

FIITJEE MEDICAL TEST SAMPLE PAPER

For students presently in
Class – 10

IQ, Physics, Chemistry, Mathematics & Biology– PAPER - 1

Time Duration: 3 Hours

Maximum Marks: 360

Instructions

Caution: Class, Paper, Code as given above **MUST** be correctly marked in the answer OMR sheet before attempting the paper. Wrong Class, Paper or Code will give wrong results.

1. This Question Paper contains only **3 Sections**. All questions will be Multiple Choice with single correct option out of four choices. The marking scheme is as per the table given below:

Section	Subject	Question No.	Marking Scheme for each questions	
			Correct Answer	Wrong Answer
Section – I	IQ	Q.NO: 1 to 30	+3	0
Section - II	Physics	Q.NO: 1 to 15	+3	0
	Chemistry	Q.NO: 16 to 30	+3	0
	Mathematics	Q.NO: 31 to 45	+3	0
Section - III	Biology	Q.NO: 1 to 45	+3	0

2. Answers have to be marked on the OMR sheet. The Question Paper contains blank spaces for your rough work. No additional sheets will be provided for rough work.
3. Blank papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices, in any form, are not allowed.
4. Before attempting paper write your Registration Number, Name and Test Centre in the space provided at the bottom of this sheet

Note: Please check this Question Paper contains all **120** questions. If not so, exchange for the correct Question Paper.

I.Q

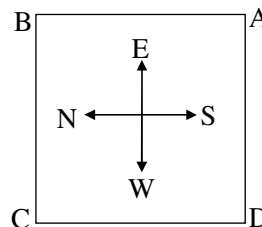
Section - I

Straight Objective Type

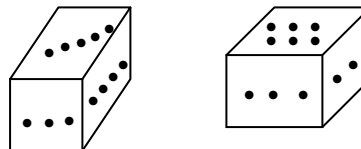
This section contains 30 multiple choice questions numbered 1 to 30. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. 12-In a joint family, there are father, mother, 4 married sons and three unmarried daughters. Of the sons, two have 2 daughters each, and two have a son and a daughter each. How many female members are there in the family?
 (A) 15 (B) 12 (C) 14 (D) 11

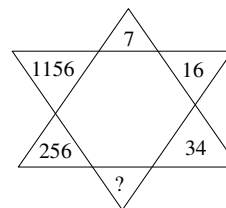
2. A, B, C and D are standing on the four corners of a square field as shown in the adjoining figure. 'A' starts crossing the field diagonally. After walking half the distance, he turns right, walks some distance and turns left. Which direction is 'A' facing now?
 (A) East (B) South-West
 (C) South-East (D) North-West



3. Two positions of a dice are shown. If 1 is on the bottom, which number will be on the top?
 (A) 4 (B) 3
 (C) 2 (D) 5



4. Find the missing character.
 (A) 72 (B) 49
 (C) 68 (D) 66



5. Five girls are standing in a row facing east. Savita is to the right of Urvashi, Tina and Urmila. Urvashi, Tina and Urmila are to the right of Kanika. Urmila is between Urvashi and Tina. If Tina is fourth from the left end, how far is Urvashi from the right end?
 (A) First (B) Second (C) Fifth (D) Fourth

Space for rough work

6. A, B, C, D, E, F and G are sitting in a row facing North.
 (i) F is to the immediate left of G.
 (ii) E is 4th to the right of G.
 (iii) C is the neighbour of B and D.
 (iv) Person who is third to the left of D is at one of the ends.
 Who are the neighbours of B?
 (A) C and D (B) C and G (C) G and F (D) C and E
7. If \times stands for $-$, \div stands for $+$, $+$ stands for \div and $-$ stands for \times , which one of the following equation is correct?
 (A) $15 - 5 \div 5 \times 20 + 10 = 6$ (B) $8 \div 10 - 3 + 5 \times 6 = 8$
 (C) $6 \times 2 + 3 \div 12 - 3 = 15$ (D) $3 \div 7 - 5 \times 10 + 3 = 10$
8. Find the missing number in the following set of number around the circle from the choice given below:
- 7 $\begin{matrix} 3 \\ \circlearrowleft \\ 84 \\ \circlearrowright \\ 5 \end{matrix}$ 8 5 $\begin{matrix} 2 \\ \circlearrowleft \\ 121 \\ \circlearrowright \\ 11 \end{matrix}$ 11 5 $\begin{matrix} 2 \\ \circlearrowleft \\ ? \\ \circlearrowright \\ 7 \end{matrix}$ 6
- (A) 28 (B) 36 (C) 48 (D) 42

Directions: (Questions 9-10): In each of the following questions, there is a certain relation between two given numbers on one side of :: and one number is given on another side of :: while another word is to be found from the given alternatives, having the same relation with this word of the given pair bears. Choose the best alternative.

