



Class 6th

Total Questions : 120

Maximum Marks : 480

Time : 3 Hrs.

PAPER PATTERN & MARKING SCHEME

Subject	Reasoning		Physics		Chemistry		Biology	Maths	
	SCQ	INT	SCQ	INT	SCQ	INT	SCQ	SCQ	INT
Question type	SCQ	INT	SCQ	INT	SCQ	INT	SCQ	SCQ	INT
No. of ques	20	10	10	5	10	5	15	30	15
Marks per ques.	4	4	4	4	4	4	4	4	4
Negative marks per ques.	1	0	1	0	1	0	1	1	0

SCQ - Single correct answer type questions & INT - Integer answer type questions

INSTRUCTIONS – 1:

- The question paper consists of **5 parts (1. Reasoning & Mental ability 2. Physics 3. Chemistry 4. Biology 5. Mathematics)**. Please fill the **OMR** answer Sheet accordingly and carefully.
- This questions paper contains **85 single correct type questions** and **35 Integer answer type questions**.
- Please ensure that the Question Paper you have received contains All the questions in each Section and Pages. If you found some mistake like missing questions or pages then contact immediately to the Invigilator.

INSTRUCTIONS – 2:

- Part – 1 contains **20 Single correct type questions** and **10 Integer type questions**.
- Part – 2 and 3 contains **10 Single correct type questions** and **5 Integer type questions**.
- Part – 4 contains **15 Single correct type questions**.
- Part – 5 contains **30 Single correct type questions** and **15 Integer type questions**.
- Indicate the correct answer for each question by filling appropriate bubble in your answer sheet.
- Use of Calculator, Log Table, Slide Rule and Mobile is not allowed.

OMR filling instructions for SCQ.

OMR filling instructions for INT.

INSTRUCTIONS

- "Think before your ink".
- Marking should be done with Blue/Black Ball Point Pen only.
- Darken only one circle for each question as shown in Example Below.

WRONG METHODS	CORRECT METHOD

- If more than one circle is darkened or if the response is marked in any other way as shown "WRONG" above, it shall be treated as wrong way of marking.
- Make the marks only in the spaces provided.
- Carefully tear off the duplicate copy of the OMR without tampering the Original.
- Please do not make any stray marks on the answer sheet.

Q. 1	Q. 2
4 7	0 5
<input type="radio"/> 0 <input type="radio"/> 0	<input checked="" type="radio"/> 0 <input type="radio"/> 0
<input type="radio"/> 1 <input type="radio"/> 1	<input type="radio"/> 1 <input type="radio"/> 1
<input type="radio"/> 2 <input type="radio"/> 2	<input type="radio"/> 2 <input type="radio"/> 2
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<input type="radio"/> 7 <input checked="" type="radio"/> 7	<input type="radio"/> 7 <input type="radio"/> 7
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<input type="radio"/> 9 <input type="radio"/> 9	<input type="radio"/> 9 <input type="radio"/> 9

MATRIX OLYMPIAD FOUNDATION

Office : Piprali Road, Sikar (Raj.) | Ph. 01572-241911

Website : www.mof.matrixedu.in ; Email : info@matrixedu.in

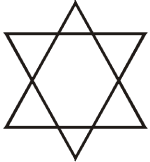


Part – 1 contains 20 Single correct type questions and 10 Integer type questions.

Question No. 1 – 20 are of Single Correct Answer Type Question.

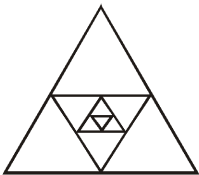
Four options are given in each question out of which only one option is correct.

1. How many triangles are there in the following figure?



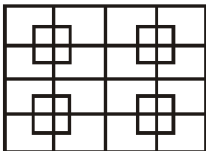
- (A) 6 (B) 7 (C) 8 (D) 9

2. Count the number of triangles in given figure.



- (A) 12 (B) 10 (C) 11 (D) 13

3. Direction (3–5): Count the number of square in the given figure.

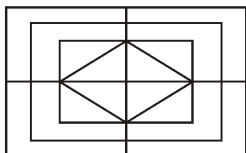


- (A) 30 (B) 40 (C) 50 (D) 60

Space for Rough Work



4.



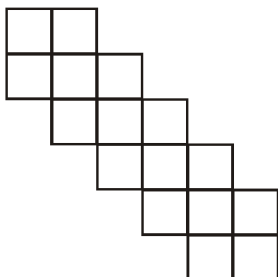
(A) 20

(B) 16

(C) 12

(D) 18

5.



