Entrance Examination

Services Preparatory Institute, Chhatrapati Sambhajinagar
Services Preparatory Institute (Girls), Nashik

EX – 50 / 2026

Test Booklet

0572

SET – A

Questions : 150 **Marks : 600** **Time: 3 Hours**

General Instructions

1. Only writing material is permitted inside the Examination Hall. Do not carry books, notebooks, papers, cell phone, calculator or any other items with you.
2. Keep your Hall Ticket and Aadhar Card ready for scrutiny.
3. Fill up your **Name, Roll Number, Centre Name and Question Paper Set Number (A/B/C/D)** on the answer sheet (OMR sheet) before starting to answer. Incomplete answer sheet will be regarded as invalid.
4. Test Booklet contains 150 questions, numbered serially from 1 to 150. However first 75 questions pertain to Mathematics portion and next 75 questions pertain to General Ability Portion (English, Science etc).
5. The Test Booklet has 12 pages. In addition, 2 blank pages are attached in the end for rough work. Check that your Test Booklet does not have any unprinted or torn or missing pages or missing questions in it. If so, get it replaced with a new booklet.
6. Each question comprises of four alternatives marked as "a, b, c and d". Select the alternative which you think is correct and darken the respective circle on the answer sheet provided.
7. Mark your answers by completely filling out the respective circle. Do not merely cross the circle. Use only blue or black colour ball point pen. Do not use pencil, gel pen etc.
8. Mark only one answer. Any cuttings or marking more than one answer will be treated as wrong answer even if one of them is correct.
9. All answers should be marked on the answer sheet only. Do not mark on the test booklet.
10. **There is a negative marking system for this exam.**
11. **For each correct answer you will get 4 marks and for each wrong answer 1 mark will be deducted. No plus or minus marks will be given if the question is not attempted.**
12. Do not tear off the sheets provided for rough work.
13. Return the Test Booklet, Answer Sheet and rough work-sheets at the end of the examination.

Part 1 : Mathematics

Set A

Q. 1	HCF of two numbers is 27 and their LCM is 162. If one number is 54, then the other number is --------. (a) 36 (b) 39 (c) 91 (d) 81
Q. 2	If the sum of the squares of zeroes of the polynomial $x^2 - 8x + k$ is 40. Find the value of 'k'. (a) 8 (b) 14 (c) 12 (d) 10
Q. 3	The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is:- (a) 10 (b) 100 (c) 504 (d) 2520
Q. 4	A motor boat whose speed is 18 km/hr in still water takes 1 hour more to go 24 km upstream than it takes to return downstream to the same spot. Then the speed of the stream is -----. (a) 8 km/hr (b) 6 km/h (c) 7 km/hr (d) 7.5 km/hr
Q. 5	The sum of the squares of two positive integers is 225. The square of the larger number is 16 times the smaller number, then the smaller number is :- (a) 9 (b) 20 (c) 12 (d) 11
Q. 6	Which term of the AP :- 3, 15, 27, 39, --------- will be 132 more than its 54^{th} term? (a) 45^{th} (b) 64^{th} (c) 65^{th} (d) 70^{th}
Q. 7	In a flower bed, there are 43 rose plants in the first row, 41 in the second, 39 in the third and so on. There are 11 rose plants in the last row. Then the number of rows in the flower bed are :- (a) 16 (b) 18 (c) 15 (d) 17
Q. 8	Find the coordinates of a point A, where AB is a diameter of the circle with centre C (3, -1) and the point B is (2, 6). (a) (4, -8) (b) (-4, 8) (c) (3, 4) (d) (-4, -8)
Q. 9	In triangles ABC and DEF, $\angle B = \angle E$ and $\angle F = \angle C$ and AB = 3 DE. Then the two triangles are :- (a) congruent but not similar (b) similar but not congruent (c) congruent as well as similar (d) neither congruent nor similar
Q. 10	If the zeroes of a polynomial $x^2 + px + q$ are twice the zeroes of the polynomial $4x^2 - 5x - 6$, then the value of p is :- (a) $\frac{2}{3}$ (b) $\frac{5}{2}$ (c) $\frac{-5}{2}$ (d) $\frac{5}{6}$
Q. 11	From a point P which is at a distance of 13 cm from the centre 'O' of a circle of radius 5 cm, the pair of tangents PQ and PR to the circle is drawn. Then the area of the quadrilateral PQOR is --------. (a) 55.5 cm^2 (b) 60 cm^2 (c) 65 cm^2 (d) 45 cm^2
Q. 12	If the perimeter of a semi-circular protractor is 36 cm, then its diameter is :- (a) 12 cm (b) 10 cm (c) 16 cm (d) 14 cm
Q. 13	Ravi gets 3 marks for each correct answer and loses 2 marks for each wrong answer. He attempted 30 questions and obtained 40 marks. Find the number of right answers. (a) 15 (b) 25 (c) 20 (d) 18
Q. 14	A boy is cycling such that the wheels of the cycle are making 140 revolutions per minute. If the diameter of the wheel is 60 cm, then the speed in km per hour with which the boy is cycling is --------. (a) 15.84 km/hr (b) 20 km/hr (c) 12.54 km/hr (d) 14.45 km/hr