9. Conference : Chairman :: Newspaper : ?
 (A) Reporter (B) Distributor (C) Printer (D) Editor
10. Crow : Carrion :: Leech : ?
 (A) Bugs (B) Blood (C) Meat (D) Bones

Space for rough work

Directions: (Questions 11-12): In each of the following questions, there is a certain relation between two given numbers on one side of :: and one number is given on another side of :: while another number is to be found from the given alternatives, having the same relation with this number of the given pair bears. Choose the best alternative.

11. $73 : 52 :: 25 : ?$
(A) 9 (B) 37 (C) 27 (D) None of these
12. $242 : 121 :: 546 : ?$
(A) 273 (B) 276 (C) 272 (D) 327

Directions: (Questions 13-14): Find the missing term in the series.

13. 20, 22, 25, 30, 37, _____
(A) 46 (B) 48 (C) 50 (D) None of these
14. 5, 7, 12, 19, 31, _____
(A) 40 (b) 50 (c) 52 (d) 55

Directions: In each of the following questions, there are four choices (a-d). Three of them are alike and one different. Find the odd-man out.

15. (a) Explain (b) Instruct (c) Teach (d) Train
16. If COULD is coded as BNTKC and MARGIN is coded as LZQFHM, then MOULDING =
(A) LNTKCHMF (B) CNMFINTK (C) LNKTCHMF (D) NITKHCMF
17. If Alphabet series is written in reverse order then, from your left, what is the 7th letter from the right of 12th letter
(A) G (B) F (C) H (D) S

Space for rough work

DIRECTION (18) Five members of a family, Rakesh, Mukesh, Roopesh, Vipul and Umesh take food in a definite order—

- (1) Umesh was next to first man.
- (2) Roopesh took food just before Vipul.
- (3) Rakesh was the last man to take food.

18. Who were the first and last men to take food?

- (A) Mukesh and Roopesh (B) Roopesh and Rakesh
(C) Umesh and Mukesh (D) None of these

19. If the numbers between 4 to 90, which are divisible by 5, and which contain 5 in the unit, tenth or both place, are removed, then how many numbers divisible by 5 will be left?

- (A) 7 (B) 8 (C) 18 (D) 12

Directions: (20): Study the following information carefully and answer the questions below it—

There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers, three brothers and a mother in the group.

20. Who is the mother?

- (A) A (B) B (C) D (D) E

21. If 'nso ptr kli chn' stands for 'Rahul get birthday gift', 'ptr lnm wop chn' stands for 'sister gives birthday gift', 'tti wop nhi' stands for 'she gives pen' what would mean 'gives'?

- (A) chn (B) nhi (C) ptr (D) wop

22. Between 4 and 5'O clock, when the hands will be inclined at 60° for the first time?

- (A) $10\frac{10}{11}$ min past 4 (B) $11\frac{10}{11}$ min past 4 (C) 12 min past 4 (D) $9\frac{10}{11}$ min past 4

DIRECTION (23-24) L,M,N,O,P,Q and R are sitting around a circle facing the centre. O is sitting between L and R. Q is second to the right of R and P is second to the right of Q. N is not an immediate neighbor of R.

23. Which of the following is not correct?

- (A) R is second to right of L (B) M is second to left of N
(C) P sits to opposite of N (D) P and N are immediate neighbors

24. How many persons are seated between L and Q if we count anticlockwise from L to Q?

- (A) 1 (B) 2 (C) 3 (D) 4

Space for rough work

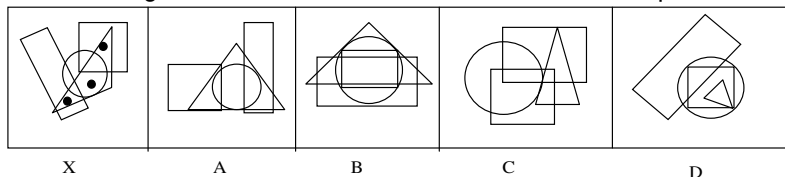
Directions (Q. Nos. 25 to 26) Study the information given below and answer the questions that follow:

A, B, C, D, E and F are cousins. No two cousins are of the same age, but all have birthdays on the same date. The youngest is 17 years old and the oldest E is 22. F is somewhere between B and D in age. A is older than B. C is older than D.