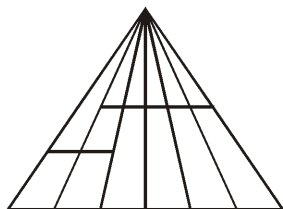
(A) 16

(B) 18

(C) 21

(D) None of these

6. Count the number of triangles in given figure.



(A) 38

(B) 39

(C) 40

(D) 41

Direction : (7–9) Find the wrong number in each of the following given series :

7. 3 , 8, 15, 24, 34, 48, 63

(A) 15

(B) 24

(C) 34

(D) 48

Space for Rough Work



8. 24, 27, 31, 33, 36

- (A) 24 (B) 27 (C) 31 (D) 33

9. 196, 169, 144, 121, 80

- (A) 80 (B) 121 (C) 169 (D) 196

Direction : (10 – 11) Find the wrong number in each of the following given series :

10. 5.40, 8.00, 10.20, 12.30, 3.00, 5.20

- (A) 5.40 (B) 8.00 (C) 10.20 (D) 12.30

11. $\frac{4}{5}, \frac{7}{15}, \frac{1}{15}, -\frac{1}{5}, -\frac{8}{15}$

- (A) $\frac{7}{15}$ (B) $\frac{1}{15}$ (C) $-\frac{1}{5}$ (D) $-\frac{8}{15}$

12. BEGK is related to ADFJ in the same way as PSVY is related to?....

- (A) LOQT (B) ROUX (C) OTUZ (D) ORUX

13. BLOCKED : YOLXPVW :: ? : OZFMXS

- (A) LAUNCH (B) DEBATE (C) LABOUR (D) RESULT

14. A's father's mother-in-law's only daughter's son is B. How is A related to B?

- (A) Brother (B) Sister (C) Nephew (D) Cannot to determined

Space for Rough Work

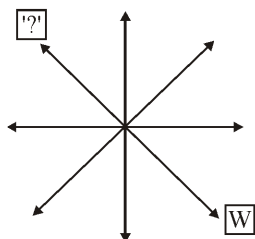


15. Pointing to a person, Raju said, "He is the only brother of my father's mother's daughter." How is the person related to Raju ?
(A) Brother (B) Father (C) Uncle (D) Nephew
16. Mohit walks 6 km to the East and turns to the South and walk 5 km. Again he turns to the East and walks 6 km. Next, he turns northwards and walks 10 km. How far is he from his starting point?
(A) 5 km (B) 12 km (C) 13 km (D) 17 km
17. A person starts towards South direction. Which of the following orders of direction will lead him to East direction ?
(A) Right, Right, Right (B) Left, Left, Left (C) Left, Right, Right (D) Right, Left, Right
18. Darsh started from a point 'A' towards South and travelled 5 km. Then he turned right and travelled 2 km. Then he turned right and travelled 5 km. Then he turned left and travelled 5 km. How far is he from the point 'A' ?
(A) 5 km (B) 7 km (C) 15 km (D) 17 km

Space for Rough Work



19. Find the direction which replaces '?' in the figure below.



- (A) NE (B) E (C) SE (D) N

20. Ashok is facing North. He turns 45 degrees in the clockwise direction and then turns 90 degrees in the anticlockwise direction. Finally, he turns back. Which direction is he facing now ?

- (A) South-East (B) South-West (C) North-East (D) North-West

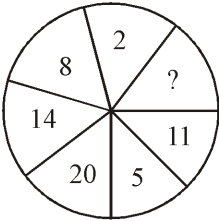
Space for Rough Work



Question No. 21 – 30 are of Integer Answer Type Question.

Answer of these question will come from **00** to **99**.

21. “SPECIAL” is written as “65” in a certain code language what will “connect” be coded as ?
22. In the given figure below, find the value of ‘?’



23. Roshan ranked 11th from the top and thirty one from the bottom in a class.
How many students are there in the class ?
24. Find the missing numbers :
0, 7, 26, ? 124, 215

Space for Rough Work



25. Look at this series 14, 28, 20, 40, 32, 64....what number should come next ?
26. If a test score goes up 15% from x to 69, what was the previous test score ?
27. Of the following numbers which can be a part of the given set ?
Set (3, 17, 19, 23)
28. 24, 32, 48, 72
Identify the one which is different form the others.
29. If the code of RAM is 32,
what is the code of MAN ?
30. Urmila has 23rd rank from the right and 15th rank from left. Then, how many persons are there in the row ?

