TARGET IIT JEE-PMT CLASSES™

(NTTSE) National Target Talent Search Examination

(FOR CLASS VII STUDENT)

Time: 2:15 Hours   **INSTRUCTIONS FOR THE CANDIDATES**   **M.M: 540**

Parts	Section	Subject	No. of Questions	Mark per Question	Negative Marking	Total Marks
PART - I	A	Physics	15	4	-1/4th	60
	B	Chemistry	15	4	-1/4th	60
	C	Biology	15	4	-1/4th	60
	D	Mathematics	45	4	-1/4th	180
PART – II	E	Mental Ability	25	4	-1/4th	100
	F	Reasoning	20	4	-1/4th	80
		Total	135			540

- ❖ Read each question carefully.
- ❖ Do not use white – fluid or any other rubbing material on sheet. No change in the answer once marked.
- ❖ Student can not use log tables and calculators or any other electronic material in the examination hall.
- ❖ Rough work is to be done on the rough sheet provided for this purpose with the booklet.
- ❖ Immediately after the prescribed examination time is over, the answer sheet to be returned to the invigilator.
- ❖ Marking Scheme:

  a. If darkened bubble is RIGHT answer: **4 Marks**.

  b. If no bubble is darkened in any question: **No Mark.**

  c. If darkened bubble is WRONG answer: **1 Marks (Minus).**
- ❖ If you are found involved in cheating or disturbing others then your OMR Sheet will be cancelled.
- ❖ Do not put any stain on OMR Sheet and hand it over back properly to the invigilator.

PART I
SECTION –A : PHYSICS

This section contains **15 Multiple Choice Questions.** Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE is correct.

1. Observe the figure given below. Which of the given statements best explains why the cardboard does NOT fall?

    (a) The wet cardboard sticks to the glass.

    (b) Atmospheric pressure acts equally on the glass and on the cardboard.

    (c) The force of gravity pulling the cardboard is negligible.

    (d) Air exerts pressure on the cardboard in the upward direction.

2. Which canned drink will remain cold the longest?
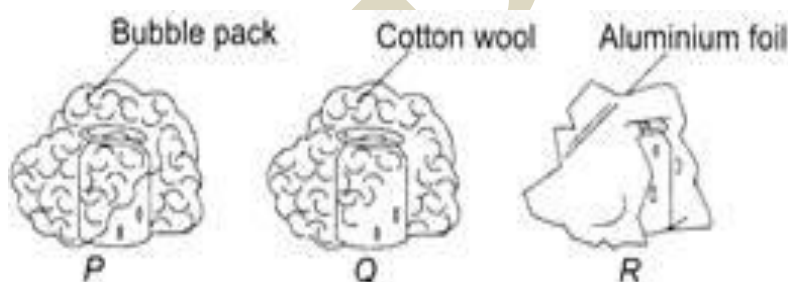
    (a) P

    (b) O

    (c) R

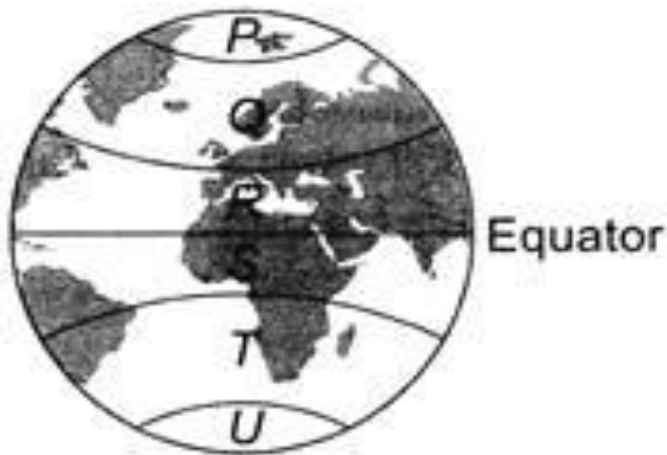   (d) Both P and Q

3. Refer to the given figure showing different temperature zones of the Earth and select the correct statement.

   (a) Labelled parts P and U are the torrid zones.

   (b) Labelled parts Q and T are temperate zones.

   (c) Labelled parts R and S are frigid zones.

   (d) None of these

4. Three species of fishes X, Y and Z with different body patterns are found in a lake. A predator who feeds on all these three fishes is introduced into the lake. Which of these fishes will be least affected?
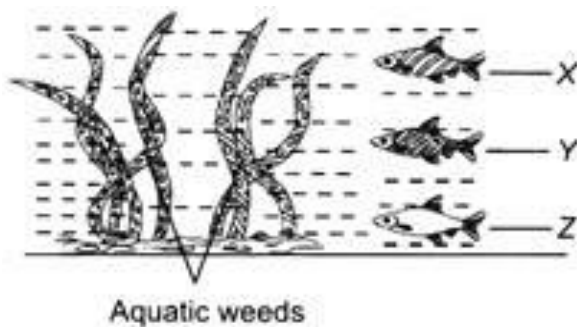
   (a) Fish Z because it lives near the ground.

   (b) Fish Y because it can show camouflage.

   (c) Fish X because it lives near surface.

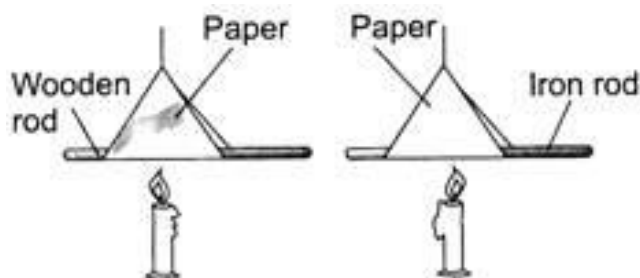   (d) All the three fishes will be equally affected.

5. A student took an iron rod and a wooden rod and wrapped each of them in a piece of paper. These were then heated as shown. It was found that the paper around the iron rod does not burn whereas the one around the wooden rod catches fire. It is because

(a) Candle, in case of iron rod, is nearer to the paper

(b) Wood being a bad conductor of heat, takes away all the heat

(c) Iron being a good conductor of heat, conducts away the heat given to the paper

(d) Paper, in first case, is thicker.

