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ALLEN'S Talent Encouragement Exam

2022



Students of Class V to X

SAMPLE TEST PAPER
FOR STAGE - I

CLASS IX

"TALLENTEX COORDINATION CELL"

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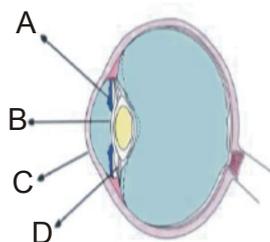


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PART - I
PHYSICS
(OBJECTIVE)

- The layer at the back of the human eye on which image is formed is called:
(1) Cornea (2) Lens (3) Iris (4) Retina
- If an object travels 13m in 10th second & 21m in 14th second with constant acceleration than its initial speed & acceleration are
(1) $u = -5, a = 2$ (2) $u = -6, a = 2$ (3) $a = 2, u = 6$ (4) $u = -7, a = -2$
- Sun is a
(1) Black hole (2) Star (3) Planet (4) Asteroid
- A 200 g iron ball having velocity 20 m/s collides with a wall normally and rebounds with the same speed. If the period of contact between the ball and wall is 0.05 second, then the force experienced by the wall is
(1) 40 N (2) 80 N (3) 0 N (4) 160 N
- Which type of wave is sound in air ?
(1) Transverse (2) Torsional (3) Longitudinal (4) EM waves
- A girl of mass 30kg jumps with a horizontal velocity of 5ms^{-1} onto a stationary cart of mass 20kg placed on frictionless wheels, such that they move together thereafter. What is their velocity after cart starts moving?(Assume that no net unbalanced force is acting on the system in horizontal direction)
(1) 2ms^{-1} (2) 1.5ms^{-1} (3) 0.5ms^{-1} (4) 3ms^{-1}
- Imagine a place in the cosmos far from all gravitational and frictional influences. Suppose that you visit that place (just suppose) and throw a rock, the rock will :
(1) Float (2) move with a constant velocity
(3) move with increasing velocity (4) stop after travelling some distance
- In the figure of the human eye, the cornea is represented by :

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



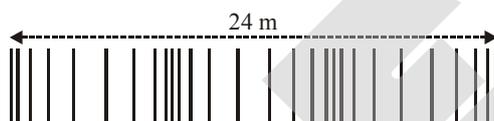
9. There is a body, which starts with an initial velocity of 10 m/s and is moving on a straight line with constant acceleration. When the velocity of the body is 50m/s, the acceleration becomes reversed in direction. The velocity of the particle when it again reaches the starting point will be
 (1) 70 m/s (2) 60 m/s (3) 10 m/s (4) 30 m/s

10. A person travels along a straight road for the first half time with a velocity v_1 and for the second half time with velocity v_2 . The average velocity(v) of the person is:

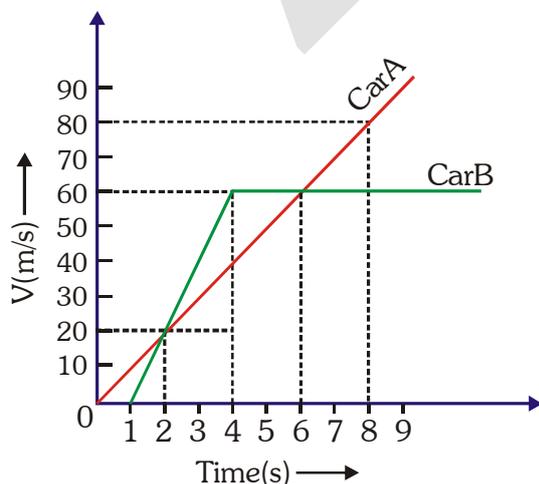
(1) $v = \frac{v_1 + v_2}{2}$ (2) $\frac{2}{v} = \frac{1}{v_1} + \frac{1}{v_2}$ (3) $v = \sqrt{v_1 v_2}$ (4) $v = \sqrt{\frac{v_2}{v_1}}$

(INTEGER)

11. A series of compressions and rarefactions of a sound wave shown below is 24 m. What is the wavelength (in m) of the wave?



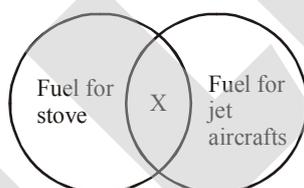
12. The time taken (in seconds) by an object to reach the maximum height, if it was thrown with a velocity of 100 m/s upwards, will be _____ (Take $g = 10 \text{ m/s}^2$)
13. A car and a motor cycle are moving with the same momentum. When equal retarding forces are applied, the car comes to halt in t_1 seconds and the motor cycle in t_2 seconds. If the mass of the car is five times more than the mass of the motor cycle, then $t_1 = x t_2$. Find x.
14. How many days are in a leap year?
15. The velocity-time graph of cars A and B which starts from the same place and moves along a straight road in the same direction is shown below. Calculate distance (in m) between two cars after 8 sec.