- 25. Which of the following is not possible?
 (A) D is 20 years old (B) F is 18 years old (C) F is 19 years old (D) F is 20 years old
- 26. Which of the following could be the ages of D and C respectively, if B is 17 years old?
 (A) 18 and 19 (B) 19 and 21 (C) 18 and 20 (D) 18 and 21

Directions (Questions 27-28): Read the following information carefully and answer the questions given below it:

- i) Six friends P, Q, R, S, T and U are members of a club and play a different game of football, cricket, tennis, basketball, badminton and volleyball.
 - ii) T, who is taller than P and S, plays tennis.
 - iii) The tallest among them plays basketball.
 - iv) The shortest among them plays volleyball.
 - v) Q and S neither play volleyball nor basketball.
 - vi) R plays volleyball.
 - vii) T is between Q who plays football and P in order of height.
- 27. What does S play?
 (A) Football (B) Cricket or badminton
 (C) Volleyball (D) None of these
 - 28. Who among them is taller than R but shorter than P?
 (A) T (B) Data inadequate (C) Q (D) None of these
 - 29. A man completes a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.
 (A) 220 km (B) 224 km (C) 230 km (D) 234 km
 - 30. Select the figure which satisfies the same conditions of placement of the dots as in Figure-X.



- (A) 1 (B) 2 (C) 3 (D) 4

Space for rough work

Physics

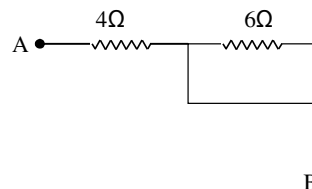
Section - II

Straight Objective Type

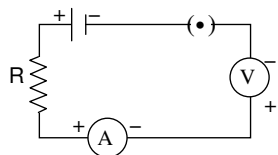
Physics contains 15 multiple choice questions numbered 1 to 15. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. In an electrical circuit
 - (A) Electrons move from the higher potential to lower potential
 - (B) Electrons move from lower potential to higher potential
 - (C) There is no fixed pattern about the movement of electrons
 - (D) Nothing can be said

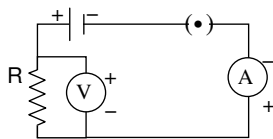
2. The effective resistance between A and B is
 - (A) 4Ω
 - (B) 6Ω
 - (C) May be 10Ω
 - (D) Must be 10Ω



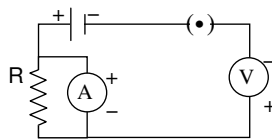
3. Identify the circuit in which the electrical components have been properly connected.



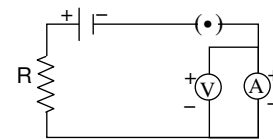
(A)



(B)



(C)



(D)

4. A current flows in a conductor from east to west. Direction of magnetic field at a point above the conductor is towards
 - (A) East
 - (B) west
 - (C) north
 - (D) south
5. If the current is flowing clockwise in a circular coil the direction of line of magnetic field inside the coil is
 - (A) Towards you
 - (B) Away from you
 - (C) Towards the centre along the radius
 - (D) Away from the centre along the radius