6. A saucepan is usually made up of two different materials, P and Q. Identify P and Q.
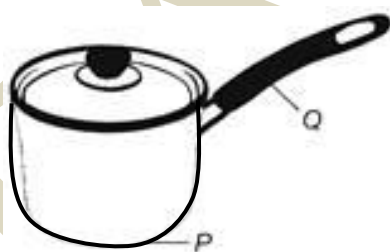
(a) P-Steel, Q-Aluminium

(b) P-Ebonite, Q-Plastic

(c) P-Steel, Q-Ebonite

(d) P-Wood, Q-Ebonite

7. What is an anemometer?

(a) A device for measuring atmospheric pressure

(b) A device for measuring wind speed

(c) A device for measuring atmospheric temperature

(d) A device for measuring humidity

8. How are sea and land breezes caused?

(a) Through convection currents

(b) Through cyclones

(c) Through rains

(d) Through conduction

9. Observe the given figure carefully and choose the correct option for matching the column I with column II.

Column I	Column II
(a) X	(i) The process of transfer of heat in a liquid or a gas by the movement of liquid or gas.
(b) Y	(ii) The flow of heat through a substance without the movement of the substance itself.
(c) Z	(iii) The process by which heat travels without the help of material medium.

(a) (a)-(iii), (b)-(i), (c)-(ii)

(b) (a)-(ii), (b)-(iii), (c)-(i)

(c) (a)-(i), (b)-(ii), (c)-(iii)

(d) (a)-(ii), (b)-(i), (c)-(iii)

10. Which of the following is true of the 'eye' of a cyclone?

(a) It is an area of high pressure

(b) It is an area of low pressure

(c) It has lots of clouds and rains

(d) It has high temperature

11. . Weather is predicted by considering

(a) Temperature

(b) Amount of water vapour

(c) Movement of air

(d) All of these

12. The normal temperature of human body is

(a) 35∘C

(b) 37∘C

(c) 39∘C

(d) None of these

13. Climate

(a) refers to average temperature at a place over a long time

(b) refers to average rainfall at a place over a long time

(c) refers to average weather pattern at a place taken over a long time

(d) none of the above

14. On the earth, the winds from the north and the south blow towards the equator. What can we understand from this?

    (a) Earth is round or spherical in shape.

    (b) It is hotter in and around the equator.

    (c) It is hotter in and around the north and the south.

    (d) Wind does not flow from the east or the west.

15. Which of the following is a good conductor of heat?

    (a) Wood

    (b) Plastic

    (c) Aluminum

    (d) None of these

SECTION –B: CHEMISTRY

This section contains **15 Multiple Choice Questions.** Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE is correct.

16. Silk fibres are obtained from silkworms. Silk fibre is obtained at which of the following stage of its life cycle?

(a)

(b)

(c)

(d)
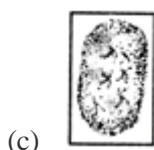
17. A base reacts with an acid to form salt and water. What is this reaction called?

(a) Oxidation reaction

(b) Neutralization reaction

(c) Reduction reaction

(d) Biochemical reaction

18. Given below are two groups of materials used to make dress articles.

Group I	Group II
Flax	Cotton
Jute	Wool
	Silk

Which of the following does not belong to the group formed by the others?

    (a) Leather

    (b) Flax

    (c) Cotton

    (d) Silk

19. Juice prepared from lemon is taken in a glass tumbler and water is added to it. Then a red litmus paper and a blue litmus paper were dipped into it. What changes were observed?

    (a) Red litmus paper turns blue.

    (b) Blue litmus paper turns red.

    (c) Red litmus paper becomes white.

    (d) Blue litmus paper becomes white

20. In which of the following processes new offspring with special characters is produced by selecting parents?

    (a) Translation

    (b) Selective breeding

    (c) Separating

    (d) Rearing

21. Observe the given experimental set-up carefully. In which test tubes rusting of iron nails will not take place?

    (a) P and Q only

    (b) Q and R only

    (c) P and R only

    (d) All of these
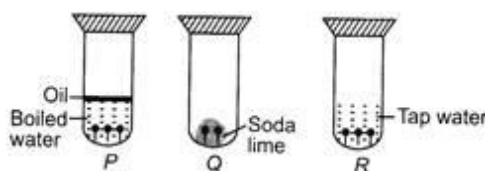
22. A In which process fleece of sheep with skin is/are removed?

    (a) Shaving

    (b) Refining

    (c) Shearing

    (d) All of the above

23. From which of the following is the natural indicator litmus extracted?

    (a) Mycorrhiza

    (b) Lichens

    (c) Mucor

    (d) Mycelia

24. Ant bite is neutralised by

    (a) Acid

    (b) Base

    (c) Salt

    (d) Water

25. Which of the following completes the given sequence? Shearing→?→Sorting

    (a) Separating

    (b) Weaving
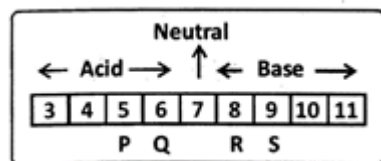
    (c) Knitting

    (d) Scouring

26. A pH scale is given below. Which of the following mixtures can produce a neutral solution?

(a) P and Q

(b) P and R

(c) R and S

(d) All of these

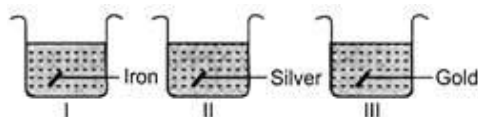**27.** …………….. helps in digestion of food in our stomach

(a) Sulphuric acid

(b) Sodium carbonate

(c) Hydrochloric acid

(d) Milk of magnesia

28. Vishakha took few wire pieces made up of different metals and placed them in blue solution of copper sulphate. What will be the changes in the colour of the solutions present in beakers I, II and III?

(a)

I	II	III
Green	Blue	Green

(b)

I	II	III
Blue	Green	Green

(c)

I	II	III
Green	Blue	Blue

d)

I	II	III
Blue	Blue	Blue

29. Rupali classified a few changes occurring around us as shown in the table.

S. No.	Change	Chemical	Physical	Reversible
(a)	Grinding of wheat	√	×	×
(b)	Bursting of crackers	√	×	×
(c)	Formation of clouds	×	√	√
(d)	Germination of seeds	√	×	√
(e)	Drying of wet clothes	×	√	×

Which of her observations are incorrect?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1, 4 and 5 only

(d) All of these.

30. Which of the following statements is incorrect?

(a) Thermometer is read by holding its bulb.

(b) A few sharp jerks are given to clinical thermometer before using it.

(c) The black fabric tent is preferred during winter.