Space for Rough Work

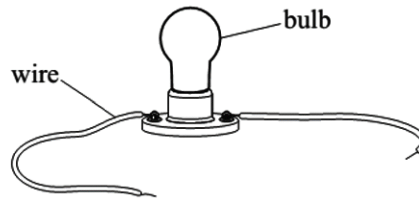


Part – 2 contains 10 Single correct type questions and 5 Integer type questions.

Question No. 31 – 40 are of Single Correct Answer Type Question.

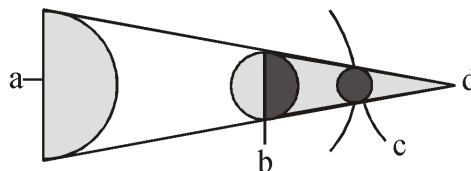
Four options are given in each question out of which only **one** option is correct.

31. Use the picture below to answer the question.



Which object is needed to light the bulb?

- (A) A battery (B) A switch
(C) Another bulb (D) Another wire
32. Look at the figure, It shows lunar eclipse. Where will be the Earth in it ?



- (A) a (B) b (C) c (D) d
33. Which of the planet is the brightest ?
- (A) Mercury (B) Venus
(C) Mars (D) Jupiter

Space for Rough Work



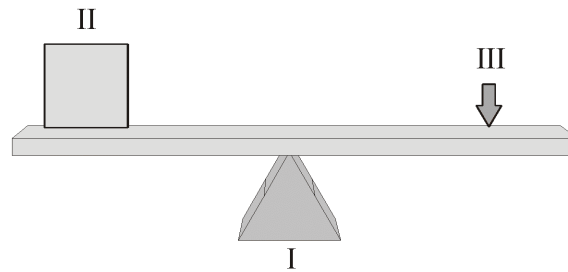
34. The given picture represents a simple machine :



What is the name of the machine shown in the given image?

- (A) Pair of scissors
- (B) Crowbar
- (C) Nut cracker
- (D) Claw hammer

35. The given picture represents a simple machine :



Which portion is called an effort in the given simple machine ?

- (A) Only II
- (B) Only III
- (C) I and II
- (D) I and III

Space for Rough Work



36. Work done is calculated as the product of (i) and (ii) by the object. Which of the following sets of words correctly completes the given statement :

- (A) i- force, ii-mass
- (B) i-pressure, ii-mass
- (C) i-force, ii-distance covered
- (D) i-pressure, ii-distance covered

37. Match the column

Column-I

- P. Anemometer
- Q. Cyclone
- R. High wind speed
- S. Wind movement

Column-II

- 1. Caused by high speed wind and air pressure differences
- 2. Accompanied by low pressure.
- 3. Instrument used to measure wind speed.
- 4. Caused by uneven heating of earth surface.

- (A) P-3, Q-2, R-1, S-4
- (C) P-3, Q-4, R-1, S-2

- (B) P-3, Q-1, R-2, S-4
- (D) P-3, Q-2, R-4, S-1

38. You have been given a mixture of iron filing sand and sugar. You have to separate them by

(i)	Use of magnet
(ii)	Making solution with water
(iii)	Evaporation
(iv)	Filtration

What will be correct sequence ?

- (A) (i) → (ii) → (iv) → (iii)
- (C) (iv) → (iii) → (ii) → (i)

- (B) (i) → (ii) → (iii) → (iv)
- (D) (ii) → (m) → (i) → (iv)

Space for Rough Work



39. Which of the following relations is correct?

(A) Speed = Distance \times Time

(B) Speed = $\frac{\text{Distance}}{\text{Time}}$

(C) Speed = $\frac{\text{Time}}{\text{Distance}}$

(D) Speed = $\frac{1}{\text{Distance} \times \text{Time}}$

40. A tester is used to check the conduction of electricity through two liquids, labelled A and B. It is found that the bulb of the tester glows brightly for liquid A while it glows very dimly for liquid B. You would conclude that

(A) liquid A is a better conductor than liquid B.

(B) liquid B is a better conductor than liquid A.

(C) both liquids are equally conducting.

(D) conducting properties of liquid cannot be compared in this manner.

Space for Rough Work



Question No. 41 – 45 are of Integer Answer Type Question.

Answer of these question will come from **00** to **99**.

41. Water freezes at ___ to a solid state called snow or ice.
42. How many moons does Jupiter have?
43. Water boils at _____ (in degree centigrade).
44. How long does the Earth take to make one complete revolution around the Sun ? fill your answer dividing by 5.
45. How many centimeter in $\frac{1}{2}$ meter



Part – 3 contains 10 Single correct type questions and 5 Integer type questions.

Question No. 46 – 55 are of Single Correct Answer Type Question.

Four options are given in each question out of which only one option is correct.

