



### Class 5<sup>th</sup>

Total Questions : 120

Maximum Marks : 480

Time : 3 Hrs.

### PAPER PATTERN & MARKING SCHEME

Subject	Reasoning		Physics	Chemistry	Biology	Maths	
Question type	SCQ	INT	SCQ	SCQ	SCQ	SCQ	INT
No. of ques.	20	10	15	15	15	30	15
Marks per ques.	4	4	4	4	4	4	4
Negative marks per ques.	1	0	1	1	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, 3 and 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.

<b>WRONG METHODS</b>	<b>CORRECT METHOD</b>

- 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.

<b>Q. 1</b>	<b>Q. 2</b>
47	05
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### MATRIX OLYMPIAD FOUNDATION

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

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

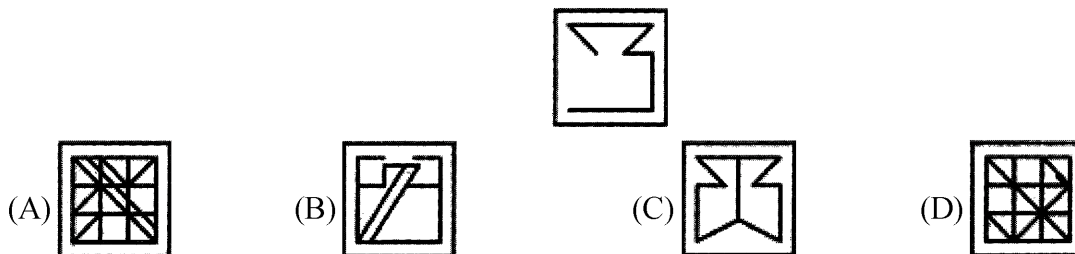
**Four options are given in each question out of which only one option is correct.**

- Find the next term:  
B,E,H, ?  
(A) K                      (B) L                      (C) M                      (D) J
- 'Match' is related to 'win' in the same way as 'Examination' is related to :  
(A) Write                      (B) Appear                      (C) Success                      (D) Attempt
- In this questions, there are two terms to the left of the sign :: which are related in some way. Obtain the same relationship between the term to the right of the sign :: from one of the four alternatives given under it.  
6 : 35 :: 11 : ?  
(A) 121                      (B) 120                      (C) 56                      (D) 54
- As Rupee is related to India, in the same way Yen is related to which of the following ?  
(A) Turkey                      (B) Bangladesh                      (C) Japan                      (D) Pakistan
- In this question , three alternatives are alike in a certain way but the rest one is different. Select the odd one.  
(A) Green                      (B) Pink                      (C) Indigo                      (D) Violet
- How many D's are there in the following series which are immediately followed by W but not immediately preceded by K?  
**K D C W K D W N K G D W W D H K V D W Z D W**  
(A) Nil                      (B) One                      (C) Two                      (D) Three

*Space for Rough Work*



7. Arrange the following in a logical order :
1. Gold                      2. Iron                      3. Sand                      4. Platinum      5. Diamond  
(A) 2, 4, 3, 5, 1            (B) 3, 2, 1, 5, 4            (C) 4, 5, 1, 3, 2            (D) 5, 4, 3, 2, 1
8. 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 ?  
(A) 5                      (B) 14                      (C) 21                      (D) 23
9. 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
10. In a row of girls, Mridula is 18<sup>th</sup> from the right and Sanjana is 18<sup>th</sup> from the left. If both of them exchange their position, Sanjana becomes 25<sup>th</sup> from the left, how many girls are there in the row ?  
(A) 40                      (B) 41                      (C) 42                      (D) 35
11. Find out the alternative figure which contains figure as its part.



*Space for Rough Work*



12. In the following question you have to visualize the image of the item (Letter/word/ number/figures) in the mirror. The mirror is below the item. Choose the mirror image from the alternatives.

3 6 0 9  
mmmmmm

- (A) 3e0d                      (B) 3d0e                      (C) 390d                      (D) 3e09

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

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

14. Choose the word which is least like the other words in the group.

- (A) Apple                      (B) Marigold                      (C) Rose                      (D) Lily

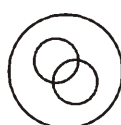


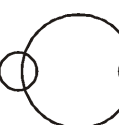
15. If NARGRUED is the code for GRANDEUR, which word is coded as SERPEVRE ?