(d) Shopkeepers selling ice blocks usually cover them with jute sacks

SECTION – C : BIOLOGY

This section contains **15 Multiple Choice Questions.** Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE is correct.

31. In process of photosynthesis

   (a) O_2 is taken and CO_2 is evolved

   (b) O_2 is taken and O_2 is not evolved

   (c) CO_2 is taken and O_2 is not evolved

   (d) CO_2 is taken and O_2 is evolved

32. Nitrogen fixing bacterium associated with root nodules of legumes is known as

   (a) Azotobacter

   (b) Nitrobacter

   (c) Lacto bacillus

   (d) Rhizobium

33. In lichens, chlorophyll is contained in

   (a) Fungus

   (b) Alga

   (c) Both

   (d) None

34. Insectivorous plants grow in the soil, which is deficient in

   (a) Magnesium
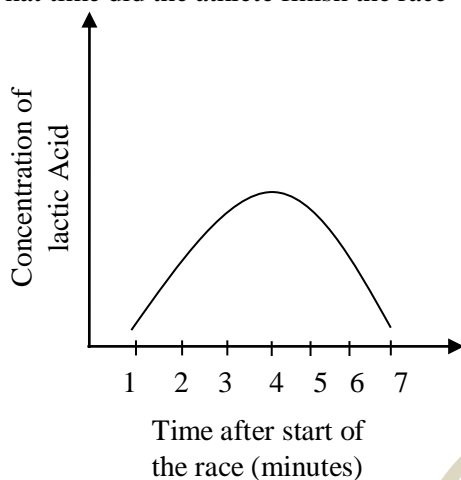
   (b) Calcium

   (c) Phosphorus

   (d) Nitrogen

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35. The given graph shows changes in the concentration of lactic acid in the muscle of an athlete both during and after race. At what time did the athlete finish the race

(a) 2 minutes

(b) 5 minutes

(c) 4 minutes

(d) 6 minutes

36. A person put warm water in aquarium, thinking that the fish would be more comfortable in it. However, the fish died, what can be the reason for this?

(a) The concentration of oxygen decreases in warm water.

(b) The concentration of carbon dioxide increases in warm water.

(c) Fish cannot bear the extreme heat of the water.

(d) All of these.

37. These are blood sucking parasites
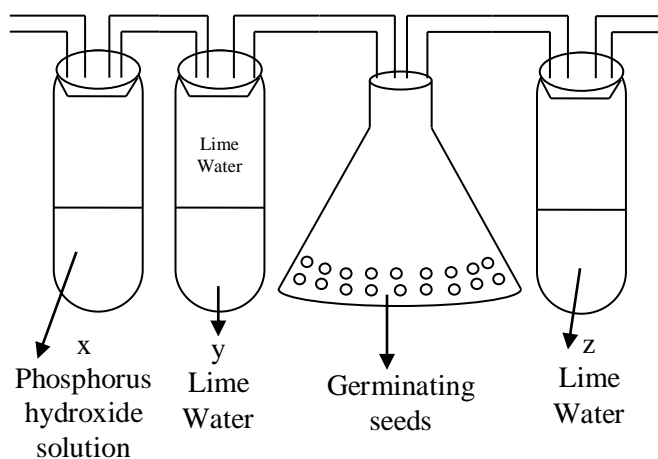
(a) Earthworm

(b) Hookworm

(c) Leeches

(d) Bed bugs

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38. Water from the undigested food is absorbed mainly in

    (a) Stomach

    (b) Foodpipe

    (c) Small intestine

    (d) Large intestine

39. Removal of soil by the action of water and wind is known as

    (a) Erosion

    (b) Fossilization

    (c) Leaching

    (d) Calcification

40. Higher porosity enhances the .

    (a) Fertility

    (b) Percolation

    (c) Texture

    (d) All of the above

41. Bile juice is secreted by which part of digestive system

    (a) Small intestine

    (b) Liver

    (c) Pituitary gland
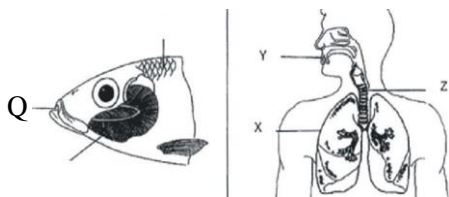
    (d) Digestive gland

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42. Rohan set up an experimental as shown in figure. What will he observe after sometime

x — Phosphorus hydroxide solution

y — Lime Water

Germinating seeds

z — Lime Water

(a) Limewater in test tube Y turns milky

(b) Lime water in test tube z turns milky.

(c) Potassium hydroxide solution in test tube x turns blue

(d) Temperature in the flask will go down.

43. Milk teeth fall off at the age between

(a) Three to four years

(b) Two to five years

(c) Six to eight years

(d) Eight to twelve years

44. Average breathing rate of an adult human being at rest is

(a) 10-12 times a minute

(b) 15-18 times a minute

(c) 20-25 times a minute

(d) More than 25 times minute

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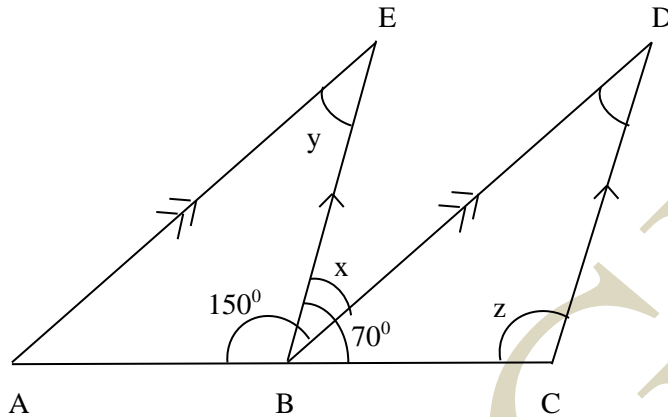Registered Office: - 106, 1st Floor, Pragati Deep Building, District Centre, Laxmi Nagar, Delhi-110092
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45. Name the breathing organs marked in given figures

(a) P-Lungs; X-Gills   (b) R- Lungs; Z-Stomata

(c) P-Gills; X-Lungs   (d) P-Stomata; X-Gills

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SECTION – D : MATHEMATICS

This section contains **45 Multiple Choice Questions.** Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE is correct.

46. Identify the sum of 'x', 'y' and 'z' from the following figure.

(a) 180^0

(b) 70^0

(c) 190^0

(d) 80^0

47. $\dfrac{1}{2}$ is subtracted from a number and the difference is multiplied by 4. If 25 is added to the product and the sum is divided by 3, the result is equal to 10. Find the number.