46. The forces by which a liquid changes to its solid form is called
(A) Evaporation (B) Condensation (C) Melting (D) Freezing
47. The chemical used to kill the microorganism in water is -
(A) Chlorine (B) Iodine (C) Salt (D) Argon
48. Water freezes at _____ temperature.
(A) 0°C (B) 100°C (C) 50° (D) None of these
49. In a solution of sugar and water, what is the solute ?
(A) Sugar (B) Water (C) Salt (D) None of these
50. Which of these is an example of chemical change ?
(A) Ripening of fruit (B) Tearing of paper (C) Melting of Glaciers (D) Peeling of a glass
51. Which of these is not a layer of Earth ?
(A) Core (B) Gneiss (C) Crust (D) Mantle
52. Which layer of atmosphere merges with space ?
(A) Troposphere (B) Mesosphere (C) Exosphere (D) Thermosphere
53. The process of clean water is poured out into another container without disturbing the sediments is called -
(A) Sedimentation (B) Decantation (C) Evaporation (D) None of these
54. _____ Causes particles to move faster.
(A) Cooling (B) Contracting (C) Heating (D) Melting
55. The rate of Sedimentation can be increased by
(A) heating (B) Loading (C) Cooling (D) Boiling

Space for Rough Work



Question No. 56 – 60 are of Integer Answer Type Question.

Answer of these question will come from **00 to 99**.

56. How many states of water are there?
57. How many types of layers of Earth?
58. How many of the following are layers of atmosphere?
Troposphere, Crust, Stratosphere, Mantle
59. How many of the following are examples of physical change?
Burning, Cooking, Rusting, Melting of glaciers, Tearing of paper.
60. How many of the following are solids in nature?
Mercury, Bag, chalk, Petroleum, Nitrogen, Rock, plastic

Space for Rough Work



Part – 4 contains 15 Single correct type questions.

Question No. 61 – 75 are of Single Correct Answer Type Question.

Four options are given in each question out of which only one option is correct.

61. Which plant gives us medicines?
(A) Castor oil (B) Tulsi (C) Dhatura (D) All of these
62. Oil yielding plants are :
(A) Mustard (B) Wheat (C) Rice (D) Urad
63. Honey comes from beehives of:
(A) Spider (B) Butterfly (C) Honeybee (D) None of these
64. Diseases that occur due to lack of nutrients over a long period are called disease.
(A) Scurvy (B) Deficiency (C) Beri-Beri (D) None of these
65. Repeated washing of rice and pulses may remove some ad present in them.
(A) Vitamins (B) Minerals (C) Both (A) and (B) (D) None of these
66. Get lost in the process of cooking and preparation.
(A) Nutrients (B) Oil (C) Taste (D) Spices
67. A snail moves by its muscular
(A) Wings (B) Foot (C) Fins (D) None of these
68. The muscles covers the.
(A) Skin (B) Bones (C) Both (A) and (B) (D) None of these
69. The skull covers and protects the
(A) Eyes (B) Nose (C) Brain (D) None of these

Space for Rough Work



70. Which one of the following statements is correct?
(A) Several kinds of plants and animals may share the same habitat.
(B) All the animals and plants in a habitat are adapted to it.
(C) Both the statements are correct.
(D) None of these is correct.
71. Animals and plants have certain features which make them to survive in a particular habitat. This is called
(A) Adaptation (B) Speciation (C) specialisation (D) Evolution
72. Which is a biotic component of environment?
(A) Plants (B) Animals (C) Microorganisms (D) All of these
73. Which one of the following will add to garbage?
(A) Wrapper of a biscuit pack (B) Tin of a cold drink
(C) Syringe used by a doctor (D) All of these
74. Which one can be used for making manure?
(A) Earthworms (B) Houseflies (C) Eagle (D) Crow
75. Leaves falling from trees should be disposed by
(A) burning (B) making compost by boiling and drying them
(C) making compost by vermicomposting (D) any of these methods

Space for Rough Work

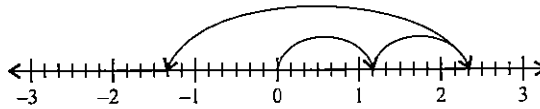


Part – 5 contains 30 Single correct type questions and 15 Integer type questions.

Question No. 76 – 105 are of Single Correct Answer Type Question.

Four options are given in each question out of which only one option is correct.