Q. 15	What is the length of the longest rod that can be placed in a room whose length is 10 m, breadth is 8 m and height is 6 m. (take $\sqrt{2} = 1.42$) (a) 14.2 m (b) 13 m (c) 15.5 m (d) 10 m
Q. 16	A cubical ice-cream brick of edge 22 cm is to be distributed among some children by fully filling ice-cream cones of radius 2 cm and height 7 cm. Then how many children will get the ice cream cones? (a) 275 (b) 353 (c) 363 (d) 324
Q. 17	While computing mean of grouped data, we assume that the frequencies are :- (a) centred at the class marks of the classes (b) evenly distributed over all the classes (c) centred at the upper limits of the classes (d) centred at the lower limits of the classes
Q. 18	If $\text{cosec}\,\theta - \cot\theta = \frac{4}{5}$ then $\text{cosec}\,\theta = ?$ (a) $\frac{47}{40}$ (b) $\frac{40}{51}$ (c) $\frac{41}{40}$ (d) $\frac{51}{40}$
Q. 19	If $\sin\theta + \cos\theta = \sqrt{2}$, then $\tan\theta + \cot\theta = ?$ (a) 1 (b) 2 (c) 3 (d) 4
Q. 20	Seven times a two digit number is equal to four times the number obtained by reversing the order of its digits. If the difference of the digits is 3, then the number is :- (a) 25 (b) 33 (c) 36 (d) 43
Q. 21	If n is a natural number, then $2(5^n + 6^n)$ always ends with --------. (a) 1 (b) 4 (c) 3 (d) 2
Q. 22	At which point the graph of the polynomial :- $(-x + 6x^2 - 1)$ intersects the negative x-axis? (a) only $\frac{-1}{3}$ (b) only $\frac{-1}{2}$ (c) both $\frac{-1}{3}$ and $\frac{-1}{2}$ (d) never intersects
Q. 23	If one zero of the polynomial $(a^2+4)x^2 + 9x + 4a$ is the reciprocal of the other, then $a = ?$ (a) 8 (b) 6 (c) 4 (d) 2
Q. 24	The perimeter of a square is same as the circumference of a circle of radius 24.5 cm, then the side of the square is :- (a) 36 cm (b) 42 cm (c) 38.5 cm (d) 40.5 cm
Q. 25	Two APs have same common difference. If the difference between their 50^{th} terms is 200, then the difference between their 500^{th} terms is :- (a) 500 (b) 400 (c) 200 (d) 250
Q. 26	The sum of the first 100 positive integers is :- (a) 5500 (b) 4050 (c) 5050 (d) 5450
Q. 27	A (-5, 6), B (-4, -2) and C (7, 5) are the coordinates of the vertices of a triangle. Then Δ ABC is? (a) Isosceles acute angled triangle (b) Isosceles right angled triangle (c) Equilateral triangle (d) Scalene triangle
Q. 28	A quadratic polynomial whose zeroes are $(5 - 3\sqrt{2})$ and $(5 + 3\sqrt{2})$ is :- (a) $x^2 + 10x - 7$ (b) $x^2 - 10x - 7$ (c) $x^2 - 10x + 7$ (d) $x^2 + 10x + 7$
Q. 29	The length of the minute hand of a clock is 14 cm. Find the area swept by the minute hand in 1 minute. (a) 12.38 cm^2 (b) 11.25 cm^2 (c) 14 cm^2 (d) 10.27 cm^2