(a) $\dfrac{3}{5}$

(b) $1\dfrac{3}{4}$

(c) $\dfrac{6}{7}$

(d) $\dfrac{2}{3}$

48. In a ΔABC, if AB + BC = 10 cm, BC + CA = 12 cm, CA + AB = 16 cm, what is its perimeter?

(a) 19 cm

(b) 17 cm

(c) 38 cm

(d) 30 cm

49. Which of the following are the symbols of operations on integers that satisfy commutative property?

   (a) $-, \div$

   (b) $-, \times$

   (c) $+, -$

   (d) $+, \times$

50. How many primes between 1 and 1000 are divisible by 13?

   (a) 14

   (b) 1

   (c) 246

   (d) 0

51. A pudding is made of 200 g sugar, 800 g eggs, 600 g flour and 200 g dry fruits. What percent of sugar is present in the pudding?

   (a) $11\dfrac{1}{9}\%$

   (b) $16\dfrac{2}{3}\%$

   (c) $6\dfrac{1}{4}\%$

   (d) $3\dfrac{1}{2}\%$

52. The hour hand of a clock is 4.5 cm long. What distance on the clock does its tip cover in 12 hours?

   (a) 56.56 cm

   (b) 33.6 cm

   (c) 28.28 cm

   (d) 20 cm

53. If $\dfrac{3p+2}{5} - \dfrac{4p-3}{7} + \dfrac{p-1}{35} = 4$, find the value of 'p'.

   (a) 65

   (b) 63

   (c) 36

   (d) 56

54. ΔABC is isosceles with AB = AC and AD ⊥ BC.
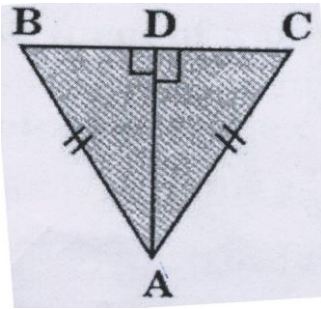
Which of the following is correct?

(a) $\Delta ADC \cong \Delta ADB$

(b) $\Delta ADB \equiv \Delta ADC$

(c) $\Delta ADB \cong \Delta ABC$

(d) $\Delta ABC \cong \Delta ADC$

55. The product of two rational numbers is $\dfrac{-8}{9}$. Of one of the numbers is $\dfrac{-4}{15}$, what is the other number?

(a) $3\dfrac{1}{3}$

(b) $\dfrac{3}{10}$

(c) $1\dfrac{1}{9}$

(d) $\dfrac{9}{10}$

56. The sides of a right angled triangle are 2a cm, (2a + 2) cm and (4a -2) cm long. What is its area if its perimeter is 24 cm?

(a) 48 cm^2

(b) 24 cm^2

(c) 10 cm^2

(d) 36 cm^2

57. Jai made a 9 m by 3 m rectangular garden and Rohit made a square garden of side 6 m. how much larger (in sq. m.) is the area of Rohit`s garden than that of Jai?

(a) 6

(b) 9

(c) 16

(d) 12

58. A man sold 10 eggs for 5 rupees and gained 20%. How many eggs did he buy for 5 rupees?

(a) 12

(b) $\dfrac{25}{12}$

(c) 25

(d) 20

59. A wire bent in the form of a circle of radius 42 cm is again bent in the form of a square. What is the ratio of the regions enclosed by the circle and the square?

(a) 11 : 12

(b) 22 : 28

(c) 22 : 33

(d) 14 : 11

60. The mean of five numbers is 27. If one of the numbers is excluded, the mean gets reduced by 2. What is the excluded number?

(a) 35

(b) 27

(c) 25

(d) 40

61. Identify the figure with only 5 lines of symmetry.
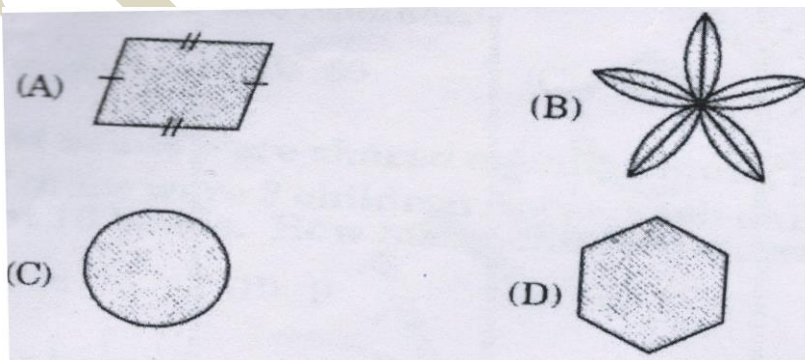
62. Given 'a; is 63% and 'c' is $\dfrac{3}{8}$, which of the following is the closest equivalent of the ratio of 'a' to 'c'?
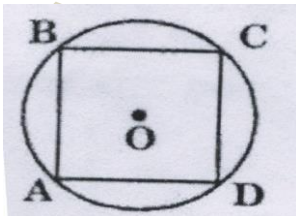
(a) 0.595

(b) 1.680

(c) 0.381

(d) 0.006

63. The given figure shows an equilateral triangle ABC and a regular pentagon PQRAT.
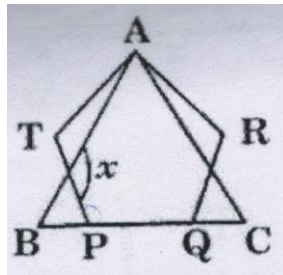
Find the measure of angle 'x'.

(a) 132^0

(b) 108^0

(c) 120^0

(d) 148^0

64. In the given figure, a square of area 50 sq. units is inscribed in a circle with centre O.

Which of the following is the circumference of the circle?

(a) $100\,\pi$ units

(b) $25\,\pi$ units

(c) $50\,\pi$ units

(d) $10\,\pi$ units

65. When a number is reduced by 4, it becomes 80% of itself. Find the number.

(a) 20

(b) 30

(c) 40

(d) 50

66. 144 beads were shared equally among some children. If there were 3 children fewer, each child would have got

16 beads. How many children shared the beads?