76. In a triangle, the longest side is double the shortest side and the third side is 5 cm less than the longest side. If the perimeter of the triangle is 63 cm, then find the length of all the sides of the triangle.
- (A) 13.6 cm, 21.5 cm, 26.5 cm (B) 14.5 cm, 29 cm, 24 cm
(C) 14 cm, 28.5 cm, 23 cm (D) 13.6 cm, 22.2 cm, 27.2 cm
77. In which of the following options, Roman numeral are arranged in ascending order?
- (A) DLIV, MCXXI, MDLXII, CMLXXXI0 (B) MCXXI, DLIV, CMLXXXI, MDLXII
(C) DLIV, CMLXXXI, MCXXI, MDLXII (D) DLIV, MDLXII, MCXXI, CMLXXXI
78. The given number line represents



(A) $\frac{7}{6} + \frac{8}{6} - \frac{22}{6}$

(B) $\frac{7}{6} + \frac{7}{6} - \frac{22}{6}$

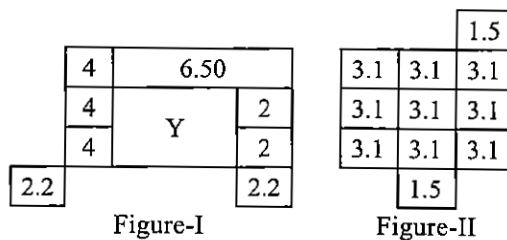
(C) $\frac{8}{6} + \frac{7}{5} - \frac{21}{5}$

(D) $\frac{7}{5} + \frac{7}{5} - \frac{22}{5}$

Space for Rough Work



79. In Figure -I and Figure-II (not drawn to scale), areas (in cm^2) of each part is written in it. Find the value of Y, if the total area of Figure-I is equal to the total area of Figure-II.



- (A) 6.2 cm^2 (B) 5.4 cm^2 (C) 7 cm^2 (D) 4 cm^2
80. A square is divided into certain number of equal parts. If 22 such parts represent $\frac{1}{15}$ of the square, then total number of equal parts of the square is ____.
- (A) 300 (B) 250 (C) 330 (D) 200
81. The length breadth and height of a room are 403 cm, 434cm and 465 cm respectively. Find the longest tape which can measure the three dimensions of the room exactly.
- (A) 31 cm (B) 30 cm (C) 25 cm (D) 35 cm

Space for Rough Work



82. Amit lives at a distance of 2.5 km more than 18.5 km from his office. Karan lives at a distance of $\frac{1}{2}$ km more than one-fourth of Amit's home distance from his office. How far does Karan live from his office, if they both work in the same office?

- (A) 6.76 km (B) 6.25 km (C) 9.54 km (D) 5.75 km

83. Fill in the blanks.

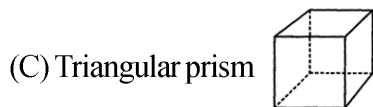
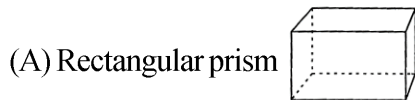
- (i) One pair of opposite sides of a trapezium are (P).
 (ii) Two lines which never meet each other are called (Q) lines.
 (iii) Every chord of a circle divides it into (R).
 (iv) If $\angle ABC = (105^\circ)$ is bisected by an angle bisector BQ, then $\angle QBC =$ (S).

(P)	(Q)	(R)	(S)
(A) Equal	Parallel	3	$\left(52\frac{1}{5}\right)^0$
(B) Parallel	Perpendicular	4	$\left(25\frac{1}{5}\right)^0$
(C) Parallel	Parallel	2	$\left(52\frac{1}{2}\right)^0$
(D) Similar	Perpendicular	2	$\left(25\frac{1}{2}\right)^0$

Space for Rough Work



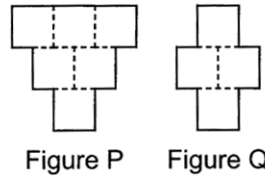
84. Ram's bank balance is Rs.500 more than 3 times his friend's bank balance. If his friend's bank balance is 'y', what is Ram's bank balance.
(A) $y+500$ (B) $3y + 500$ (C) $3y$ (D) $3y - 500$
85. Jatin deposited Rs. 35673 in his bank account on Tuesday and withdrew Rs. 3568 on Wednesday. He again deposited Rs. 24113 on Friday. What is the total amount of money in his account on Saturday ?
(A) Rs. 56218 (B) 57318 (C) 55118 (D) 50218
86. A vendor supplies 105 litres of milk to a hotel in the morning and 85 litres of milk in the evening. If the milk costs Rs. 20 per litre, then how much money is due to the vendor per day ?
(A) Rs. 3500 (B) Rs. 4200 (C) Rs. 3950 (D) Rs. 3800
87. How many degrees does the hour hand of a clock turn in 5 minutes ?
(A) $\left(\frac{1}{2}\right)^\circ$ (B) $\left(3\frac{1}{2}\right)^\circ$ (C) 5° (D) $\left(2\frac{1}{2}\right)^\circ$
88. Select the INCORRECT match.