Q. 30	If $0^0 < \theta < 90^0$ then find the value of θ which satisfies the equation :- $2 \sin \theta = \text{Cosec } \theta$ (a) 30^0 (b) 45^0 (c) 60^0 (d) 75^0
Q. 31	If $k + 1 = \text{Sec}^2 \theta (1 - \sin \theta)(1 + \sin \theta)$ then $k = ?$ (a) -1 (b) 0 (c) 1 (d) 2
Q. 32	The smallest irrational number by which $\sqrt{20}$ should be multiplied so as to get a rational number is --------. (a) $\sqrt{20}$ (b) $\sqrt{2}$ (c) 5 (d) $\sqrt{5}$
Q. 33	In a cricket match Harbhajan took three wickets less than twice the number of wickets taken by Zaheer. The product of the numbers of wickets taken by these two is 20, then the wickets taken by Harbhajan are :- (a) 7 (b) 5 (c) 6 (d) 8
Q. 34	If the zeroes of the quadratic polynomial $ax^2 + bx + c$ are equal and $c \neq 0$, then (a) c and b have opposite signs (b) c and a have opposite signs (c) c and b have same signs (d) c and a have same signs
Q. 35	The whole surface area of a rectangular block is 846 cm^2 , find the volume of the block if its dimensions are proportional to 5 : 4 : 3 (a) 1400 cm^3 (b) 1575 cm^3 (c) 1620 cm^3 (d) 1680 cm^3
Q. 36	Maximum number of common tangents that can be drawn to two circles intersecting at two distinct points is :- (a) 2 (b) only 1 (c) 4 (d) infinite
Q. 37	If a number 'x' is 10% less than another number 'y' and 'y' is 10% more than 125, then 'x' = ? (a) 123.25 (b) 125 (c) 137.50 (d) 123.75
Q. 38	If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3b$; where a, b are prime numbers, then the LCM (p, q) is --------. (a) a^3b^3 (b) a^2b^2 (c) a^2b^3 (d) a^3b^2
Q. 39	If the system $2x + 3y - 5 = 0$ and $4x + ky - 10 = 0$ has infinite number of solutions then :- (a) $k = 6$ (b) $k \neq 6$ (c) $k = \frac{3}{2}$ (d) $k \neq \frac{3}{2}$
Q. 40	If 3 is one root of the quadratic equation $x^2 - 2kx - 6 = 0$, then the value of K = ? (a) 3 (b) 2 (c) $\frac{1}{2}$ (d) $\frac{1}{3}$
Q. 41	Three vertices of the parallelogram ABCD are A (1, 4), B (-2, 3), and C (5, 8). Then the ordinate of the fourth vertex D is ---------. (a) 8 (b) 7 (c) 6 (d) 9
Q. 42	Find the distance between the points P (-6, 7) and Q (-1, -5). (a) 12 units (b) 11 units (c) 13 units (d) 14 units
Q. 43	A train travels first 300 km at an average speed of 30 km/hr. Further it travels the same distance at an average speed of 60 km/hr. Then the average speed of the train over the whole distance is :- (a) 40 km/hr (b) 35 km/hr (c) 42 km/hr (d) 45 km/hr
Q. 44	If Ritu were younger by 5 years than what she really is, then the square of her age would have been 11 more than 5 times her present age. What is her present age? (a) 12 years (b) 14 years (c) 17 years (d) 16 years
Q. 45	Point (x, y) is 5 units from the origin in the third quadrant. How many such points lie in the third quadrant = ? (a) 1 (b) 2 (c) 3 (d) Infinite