16. A jogger is running around a circular track. Her displacement after 1 complete revolution is
17. How many moons does planet Venus has ?
18. When a car of mass 1500kg is pushed on a road by two persons, it moves with a small uniform velocity. On the other hand, if this car is pushed on the same road by three persons, it moves with an acceleration of 0.2ms^{-2} . Assuming that each person applies same force, the force of friction between tyres of car and the road is _____ N.
19. If the time period of a wave is 0.5 second and its speed is 1000 m/s, find the numbers of waves in a length of 3000 m.
20. A fielder catches a ball of mass 100 g moving with a speed of 40 m/s. She stops the ball in 0.01 second. The force acting on her hands is ___ N

CHEMISTRY
(OBJECTIVE)

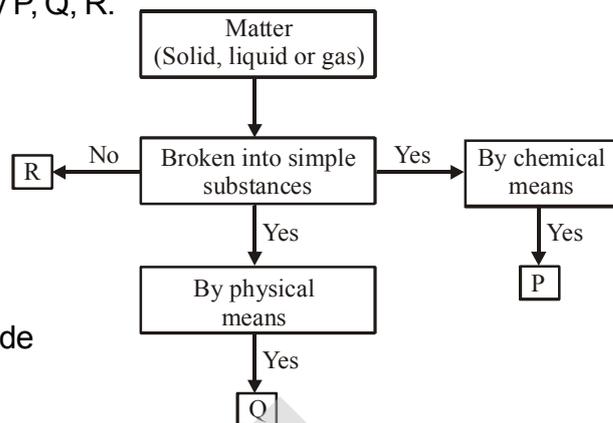
21. Refer the given venn diagram. Identify 'X'.



- (1) LPG (2) Kerosene (3) Petrol (4) Diesel
22. Sol and gel are examples of
 (1) Solid - solid colloids
 (2) Sol is a solid - liquid colloid and gel is liquid - solid colloid.
 (3) Sol is solid - solid colloid and gel is solid - liquid colloid.
 (4) Sol is a liquid - solid colloid and gel is a solid - liquid colloid.
23. The metal which does not react with cold as well as hot water but reacts with steam is
 (1) Fe (2) Na (3) Mg (4) Ca
24. What is P in the given equation?
 $P + \text{Oxygen} \longrightarrow \text{Carbon dioxide} + \text{H}_2\text{O}$
 (1) Magnesium (2) Water
 (3) Sodium (4) Glucose

25. Study the given flow chart carefully and identify P, Q, R.

- | | | |
|---------------------|----------------|------------|
| (P) | (Q) | (R) |
| (1) Iron | Salt solution | Water |
| (2) Copper | Sugar solution | Iron |
| (3) Copper sulphate | Salt solution | Iron |
| (4) Aluminium | Camphor | Iron oxide |



26. Naphthalene balls are derived from

- (1) Petroleum (2) Sugar (3) Glucose (4) Coal tar

27. Cloud is an example of:

- (1) Solid dispersed in a gas (2) Liquid dispersed in a gas
(3) Liquid dispersed in a solid (4) Solid dispersed in a liquid

28. Three different metals of the same size and thickness reacted with equal volumes of dilute hydrochloric acid in 3 different test tubes. The time taken to collect 5 cm³ of hydrogen gas is recorded in seconds. Which option gives the correct recording?

S.No	Magnesium	Zinc	Sodium
(1)	20	30	10
(2)	20	10	30
(3)	30	20	10
(4)	10	20	30

29. Wax is a :

- (1) Only carbon (2) Hydrocarbon
(3) Chlorinated hydrocarbon (4) Carboxylic acid

30. Face cream is an example of which type of colloid ?

- (1) Solid aerosol (2) Emulsion (3) Liquid aerosol (4) Sol

(INTEGER)

31. How many of the following are natural objects ?

Polythene bag, Soap, Sun, Moon, Water, Minerals, Glass, Television, Soil, Stars.

32. How many among the following can easily displace copper metal in displacement reaction ?

Potassium (K), Barium (Ba), Calcium (Ca), Aluminium (Al), Silver (Ag), Gold (Au), Platinum (Pt), Nickel (Ni), Mercury (Hg)

33. If 9 kg of a fuel is burnt completely and the heat produced is measured to be 4,05,000 KJ. Calculate the calorific value of fuel in KJ/g.
34. 12 grams of potassium sulphate dissolves in 75 grams of water at 60°C. What will be its solubility at 60°C.
35. Identify the total numbers of primary fuels from the following.
Wood, Kerosene, Natural gas, Crude oil, Coal, Coke, Coal gas, Petrol.
(Note :- If your answer is 2, mark it as 222.)
36. How many is/are examples of rapid combustion?
- Combustion of natural gas, Burning of match stick, Firecrackers, Combustion of coal dust, burning of kerosene oil in kerosene stove, Explosion of Dynamite, Burning of camphor, Burning of Phosphorus, Magnesium ribbon in air
37. Read the given fractions of petroleum and their uses.
(i) Kerosene – House hold fuel
(ii) Vaseline – Lubrication
(iii) Paraffin wax – Gaseous fuel
(iv) Bitumen – Road surfacing
(v) Gasoline – Dry cleaning fluid
(vi) Petroleum ether – Electrodes
How many of the above are correctly matched ?
38. How many metals can react with caustic soda and forms metal salts ?
Al, Zn, Sn, Pb, K, Ca, Fe, Be
39. The number of protons present in Al^{+3} are (atomic number of Al is 13) :
40. Global warming is the gradual increase in temperature of the earth's surface. Global warming occurs because of the green house effect.
Green house gases trap radiation and prevent heat from leaving the earth's surface.
How many gases are considered as green house gases from the followings ?
Carbon dioxide, Oxygen, Nitrogen, Water vapour, Coal gas, Methane, Water gas, Argon

BIOLOGY

(OBJECTIVE)