- (A) PRESERVE                      (B) PERSERVE                      (C) PREVERSE                      (D) PERSEVER

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*Space for Rough Work*



16. If E = 5, PEN = 35, then PAGE = ?  
(A) 27                      (B) 28                      (C) 29                      (D) 36
17. In each of the following question four words are given. Which of them will come in the middle if all of them are arranged alphabetically as in a dictionary?  
(A) Heaven                  (B) Hillock                  (C) Hawker                  (D) Hilt
18. Which letter will be the sixth to the left of the eleventh letter from the right end of the alphabet?  
(A) K                          (B) V                          (C) J                          (D) U
19. Which one of the following Venn diagrams correctly represents the relation between Rajasthan, Jaipur and Amer ?
- (A)       (B)       (C)       (D) 
20. In a coded language the given alphabets are written in special codes. ABCDESUVMN 7913420658 Then code 973578 will be:  
(A) BADMAN                  (B) BACMAN                  (C) DUEMAN                  (D) MANSDE

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*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. Replace the question mark in the given series.

1, 9, 25, 49, ?, 121

22. Replace the question mark in the given series.

4, 7, 12, 19, 28, ?

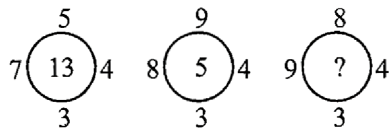
23. Choose the best alternative.

9 : 8 :: 16 : ?

24. If '+' means 'multiplied by', '-' means 'divided by', '×' means 'plus' and '÷' means 'minus' than

$(18 + 10 \times 20) - 8 \div 6 = ?$

25. Find the missing character.



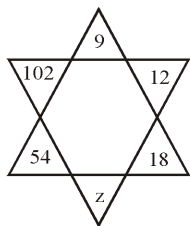
26. Find the missing character.

2	3	25
3	5	64
4	?	144

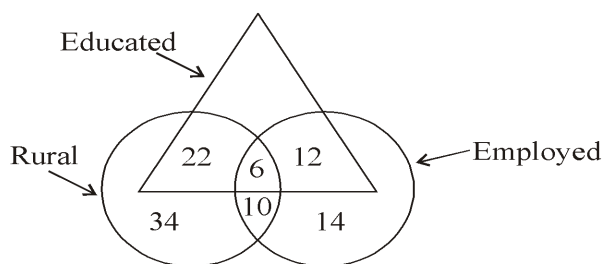
*Space for Rough Work*



27. Find out the wrong term.  
15, 16, 22, 29, 45, 70
28. How many numbers from 1 to 50 are there which are prime ?
29. Find out the value of z.



30. How many educated people are employed ?



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*Space for Rough Work*

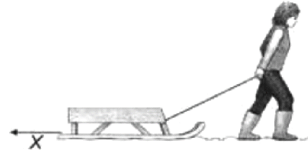


Part – 2 contains 15 Single correct type questions.

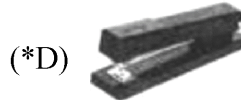
Question No. 31 – 45 are of Single Correct Answer Type Question.

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

31. The two common forces that are acting everywhere around us are  
(A) Gravity and magnetic force (B) Friction and magnetic force  
(\*C) Gravity and friction (D) Electrostatic force and gravity
32. The two force acting on stationary object is  
(A) Magnetic force and frictional force (B) Static force and magnetic force  
(C) Magnetic force and frictional force (\*D) Gravitational force and frictional force
33. In the activity shown in the picture \_\_\_ energy is being converted into energy.



- (A) Mechanical sound (B) Sound, kinetic  
(\*C) Mechanical, kinetic (D) Solar, potential
34. Select the odd one out.



*Space for Rough Work*





35. Jamuna investigated the properties of matter X. She noted down the following observations in her notebook:
- It has mass.
  - It occupies space.
  - It can be compressed.
  - It takes the shape of the container that holds it.
- (\*A) Air                      (B) Honey                      (C) Pebble                      (D) Milk
36. Which of these protects us from the harmful rays of the sun?
- (\*A) Ozone                      (B) Stratosphere                      (C) Ionosphere                      (D) Hydrosphere
37. The figure given below shows a bottle with hot water when placed in ice water taken in a glass trough. It undergoes a change in its shape. Why does the bottle change its shape?



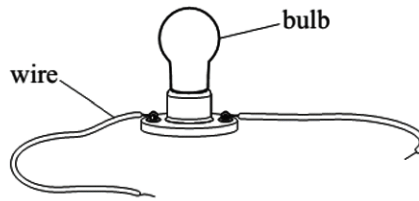
- (A) The pressure exerted by the air inside the bottle is more.
- (B) The pressure exerted by ice is more.
- (\*C) The pressure exerted by air outside is much more.
- (D) The pressure exerted by water is more.

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*Space for Rough Work*



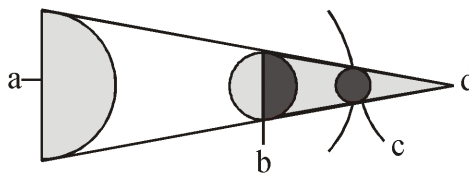
38. Use the picture below to answer the question.