Space for Rough Work



89. Purna had Rs. 5000. She bought 2 boxes of chocolates for Rs. 52.98 each, 3 packets of chips for Rs. 12.98 each and 2 books for Rs. 300.05 each. How much money left with her ?
(A) Rs. 4255 (B) Rs. 4750 (C) Rs. 4000 (D) Rs. 3875
90. Figure P is made up of six identical squares. Two squares were removed from figure P to form figure Q. The perimeter of figure P is 240 cm. What is the perimeter of figure Q ?

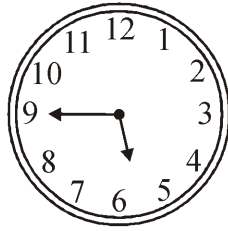


- (A) 220 cm (B) 180 cm (C) 200 cm (D) 160 cm
91. Which digit should come at place of * to make the number divisible by 2 ?
4328*
(A) 4 (B) 6 (C) 0 (D) All of these
92. Rohan asked a question to Shruti.
" Multiply the second multiple of 12 by the third multiple of 8 ".
Help her in solving the question and finding the correct result.
(A) 48 (B) 96 (C) 192 (D) 576

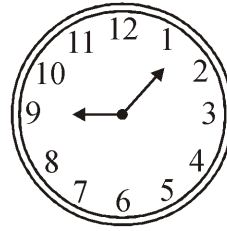
Space for Rough Work



93. The given clocks show the time when a movie started and ended. How long was the movie ?



Movie Started



Movie ended

- (A) 2 hrs 17 mins (B) 2 hrs 20 mins (C) 1 hr 55 mins (D) 3 hrs 22 mins

94. Fill in the blanks.

(i) $16\frac{2}{3} \times 5.25 \times 0 = \underline{P}$

(ii) $7\frac{1}{2} \times 8\frac{3}{4} \times 3\frac{3}{5} \times 7\frac{1}{2} \times \underline{Q}$

(iii) $7.20 \times 1.20 = \underline{R} \times 1.2$

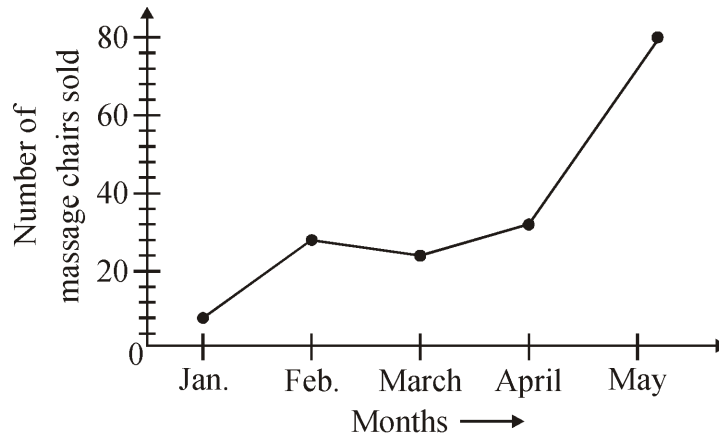
(iv) $12.5 \div \underline{S} = 125$

	(P)	(Q)	(R)	(S)
(A)	0	$8\frac{3}{4}$	8	1
(B)	1	$8\frac{3}{5}$	8	0
(C)	0	$8\frac{3}{4}$	7.2	0.1
(D)	1	$3\frac{8}{4}$	7.2	0.1

Space for Rough Work



95. Study the graph carefully.



If the salesman earned Rs. 150 from the sale of each massage chair, how much did he earn in May ?

- (A) Rs. 6,000 (B) Rs. 9,000 (C) Rs. 12,000 (D) Rs. 15,000

96. Match the following :

Column – I

(P) $720 + 720 =$

(Q) 120 less than 720 is

(R) 1000 more than 720 is

(S) Twice of 396 is

Column – II

(i) MDCCXX

(ii) DCCXCII

(iii) MCDXL

(iv) DC

(A) (P) → (iii), (Q) → (ii), (R) → (i), (S) → (iv)

(B) (P) → (i), (Q) → (ii), (R) → (iii), (S) → (iv)

