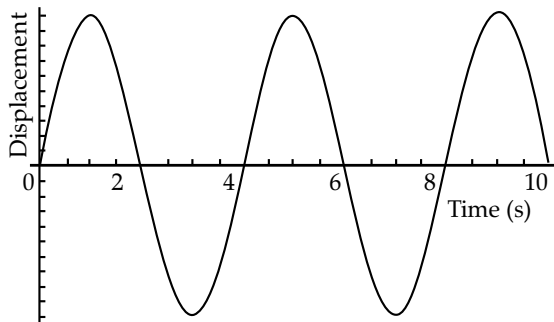
1. This Test contains 100 items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case, you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
2. You have to mark all your responses **ONLY** on the separate Answer Sheet provided.
3. All items carry equal marks.
4. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions.
5. Penalty for wrong answers:
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

1. Which one of the following devices changes low voltage alternating current to high voltage alternating current and vice versa?
(a) Generator (b) Motor
(c) Transformer (d) Vibrator
2. An optical illusion which occurs mainly in deserts during hot summer is based on the principle of
(a) Reflection
(b) Interference
(c) Dispersion
(d) Total internal reflection
3. At which place Earth's magnetic field becomes horizontal?
(a) Magnetic meridian (b) Magnetic equator
(c) Geographical pole (d) Tropic of Cancer
4. The speed of a car travelling on a straight road is listed below at successive intervals of 1 s:
Time (s) 0 1 2 3 4
Speed (m/s) 0 2 4 6 8
Which of the following is/are correct?
The car travels
(1) with a uniform acceleration of 2 m/s².
(2) 16 m in 4 s.
(3) with an average speed of 4 m/s.
5. Select the correct answer using the code given below:
(a) 1, 2 and 3 (b) 2 and 3 only
(c) 1 and 2 only (d) 1 only
6. The speed of a body that has Mach number more than 1 is
(a) supersonic (b) subsonic
(c) 300 m/s (d) about 10 m/s
7. Molecules of which of the following has cage like structure?
(1) Diamond
(2) Graphite
(3) Fullerenes
Select the correct answer using the code given below:
(a) 1, 2 and 3
(b) 2 and 3 only
(c) 2 only
(d) 3 only
8. Temporary hardness in water is due to which one of the following of Calcium and Magnesium?
(a) Hydrogencarbonates
(b) Carbonates
(c) Chlorides
(d) Sulphates

8. Stung by hairs of nettle leaves causes burning pain. This is due to the injection of
 (a) Acetic acid (b) Methanoic acid
 (c) Sulphuric acid (d) Hydrochloric acid
9. Which one of the following elements is least reactive with water?
 (a) Lithium (b) Sodium
 (c) Potassium (d) Cesium
10. Rutherford's alpha-particle scattering experiment was responsible for the discovery of
 (a) Electron (b) Proton
 (c) Nucleus (d) Helium
11. Glass is a
 (a) liquid
 (b) colloid
 (c) non-crystalline amorphous solid
 (d) crystalline solid
12. Cell wall of any fungus is different from plants in having
 (a) cellulose (b) chitin
 (c) cholesterol (d) glycogen
13. Sleeping sickness is a parasitic disease of humans and other animals. It is caused by
 (a) *Histomonas* (b) *Trypanosoma*
 (c) *Angomonas* (d) *Naegleria*
14. Which one of the following agencies enforces the laws on food security in India?
 (a) FDA (b) WHO
 (c) FSSAI (d) FAO
15. Dengue virus causes high fever, rashes and reduces the number of a particular type of blood cells. Those blood cells are
 (a) Monocytes (b) Platelets
 (c) Eosinophils (d) Neutrophils
16. Kidney secretes an enzyme, which changes plasma protein angiotensinogen into angiotensin. The enzyme is
 (a) Renin (b) Nitrogenase
 (c) Hydrolase (d) Mono-oxygenase
17. Red blood cells (RBCs) have
 (a) no nucleus, no mitochondria and no endoplasmic reticulum
 (b) nucleus, mitochondria and endoplasmic reticulum
 (c) nucleus, mitochondria but no endoplasmic reticulum
 (d) no mitochondria but endoplasmic reticulum is present
18. According to the Census 2011, the density of population in which one among the following States is the lowest?
 (a) Sikkim (b) Nagaland
 (c) Manipur (d) Mizoram
19. Headquarters of the World Meteorological Organization is located in
 (a) Washington (b) Geneva
 (c) Moscow (d) London
20. Match List I with List II and select the correct answer using the code given below the Lists:
- | List I
(Industry) | List II
(Place) |
|----------------------|--------------------|
| (A) Petrochemical | (1) Coimbatore |
| (B) Aircraft | (2) Pinjore |
| (C) Machine tools | (3) Bengaluru |
| (D) Cotton textiles | (4) Bongaigaon |
- Code:**
- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 4 | 3 | 2 | 1 |
| (b) | 4 | 2 | 3 | 1 |
| (c) | 1 | 2 | 3 | 4 |
| (d) | 1 | 3 | 2 | 4 |
21. Consider the following statements pertaining to Coffee plantation in India:
 (1) Need warm and moist climate with a spell of dry weather during the ripening period.
 (2) Rolling fields having good drainage.
 (3) Strong sunshine over hilly slopes exceeding temperature 35° C.
 (4) Karnataka is the leading producer in India.
 Which of the statements given above are correct?
 (a) 1 and 4 only
 (b) 1, 2 and 3
 (c) 3 and 4
 (d) 1, 2 and 4
22. Dr. Urjit Patel, who has been appointed recently as Governor of Reserve Bank of India, was holding which position immediately prior to this appointment?
 (a) Chief Economist, IMF
 (b) Deputy Governor, Reserve Bank of India
 (c) Chief Economic Advisor to the Government of India
 (d) Professor of Economics at Harvard University