Which object is needed to light the bulb?

- (A) A battery
- (B) A switch
- (C) Another bulb
- (D) Another wire

39. Look at the figure, It shows lunar eclipse. Where will be the Earth in it ?



- (A) a
- (B) b
- (C) c
- (D) d

40. Which of the planet is the brightest ?

- (A) Mercury
- (B) Venus
- (C) Mars
- (D) Jupiter

*Space for Rough Work*



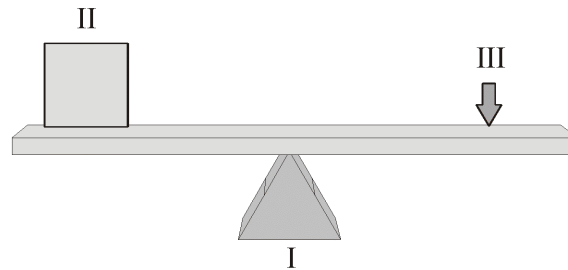
41. The given picture represents a simple machine :



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

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

42. 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*



43. 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
44. 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 =  $\frac{1}{\text{Distance} \times \text{Time}}$
45. 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.

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*Space for Rough Work*



**Part – 3 contains 15 Single correct type questions.**

**Question No. 46 – 60 are of Single Correct Answer Type Question.**

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

46. Which of these processes is used to make a fabric ?  
(A) Weaving and Knitting (B) Fabrics and Fibres  
(C) Yarns and fibres (D) All of these
47. Which of these are used to make clothes worn in summer ?  
(A) Silk and Cotton (B) Silk and Wool  
(C) Nylon and Polyester (D) Cotton and Linen
48. Which of these falls in the group 'Fluids' ?  
(A) Solids (B) Liquids  
(C) Liquids and gases (D) Gases
49. Which of these is the solute in a sugar solution ?  
(A) Sugar (B) Milk  
(C) Water (D) None of these
50. Which process takes place when you take out an ice cube from the freezer and leave it at normal room temperature ?  
(A) Freezing (B) Melting  
(C) Condensation (D) Evaporation

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*Space for Rough Work*



51. Which one of these occupies all the available space in a container ?  
(A) Solid (B) Liquid  
(C) Gas (D) Pencil
52. What are stars made of up ?  
(A) Gases (B) Heat  
(C) Light (D) All of these
53. What is the average temperature on the surface of the moon at night ?  
(A)  $100^{\circ}\text{C}$  (B)  $-100^{\circ}\text{C}$   
(C)  $173^{\circ}\text{C}$  (D)  $-173^{\circ}\text{C}$
54. What is the process by which water is changes to water vapour ?  
(A) Evaporation (B) Condensation  
(C) Filtration (D) Sedimentation
55. Moving air is called \_\_\_\_\_.  
(A) Wind (B) Humidity (C) Evaporation (D) Condensation

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*Space for Rough Work*



56. How many are solids in given examples ?
- (i) Wood                      (ii) Milk                      (iii) Water                      (iv) Pen  
(v) Mobile                      (vi) Chair                      (vii) sand
57. How many are liquid in given examples ?
- (i) Blood                      (ii) Book                      (iii) ICE                      (iv) Vapour  
(v) Oxygen                      (vi) Sugar solution                      (vii) Water
58. How many are gases state in given examples ?
- (i) Air                      (ii) Vapour                      (iii) Oxygen                      (iv) Juice  
(v) Book                      (vi) Pen
59. How many fibres are obtained from animals ?
- (i) Cotton                      (ii) wool                      (iii) Linen                      (iv) Nylon  
(v) Silk
60. Number of natural fibres in given fibres ?
- (i) Wool                      (ii) Cotton                      (iii) Linen                      (iv) Nylon  
(v) Silk                      (vi) Polyester

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*Space for Rough Work*

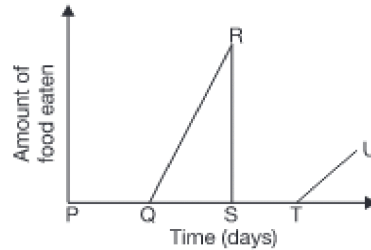


Part – 4 contains 15 Single correct type questions.

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. Study the given graph carefully. The line QR shows the \_\_\_\_\_ stage of the mosquito.



- (A) Egg                      (B) Larval                      (C) Pupal                      (D) Adult
62. Refer to the given figure. Which of the following CANNOT be X?



- (A) Oxygen                      (B) Carbon dioxide                      (C) Water                      (D) None of these
63. The energy that an object gets from its motion is
- (A) Electrical energy                      (B) Chemical energy                      (C) Kinetic energy                      (D) Potential energy.