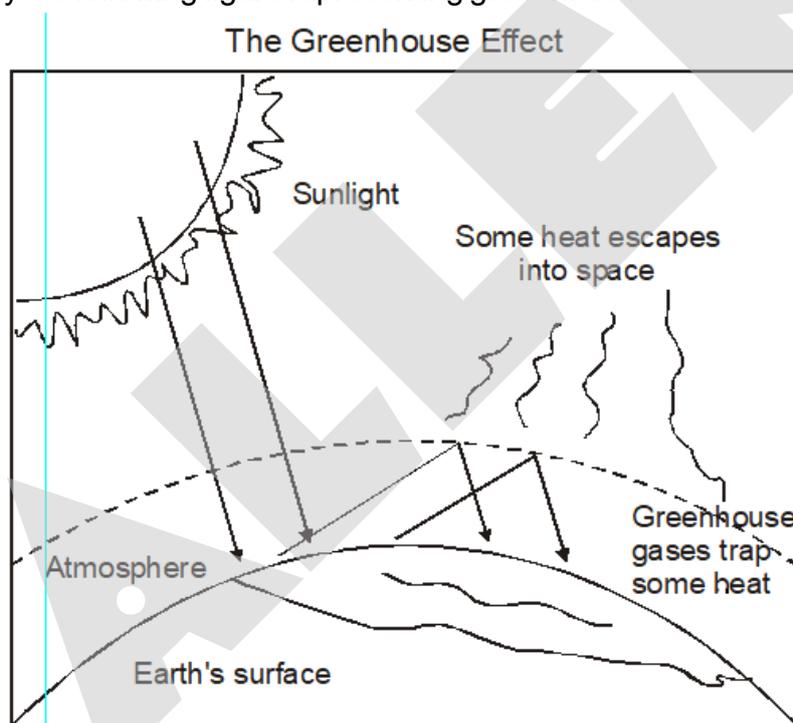
41. Features that help in distinguishing male from female are—
- | | |
|---------------------------------|-----------------|
| (1) Puberty | (2) Adolescence |
| (3) Secondary sexual characters | (4) Autosomes |

42. The red Data Book keep a record of all the
(i) Extinct species (ii) Endangered plants
(iii) Endangered animals (iv) Migratory animals
(1) (i) & (ii) (2) (i), (ii) & (iii) (3) (iii) & (iv) (4) (iv) & (i)
43. ----- discovered the bacterium -----, which causes anthrax disease.
(1) Robert Köch , *Bacillus anthracis*
(2) Edward Jenner, *variola*
(3) Robert hooke, *Salmonella*
(4) Robert Koch, *Bacillus thuringiensis*
44. Which muscles we can move consciously?
(1) Skeletal muscles
(2) Cardiac muscles
(3) Smooth muscles
(4) Unstriated muscles
45. A student has conducted an experiment with raisins, she took 4 raisins. The weight of each raisin is measured. One raisin is placed in water and others in different concentration of salt solution. After 2 hours the weight of raisins were measured again. The results are shown in the table. Which of the liquids A,B,C,D is water ?
- | Liquid | Original weight of raisin (gm) | Final weight of raisin (gm) |
|--------|--------------------------------|-----------------------------|
| A | 2gm | 2gm |
| B | 2gm | 4 gm |
| C | 8 gm | 4gm |
| D | 10 gm | 8 gm |
- (1) A (2) B (3) C (4) D
46. Inactive enzymes are found in
(1) Primary lysosomes (2) Secondary lysosomes
(3) Autosomes (4) Residual bodies
47. Which of the following food preserving methods reduces growth of microbes.
(1) Oil and vinegar only (2) Sugar, oil and vinegar.
(3) Sugar only (4) Oil and Sugar only
48. Cork cells have a chemical called ----- in their walls that makes them impervious to gases and water.
(1) Cellulose (2) Hemicellulose (3) Lignin (4) Suberin

49. Red data book published by,
 (1) International union for conservation of nature and natural resources
 (2) Wild life agencies
 (3) Convention on international trade in endangered species of wild fauna and flora.
 (4) Government of india
50. Lysosomal enzymes made by –
 (1) RER (2) SER (3) Mitochondria (4) Vacuole

(INTEGER)

51. Prokaryotic type of DNA found in
 (i) Mitochondria, (ii) Golgi body (iii) Chloroplast (iv) Endoplasmic reticulum (v) Lysosomes
52. Study carefully the following figure representing greenhouse effect?



Select how many of the following statements regarding this are true.

- (a) Most of the infrared radiations reradiated by the earth surface are absorbed by the atmospheric green house gases
- (b) CO_2 , CH_4 , CFC's, N_2O are the gases which are responsible for the green house effect
- (c) Greenhouse effect is directly related to the global warming
- (d) Deforestation leads to high level of CO_2 because more trees are cut so less CO_2 would be used up in photosynthesis.
- (e) High concentration of greenhouse gases has resulted in maximum rise of atmospheric temperature in polar region