Q. 46 If $\cos x = \frac{2}{3}$ then $\tan x = ?$

(a) $\frac{2}{5}$ (b) $\frac{3}{\sqrt{2}}$ (c) $\frac{\sqrt{5}}{2}$ (d) $\frac{2}{\sqrt{5}}$

Q. 47 One card is drawn randomly from a well shuffled pack of 52 cards. Then the probability that the card drawn is red and a king is :-

(a) $\frac{1}{26}$ (b) $\frac{7}{13}$ (c) $\frac{6}{13}$ (d) $\frac{1}{13}$

Q. 48 Two dice are thrown at the same time. Determine the probability that the difference of the numbers on the two dice is 2.

(a) $\frac{2}{9}$ (b) $\frac{5}{18}$ (c) $\frac{9}{11}$ (d) $\frac{7}{11}$

Q. 49 In an office, there are 108 tables and 132 chairs. If $\frac{1}{6}$ of the tables and $\frac{1}{4}$ of the chairs are broken, then how many people can work in the office, if each person requires one table and one chair to work?

(a) 86 (b) 90 (c) 92 (d) 99

Q. 50 Consider the following frequency distribution of the heights of 60 students of a class :

Height (cm)	150-155	155-160	160-165	165-170	170-175	175-180
Students	15	13	10	8	9	5

Then the sum of the lower limit of the modal class and upper limit of the median class is :-

(a) 310 (b) 320 (c) 315 (d) 325

Q. 51 Find the missing frequencies f_1 and f_2 in the following frequency distribution table, if N = 100 and median = 32.

Class	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	10	f_1	25	30	f_2	10

(a) 11 and 16 (b) 9 and 16 (c) 8 and 14 (d) 7 and 11

Q. 52 The number of polynomials having -3 and 5 as its zeroes is :-

(a) only one (b) exactly two (c) at most two (d) infinite

Q. 53 Rs. 6500 were divided equally among a certain number of persons. If there had been 15 more persons, each would have got Rs. 30 less, then the original number of persons is --------.

(a) 45 (b) 50 (c) 60 (d) 55

Q. 54 A sum of Rs 700 is to be used to give cash prizes to 7 students of a school for their overall performance. If each prize is Rs. 20 less than its preceding prize, then the value of the first prize will be _____?

(a) Rs. 160 (b) Rs. 140 (c) Rs. 170 (d) Rs. 150

Q. 55 Which term of the AP :- 3, 8, 13, 18, ------ is 78?

(a) 14^{th} (b) 15^{th} (c) 16^{th} (d) 17^{th}

Q. 56 In a circle of radius 21 cm, an arc subtends an angle of 60^0 at the centre. Then the area of the sector formed by the arc and the length of the arc, respectively, are -------

(a) 189.5 cm^2, 19 cm (b) 225 cm^2, 23 cm (c) 214 cm^2, 24 cm (d) 231 cm^2, 22 cm

Q. 57 The value of expression :- $\text{Cosec}(75^0 + \theta) - \sec(15^0 - \theta) - \tan(55^0 + \theta) + \cot(35^0 - \theta) = ?$