Space for rough work

6. Which of the following cannot be deflected by a magnetic field?
(A) Alpha rays (B) Beta rays
(C) Gamma rays (D) Moving charge particle
7. When light travels from glass to air, the incident angle is θ_1 and the refracted angle is θ_2 . The true relation is
(A) $\theta_1 = \theta_2$ (B) $\theta_1 < \theta_2$ (C) $\theta_1 > \theta_2$ (D) not predictable
8. When a ray of light enters a glass slab from air:
(A) Its wavelength decreases (B) its wavelength increases
(C) Its frequency increases (D) neither wavelength nor frequency changes
9. A clock hung on a wall has marks instead of numerals on its dial. On the adjoining wall, there is a plane mirror and the image of the clock in the mirror indicates the time 7: 10. Then the time on the clock is:
(A) 7: 10 (B) 4: 50 (C) 5: 40 (D) 10: 7
10. The sun remains visible for up to 2 minutes after the actual sunset because of
(A) Total internal reflection in the earth's atmosphere (B) reflection of light by the earth's surface
(C) Scattering of light in the earth's atmosphere (D) atmospheric refraction.
11. What is the minimum number of principal rays needed to locate the image formed by a lens?
(A) 1 (B) 2 (C) 3 (D) 4
12. _____ plays the same role as the aperture in a camera
(A) Sclera (B) pupil (C) cornea (D) ciliary muscle
13. What type of lens is used in the spectacles of a person suffering from myopia?
(A) Converging (B) diverging (C) cylindrical (D) convex
14. When we see an object, the image found on the retina is
(A) Real (B) virtual (C) erect (D) real-erect
15. The maximum focal length of the eye – lens of a person is greater than its distance from the retina. The eye is
(A) Strained for objects at large distances only (B) unstrained for all distance
(C) Strained for objects at short distances only (D) none of the above

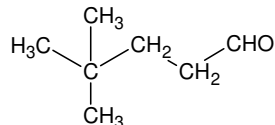
Space for rough work

Chemistry

Straight Objective Type

Chemistry contains 15 multiple choice questions numbered 16 to 30. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

16. What is the IUPAC name of the given compound



- (A) 2,2- dimethyl pentanal
(C) 2,2- dimethyl 5-pentanal

- (B) 4,4 – dimethyl pentanal
(D) 4,4 – dimethyl 5-pentanal

17. The molecular formula of the third member of the homologous series of ketone is

- (A) C_4H_8O (B) C_3H_6O (C) $C_5H_{10}O$ (D) $C_6H_{12}O$

18. Which of the following molecular formula corresponds to ethyl butanoate ester?

- (A) $C_4H_{10}O_2$ (B) $C_6H_{12}O_2$ (C) $C_7H_{14}O_2$ (D) $C_8H_{16}O_2$

19. When ethanol is heated with concentrated sulphuric acid at $170^\circ C$, it gets converted into ethene. In this reaction, concentrated sulphuric acid act as:

- (A) Oxidising agent (B) Reducing agent (C) Dehydrating agent (D) None of these

20. Which pair of minerals contains of same metal?

- (A) Bauxite, Limonite (B) Haematite, Magnesite
(C) Cupurite, Malachite (D) Galena, pyrolusite

Space for rough work

21. Roasting is generally carried out in case of
(A) Oxide ores (B) Sulphide ores (C) Silicate ores (D) Carbonate ores
22. Zinc metal is refined by
(A) Crystallisation (B) Poling (C) Cupellation (D) Distillation
23. Which of the following will occur in nature state?
(A) Ag (B) Au (C) Pt (D) All of the above
24. Which one of the following reactions represents reduction only change?
(A) $X \rightarrow X^{3+} + 3e^{-}$ (B) $A + D^{2+} \rightarrow A^{2+} + D$ (C) $E - 2e^{-} \rightarrow E^{2+}$ (D) $I_2 + 2e^{-} \rightarrow 2I^{-}$
25. Which one of the following metals will not liberate hydrogen gas when added to dilute sulphuric acid?
(A) Zn (B) Mg (C) Sn (D) Hg
26. Identify the anionic single displacement reaction
(A) $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$ (B) $ZnO + Mg \rightarrow MgO + Zn$
(C) $Cu(NO_3)_2 + Sn \rightarrow Sn(NO_3)_2 + Cu$ (D) $2KI + Br_2 \rightarrow 2KBr + I_2$
27. Give the values of a, b, c and d which are required to balance the equation given below.
 $aKOH(aq) + bH_2SO_4(aq) \rightarrow cK_2SO_4(aq) + dH_2O(l)$
(A) 1,1,1,2 (B) 2,2,1,2 (C) 1,2,1,1 (D) 2,1,1,2
28. Which of the following is Lewis acid _____
(A) NH_3 (B) H_2SO_4 (C) H_3O (D) $AlCl_3$
29. In which compound is nitrogen in its lowest oxidation state?
(A) N_2O (B) NO (C) NO_2 (D) N_2O_2
30. 10 mL of 0.1 M HCl is mixed with 10 mL of 0.1 M NaOH and the resulting solution is diluted to 100 mL, the pH of the resulting solution would be approximately
(A) 8 (B) 6 (C) 7 (D) 9