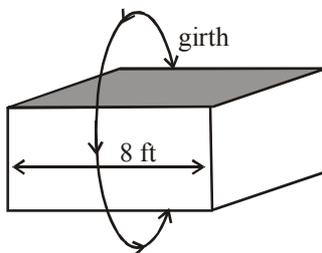
53. Select the dead tissues supporting the plants body.
(i) Collenchyma (ii) Sclereids (iii) Tracheids
(iv) Cork (v) Sieve tube
54. Read the given statements and select the options that correctly identifies the incorrect ones?
(i) Mitochondria are used for aerobic oxidation of food.
(ii) Active transport of material is rapid and usually occurs against the concentration gradient involving energy in the form of ATP.
(iii) Semipermeable membrane does not allow both solvent and solute to pass through it.
(iv) Nucleolus is also known as ribosome factory.
(v) Golgi body helps in detoxification.
(vi) SER helps in protein synthesis.
55. Identify the correct sentences and count.
(i) Testosterone is male hormone.
(ii) Fertilization takes place in oviduct.
(iii) The period of life, when the body undergoes changes, leading to reproductive maturity, is called adolescence.
(iv) Fusion of sperm and ovum is called cloning.
(v) Oestrogen called birth hormone.
56. Read the following statements about connective tissue and choose how many of them are correct ?
(i) Connective tissue are most abundant and widely distributed in the body of complex animals.
(ii) They include diverse tissue such as bone, cartilage, tendons, adipose tissue etc.
(iii) They connect and support other tissues.
(iv) They form the internal or external lining of many organs.
(v) Bone is the hardest connective tissue.
57. Rehmat has drawn the diagram of a neuron and labelled it properly. How many of the following terms will surely be there in the labelling of the diagram?
Cell body, Axon, Dendrites, Nucleus, Cristae, Mesosome, Nissl's granules
58. How many of the listed microorganisms are Protozoa ?
Volvox, Aspergillus, Bacteriophage, Paramecium, Spirogyra, Amoeba, Penicillium and Euglena

59. Read the following statements and select the correct ones.
- (i) Hotspots are those specific regions of megabiodiversity nations which have large number of endemic species.
 - (ii) The Asiatic lion (Babbar sher) is endemic to Gir forests in Gujarat.
 - (iii) Increase in atmospheric CO₂ concentration due to deforestation does not affect global temperature
 - (iv) Silent Valley National Park is located in Nilgiri Hills of Tamil Nadu
60. (i) Fat is stored in Adipose tissue.
(ii) Xylem and phloem are simple permanent tissue
(iii) The brain, spinal cord and nerves are all composed of the nervous tissue
(iv) Aerenchyma provides buoyancy in Aquatic plants.
(v) Vessels are present in phloem.
How many statements are correct?

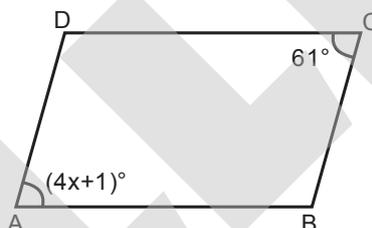
MATHEMATICS (OBJECTIVE)

61. The volume of a cube is 4096 cm³. The length of its edge will be
(1) 17 cm (2) 14 cm (3) 16 cm (4) 26 cm
62. The rational number $0.\overline{9}$ can also be written as –
(1) $9.\overline{9}$ (2) $\frac{9}{10}$ (3) 1 (4) $0.0\overline{9}$
63. The number 602.3×10^{21} is equal to
(1) 6.023×10^{19} (2) 60.23×10^{23} (3) 6.023×10^{24} (4) 6.023×10^{23}
64. Which one of the following statements is not false :
(1) if two angles forming a linear pair, then each of these angles is of measure 90°
(2) angles forming a linear pair can both be acute angles
(3) one of the angles forming a linear pair can be obtuse angle
(4) bisectors of the adjacent angles form a right angle
65. If $\sqrt{1 + \frac{27}{169}} = 1 + \frac{x}{13}$, then 'x' is equal to
(1) 1 (2) 14 (3) 3 (4) 2

66. A wooden shipping crate is measured for shipping. Its length is 8 feet and its girth (going completely once around in the direction perpendicular to the length) is 24 feet. The surface area of the lid of the crate is 40 square feet. The dimensions are whole numbers of feet. What is the volume of the crate in cubic feet?



- (1) 310 (2) 280 (3) 260 (4) 240
67. The perimeter of a triangular field is 144 m and ratio of the sides is 3 : 4 : 5. Then the area of the field is :
- (1) 864 sq. m (2) 764 sq. m (3) 854 sq. m (4) 754 sq. m
68. ABCD is a parallelogram, then find the value of x.



- (1) 15 (2) 20 (3) 10 (4) 13
69. On Old MacDonald's farm, every two horses share a trough, every three cows share a trough, and every eight pigs share a trough. Old MacDonald has the same number of each animal, and he has a total of 69 troughs. How many animals does Old MacDonald have on his farm?
- (1) 210 (2) 216 (3) 215 (4) 214
70. On which price discount is calculated ?
- (1) S.P. (2) M.P (3) C.P (4) Either S.P. or C.P.
71. The value of $(2x + 3y)(2x - 3y)$ at $x = 1, y = 1/3$ is :
- (1) 4 (2) 3 (3) 1 (4) 0
72. Find a four-digit number 'abcd' such that if a decimal point is placed between ab and cd, (i.e., ab.cd), the resulting number is the mean of ab and cd.
- (1) 4950 (2) 4590 (3) 4850 (4) 7980