(a) -1 (b) 0 (c) 1 (d) 3/2

Q. 58 The AP 8, 10, 12, ------ has 60 terms. Then the sum of the last 10 terms of the AP =?

(a) 1050 (b) 1250 (c) 1170 (d) 1070

Q. 59	The angles of elevation of the tops of two vertical towers as seen from the middle point of the line joining the feet of the towers are 60^0 and 30^0 respectively. Then the ratio of the heights of the towers is :- (a) $\sqrt{3} : 1$ (b) 2 : 1 (c) 3 : 1 (d) 3 : 2
Q. 60	The sum of the areas of two squares is 468 m^2 and the difference of their perimeters is 24 m, then the sides of these two squares are :- (a) 12m and 18m (b) 15m and 21m (c) 10m and 16m (d) 14m and 20m
Q. 61	Cards marked with numbers 2 to 101 are placed in a box and mixed thoroughly. One card is drawn from the box. Then the probability of card having a perfect cube number is :- (a) $\frac{5}{101}$ (b) $\frac{4}{101}$ (c) $\frac{3}{101}$ (d) $\frac{3}{100}$
Q. 62	The method used to find the mean of a given data is :- (a) direct method (b) assumed mean method (c) step deviation method (d) all of these
Q. 63	Construction of a cumulative frequency table is useful in determining the :- (a) mean (b) median (c) mode (d) all of these
Q. 64	Pratik has 50 blue coins and 50 green coins of same size in a bag. He is randomly taking out one coin at a time without replacing it back in the bag. He does not see which colour coin he has taken out. What is the minimum number of coins he will have to take out to definitely get a pair of same colour coins? (a) 2 (b) 3 (c) 4 (d) 5
Q. 65	The sum of the squares of the three consecutive natural numbers is 770, then the smallest of these numbers is :- (a) 10 (b) 17 (c) 15 (d) 8
Q. 66	The number of multiples of 4 between 10 and 500 is :- (a) 104 (b) 98 (c) 125 (d) 123
Q. 67	If (6, k) lies on the line represented by $x - 3y + 6 = 0$ then the value of k = ? (a) -4 (b) 4 (c) -12 (d) 12
Q. 68	The length of a tangent from a point 'A' at a distance 5 cm from the centre of the circle is 4 cm. Then the radius of the circle will be :- (a) 3 cm (b) 5 cm (c) 6 cm (d) 7 cm
Q. 69	A tower stands vertically on the ground. From a point on the ground which is $15\sqrt{3}$ meter away from the foot of the tower, the angle of elevation of the top of the tower is found to be 30^0 then the height of the tower is :- (a) $15\sqrt{3}$m (b) 14.5m (c) 15m (d) 13m
Q. 70	A cone, a hemisphere and a cylinder are of the same base and of the same height. Then the ratio of their volumes is :- (a) 2:1:3 (b) 1:2:3 (c) 3:1:2 (d) 3:2:1
Q. 71	The longest diameter of a cone, which can be fully fitted in a cube of edge 8 cm is ------ (a) $8\sqrt{2}$ cm (b) $6\sqrt{2}$ cm (c) 8 cm (d) 12 cm
Q. 72	If a letter is chosen at random from English alphabets, then the probability that it is a letter of the word "mathematics" is ----- (a) $\frac{4}{11}$ (b) $\frac{4}{13}$ (c) $\frac{5}{13}$ (d) $\frac{11}{26}$

Q. 73	An observer, 1.5 m tall, is 28.5 m away from a 30 m high tower. The angle of elevation of the top of the tower from the eye of the observer is :- (a) 30^0 (b) 45^0 (c) 60^0 (d) 75^0
Q. 74	Three coins are tossed simultaneously, what is the probability of getting exactly two tails? (a) $\frac{3}{8}$ (b) $\frac{1}{2}$ (c) $\frac{5}{8}$ (d) $\frac{7}{8}$
Q. 75	Rahul and Hemant solve an equation. In solving Rahul commits a mistake in constant term and finds the roots as 8 and 2. Hemant commits a mistake in the coefficient of 'x' and finds the roots as -9 and -1. Then the correct roots are :- (a) -9, 1 (b) 9, -1 (c) -9, -1 (d) 9, 1

Read the following passage and answer the questions given below:-

Most of you probably did not see Mohan at close quarters. He had amazing qualities. One of these qualities was that he managed to draw out the good in another person. The other person may have had plenty of evil in him. But Mohan somehow spotted the good and laid emphasis on the good. The result was that the man had to try to be good. He could not help it. He would feel ashamed when he did something wrong.

Q. 76 The author assumes that most of us :-
(a) Are not well-acquainted with Mohan's powers. (b) Have not heard of Mohan.
(c) Have not seen or met Mohan. (d) Have not observed Mohan's house closely.

Q. 77 One of Mohan's greatest qualities was that :-
(a) He could completely destroy the evil in another man. (b) He kept away from bad men.
(c) He could discover the good in another man. (d) He always maintained good relations.