Space for rough work

Mathematics

Straight Objective Type

Mathematics contains 15 multiple choice questions numbered 31 to 45. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

31. If one root of the equation $5x^2 + 13 + k = 0$ is the reciprocal of the other then
(A) $k = 0$ (B) $k = 5$ (C) $k = 1/6$ (D) $k = 6$
32. If α, β are the roots of $4x^2 + 3x + 7 = 0$ then the value of $\frac{1}{\beta} + \frac{1}{\alpha}$ is
(A) $3/7$ (B) $-3/7$ (C) $4/7$ (D) $-4/7$
33. If the coefficient of x in the quadratic equation $x^2 + px + q = 0$ was taken as 17 in place of 13, its roots were found to be -2 and -15 the roots of the original equation are
(A) 4, 9 (B) -4, -9 (C) 3, 10 (D) -3, -10
34. Find the value of $\cos 60^\circ \cos 30^\circ + \sin 60^\circ \sin 30^\circ$
(A) $\frac{\sqrt{3}}{2}$ (B) 1 (C) $\frac{\sqrt{3}+1}{2}$ (D) $\frac{1}{2}$
35. If the roots of the equation $x^2 - 15 - m(2x - 8) = 0$ are equal then $m =$
(A) 3, -5 (B) 3, 5 (C) -3, 5 (D) -3, -5
-

Space for rough work

36. If $5 \tan \theta - 4 = 0$, then the value of $\frac{5 \sin \theta - 4 \cos \theta}{5 \sin \theta + 4 \cos \theta}$ is
(A) $\frac{5}{3}$ (B) $\frac{5}{6}$ (C) 0 (D) $\frac{1}{6}$
37. If $\frac{x \cos^2 30^\circ \sec^2 45^\circ}{8 \cos^2 45^\circ \sin^2 60^\circ} = \tan^2 60^\circ - \tan^2 30^\circ$, then $x =$
(A) 1 (B) -1 (C) 2 (D) 0
38. The value of $\tan 1^\circ \tan 2^\circ \tan 3^\circ \dots \tan 89^\circ$ is
(A) 1 (B) -1 (C) 0 (D) None of these
39. If $\cos \theta = \frac{2}{3}$, then $2 \sec^2 \theta + 2 \tan^2 \theta - 7$ is equal to
(A) 1 (B) 0 (C) 3 (D) 4
40. If A, B and C are interior angles of a triangle ABC, then $\sin\left(\frac{B+C}{2}\right) =$
(A) $\sin \frac{A}{2}$ (B) $\cos \frac{A}{2}$ (C) $-\sin \frac{A}{2}$ (D) $-\cos \frac{A}{2}$

Space for rough work

41. The value of k for which the system of equations $x + 2y - 3 = 0$ and $5x + ky + 7 = 0$ has no solution, is
(A) 10 (B) 6 (C) 3 (D) 1
42. The area of the triangle formed by the line $\frac{x}{a} + \frac{y}{b} = 1$ with the coordinate axes is
(A) ab (B) 2ab (C) $\frac{1}{2}ab$ (D) $\frac{1}{4}ab$
43. The area of the triangle formed by the lines $y = x$, $x = 6$ and $y = 0$ is
(A) 36 sq.units (B) 18 sq.units (C) 9 sq.units (D) 72 sq.units
44. If the system of equations $2x + 3y = 5$, $4x + ky = 10$ has infinitely many solutions, then k =
(A) 1 (B) $\frac{1}{2}$ (C) 3 (D) 6
45. The sum of a two digit number and the number formed by interchanging its digits is 110. If 10 is subtracted from the first number, the new number is 4 more than 5 times the sum of the digits in the first number. Find the first number
(A) 64 (B) 55 (C) 35 (D) None