73. Which of the following is equal to its own cube ?
 (1) -1 (2) -2 (3) -3 (4) -9
74. The exponential form of $\sqrt{\sqrt{2} \sqrt{0} + \sqrt{3} \sqrt{3}}$
 (1) $3^{\frac{1}{2}}$ (2) $3^{\frac{1}{3}}$ (3) $3^{\frac{1}{4}}$ (4) 3
75. The value of $4^3 \div 4^{-3}$ is
 (1) 4^3 (2) 4^{-3} (3) 4^6 (4) 4^{-6}
76. If $AB + BC = CA$ in $\triangle ABC$ then points A, B and C form :
 (1) Equilateral triangle (2) Isosceles triangle
 (3) Scalene triangle (4) are collinear
77. The least number which must be subtracted from 2509 to make it a perfect square is
 (1) 6 (2) 9 (3) 12 (4) 14
78. Which one of the following is the solution of linear equation $4x - 3y = 8$:
 (1) $x = 3, y = 2$ (2) $x = 5, y = 4$ (3) $x = 16, y = -8$ (4) No solution
79. On joining the points A (0, 5), B (8, 0), C (8, 5) what figure do you obtain?
 (1) Equilateral Triangle (2) Right angled triangle
 (3) Isosceles triangle (4) Acute angle triangle
80. PQRS is a parallelogram, $PQ = 8$ cm, $QR = 6.4$ cm and perpendicular from S to side PQ is 6 cm, find area of parallelogram (in cm^2) and length of perpendicular (in cm) from vertex Q to the side SP respectively.
 (1) 48, 7.5 (2) $\frac{15}{2}, 48$ (3) 24, 7.5 (4) 7.5, 24
81. Find x : $(7x - 3)2 = \frac{14}{3}$
 (1) 1 (2) -1 (3) $\frac{16}{21}$ (4) $\frac{21}{16}$
82. In an examination 10 students scored marks in mathematics 35, 19, 28, 32, 63, 02, 47, 31, 13, 98 its range is :
 (1) 96 (2) 02 (3) 98 (4) 50

83. If the area of a rectangle and a square are equal, then the perimeter of the rectangle is :
 (1) Equal to the perimeter of square. (2) Greater than the perimeter of square
 (3) Less than the perimeter of square (4) twice the perimeter of square.
84. The perimeter of a square is double the perimeter of a rectangle. The area of the rectangle is 480 sq.cm. Find the area of the square.
 (1) 200 sq. cm (2) 72 sq. cm
 (3) 162 sq. cm (4) can not be determined.
85. Rajesh takes 3 hours to prepare 180 boxes of sweets and Suresh prepares the same number of boxes in 6 hours. The total time taken by them when they work together is
 (1) 2.5 hours (2) 2 hours (3) 1.5 hours (4) 6 hours

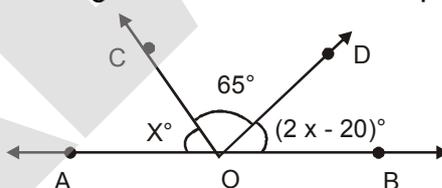
(INTEGER)

86. In the five digit number $13ab4$, a is the greatest single digit perfect cube and a is four times of b , then the sum of the number and its cube root is $138xy$. Find xy (two digit number).

87. If $x = \frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}}$ and $y = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$. Find the value of $x^2 + xy + y^2$.

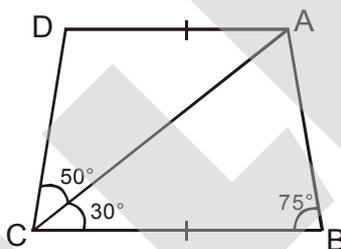
88. The values 2, 3, 4 and 5 are each assigned to exactly one of the letters V, W, X, and Y to give $Y^X - W^V$ the greatest possible value. The value of $X + V$ is equal to

89. In the adjoining figure, AOB is a straight line. Then $\angle BOD$ equals



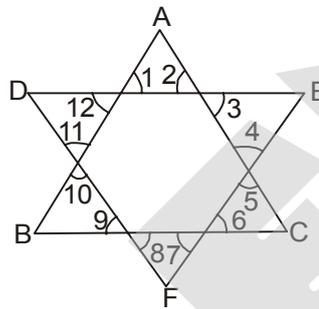
90. The prime number which divides the difference between the square of 18 and 19 is _____ .
91. A carpet is laid on the floor of a room $8\text{ m} \times 5\text{ m}$. There is a border of constant width all around the carpet. If the area of the border is 12 m^2 . Find width of border.
92. The base of an isosceles triangle is 12 cm and its perimeter is 32 cm. Then its area is :
93. Adjacent angles of parallelogram are in the ratio of 7 : 2. Find two third of 20 more than the smaller angle. (In degrees)
94. The sum of five cosecutive even numbers of set x is 440. Find the sum of a different set of five consecutive integers whose second least number is 121 less than double the least number of set x .

95. The average of 15 numbers is 18. The average of first 8 is 19 and that of last 8 is 17, then the 8th number is :
96. What is the value of $3x^6 - 4x^2 + 3$ at $x = 2$?
97. The value of $\sqrt[8]{(121)^{-4}} \times \sqrt[3]{(8^3)^2} = \frac{P}{Q}$, find the sum of $P + Q$.
98. If $(\alpha, 10)$ be a point on the straight line $3x = 17 - 2y$ then the value of α is :
99. If line $3x + 4y = 8$ cuts x -axis at $A\left(\frac{x}{y}, p\right)$ then $x \times y + p =$
100. In the diagram $BC = AD$, what is the measure of $\angle DAC =$ degree.