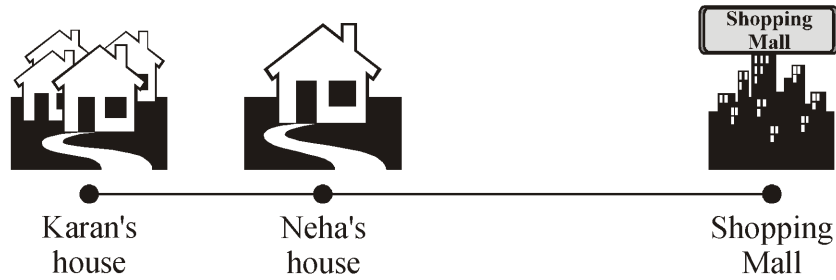
(C) (P) → (iii), (Q) → (iv), (R) → (i), (S) → (ii)

(D) (P) → (ii), (Q) → (iv), (R) → (iii), (S) → (i)

Space for Rough Work



97. The total distance from Karan's house to Neha's house is 3000 m. The distance from Karan's house to a shopping mall is 4 times as far as from Karan's house to Neha's house.



- (i) If Karan travels from his house to Neha's house and then travels to the shopping mall with Neha, find the distance travelled by Karan.
- (ii) Find the distance travelled by Neha from her house to the shopping mall and back to her house.

- | | (i) | (ii) |
|-----|-------|-------|
| (A) | 12 km | 24 km |
| (B) | 9 km | 18 km |
| (C) | 9 km | 24 km |
| (D) | 12 km | 18 km |

Space for Rough Work



98. Evaluate: $\frac{\frac{1}{2} + 3\frac{1}{4} + 1\frac{1}{6}}{2\frac{1}{2} + 1\frac{1}{6} + 6\frac{1}{3}} + \frac{1}{120}$.

(A) $\frac{59}{17}$

(B) $\frac{1}{12}$

(C) $\frac{6}{7}$

(D) $\frac{1}{2}$

99. A pipe leaks 3.5 gallons of water each hour.

Which table represents the total amount of water leaked at the end of each hour ?

(A)

Time(Hours)	Water Wasted (gallons)
1	3.5
2	3.5
3	3.5
4	3.5
5	3.5

(B)

Time(Hours)	Water Wasted (gallons)
1	3.5
2	7
3	10.5
4	14
5	17.5

(C)

Time(Hours)	Water Wasted (gallons)
1	3.5
2	7
3	21
4	84
5	420

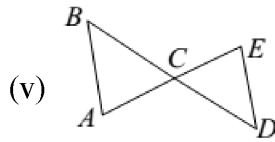
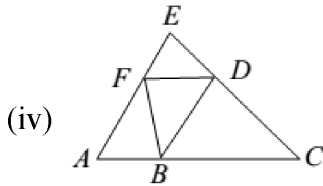
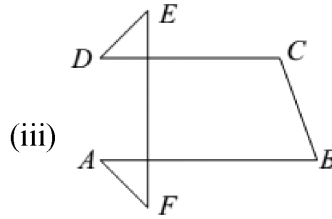
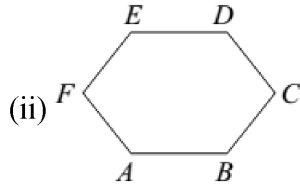
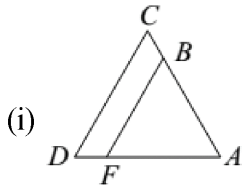
(D)

Time(Hours)	Water Wasted (gallons)
1	3.5
2	12.25
3	42.88
4	150.06
5	525.22

Space for Rough Work



100. When an arm of an angle is doubled then the measure of angle _____.
(A) Doubles (B) Triples (C) Remains the same (D) None of these
101. Which of the following figures are NOT polygons ?

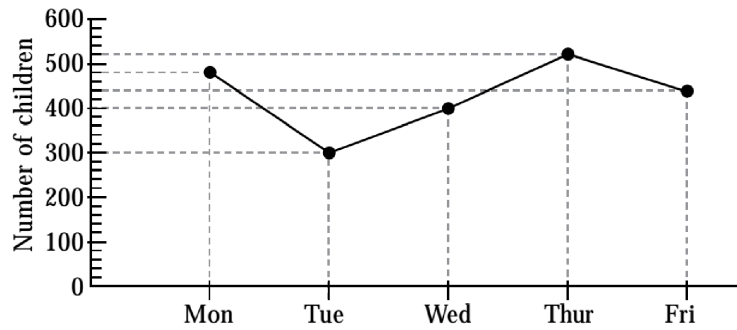


- (A) (i), (ii) and (v) (B) (i), (ii) and (iii)
(C) (i), (iii), (iv) and (v) (D) (i), (ii), (iii) and (iv)

Space for Rough Work



102. The given graph shows the number of children who visited an old age home in 5 days. Study the graph carefully and answer the given question.