(a) 8

(b) 9

(c) 12

(d) 11

67. Given $a = 1\dfrac{5}{7}, b = \dfrac{1}{4}, c = \dfrac{1}{9}$ and $d = \left(-1\dfrac{1}{4}\right)$, identify the value of a (b – c) ÷ d.
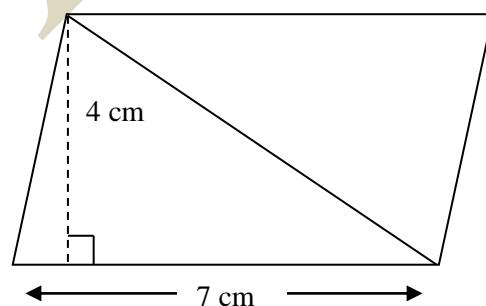
(a) $\dfrac{-4}{21}$

(b) $\dfrac{-6}{23}$

(c) $\dfrac{-5}{27}$

(d) $\dfrac{4}{21}$

68. A father is 26 years older than his son. In 3 years' time the son`s age will be one-third his father`s age. What is

the present age of the son?

(a) 26 years

(b) 13 years

(c) 39 years

(d) 10 years

69. Find the area of each figure:-

(a) 30 cm^2

(b) 28 cm^2
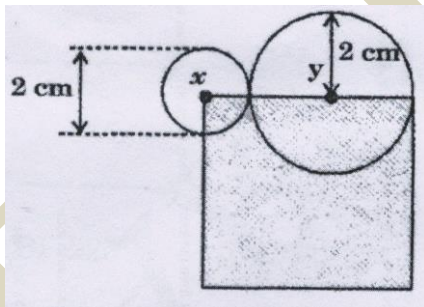
(c) 34 cm^2

(d) 14 cm^2

4 cm

7 cm

70. The product of 3 integers is odd. What can their sum be?

    (a) Odd

    (b) Even

    (c) Positive

    (d) Negative

71. The S.I. on a sum of money is $\dfrac{1^{th}}{9}$ of the principal and the number of years is equal to the rate percent per annum. Find the rate percent.

    (a) $2\dfrac{1}{3}\%$

    (b) $3\dfrac{1}{3}\%$

    (c) $4\dfrac{1}{2}\%$

    (d) $3\dfrac{1}{2}\%$

72. X and y are centers of the 2 circles as shown in the figure. What is the area of the shaded square?

    (a) 5 cm^2

    (b) 9 cm^2

    (c) 16 cm^2

    (d) 25 cm^2

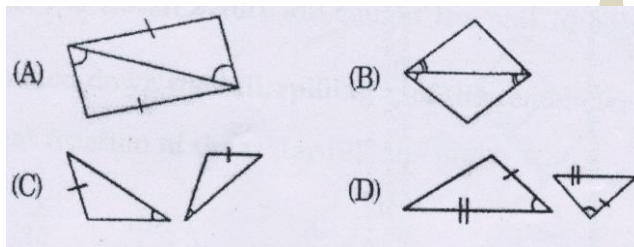**73.** Identify the value of x in the given equation.

$$\frac{x-4}{3} - \frac{2x+1}{6} = \frac{5x+1}{2}$$

(a) $\dfrac{3}{5}$

(b) $\dfrac{4}{5}$

(c) $\dfrac{5}{6}$

(d) $\dfrac{-4}{5}$

74. Identify the pair of triangles that are congruent.

75. What is the percentage of the least number in the greatest number among $\dfrac{3}{5}, \dfrac{9}{5}, \dfrac{1}{5}$ and $\dfrac{7}{5}$?

(a) $11\dfrac{1}{9}\%$

(b) $9\dfrac{2}{3}\%$

(c) 10%

(d) 25%

76. Which of the following pairs represents the same rational number?

(a) $\dfrac{-7}{21}$ and $\dfrac{1}{3}$

(b) $\dfrac{1}{3}$ and $\dfrac{-1}{9}$

(c) $\dfrac{-5}{-9}$ and $\dfrac{5}{-9}$

(d) $\dfrac{8}{-5}$ and $\dfrac{-24}{15}$

**77.** Jack and Jill went up the hill to fetch a pail of water. Having filled the pail to the full, Jack fell down, spilling $\frac{2}{3}$ of the water, before Jill caught the pail. She then tumbled down the hill, spilling $\frac{1}{5}$ of the reminder. What fraction of the water fills the pail?

(a) $\frac{4}{15}$

(b) $\frac{1}{3}$

(c) $\frac{11}{15}$

(d) $\frac{1}{15}$

78. If 24 – carat gold is 100% pure gold, then what percentage of pure gold is in 22 – carat gold?

(a) $61\frac{2}{3}\%$

(b) $71\frac{2}{3}\%$

(c) $81\frac{2}{3}\%$

(d) $91\frac{2}{3}\%$

79. The following bar graph shows the number of cars sold by a group of salesmen in one week. Study it and answer the following questions.
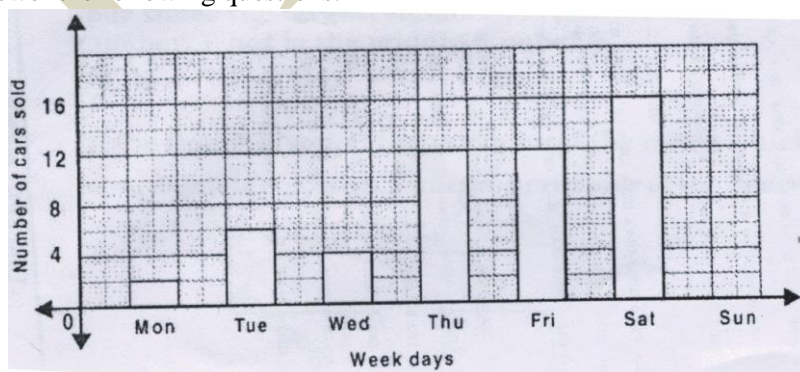
What was the average number of cars sold each day to the nearest whole number?

(a) 7

(b) 8

(c) 9

(d) 10

80. Point P is given on line 'm'. Identify the correct construction of a line parallel to 'm' through P.
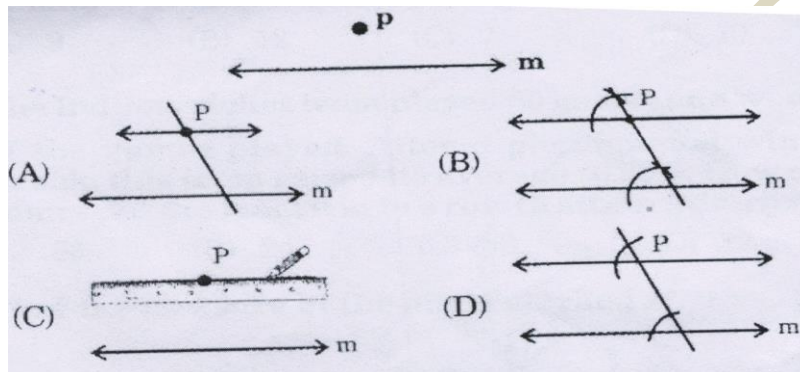
81. After a deduction of 5% from a certain sum and then 10% from the reminder, a sum of Rs. 171 is left. What was the original sum?