101. The perimeter of a square is increased by 20% when the sides are increased. Then the corresponding percentage increase in the area is :
102. A can finish a work in 12 days and B can do it in 15 days. After A had worked for 3 days, B also joined A to finish the remaining work. In how many days remaining work will be finished?
103. ABC is a triangle in which $\angle B = 2\angle C$, D is a point on BC such that AD bisects $\angle BAC$ and $AB = CD$, then $\angle BAC =$
104. A copper wire when bent into the form of a rhombus of perimeter 84 cm. If the same wire is bent into the form of an equilateral triangle, the height of the triangle is $P\sqrt{3}$ cm then P is equal to _____.
105. Two taps A and B fill an overhead water tank in 35 hours and 15 hours respectively. If both of them are opened together, then total time taken by them to fill the tank completely in hours.

106. If one of the diagonals of a rhombus is equal to its side then find the ratio of square of longer diagonal to the square of shorter diagonal.
107. The cost of 2 chairs and 3 tables is Rs. 1300 The cost of 3 chairs and 2 tables is Rs. 1200. The cost of each table is more than that of each chair by rupees.
108. A covers half of his distance with 20 km/h and rest with 30 km/hr. What is his average speed (in km/hr) during the whole journey ?
109. In the adjoining figure, $\angle 1 + \angle 2 + \dots + \angle 12$ equals :

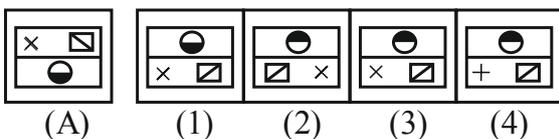


110. The area of a square is 4096 sq. cm. The length of a reactangle is twice the side of the square and breadth is 24 cm less than the side of the square. The ratio of breadth and length is $\frac{p}{q}$, where p and q are coprimes. Find p + q.

PART - II
IQ
(OBJECTIVE)

111. Pointing to Priyanka, Bunty's father says, "She is the daughter of the daughter of the wife of the only son of the grandfather of my sister." How is Sonam related to Priyanka if Sonam is the sister of Bunty's father ?
(1) Aunt (2) Mother (3) Niece (4) Sister

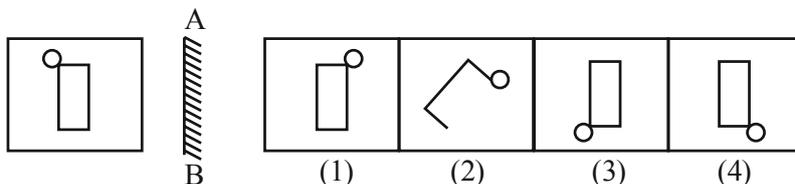
112. Find the water image of figure (A).



113. Find the mirror image of given figure.

Question Figures

Answer Figure



114. Anita facing towards North-East and then she turns 90° clockwise direction then finally she turns 135° in clockwise directions. In which direction Anita finally facing?

- (1) South-East (2) North-East (3) West (4) South-West

115. If $L = +$, $M = -$, $N = \times$, $P = \div$, then

$14N10L42P2M8 = ?$

- (1) 153 (2) 216 (3) 248 (4) 251

116. Find the wrong term.

9, 13, 21, 37, 69, 132, 261

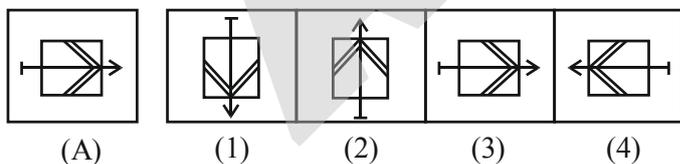
- (1) 21 (2) 37 (3) 69 (4) 132

117. Insert the missing number in the following figure.

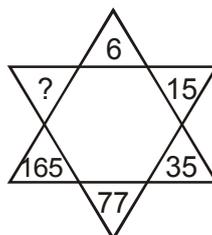
17	16	15
52	39	26
29	44	59
37	?	45

- (1) 43 (2) 31 (3) 41 (4) 40

118. Find the water image of given figure (A).



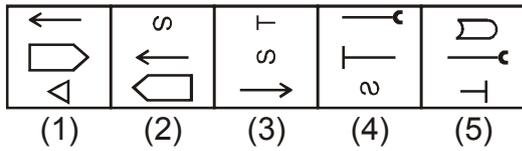
119. Insert the missing number in the following figure.



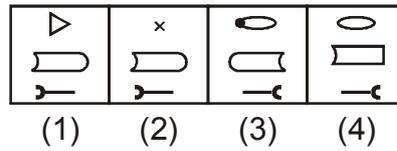
- (1) 286 (2) 264 (3) 335 (4) 343

120. Find the next figure in the following series.

Problem Figure



Answer Figure



121. Which of the two signs are to be interchanged to make the equation correct?

$$100 + 100 \div 100 - 100 \times 100 = 100$$

- (1) + and - (2) + and ÷ (3) + and × (4) ÷ and ×

122. Find the missing alphabets shown by (?) in the series.

?, Y, P, I, D, A

- (1) M (2) I (3) Q (4) J

123. If P\$Q means P is father of Q

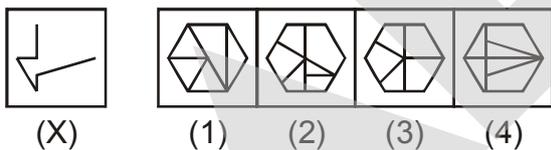
P#Q means P is mother of Q

P*Q means P is the sister of Q.