23. Who among the following personalities is NOT a Governor of any Indian State?
 (a) Najma Heptulla
 (b) Ram Nath Kovind
 (c) Acharya Dev Vrat
 (d) Arvind Subramaniam
24. Which of the following cricket teams was defeated by India to lift the Women's Twenty 20 Asia Cup 2016?
 (a) Bangladesh (b) Sri Lanka
 (c) Pakistan (d) Afghanistan
25. Which one of the following was the venue of 2nd BRICS Youth Summit of the Ministers, Officials and Youth Delegations?
 (a) New Delhi (b) Mumbai
 (c) Shillong (d) Guwahati
26. Which one among the following states of India has recently proposed to frame the first Internal Security Act to deal with the challenges of terrorism, insurgency, communalism and caste violence?
 (a) Maharashtra (b) Gujarat
 (c) Uttar Pradesh (d) Chhattisgarh
27. The World Humanitarian Day is being observed every year on which date?
 (a) 24 October (b) 19 August
 (c) 10 December (d) 8 March
28. Surge pricing takes place when a service provider
 (a) raises the price of its product or service as demand outstrips supply.
 (b) follows preset prices immune to demand and supply dynamics.
 (c) fixes a minimum price for its services.
 (d) fixes an average price on the basis of transactions carried over a day.
29. By fulfilling which of the following conditions can a political party claim the status of a national party?
 (1) It secures at least six per cent (6%) of the valid votes polled in any four or more states, at a general election to the House of the People or, to the State Legislative Assembly.
 (2) It wins at least four seats in the House of the People from any State or States or wins at least two per cent (2%) seats in the House of the People (*i.e.*, 11 seats in the existing House having 543 members), and these members are elected from at least three different States.
 (3) The party in question has got recognition as a state party in at least two states.
 (4) It must have its headquarters in New Delhi.
 Select the correct answer using the code given below:
 (a) 1, 2 and 3 (b) 2 and 4
 (c) 1 and 2 only (d) 1, 3 only 4
30. In its emphasis on enhancing human capabilities, which one among the following does NOT figure in the Twelfth Five-Year Plan?
 (a) Life and longevity
 (b) Education
 (c) Delivery of Public Service
 (d) Skill development
31. Which one of the following is NOT a target of the 12th Five-Year Plan?
 (a) Real GDP Growth Rate of 8 per cent
 (b) Agriculture Growth Rate of 5 per cent
 (c) Manufacturing Growth Rate of 10 per cent
 (d) Increase in green cover by 1 million hectare every year during the Plan period
32. Which one of the following statements is NOT correct?
 (a) In the conduction mode of transference of heat, the molecules of solid pass heat from one molecule to another without moving from their positions.
 (b) The amount of heat required to raise the temperature of a substance is called its specific heat capacity.
 (c) The process of heat transfer in liquids and gases is through convection mode.
 (d) The process of heat transfer from a body at higher temperature to a body at lower temperature without heating the space between them is known as radiation.
33. The amount of heat required to change a liquid to gaseous state without any change in temperature is known as
 (a) specific heat capacity
 (b) mechanical equivalent of heat
 (c) latent heat of vaporization
 (d) quenching

34. The following figure shows displacement versus time curve for a particle executing simple harmonic motion:



Which one of the following statements is correct?