(a) Rs.200

(b) Rs.250

(c) Rs.150

(d) Rs.300

82. Three consecutive even numbers are such that the difference between six times the smallest number and four times the largest number is equal to the middle number. What is the middle number?

(a) 18

(b) 16

(c) 20

(d) 22

83. In the figure given, O is the centre of the circle which has a diameter of 14 cm. Find the perimeter of the figure .

(a) 98 cm

(b) 125 cm

(c) 134 cm

(d) 148 cm
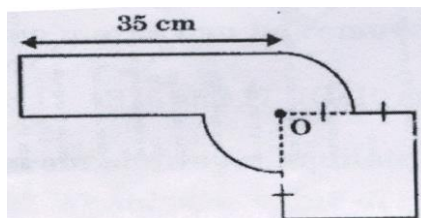
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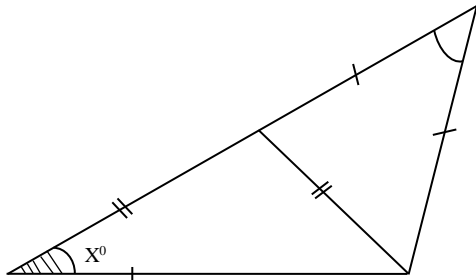Contact No: - 011- 43034114, 9268777177, 9205078754
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84. Pankaj has 96 marbles and Arun ha 63 marbles. How many marbles should Arun give to Pankaj so that Pankaj will have twice as many marbles as Arun?

(a) 9

(b) 12

(c) 7

(d) 10

85. Find the measure of the angle marked x^0.

(a) 13^0

(b) 15^0

(c) 36^0

(d) 40^0

86. Identify the rational number between $\dfrac{3}{4}$ and $\dfrac{9}{11}$.

(a) $\dfrac{1}{2}$

(b) $\dfrac{13}{11}$

(c) $\dfrac{69}{88}$

(d) $\dfrac{1}{4}$

87. A teacher has a list of marks as given in the box.

17, 13, 5, 10, 14, 9, 12, 16

Which two marks can be removed without changing the mean?

(a) 12 and 17

(b) 5 and 17

(c) 10 and 12

(d) 10 and 14

88. The diagram shows an equilateral triangle inside a rectangle. What is the value of $x^0 + y^0$?

(a) 45^0

(b) 90^0

(c) 60^0

(d) 75^0
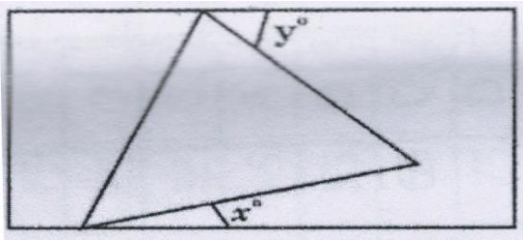
89. Which one of the following represents the largest area?

(a) $\dfrac{1}{4}$ of a circle of radius 3 cm

(b) A square of side 2 cm

(c) A rectangle of dimensions 3 cm by 1 cm

(d) A triangle of base 3 cm and vertical height 4 cm.

90. Which of the following are the angles of a right angled triangle?

(a) $35^0, 65^0, 90^0$

(b) $90^0, 5^0, 65^0$

(c) $40^0, 60^0, 90^0$

(d) $55^0, 35^0, 90^0$

PART II
SECTION - E: MENTAL ABILITY

This section contains **25 Multiple Choice Questions.** Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE is correct.

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91. Find the number which replaces the question mark.
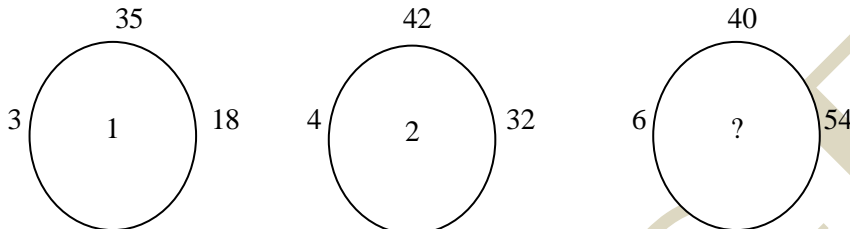
(a) 0
(b) 1
(c) 3
(d) 5

92. If '+' means 'X', '-' means '÷', '÷' means '+' and 'x' means '-', then what will be the value of $16 ÷ 64 – 4 \text{ x } 4$ ÷ 3 ?

(a) 20
(b) 15
(c) 52
(d) 12

93. If 15 x 20 x 60 = 20 x 60 15 and 21 x 42 x 63 = 42 x 63 x 21 then 19 x 17 x 41 = ?

(a) 17 x 19 x 41
(b) 17 x 41 x 19
(c) 19 x 41 x 17
(d) 41 x 19 x 17

94. A circular park of 20 metre diameter has a circular path just inside the boundary of width 1 metre. The area of the path is (in sq. m) _____.

(a) 15π
(b) 17π
(c) 19π
(d) 25π

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95. 40 % of ? + 180 = 564. What is the value of (?) ?

(a) 960

(b) 860

(c) 950

(d) 850

96. When a = 1 and b = -2, then find the value of $2a^2b + 2ab^2 + 3ab$.

(a) -12

(b) -2

(c) -4

(d) -14

97. A triangle has _____medians.

(a) 1

(b) 2

(c) 3

(d) 4

98. If the digit '4' and '8' signs '+' and '-' are interchanged then which one of the four equations would be correct?

(a) $4 + 8 - 12 = 16$

(b) $4 - 8 + 12 = 0$

(c) $8 + 4 - 12 = 24$

(d) $8 - 4 + 12 = 8$

99. Jennifer wants to run 3 km. The track she runs on is $\dfrac{1}{4}$ of a km in length. How many times does Jennifer have to run the length of the track to run a total of 3 km?