Space for rough work

Biology**Section - III****Straight Objective Type**

Biology contains 45 multiple choice questions numbered 1 to 45. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. Trypsin is an enzyme that breaks down
(A) Proteins (B) Fats (C) Starch (D) Maltose
2. Vernalization takes place in response to
(A) Low light intensity (B) High light intensity (C) Low temperature (D) High temperature
3. Identify the disease is transmitted through sexual contact?
(A) Cancer (B) Gonorrhoea (C) Diabetes (D) Hydrophobia
4. A pregnant woman has an equal chance of her baby being blood group A or blood group AB. Which one of the following shows the possible genotypes of the woman and the father of her child?
(A) $I^A I^A$ and $I^B I^O$ (B) $I^A I^B$ and $I^B I^O$ (C) $I^A I^O$ and $I^B I^O$ (D) $I^O I^B$ and $I^A I^O$
5. In peas, a pure tall plant (TT) is crossed with a pure short plant (tt). The ratio of pure tall plants to pure short plants in F_2 generation will be:
(A) 1 : 3 (B) 3 : 1 (C) 1 : 1 (D) 2 : 1
6. When air is blown from mouth into a test-tube containing lime water, the lime water turned milky due to the presence of
(A) oxygen (B) carbon dioxide (C) nitrogen (D) water vapour
7. Which of the following acts as both endocrine and exocrine gland?
(A) Pancreas (B) Thyroid (C) Adrenal (D) Liver
8. In a normal healthy woman, menstruation occurs every _____ days.
(A) 14 (B) 28 (C) 10 (D) 270
9. Which is the correct sequence of parts in human alimentary canal?
(A) Mouth → stomach → small intestine → oesophagus → large intestine
(B) Mouth → oesophagus → stomach → large intestine → small intestine
(C) Mouth → stomach → oesophagus → small intestine → large intestine
(D) Mouth → oesophagus → stomach → small intestine → large intestine

Space for rough work

10. A revolt “Narmada Bachao Andolan” was launched under the leadership of
(A) Amrita Devi (B) Gaura Devi
(C) Medha patkar (D) Sundar Lal Bahuguna
11. Deficiency of Insulin results in
(A) Diabetes insipidus (B) Diabetes mellitus (C) Both A & B (D) Goitre
12. What is meant by emasculation?
(A) Pollination between flowers of same plant
(B) Pollination between the flowers of different plants
(C) Removal of the anthers
(D) Artificial pollination
13. A short length of a DNA molecule contains 100 adenine and 100 cytosine bases. The total number of nucleotides in this DNA fragment is
(A) 400 (B) 200 (C) 600 (D) 240
14. ----- refers to the sequence of events in an ecosystem, where one organism eats another and then is eaten by another organism.
(A) Biogeochemical cycle (B) Nutrient cycle (C) Interaction (D) Food chain
15. A massive multi-crore project “Ganga Action Plan” was implemented in the year
(A) 1985 (B) 1972 (C) 1731 (D) 1970
16. The diastolic pressure in a healthy person is
(A) 60 mm Hg (B) 80 mm Hg (C) 100 mm Hg (D) 120 mm Hg
17. Which part of the Brain comprises of Pneumotaxic centre?
(A) Cerebrum (B) Olfactory lobe (C) Pons varolii (D) Medulla oblongata
18. Any cell, tissue or an organ removed from a plant for the purpose of tissue culturing is called
(A) Stock (B) Scion (C) Explant (D) Embryoid
19. Theory of acquired characters was proposed by
(A) Lamarck (B) Weismann (C) Darwin (D) De Vries
20. In an aquatic food chain the maximum amount of DDT accumulates in the body of ?
(A) Phytoplankton (B) Zooplankton
(C) Fish feeding on planktons (D) Bird feeding on fish

Space for rough work

21. The movement of water out of the descending limb and the collecting tubule serves to
(A) Decrease the concentration of the urine (B) Increase the concentration of the urine
(C) No change in the concentration of the urine (D) Increase the glucose concentration
22. Lack of oxygen in muscles often leads to cramps among cricketers. This results due to
(A) conversion of pyruvate to ethanol (B) conversion of pyruvate to lactic acid
(C) conversion of pyruvate to glucose (D) conversion of pyruvate to galactose
23. Leydig cells of the testis secrete a hormone called
(A) FSH (B) Growth hormone (C) Prolactin (D) Testosterone
24. The fossil remains of *Archaeopteryx* is said to be a connecting link between
(A) Amphibians (B) Reptiles and birds
(C) Fish and amphibians (D) Reptiles and mammals
25. Which plant hormone promotes cell division?
(A) Auxin (B) Cytokinin (C) Gibberellin (D) Abscissic acid
26. 'Chipko Andolan' is related with
(A) Soil conservation (B) Forest conservation
(C) Green house effect (D) Water conservation
27. The instrument used to measure the Blood pressure is
(A) Doppler foetal monitor (B) Infusion pump
(C) Sphygmomanometer (D) Laryngoscopy
28. The blood calcium level is lowered in the blood by the hormone
(A) Thyroxine (B) Prolactin (C) Calcitonin (D) Insulin
29. ----- is a surgical procedure for male sterilization or permanent contraception.
(A) Vasectomy (B) Tubectomy (C) Tubal ligation (D) Ovariectomy
30. -----are those which are similar in their morphology, anatomy, genetics and embryology but dissimilar in their functions.
(A) Analogous Organs (B) Homologous Organs
(C) Both A & B (D) None of the above
31. Eutrophication or Algal Bloom leads to the death of fishes due to
(A) Increased oxygen content (B) Increased fungi content
(C) Decreased algae content (D) Decreased oxygen content