- (a) Phase of the oscillating particle is same at $t = 1$ s and $t = 3$ s.
 (b) Phase of the oscillating particle is same at $t = 2$ s and $t = 8$ s.
 (c) Phase of the oscillating particle is same at $t = 3$ s and $t = 7$ s.
 (d) Phase of the oscillating particle is same at $t = 4$ s and $t = 10$ s.
35. Match List I with List II and select the correct answer using the code given below the Lists:
- | List I | List II |
|-------------------|------------------|
| <i>(Disease)</i> | <i>(Remedy)</i> |
| (A) Hypermetropia | (1) Concave lens |
| (B) Presbyopia | (2) Bifocal lens |
| (C) Myopia | (3) Surgery |
| (D) Cataract | (4) Convex lens |
- Code:**
- | A | B | C | D |
|-------|---|---|---|
| (a) 4 | 2 | 1 | 3 |
| (b) 4 | 1 | 2 | 3 |
| (c) 3 | 1 | 2 | 4 |
| (d) 3 | 2 | 1 | 4 |
36. A circular coil of single turn has a resistance of $20\ \Omega$. Which one of the following is the correct value for the resistance between the ends of any diameter of the coil?
 (a) $5\ \Omega$ (b) $10\ \Omega$
 (c) $20\ \Omega$ (d) $40\ \Omega$
37. In a solenoid, the current flowing through the wire is I and number of turns per unit length is n . This gives a magnetic field B inside the solenoid. If number of turns per unit length is increased to $2n$, what will be the value of magnetic field in the solenoid?
 (a) B (b) $2B$
 (c) $B/2$ (d) $B/4$
38. Which one of the following statements is correct about the magnification of an optical microscope?
 (a) Magnification increases with the increase in focal length of eyepiece.
 (b) Magnification increases with the increase in focal length of objective.
 (c) Magnification does not depend upon the focal length of eyepiece.
 (d) Magnification decreases with the increase in focal length of eyepiece.
39. A homogeneous mixture contains two liquids. How are they separated?
 (a) By filtration (b) By evaporation
 (c) By distillation (d) By condensation
40. Which one of the following elements forms highest number of compounds?
 (a) Oxygen (b) Hydrogen
 (c) Chlorine (d) Carbon
41. Which one of the following elements corrodes rapidly?
 (a) Aluminium (b) Iron
 (c) Zinc (d) Silver
42. 20 g of common salt is dissolved in 180 g of water. What is the mass percentage of the salt in the solution?
 (a) 5% (b) 9%
 (c) 10% (d) 15%
43. The valency of an element depends upon the
 (a) total number of protons in an atom
 (b) mass number of an atom
 (c) total number of neutrons in an atom
 (d) total number of electrons in the outer most shell of an atom
44. Match List I with List II and select the correct answer using the code given below the Lists:
- | List I | List II |
|--------------------|--|
| <i>(Noble gas)</i> | <i>(Use)</i> |
| (A) Argon | (1) In lights for advertising display |
| (B) Neon | (2) Airport landing lights and in light houses |
| (C) Krypton | (3) Light in photographer's flash gun |
| (D) Xenon | (4) In tungsten filament to last longer |

Code:

A B C D

(a) 3 1 2 4

(b) 3 2 1 4

(c) 4 2 1 3

(d) 4 1 2 3

45. Colour vision in human eyes is the function of photoreceptor cells named

(a) Rods (b) Cones

(c) Blind spot (d) Fovea

46. Which one of the following statements is NOT correct?

(a) All proteins are enzymes.

(b) Mostly enzymes are proteins.

(c) All fats are energy rich compounds.

(d) Glucose is a common carbohydrate.

47. Sugarcane is one of the important cash crops in India. It is grown to obtain

(a) Starch (b) Glucose

(c) Fructose (d) Sucrose

48. The colourful part of the Sunflower or Marigold plant is

(a) Flower (b) Inflorescence

(c) Fruit (d) Seed

49. Match List I with List II and select the correct answer using the code given below the Lists:

List I

(Mineral)

(A) Manganese

(B) Gypsum

(C) Limestone

(D) Magnesite

List II

(Leading State)

(1) Uttarakhand

(2) Karnataka

(3) Rajasthan

(4) Odisha

Code:

A B C D

(a) 1 3 2 4

(b) 1 2 3 4

(c) 4 2 3 1

(d) 4 3 2 1

50. Which one among the following is the correct order of tiger reserves situated from North to South in India?

(a) Corbett – Simlipal – Sariska – Periyar

(b) Periyar – Sariska – Simlipal – Corbett

(c) Corbett – Sariska – Simlipal – Periyar

(d) Periyar – Simlipal – Sariska – Corbett

51. Which of the following are correct with regard to Indian Monsoonal Rainfall?

(1) Largely governed by the topographical features

(2) Regional and seasonal variation in the distribution of rainfall

(3) Heavy downpour resulting in considerable runoff

(4) Beginning and end of rain is regular and on time

Select the correct answer using the code given below:

(a) 1 and 2 only

(b) 1, 2 and 3

(c) 3 and 4 only

(d) 2, 3 and 4

52. Match List I with List II and select the correct answer using the code given below the Lists:

List I

(Type of climate)

(A) Monsoon with

Short Dry

Season (Amw)

(B) Cold Humid

Winter with

Short Summer

(Dfc)

(C) Monsoon with

Dry Winter

(Cwg)

(D) Monsoon with

Dry summer

(As)

List II

(State)

(1) Uttar Pradesh

and Bihar

(2) Tamil Nadu

Coast

(3) Arunachal

Pradesh

(4) Kerala and

Karnataka

Coast

Code:

A B C D

(a) 4 3 1 2

(b) 4 1 3 2

(c) 2 1 3 4

(d) 2 3 1 4

53. Which one of the following Himalayan rivers does NOT originate from across the Himalayas?

(a) Indus

(b) Satluj

(c) Ganga

(d) Brahmaputra

54. The Headquarters of Eastern Railway Zone of Indian Railway is located at

(a) Bhubaneswar

(b) Kolkata

(c) Hajipur

(d) Guwahati

55. Which one among the following countries is the largest trading partner of India in external trade for the year 2015-2016?
 (a) United States of America
 (b) United Kingdom
 (c) United Arab Emirates
 (d) China
56. The radii of curvature of the faces of a double convex lens are 10 cm and 20 cm. The refractive index of the glass is 1.5. What is the power of this lens?
 (a) + 7.5 D (b) - 7.5 D
 (c) + 2.5 D (d) + 5.0 D
57. The time period of a simple pendulum made using a thin copper wire of length L is T. Suppose the temperature of the room in which this simple pendulum is placed increases by 30° C, what will be the effect on the time period of the pendulum?
 (a) T will increase slightly
 (b) T will remain the same
 (c) T will decrease slightly
 (d) T will become more than 2 times
58. Which one of the following physical quantity has the same unit as that of pressure?
 (a) Angular momentum (b) Stress
 (c) Strain (d) Work
59. Which one of the following statements is correct with regard to the material of electrical insulators?
 (a) They contain no electrons.
 (b) Electrons do not flow easily through them.
 (c) They are crystals.
 (d) They have more number of electrons than the protons on their surface.
60. Which one of the following physical quantities does NOT affect the resistance of a cylindrical resistor?
 (a) The current through it
 (b) Its length
 (c) The resistivity of the material used in the resistor
 (d) The area of cross-section of the cylinder
61. Which one of the following statements regarding King Krishnadevaraya is NOT correct?
 (a) He was a great scholar of Telugu and Sanskrit.
 (b) Foreign travellers Paes and Nuniz visited his court.
 (c) Barbosa praised him for the great justice and equity prevailing in his empire.
 (d) He wrote his magnum opus *Amuktamalyada* in Sanskrit.
62. Match List I with List II and select the correct answer using the code given below the Lists:
- | List I | List II |
|---|--|
| <i>(Amendment to the Constitution of India)</i> | <i>(Subject)</i> |
| (A) 52 nd Amendment Act, 1985 | (1) Reduction of voting age from 21 to 18 |
| (B) 73 rd Amendment Act, 1992, | (2) Right to Education |
| (C) 61 st Amendment Act, 1988 | (3) Panchayati Raj |
| (D) 86 th Amendment Act, 2006 | (4) Disqualification on grounds of defection |
- Code:**
- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 4 | 1 | 3 | 2 |
| (b) | 4 | 3 | 1 | 2 |
| (c) | 2 | 3 | 1 | 4 |
| (d) | 2 | 1 | 3 | 4 |
63. Which one of the following was NOT a cause of the Revolt of 1857?
 (a) The rumour that the British had mixed the bone dust of cows and pigs into the flour being sold in the market.
 (b) The prophecy that British rule would come to an end on the centenary of the Battle of Plassey on 2nd June, 1857.
 (c) Popular discontent with British rule.
 (d) The prophecy that the end of British rule would lead to the end of the Kali Yuga and the return of Ram Rajya.
64. Which one of the following was NOT a feature of the Subsidiary Alliance of Lord Wellesley?
 (a) The British were responsible for protecting the ally from any external threats
 (b) All internal threats were to be handled by the ally alone, with no help from the British
 (c) The ally was to provide resources for maintaining a British armed contingent stationed in its territory