(a) $\dfrac{3}{4}$

(b) $3\dfrac{1}{4}$

(c) 7

(d) 12

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100. The bottom, side and front areas of a rectangular box are known. The product of these areas is equal to _____.

(a) The volume of the box

(b) The square root of the volume

(c) Twice the volume

(d) The square of the volume

101. P can do a piece of work in 9 days. Q is 50 % more efficient than P. The number of days it takes Q to do the same piece of work is _____.
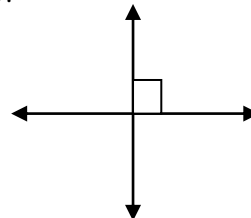
(a) $13\dfrac{1}{2}$

(b) $4\dfrac{1}{2}$

(c) 6

(d) 3

102. In the product shown, here B is digit. The value of B is _____.

(a) 3

(b) 5

(c) 6

(d) 8

$$\begin{array}{r} B\ 2 \\ \times\ \ 7\ B \\ \hline 6396 \end{array}$$
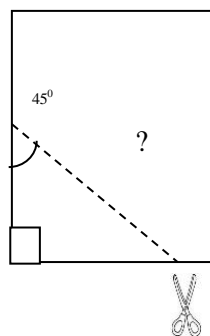
103. Which of the following is best described in the given figure?

(a) Acute angles

(b) Obtuse angles

(c) Parallel lines

(d) Perpendicular lines

104. Nina made a triangle by cutting the corner of a sheet of paper. One angle is 45^0. What is the measure of the third angle of Nina`s triangle?

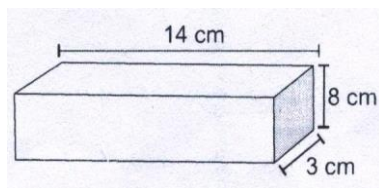(a) 30^0

(b) 45^0

(c) 55^0

(d) 60^0

105. The value of $4\dfrac{3}{4} - 2\dfrac{1}{2} =$

  (a) $1\dfrac{1}{4}$

  (b) $1\dfrac{3}{4}$

  (c) $2\dfrac{1}{4}$

  (d) $2\dfrac{3}{4}$

106. This rectangular prism has a length of 14 cm, a height of 8 cm, and a width of 3 cm. What is the volume?

  (a) 25 cu cm

  (b) 42 cu cm

  (c) 112 cu cm

  (d) 336 cu cm

107. Which expression represents the product of *n* and 25?

  (a) $25n$

  (b) 25 – n

  (c) 25 + n

  (d) 25 ÷ n

108. What is the factorization of 45?

  (a) 2^3 x 5

  (b) 3^2 x 5

  (c) 5^2 x 3

  (d) 5^2 x 9

109. The value of 11.3 x 2.7 =

  (a) 29.31

  (b) 29.51

  (c) 30.31

  (d) 30.51

110. Mohit gains 60 paise on Rs 60. His gain percent is _____.

(a) 1%

(b) 0.1%

(c) 2%

(d) 1.1%

111. Kartik can throw a ball $50\dfrac{3}{5}$ metres high. Ayan can throw the same ball $48\dfrac{1}{3}$ metres high. How much

farther can Kartik throw the ball than Ayan?

(a) $2\dfrac{2}{15}m$

(b) $2\dfrac{4}{15}m$

(c) $2\dfrac{3}{5}m$

(d) $2\dfrac{4}{5}m$

112. In a parking lot, 1 out of every 8 cars is blue. What percent of the cars in this lot are blue?

(a) 1.25%

(b) 7%

(c) 9%

(d) 12.5%

113. A duck flew at 18 km per hour for 3 hours, then at 15 km per hour for 2 hours. How far did the duck fly in

all? $\left(Speed = \dfrac{Dis\tan ce}{Time} \right)$

(a) 69 km

(b) 75 km

(c) 81 km

(d) 84 km

DIRECTION: - This question is based on letter series in which some of the letters are missing. The missing letters are given in the proper sequence in one of the alternatives among the four given under each question. Find out the correct alternatives for each question.

114. ___ab___a___bb___ab___a___

(a) abaaba

(b) babbba

(c) aabbab

(d) bbaabb

115. Complete the number series

1, 2, 4, 8, (?), 32.

(a) 10

(b) 12

(c) 14

(d) 16

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SECTION – F: REASONING

This section contains **20 Multiple Choice Questions.** Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE is correct.

116. If 'finger ' is called 'toe', 'toe' is called 'foot', 'foot' is called 'thumb', 'thumb' is called ankle, 'ankle' is called 'palm' and 'palm' is called 'knee', which one finger has different name?

  (a) Thumb

  (b) Ankle

  (c) Knee

  (d) Palm

117. In a certain code, OVER is written as $ # % * and VIST is written as # + X - , then how SORE will written in that code?

  (a) X $ * %

  (b) % X $*

  (c) X * $ %

  (d) None of these

118. Find the odd one

  (a) Pen

  (b) Pencil

  (c) Ball pen

  (d) Eraser

119. 5, 9, 17, 29, 45, ……..?

  (a) 60

  (b) 65

  (c) 70

  (d) 68

120. BEH, KNQ, TWZ, ……..?.......
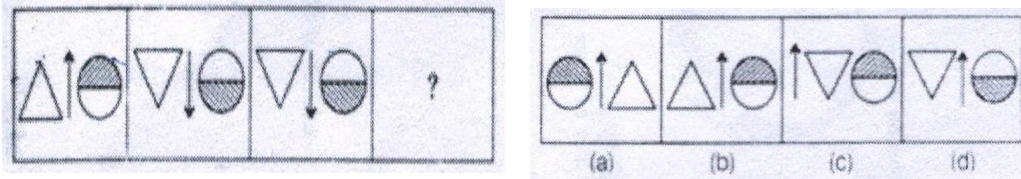
  (a) IJL

  (b) CFI

  (c) BDF

  (d) ADG

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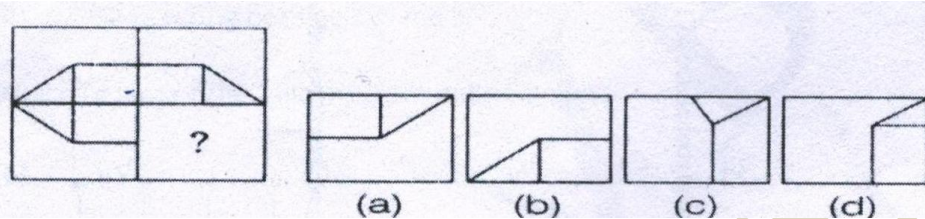Contact No: - 011- 43034114, 9268777177, 9205078754
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121. 5, 7, 10, 15, 22, ……?......