Space for rough work

32. The disadvantages normally associated with dam constructions is/are
(A) Need to relocate large number of people (B) Consume large amount of public money
(C) Deforestation and different types of pollution (D) All of the above
33. Name the plasma protein that function in blood clotting
(A) Haeme (B) Globulin (C) Fibrinogen (D) Globulin
34. The Brain and the Spinal cord together comprises the
(A) Central nervous system (B) Peripheral nervous system
(C) Autonomous nervous system (D) Sympathetic nervous system
35. ----- is defined as the point in time in a woman when menstrual cycles permanently stops due to the natural depletion of ovarian oocytes due to aging.
(A) Menopause (B) Menarche (C) Ovulation (D) Oogenesis
36. The Theory of Natural selection was given by
(A) Lamarck (B) August Weismann (C) J. B. S. Haldane (D) Charles Darwin
37. 5th June is celebrated as
(A) World forest day (B) World environment day
(C) World red cross day (D) World food day
38. Stakeholders from the following is/are
(A) Forest department of the government which owns the land and controls the forest resources
(B) People who live in or around forests and depend on forest resources
(C) Industrialists and Environmentalists
(D) All the above
39. The Sudden jerky withdrawal of hand or leg when pricked by a pin is an example of
(A) Muscle Twitch (B) Reflex action (C) Both A & B (D) None of these
40. Allosomes are
(A) Somatic chromosomes (B) Sex chromosomes
(C) type of oxsomes (D) type of centrosome
41. Which of the following hormone helps in maintaining Biological clock or Circadian rhythms?
(A) Relaxin (B) Melatonin (C) Thyroxine (D) Insulin
42. If a normal cell of human body contains 46 pairs of chromosomes then the numbers of chromosomes in a sex cell of a human being is most likely to be:
(A) 60 (B) 23 (C) 22 (D) 40
43. The presence of which microorganism in Ganga water indicates contamination?
(A) Lactobacillus bacteria (B) Streptococcus (C) Coliform bacteria (D) Mucor spores
44. Amirata Devi Bishnoi scarified her life to the protection of
(A) Sal trees (B) Pine trees (C) khejri trees (D) Alpine meadows
45. Which of the following shows multiple fission ?
(A) Hydra (B) Yeast (C) Spirogyra (D) Plasmodium

ANSWERKEY

Section - I

IQ

1.C	2.D	3.B	4.B	5.D
6.D	7.B	8.D	9.D	10.B
11.A	12.A	13.B	14.B	15.A
16.A	17.C	18.D	19.B	20.D
21.D	22.A	23.C	24.C	25.A
26.B	27.B	28.D	29.B	30.A

Section - II

Physics

1.B	2.A	3.B	4.C	5.B
6.C	7.B	8.A	9.B	10.A
11.B	12.B	13.B	14.A	15.D

Chemistry

16.B	17.C	18.B	19.C	20.C
21.B	22.D	23.D	24.D	25.D
26.D	27.D	28.D	29.A	30.C

Mathematics

31.B	32.B	33.D	34.A	35.B
36.C	37.A	38.A	39.B	40.B
41.A	42.C	43.B	44.D	45.A

Section - III

Biology

1.A	2.C	3.B	4.A	5.C
6.B	7.A	8.B	9.D	10.C
11.B	12.C	13.A	14.D	15.A
16.B	17.C	18.C	19.A	20.D
21.B	22.B	23.D	24.B	25.B
26.B	27.C	28.C	29.A	30.B
31.D	32.D	33.C	34.A	35.A
36.D	37.B	38.D	39.B	40.B
41.B	42.B	43.C	44.C	45.D