- (d) The ally could not enter into any agreement with other rulers without the permission of the British
65. Match List I with List II and select the correct answer using the code given below the Lists:
- | | |
|-------------------|----------------------|
| List I
(Place) | List II
(Mineral) |
| (A) Lakwa | (1) Copper |
| (B) Malanjhand | (2) Petroleum |
| (C) Kalakot | (3) Zinc |
| (D) Zawar | (4) Coal |
- Code:**
- | | | | |
|-------|---|---|---|
| A | B | C | D |
| (a) 3 | 4 | 1 | 2 |
| (b) 3 | 1 | 4 | 2 |
| (c) 2 | 1 | 4 | 3 |
| (d) 2 | 4 | 1 | 3 |
66. Which of the following are the major coral reef areas of India?
- (1) Gulf of Kachchh
 - (2) Gulf of Mannar
 - (3) Lakshadweep
 - (4) Andaman and Nicobar Islands
- Select the correct answer using the code given below:
- | | |
|---------------------|-------------------|
| (a) 1 and 3 only | (b) 2 and 4 only |
| (c) 1, 2 and 3 only | (d) 1, 2, 3 and 4 |
67. Which of the following regions is/are NOT known for cotton-textile industry?
- (1) Mumbai – Pune region
 - (2) Madurai – Coimbatore-region
 - (3) Dhanbad – Jamshedpur region
 - (4) Indore – Ujjain region
- Select the correct answer using the code given below:
- | | |
|----------------|-------------|
| (a) 1 and 3 | (b) 2 and 3 |
| (c) 1, 2 and 4 | (d) 3 only |
68. Which one of the following States does NOT have the Headquarters of any Railway Zone?
- (a) Jharkhand
 - (b) Chhattisgarh
 - (c) Odisha
 - (d) Bihar
69. Suppose a rod is given a negative charge by rubbing it with wool. Which one of the following statements is correct in this case?
- (a) The positive charges are transferred from rod to wool.
 - (b) The positive charges are transferred from wool to rod.
 - (c) The negative charges are transferred from rod to wool.
 - (d) The negative charges are transferred from wool to rod.
70. Which one of the following is the correct relation between frequency f and angular frequency ω ?
- (a) $f = \pi\omega$
 - (b) $\omega = 2\pi f$
 - (c) $f = 2\omega/\pi$
 - (d) $f = 2\pi\omega$
71. A Kelvin thermometer and a Fahrenheit thermometer both give the same reading for a certain sample. What would be the corresponding reading in a Celsius thermometer?
- | | |
|---------|---------|
| (a) 574 | (b) 301 |
| (c) 273 | (d) 232 |
72. If the potential difference applied to an X-ray tube is doubled while keeping the separation between the filament and the target as same, what will happen to the cutoff wavelength?
- (a) Will remain same
 - (b) Will be doubled
 - (c) Will be halved
 - (d) Will be four times of the original wavelength
73. Which one of the following statements is true for the relation $F = \frac{Gm_1m_2}{r^2}$?
- (All symbols have their usual meanings)
- (a) The quantity G depends on the local value of g , acceleration due to gravity.
 - (b) The quantity G is greatest at the surface of the Earth.
 - (c) The quantity G is used only when earth is one of the two masses.
 - (d) The quantity G is a universal constant.
74. Why is it difficult to measure the coefficient of expansion of a liquid than solid?
- (a) Liquids tend to evaporate at all temperatures.
 - (b) Liquids conduct more heat.
 - (c) Liquids expand too much when heated.
 - (d) Their containers also expand when heated.
75. Radon is
- (a) an inert gas
 - (b) an artificial fibre
 - (c) an explosive
 - (d) a metal