Q. 78 The other man had to try to be good because :-
(a) Mohan forced him to do so. (b) He wanted to imitate Mohan.
(c) He did not want to remain evil. (d) He was ashamed of doing a wrong thing.

Directions :- Identify tense in following two sentences.

Q. 79 "He is going to the library."
(a) Present perfect tense (b) Present continuous tense
(c) Simple present tense (d) Simple future tense

Q. 80 "She had washed her hands before she cooked the dinner."
(a) Present perfect tense (b) Simple past tense
(c) Past continuous tense (d) Past perfect tense

Directions :- Mark the meaning of the idiom written in bold in the following two sentences:-

Q. 81 During the lecture by our swimming coach, I was ***all at sea***.
(a) out of reach (b) very happy (c) puzzled (d) drowning

Q. 82 His dealings are all ***above board***.
(a) simple (b) open (c) decent (d) friendly

Directions :- Choose the correct **synonym** of the underlined word in the following sentences.

Q. 83 People fear him because of his vindictive nature.
(a) violent (b) revengeful (c) cruel (d) irritable

Q. 84 He is quite meticulous in his dealings with others.
(a) indifferent (b) haughty (c) very careful (d) reserved

Q. 85 His information is not authentic.
(a) real (b) reliable (c) believable (d) genuine

Q. 86 Nobody believed him but subsequent events proved that he was right.
(a) later (b) earlier (c) many (d) few

Directions :- Choose the correct **antonym** of the underlined word in the following sentences.

Q. 87 He is a man of extravagant habits.
(a) sensible (b) careful (c) economical (d) balanced

Q. 88 The inhabitants of the island were barbarians.
(a) civilized (b) cruel (c) uncivilized (d) rich

Q. 89 For the first time I saw him speaking rudely to her.
(a) softly (b) gently (c) politely (d) slowly

Q. 90 The smoke and pollution has made it hazardous to breathe the air in Delhi.
(a) convenient (b) risky (c) wrong (d) safe

Directions.	Choose the correctly spelt word :-
Q. 91	(a) Acomodation (b) Accommodation (c) Accomodation (d) Acommodation
Q. 92	(a) Parralal (b) Parrallel (c) Parallel (d) Paralel
Do as directed :-	
Q. 93	**Identify the type of the sentence:-** 'When she arrived at the airport, the plane had already taken off'. (a) Simple Sentence (b) Compound Sentence (c) Mixed Sentence (d) Complex Sentence
Q. 94	Select a single word for :- "Government by one man." (a) anarchy (b) monarchy (c) autocracy (d) democracy
Q. 95	**Choose the correct indirect speech of the following sentence :-** He said, "I am learning English now." (a) He said that he was learning English now. (b) He said he was learning English then. (c) He said he was learning English now. (d) He said that he was learning English then.
Q. 96	**Choose the correct direct speech of the following sentence :-** They said that they would come the next day. (a) They said, "We will come tomorrow." (b) They told, "We may come tomorrow." (c) They said, "They will come tomorrow." (d) They said, "They would come tomorrow."
Q. 97	**Convert the following sentence from Active to Passive voice :-** 'They are writing a novel.' (a) A novel is written by them. (b) A novel was written by them. (c) A novel is being written by them. (d) A novel will be written by them.
Q. 98	**Convert the following sentence from Passive to Active voice :-** 'Why has the mirror been broken by you?' (a) Why have you broken the mirror? (b) Why have you broke the mirror? (c) Why have you been breaking the mirror? (d) Why were you broken the mirror?
Directions :-	Mark the appropriate choice to fill in the blank :-
Q. 99	The smuggled goods get ---------- by the custom authorities. (a) possessed (b) punished (c) confiscated (d) fined
Q. 100	I saw a -------- of cows in the field. (a) group (b) herd (c) flock (d) gathering
Q. 101	The grapes are now --------- enough to be picked. (a) ready (b) matured (c) ripe (d) advanced
Q. 102	Success in this exam depends --------- hard work alone. (a) by (b) over (c) in (d) on
Directions :-	Rearrange the jumbled parts to make meaningful sentence.
Q. 103	(P) of any kind (Q) to freedom and intelligence (R) domination or compulsion (S) is a direct hindrance (a) RPSQ (b) RQPS (c) SPQR (d) QRSP
Q. 104	(P) most spectacular gold coins (Q) some of the (R) the Gupta rulers in India (S) were issued by (a) RSPQ (b) QPSR (c) PQRS (d) SPQR
Q. 105	(P) for long and (Q) the backbone of India (R) will continue to be the same (S) agriculture has been (a) SPQR (b) RSQP (c) SQPR (d) PQRS