Then how is Q related to N in N#L\$P*Q?

- (1) Grand son (2) Grand daughter (3) Nephew (4) Data inadequate

124. Figure (X) is embedded in any one of the four alternative figures. Select the alternative which contains figure (X).

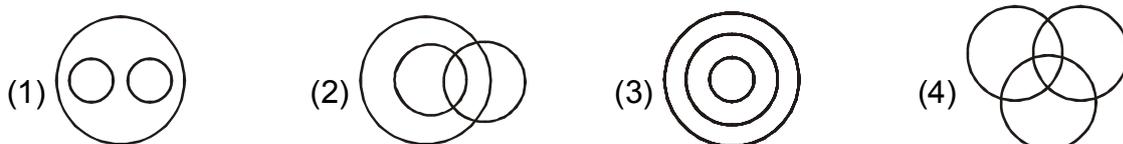


125. Find the missing term.

4, 6, 12, 14, 28, 30, ?

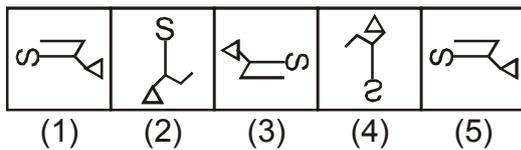
- (1) 32 (2) 60 (3) 62 (4) 64

126. There are four diagrams representing different relations among the three items. Each circle represents one item. You have to pick the figure that represents relation among three items. Which figure represents the relation among Doctors, Surgeons, Married people?

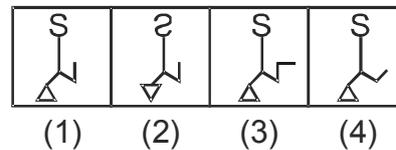


127. Find the next figure in the following series.

Problem Figure

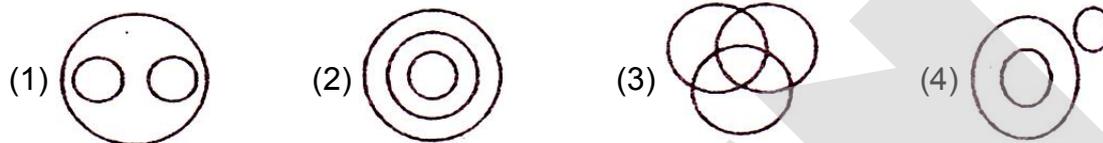


Answer Figure



128. In the following question three objects / subjects are given. Choose the diagram that best illustrates the relationship between them.

Furniture, Table, Books



129. If a stands for 'add', b stands for 'subtract', c stands for 'divide' and d stands for 'multiply' then what is the value of $(9 a 7) c 4 b 1$?

- (1) 5 (2) 3 (3) 4 (4) 8

130. Manish is fourteenth from the right end in a row of 40 boys. What is his position from the left end ?

- (1) 24th (2) 25th (3) 26th (4) 27th

131. Ravi is 7 ranks ahead of Sumit in a class of 39. If Sumit's rank is seventeenth from the last. What is Ravi's rank from the start ?

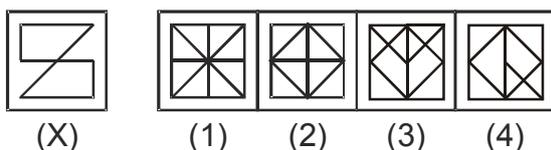
- (1) 14th (2) 15th (3) 16th (4) 17th

132. Find the missing alphabets shown by (?) in the series.

AB, CD, GH, OP, ?

- (1) WX (2) BC (3) EF (4) IJ

133. Choose the alternative which has figure (X) embedded in it.



134. A and B are sisters. R and S are brothers. A's daughter is R's sister. What is B's relation to S?

- (1) Mother (2) Grand mother (3) Sister (4) Aunt (maternal)

135. Find the next term.

1, 4, 27, 16, 125, 36, ?

(1) 216

(2) 343

(3) 64

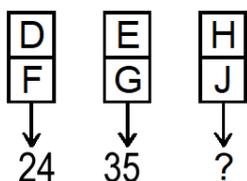
(4) 49

(INTEGER)

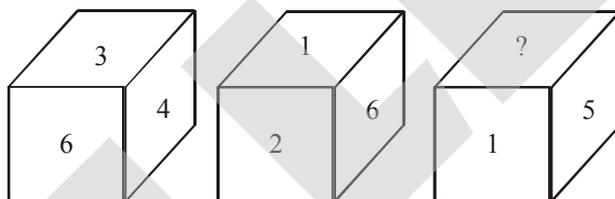
136. In a certain code, BAT = 23 and CAT = 24 then how will you code BALL?

137. Mohan travels 7 km eastwards, then he turns right and travels 3 km and further turns right again and travels 11 km. How far is he from the starting point?

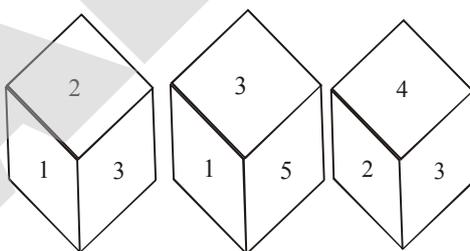
138. Insert the missing number in the following.



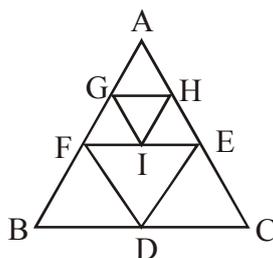
139. On the basis of following figures which number will come in place of?