76. The chemical name of baking soda is
 (a) Na_2CO_3 (b) NaHCO_3
 (c) CaCO_3 (d) NaOH
77. Which one of the following elements is used in pencil-lead?
 (a) Zinc (b) Lead
 (c) Carbon (Graphite) (d) Tin
78. Who among the following is one of the authors of the book "Philosophy of the Bomb?"
 (a) Bhagat Singh
 (b) Jawaharlal Nehru
 (c) Surya Sen
 (d) Bhagwati Charan Vohra
79. Which of the following statements about the Chittagong group is NOT correct?
 (a) Its membership included a large number of youth including Ganesh Ghosh, Lokenath Baul and Anant Singh
 (b) Its leader Surya Sen had been a lawyer in Dhaka before joining the group
 (c) Surya Sen and his group were closely associated with Congress work in Chittagong
 (d) This group had prepared an action plan to occupy the armouries in Chittagong
80. Which one of the following was a significant feature of the Quit India Movement?
 (a) Women did not play an important role in the movement.
 (b) Nasik in Maharashtra was an important regional base during the movement.
 (c) It was marked by anti-zamindar violence.
 (d) It was marked by the emergence of parallel governments in different parts of India.
81. Which one of the following characteristics does NOT describe the Khilafat movement?
 (a) Mahatma Gandhi sought to link it to the Non-Cooperation movement.
 (b) It was not supported by the Congress.
 (c) It demanded that the Turkish Sultan must retain control over Muslim sacred spaces in the erstwhile Ottoman empire.
 (d) It was led by Muhammad Ali and Shaukat Ali.
82. Which one of the following was NOT a feature of railways in colonial India?
 (a) The main purpose of the setting up of railways in India was to serve the interest of the empire.
 (b) British capital investments were invited with 15% guaranteed interest to be paid if necessary from Indian revenues.
 (c) The construction work disturbed ecology.
 (d) The construction of the railways was planned in such a way that it connected the internal markets with the ports, but provided no interconnection between internal market cities.
83. Which colonial administrator made the following declaration about the partition of Bengal in 1904? "Bengal united is a power. Bengal divided will pull in different ways. That is perfectly true and one of the merits of the scheme"
 (a) Lord Curzon
 (b) H. H. Risley
 (c) Lord Minto
 (d) Sir Lancelot Hare
84. Who launched the Bardoli Satyagraha on 4th February, 1928?
 (a) Mahatma Gandhi
 (b) Vallabhbhai Patel
 (c) Rajendra Prasad
 (d) Kalyanji Mehta
85. Which one of the following Princely States did NOT support the Congress during the course of the Civil Disobedience Movement?
 (a) Bhavnagar (b) Mysore
 (c) Junagadh (d) Kathiawar
86. Which one of the following is a feature of thought and philosophy of the Kandukuri Viresalingam?
 (a) He believed that science and morality were unconnected to truth.
 (b) He believed in universal education.
 (c) He believed that language had no role in inculcating morality in students.
 (d) He did not attempt to build a national consciousness on a cultural base.
87. Name the calligrapher in Akbar's court who was honoured with the title "Zarrin Kalam" or Golden Pen
 (a) Abut Fazl
 (b) Tansen
 (c) Muhammad Husayn
 (d) Muhammad Kasim

88. Which one of the following sections of the Golden Quadrilateral Highway in India is the longest in terms of route distance?
- (a) Delhi – Kolkata
(b) Kolkata – Chennai
(c) Chennai – Mumbai
(d) Mumbai – Delhi
89. Match List I with List II and select the correct answer using the code given below the Lists:
- | | |
|---|----------------------|
| List I
(Classification of
resources) | List II
(Example) |
| (A) Basic inexhaustible resource | (1) Hydel power |
| (B) Conventional non-renewable resource | (2) Coal |
| (C) Non-conventional renewable resource | (3) Solar energy |
| (D) Non-conventional non-renewable resource | (4) Natural gas |
- Code:**
- | | | | |
|-------|---|---|---|
| A | B | C | D |
| (a) 3 | 2 | 1 | 4 |
| (b) 3 | 1 | 2 | 4 |
| (c) 4 | 1 | 2 | 3 |
| (d) 4 | 2 | 1 | 3 |
90. Match List I with List II and select the correct answer using the code given below the Lists:
- | | |
|-----------------------------|-----------------------|
| List I
(Mineral deposit) | List II
(State) |
| (A) Gypsum | (1) Odisha |
| (B) Graphite | (2) Gujarat |
| (C) Fluorspar | (3) Arunachal Pradesh |
| (D) Nickel | (4) Rajasthan |
- Code:**
- | | | | |
|-------|---|---|---|
| A | B | C | D |
| (a) 1 | 3 | 2 | 4 |
| (b) 1 | 2 | 3 | 4 |
| (c) 4 | 3 | 2 | 1 |
| (d) 4 | 2 | 3 | 1 |
91. Which one of the following pairs of Tribe and State is NOT correctly matched?
- (a) Tharu : Madhya Pradesh
(b) Adi : Arunachal Pradesh
(c) Irula : Kerala
(d) Shaharia : Rajasthan
92. If the absolute refractive indices of glass and water are $3/2$ and $4/3$ respectively, what will be the ratio of velocity of light in glass and water?
- (a) 3 : 4 (b) 4 : 3
(c) 8 : 7 (d) 8 : 9
93. A positive charge $+q$ is placed at the centre of a hollow metallic sphere of inner radius a and outer radius b . The electric field at a distance r from the centre is denoted by E . In this regard, which one of the following statements is correct?
- (a) $E = 0$ for $a < r < b$
(b) $E = 0$ for $r < a$
(c) $E = q/4\pi\epsilon_0 r$ for $a < r < b$
(d) $E = q/4\pi\epsilon_0 a$ for $r < a$
94. Consider the following Indian States:
- (1) Bihar
(2) Rajasthan
(3) Jammu and Kashmir
(4) Haryana
- Which one of the following is the correct ascending order of the above States on the basis of percentage of State's population to total population of India (based on census 2011)?
- (a) 3 – 4 – 1 – 2
(b) 4 – 2 – 1 – 3
(c) 3 – 4 – 2 – 1
(d) 2 – 3 – 4 – 1
95. Who among the following was the author of the Badshah Nama?
- (a) Abdul Hamid Lahori
(b) Abul Fazl
(c) Shah Jahan
(d) Sadullah Khan
96. Which one of the following statements about Fatehpur Sikri is NOT correct?
- (a) It was located on the direct road to Ajmer.
(b) Akbar commissioned the building of a marble tomb for Sheikh Salim Chisti next to the Friday mosque at Fatehpur Sikri.