Sentence Improvement :- Choose better word to improve upon the underlined words.	
Q. 106	I can always count in him in times of difficulty. (a) count at him (b) count on he (c) count with him (d) count on him
Q. 107	Despite of their differences, they all agreed on the demand of hike in salary. (a) despite their (b) despite for their (c) despite of there (d) No improvement
Q. 108	They feel very proudly that their team had won the match. (a) feels very proudly (b) felt very pride (c) felt very proud (d) No improvement
Q. 109	Why did you not threw the bag away? (a) did you threw (b) did you not throw (c) had you not threw (d) did you not thrown
Spotting Error : In the following sentences identify the part in which there is an error.	
Q. 110	My mother (a)/ is cooking (b)/ in a kitchen (c)/ No Error.(d)
Q. 111	He is one (a)/ of the greatest man (b)/ that have ever lived in India. (c)/ No error.(d)
Q. 112	Hardly had (a)/ he left (b)/ then his father came (c)/No error.(d)
Q. 113	Meena talks (a)/ as if she is (b)/ a queen. (c)/ No error.(d)
Q. 114	The criminal was (a)/sentenced to death (b)/and was hung for his crimes. (c)/ No error.(d)
Q. 115	The teacher (a)/ as well as the students (b)/ have gone to the library. (c)/ No error.(d)
Q. 116	Sodium carbonate is a basic salt because it is a salt of :- (a) strong acid and strong base (b) weak acid and weak base (c) weak base and strong acid (d) strong base and weak acid
Q. 117	The major problem in harnessing nuclear energy is how to :- (a) split nuclei (b) sustain the reaction (c) dispose of spent fuel safely (d) convert nuclear energy into electrical energy
Q. 118	Which one of the following properties is not generally exhibited by ionic compounds? (a) Solubility in water (b) Electrical conductivity in solid state (c) High melting and boiling points (d) Electrical conductivity in molten state
Q. 119	Pentane has the molecular formula C_5H_{12} , it has :- (a) 5 covalent bonds (b) 12 covalent bonds (c) 16 covalent bonds (d) 17 covalent bonds
Q. 120	A solution of Sodium Chloride will:- (a) turn red litmus blue (b) turn blue litmus red (c) turn red litmus orange (d) will not change colour of red or blue litmus
Q. 121	Chemical messengers in the body are:- (a) enzymes (b) hormones (c) nutrients (d) secretions
Q. 122	Which of the following is fast reaction:- (a) reaction between H_2 and O_2 to form H_2O (b) hydrolysis of ester (c) reaction between acid and base to form salt and water (d) hydrolysis of sugar to glucose
Q. 123	$Fe + CuSO_4 \rightarrow FeSO_4 + Cu$ is an example of :- (a) Combination reaction (b) Displacement reaction (c) Decomposition reaction (d) Double Displacement reaction