(a) 33

(b) 25

(c) 27

(d) 29

122. How many such 5s are there in the following number sequence which are immediately proceeded by 7 but not immediately followed by 9?

2 5 9 7 5 2 1 4 7 5 9 3 1 7 5 2 8 7 5 9 4 7 5

(a) One

(b) Two

(c) Three

(d) Four

123. Pointing to a women in the photograph, a man says, "This woman is the wife of the father of my bother-in-law. How is the woman related to the man?

(a) Mother

(b) Mother-in-law

(c) Sister

(d) Sister-in-law

124. A boy ride his bicycle Northwards, then turned left and ride 1 km and again turned left and rode 2 km. He found himself exactly 1 km West of his starting point. How far did he ride Northwards initially?

(a) 1 km

(b) 2 km

(c) 3 km

(d) 5 km

125. Ravi is 7th ranks ahead of Sumit in a class of 39. If sumit`s rank is 17$^{th}$ from the last, what is Ravi`s rank from the top?

(a) 14th

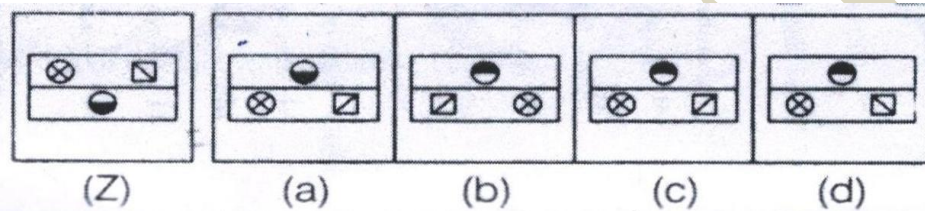(b) 12th

(c) 16th
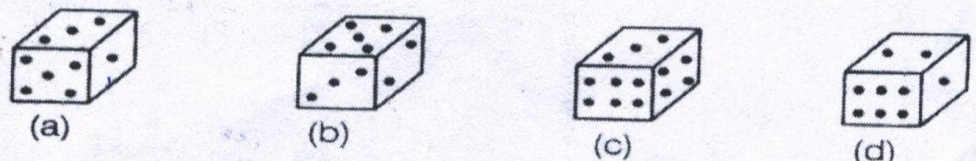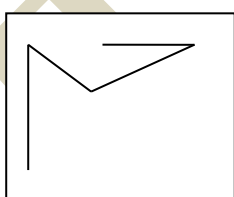
(d) 11th

126.

127.

128. Choose the correct water image

129. Which one of the following figures is correct, if total number of dots on opposite faces of a dice always remains 7?
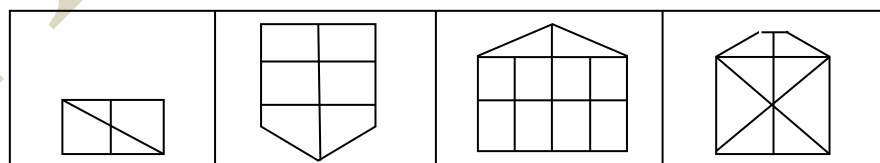

130. In the question given below, a figure (X) followed by four figures (a), (b) (c) and (d) such that (X) is embedded in one of them. Trace out the correct alternative.

Answer Figure

(X)   (a)   (b)   (c)   (d)

DIRECTIONS FOR Q.131 TO 135):- Study the following sitting arrangement carefully and answer the given questions. P, Q, R, S, T, U, V and W are sitting around the circle and are facing the centre.

(1) P is second to the right of T who is the neighbor of R and V.

(2) S is not the neighbor of P.

(3) V is the neighbor of U.

(4) W is sitting between U and S.

131. Which of two of the following are not neighbors?

(a) RV

(b) UV

(c) RP

(d) QS

132. Who is an immediate right of V?

(a) P

(b) U

(c) R

(d) T

133. Which of the following statement is correct?

(a) P is the immediate right of Q

(b) R is between U and V

(c) S is to immediate left of W

(d) U is between W and S

134. Rectangle: Square: : Ellipse : ?

(a) Centre

(b) Diameter

(c) Circle

(d) Radius

135. Complete the series:

(a)   (b)   (c)   (d)

ANSWER KEYS

(FOR CLASS VII NTTSE)

Part - I		Physics	Q. (1-15)	Part-II	Mental Ability & Reasoning		Q.(91-135)
		Chemistry	Q. (15-30)				
		Biology	Q.(31-45)				
		Mathematics	Q.(46-90)				
1.	D	30.	A	59.	D	88.	C	117.	A
2.	A	31.	D	60	A	89.	A	118.	D
3.	B	32.	D	61.	B	90.	D	119.	B
4.	B	33.	B	62	B	91.	B	120.	B
5.	C	34.	D	63.	A	92.	A	121.	A
6.	C	35.	C	64.	D	93.	B	122.	C
7.	B	36.	A	65.	A	94.	C	123.	B
8.	A	37.	C	66.	C	95.	A	124.	B
9.	A	38.	D	67.	A	96.	B	125.	C
10.	B	39.	A	68.	D	97.	C	126.	B
11.	D	40.	D	69.	B	98.	A	127.	A
12.	B	41.	B	70.	A	99.	D	128.	C
13.	C	42	B	71.	B	100.	D	129.	A
14.	B	43.	C	72.	D	101.	C	130.	D
15.	C	44.	B	73.	D	102.	D	131.	A
16	C	45.	C	74.	B	103.	D	132.	D
17.	B	46.	C	75.	A	104.	B	133.	C
18.	C	47.	B	76.	D	105.	C	134.	C
19.	B	48.	A	77.	C	106.	D	135.	A
20.	B	49.	D	78.	D	107.	A		
21.	A	50	B	79.	A	108.	B		
22.	C	51.	A	80	B	109	D		
23.	B	52.	C	81.	A	110.	A		
24.	B	53.	D	82.	C	111.	B		
25.	D	54.	A	83.	C	112.	D		
26.	B	55.	A	84.	D	113.	D		
27.	C	56.	B	85.	C	114.	A		
28.	C	57.	B	86.	C	115.	D		
29.	C	58.	A	87.	D	116.	B		