- (c) The arched gateway or Bulund Darwaza was meant to remind visitors of the Mughal victory in Gujarat.
- (d) In 1585, the capital of the Mughal emperor shifted from Fatehpur Sikri to Delhi.
97. Which one of the following cities hosted the 3rd World Trauma Congress recently?
- (a) New Delhi (b) Dacca
(c) Singapore (d) Bangkok
98. Which one of the following is NOT one of the objectives of Act East Policy?
- (a) To promote economic cooperation, cultural ties and develop strategic relationship with countries in the Asia-Pacific region.
(b) To promote peace and amity with the neighbouring countries of Asia.
(c) To place emphasis on India-ASEAN cooperation in India's domestic agenda.
(d) To provide enhanced connectivity to the North East of India.
99. Arrange the following countries in ascending order on the basis of the total medals earned by them in Rio Olympic 2016:
- (1) United States
(2) China
(3) Great Britain
(4) Russia
- Select the correct answer using the code given below :
- (a) 1, 2, 3, 4 (b) 1, 3, 2, 4
(c) 4, 3, 2, 1 (d) 4, 3 1, 2
100. Which one of the following is NOT an objective of the National Civil Aviation Policy 2016?
- (a) Establish an integrated eco-system which will lead to significant growth of civil aviation sector.
(b) To promote tourism, increase employment and lead to a balanced regional growth.
(c) Ensure safety, security and sustainability of all sectors through the use of technology.
(d) Enhance regional connectivity through fiscal support and infrastructure development.



Answers

Q No	Answer Key	Topic's Name	Chapter's Name
1	(c)	Transformer	Current Electricity
2	(d)	Total Internal Reflection	Ray Optics
3	(a)	Magnetic Field	Magnetism and Matter
4	(a)	Acceleration	Motion
5	(a)	Sound	Waves
6	(d)	Carbon and its compound	Some Important Chemical Compounds
7	(a)	Soaps-hardness of soap	Some Important Chemical Compounds
8	(b)	Acids	Acids, Bases & Salts
9	(a)	Alkali Metals-Chemical Properties	Metals and Non-Metals
10	(c)	Rutherford's Experiment	Structure of Atom
11	(c)	Glass	Elements, Compounds & Mixtures
12	(b)	Cell Wall	Biological Classification
13	(b)	Protozoan Diseases	Human Disease
14	(c)	Current Important World Events	Current Affairs
15	(b)	Communicable Disease	Human Disease
16	(a)	Renin	Excretory System
17	(a)	Red Blood Cells	Circulatory System
18	(d)	Census	Current Affairs
19	(b)	Current Important World Events	Current Affairs
20	(a)	Current Important World Events	Current Affairs
21	(d)	Natural Vegetation	Regional Geography of India
22	(b)	Current Important World Events	Current Affairs
23	(d)	Current Important World Events	Current Affairs
24	(c)	Current Important World Events	Current Affairs
25	(d)	Current Important World Events	Current Affairs
26	(a)	Current Important World Events	Current Affairs
27	(b)	Current Important World Events	Current Affairs
28	(a)	Current Important World Events	Current Affairs
29	(c)	Political Parties	Elementary Study of Indian Constitution and Administration
30	(c)	Elementary Knowledge of Five Year Plans of India	Concept of One World
31	(b)	Elementary Knowledge of Five Year Plans of India	Concept of One World
32	(b)	Modes of Heat Transfer	Thermal Properties of Matter
33	(c)	Latent Heat	Thermal Properties of Matter
34	(c)	Simple Harmonic Motion	Oscillation