Q. 124	Hydrogen loses its electron to form H^+, in this respect, it resembles:- (a) alkali metals (b) halogens (c) transition elements (d) alkaline earth metals
Q. 125	The process by which smaller molecules combine to give a molecule with a higher molecular weight is known as:- (a) condensation (b) polymerisation (c) catenation (d) isomerisation
Q. 126	The process of reduction involves:- (a) removal of hydrogen (b) addition of oxygen (c) gain of electrons (d) loss of electrons
Q. 127	A person cannot see distinctly objects kept beyond 2 m. This defect can be corrected by using a lens of power (a) + 0.5 D (b) – 0.5 D (c) + 0.2 D (d) – 0.2 D
Q. 128	The inner lining of stomach is protected from hydrochloric acid by :- (a) pepsin (b) amylase (c) bile (d) mucus
Q. 129	A full length image of a distant tall building can definitely be seen by using :- (a) a concave mirror (b) a convex mirror (c) a plane mirror (d) both concave as well as plane mirror
Q. 130	When light rays enter the eye, most of the refraction occurs at the :- (a) crystalline lens (b) iris (c) outer surface of the cornea (d) pupil
Q. 131	When white light enters a prism, it gets split into its constituent colours. This is due to :- (a) different refractive index for the different wavelengths of each colour (b) each colour has the same velocity in the prism (c) prism material has high density (d) scattering of light
Q. 132	In optical instruments, the lenses are used to form images by:- (a) reflection (b) refraction (c) dispersion (d) scattering
Q. 133	In an electrical circuit, two resistors of 2 Ω and 4 Ω respectively are connected in series to a 6 V battery. The heat dissipated by the 4 Ω resistor in 5 seconds will be :- (a) 5 J (b) 10 J (c) 20 J (d) 30 J
Q. 134	Fleming's right hand rule gives:- (a) the magnitude of induced emf (b) the magnitude of the magnetic field (c) the direction of induced emf (d) both the direction and magnitude of induced emf
Q. 135	Magnetic field around a straight conductor is :- (a) In straight lines (b) In concentric circles (c) Zigzag (d) Random
Q. 136	The resistance of germanium _____ with rise in temperature:- (a) decreases (b) increases (c) remains same (d) first increases then decreases
Q. 137	When the object is at the focus of concave mirror, the image is formed at:- (a) focus (b) centre of curvature (c) within focus (d) infinity
Q. 138	Variable focal length of eye is responsible for :- (a) Persistence of vision (b) Colour blindness (c) Accommodation of eye (d) Least distance of distinct vision
Q. 139	If the current in the core decreases, then the strength of the magnetic field :- (a) decreases (b) increases (c) remains unchanged (d) cannot be predicted
Q. 140	When a ray of light passes from an optically denser medium to a less dense medium, it:- (a) passes unaffected (b) bends towards the normal (c) bends away from the normal (d) not predictable
Q. 141	The defect of astigmatism can be rectified using --------- :- (a) Convex Lens (b) Bifocal Lens (c) Concave Lens (d) Cylindrical Lens

Q. 142	Each kidney has a large number of filtering units called _____ :- (a) neurons (b) nephrons (c) axons (d) dendrites
Q. 143	If a nail touches a magnet, it will ---------- :- (a) generate electric current (b) melt (c) get polarized (d) de-magnetize the magnet
Q. 144	In a certain language, MADRAS is coded as NBESBT, how is BOMBAY coded in that code? (a) CPNCBZ (b) CPNCBX (c) DPNCBZ (d) DPNCBX
Q. 145	A shepherd had 17 sheep. All but nine died. How many sheep he is left with? (a) 0 (b) 8 (c) 9 (d) 10
Q. 146	Sohan introduces Mohan as the son of the only brother of his father's wife. How is Mohan related to Sohan? (a) Son (b) cousin (c) Uncle (d) Son-in-law
Q. 147	Vishnu ranks 16th from the top and 49th from the bottom in a class. Then how many students are there in that class? (a) 64 (b) 65 (c) 66 (d) 68
Q. 148	If :- Newspaper = Editor, then Film = ? (a) Actor (b) Director (c) Producer (d) Writer
Q. 149	Out of the following which set of numbers is like given set (64, 32, 8)? (a) 125, 25, 5 (b) 81, 27, 3 (c) 56, 28, 7 (d) 112, 56, 16
Q. 150	A man walks 2 km towards North. Then he turns to East and walks 10 km. After this he turns to North and walks 3 km. Again he turns towards East and walks 2 km. How far is he from the starting point? (a) 10 km (b) 13 km (c) 15 km (d) 18 Km

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