140. What number should be opposite to 3 in following figures

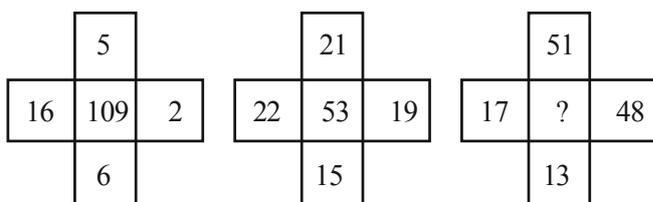


141. Count the number of parallelogram in following figure.

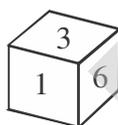


142. A child went 90m in the East to find his father. Then he turned right and went 20m. After then he turned right and after going 30m he reached to his uncles house. His father was not there. From there he went 100m to his north and met his father. How far did he meet his father from the starting point ?

143. Find the missing term :



144. Numbers 1,2,3,4,5 and 6 are printed on the face of a dice rolled 3 times and the picture of the dice are given below.



What is the number that is printed on the face opposite to '4'?

145. If GO = 32, HE = 41 then ONE will be equal to

146. Find the missing term:

31, 35, 44, 60, 85, ?

147. How many numbers from 1 to 100 are there each of which is not only exactly divisible by 4 but also has 4 as a digit ?

148. Manas walks 1 km towards north, then he turns to his right, at an angle of 90° and walks 3 km again he turns to his right and walks 5 km. Now how far is he from the starting point?

149. In a row of girls, Kamyra is 5th from the left and Preeti is 6th from the right. When they exchange their positions, then Kamyra becomes 13th from the left. What will be Preeti's new position from the right end ?

150. Find the missing term :

3, 5, 10, 20, 37, ?

151. A cube of side 10 cm is painted out side and then divided into small cubes of side 2cm each. How many small cubes are formed ?

152. How many triangles are there in following figure ?

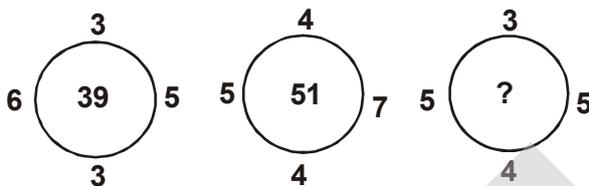


153. If BOY is coded as 750 and TOY is coded as 7500, how will you code TAP?

154. If LDP = 32, PDP = 36, then YDT = ?

155. Find the missing term in the given series.
2, 5, 11, 23, ?, 95, 191

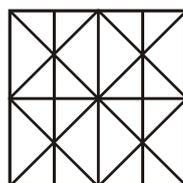
156. Find the missing term.



157. Mohan walked 30 m towards south, took a left turn and walked 15 m. He, then took a right turn and walked 20 m. He again took a right turn and walked 15 m. How far is he from the starting point?

158. The six faces of a cube are painted in such a manner that no two adjacent faces have the same colour. The three colours used are red, white and black. The cube is then cut into 36 smaller cubes in such a manner that 32 cubes are of one size and the rest are of bigger size, and each of the bigger cubes has no red-coloured face. Answer the following question by considering the smaller cubes of both the sizes.
How many smaller cubes have two or more of their faces painted?

159. How many straight lines are there in the following figure?



160. In a certain code language, If MENTION = 343, NEUROTIC = 512 then ALLEN = ?

* * * * *

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10
Ans.	4	2	2	4	3	4	2	3	1	1
Que.	11	12	13	14	15	16	17	18	19	20
Ans.	8	10	1	366	10	0	0	600	6	400
Que.	21	22	23	24	25	26	27	28	29	30
Ans.	2	2	1	4	3	4	2	1	2	2
Que.	31	32	33	34	35	36	37	38	39	40
Ans.	6	5	45	16	444	5	4	5	13	3
Que.	41	42	43	44	45	46	47	48	49	50
Ans.	3	2	1	1	2	1	2	4	1	1
Que.	51	52	53	54	55	56	57	58	59	60
Ans.	2	5	3	3	3	4	5	3	2	3
Que.	61	62	63	64	65	66	67	68	69	70
Ans.	3	3	4	3	1	2	1	1	2	2
Que.	71	72	73	74	75	76	77	78	79	80
Ans.	2	1	1	1	3	4	2	2	2	1
Que.	81	82	83	84	85	86	87	88	89	90
Ans.	3	1	2	4	2	48	99	8	70°	37
Que.	91	92	93	94	95	96	97	98	99	100
Ans.	0.5	48	40	240	18	179	75	-1	24	80
Que.	101	102	103	104	105	106	107	108	109	110
Ans.	44	5	72	14	10.5	3	100	24	720	21
Que.	111	112	113	114	115	116	117	118	119	120
Ans.	2	3	1	3	1	4	3	3	4	2
Que.	121	122	123	124	125	126	127	128	129	130
Ans.	3	4	4	4	2	2	4	4	2	4
Que.	131	132	133	134	135	136	137	138	139	140
Ans.	3	3	1	4	2	27	5	80	2	6
Que.	141	142	143	144	145	146	147	148	149	150
Ans.	6	100	25	6	47	121	7	5	14	63
Que.	151	152	153	154	155	156	157	158	159	160
Ans.	125	14	320	49	47	37	50	28	14	125