Q No	Answer Key	Topic's Name	Chapter's Name
35	(a)	Eye Defects	Ray Optics
36	(a)	Diameter	General Principles in the Working
37	(b)	Velocity and Acceleration	Properties of a Magnet
38	(d)	Motion of Objects	Natural and Artificial Magnets
39	(c)	Separation of Mixtures	Elements, Compounds & Mixtures
40	(d)	Catenation Property	Carbon and its compounds
41	(b)	Rusting	Redox Reactions
42	(c)	Concentration of Solutions	Solutions
43	(d)	Valency	Atomic Mass and Equivalent Mass
44	(d)	Noble gases Uses	Metals and Non-metals
45	(b)	Spherical Mirrors and Lenses	Human Eye
46	(a)	Proteins	Biomolecules
47	(d)	Distribution of Agricultural and Industrial Activities	Regional Geography of India
48	(b)	Inflorescence	Plant Morphology
49	(d)	Mineral and Power Resources	Regional Geography of India
50	(c)	Tiger Reserve	Current Affairs
51	(b)	Monsoon	Types of Climates
52	(a)	Monsoon	Types of Climates
53	(c)	Rivers	Current Affairs
54	(b)	Railway	Current Affairs
55	(d)	Current Important World Events	Current Affairs
56	(a)	Power of Lens	Ray Optics
57	(a)	Simple Pendulum	Oscillations
58	(b)	Units	Units and Measurements
59	(b)	Conductors	Current Electricity
60	(a)	Resistance	Current Electricity
61	(d)	Vijaynagar Empire	A Broad Survey of Indian History
62	(b)	Amendments	Elementary Study of Indian Constitution and Administration
63	(d)	Revolt of 1857	Freedom Movement in India
64	(b)	Forces Shaping the Modern World	A Broad Survey of Indian History
65	(c)	Material Used in the Preparation of Substances	Regional Geography of India
66	(d)	Material Used in the Preparation of Substances	Regional Geography of India
67	(d)	Material Used in the Preparation of Substances	Regional Geography of India
68	(a)	Railway	Current Affairs
69	(d)	Charge	Electrostatics
70	(b)	Simple Harmonic Motion	Oscillations

Q No	Answer Key	Topic's Name	Chapter's Name
71	(b)	Temperature	Thermal Properties of Matter
72	(b)	X Rays	Atoms
73	(d)	Gravitational Force	Gravitation
74	(d)	Thermal Expansion	Thermal Properties of Matter
75	(a)	Noble Gases	Metals and Non-metals
76	(b)	Baking Soda	Some Important Chemical Compounds
77	(c)	Carbon Elements	Elements, Compounds & Mixtures
78	(d)	Books and Authors	Modern History
79	(b)	Freedom Fighters	Freedom Movement in India
80	(d)	Quit India Movement	Mahatama Gandhi
81	(b)	Khilafat Movement	Freedom Movement in India
82	(b)	Railway	Current Affairs
83	(b)	Partition of Bengal	Freedom Movement in India
84	(b)	Bardoli Satyagrah	Freedom Movement in India
85	(b)	Civil Disobedience Movement	Freedom Movement in India
86	(b)	K Viresalingam	Social Reformers
87	(c)	Authors	Mughal Empire
88	(b)	Land Route	Important Sea Ports and Main Sea, Land and Air Routes of India
89	(a)	Natural Resources	Mineral and Power Resources
90	(c)	Natural Resources	Mineral and Power Resources
91	(a)	Natural Vegetation	Regional Geography of India
92	(d)	Refraction	Ray Optics
93	(a)	Electric Field Intensity	Electrostatics
94	(c)	Census	Current Affairs
95	(a)	Authors	Mughal Empire
96	(d)	Akbar	Mughal Empire
97	(a)	Important Events	Current Affairs
98	(b)	Current Important World Events	Current Affairs
99	(c)	Sports Events	Current Affairs
100	(c)	Government Schemes	Current Affairs