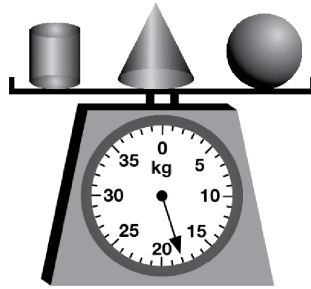
On which two consecutive days was there a difference of 80 in the number of children who visited the old age home ?

- (A) Monday, Tuesday
- (B) Tuesday, Wednesday
- (C) Wednesday, Thursday
- (D) Thursday, Friday

Space for Rough Work



103. The total weight of 3 objects is shown in the figure. The cone is 1 kg heavier than the ball. The ball is 1 kg heavier than the cylinder. What is the weight of the cone ?



- (A) 5 kg (B) 8 kg (C) 6 kg (D) 7 kg
104. A triangle whose lengths of sides are 5 cm, 12 cm and 13 cm. The triangle is :
- (A) obtuse - angled triangle (B) Acute - angled triangle
(C) Right angled triangle (D) Triangle is not formed
105. A cone, standing on its base, would appear in the top view as a
- (A) Circle (B) Triangle (C) Rectangle (D) None of these

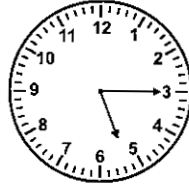
Space for Rough Work



Question No. 106 – 120 are of Integer Answer Type Question.

Answer of these question will come from **00 to 99**.

106. Sonakshi drives from place L to place M. The given clock shows the time when she leaves place L. She take 225 minutes to reach place M. What is the angle formed by the minute hand and hour hand of the clock, when she reaches place M?



107. How many of the following statement(s) is/are incorrect?
(i) H.C.F. of an even and an odd number is always even.
(ii) The additive inverse of 3 is $1/3$.
(iii) Zero is the identify for addition of whole numbers.
108. The number of diagonals in a regular octagon is ____.
109. The HCF of two numbers is 28 and their LCM is 336. If one number is 112, then the other number is ____.
110. What is the missing value in the given mathematical statement ?

$$0.25 \times 12 = 0.25 \times 3 + 0.25 \times 3 + 0.25 \times ?$$

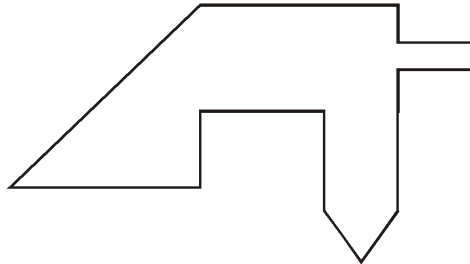
Space for Rough Work



111. How many of the following letters have atleast one line of symmetry ?

SINGAPORE

112. How many pairs of perpendicular lines are there in the given figure ?



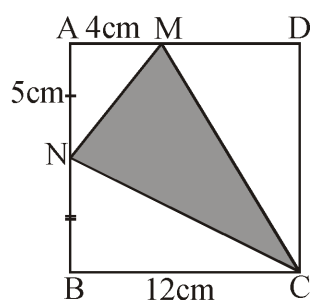
113. Find the value of $\frac{P \times Q - S + R}{2}$.

$$\begin{array}{r}
 5\boxed{P}9\boxed{Q} \\
 463 \overline{)2730311} \\
 \underline{-231\boxed{R}} \\
 4153 \\
 \underline{-3704} \\
 4491 \\
 \underline{-4\boxed{S}67} \\
 3241 \\
 \underline{-3241} \\
 0
 \end{array}$$

Space for Rough Work



114. The side of an equilateral triangle measures 72 cm. The perimeter of this triangle is equal to the perimeter of a square shape. What is the length of the side of the square ?
115. Find the greatest number from the options that will divide 1025, 1299 and 1575 leaving remainders 5, 7 and 11 respectively.
116. Find the value of $45 + 3\{34 - \overline{18-14}\} \div 3 [17 + 3 \times 4 - (2 \times 7)] + 20 - 2(5 - 4) \times \{3 - (5 - 3)\}$.
117. What is sum of digits of the smallest 4-digit number formed by two different digits?
118. If you take out twenty from me, I get halved. What am I ?
119. How many lines of symmetry are there in our National Flag ?
120. In the diagram, $\triangle MNC$ is inscribed in a square ABCD.



Calculate the area, in cm^2 , of $\triangle MNC$.

Space for Rough Work