*Space for Rough Work*

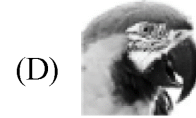




64. Which of the following statements hold true regarding X and Y?
1. X depends partly on animals for food but can also make its own food while Y cannot make its own food.
  2. X has chlorophyll while Y does not contain chlorophyll and is non-green.
  3. In X, food is prepared by the green stem, whereas Y obtains its food from dead and decaying plants and animals.
  4. X and Y have patches of green colour. Only green part of their leaves performs photosynthesis.



- (A) 1, 3 and 4      (B) 2 and 3      (C) 1 and 4      (D) 3 and 4
65. Amongst the given birds, which one has climbing claws with two toes in the front and two behind?



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*Space for Rough Work*

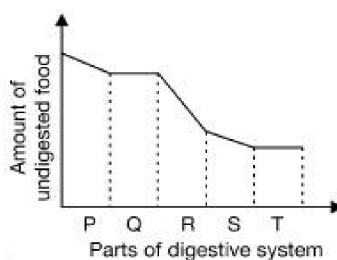


66. Which of the following teeth function in the same way as the object shown in the picture?



- (A) Incisors                      (B) Canines                      (C) Premolars                      (D) Both (A) and (B)

67. The given graph shows the changes in amount of undigested food as it progresses through the alimentary canal. Select the INCORRECT option regarding the parts labelled as P, Q, R, S and T.

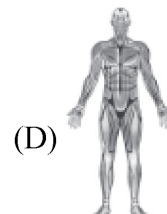
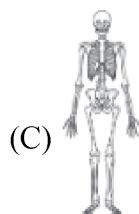
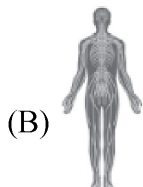
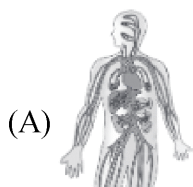


- (A) Q and T are oesophagus and large intestine respectively  
(B) P represents mouth where about 30% of carbohydrate is digested.  
(C) S is small intestine, where both digestion and absorption takes place.  
(D) R is stomach, the primary site of digestion of carbohydrate and protein.

*Space for Rough Work*



68. The term 'Reduce' is one of the three R's (reduce, reuse and recycle) to save the environment. An example of the opposite of reducing is over-packaging which is an anti-environment activity. Which of the following packaging activities is anti-environment?
- (A) Filling a cereal box completely  
(B) Putting an item in a cardboard box, then putting that box in another box  
(C) Putting foam packing material around a fragile item  
(D) Packing an item in the smallest possible box
69. Select the animal pair who has similar breathing mechanisms.
- (A) Bat : Fish            (B) Turtle : Lizard            (C) Butterfly : Mouse            (D) Earthworm : Cockroach
70. \_\_\_\_\_ is a good conductor of electricity.
- (A) Metal            (B) Rubber            (C) Plastic            (D) All of these
71. Which of these organ systems gives shape and support to our body and protects the important organs of the body such as lungs, brain, heart, etc.?

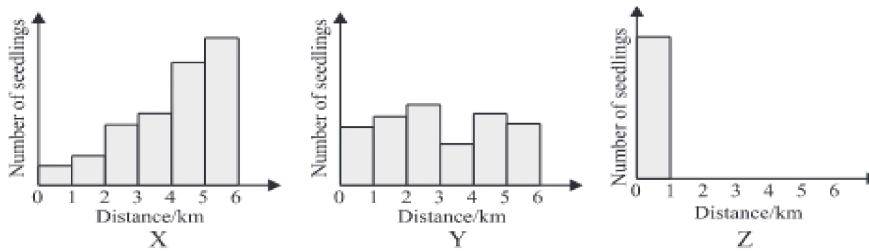


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*Space for Rough Work*



72. A small baby plant coming out of a seed is called \_\_\_\_\_.
- (A) Grain                      (B) Root                      (C) Dispersal                      (D) Seedling
73. Which of these is needed to measure the mass of a rock?
- (A) A balance                      (B) A barometer                      (C) A metric ruler                      (D) A thermometer
74. The substance that imparts green colour to the plants is known as
- (A) Water                      (B) Chlorophyll                      (C) Carbon dioxide                      (D) Calcium
75. Three different types of plants X, Y and Z, were selected by scientists who want to document their methods of seed dispersal. The graphs below show the approximate number of seedlings found at various distances around the parent plant.



Which option most correctly lists the methods of seed dispersal of each plant?

- | X                    | Y                | Z                |
|----------------------|------------------|------------------|
| (A) Water            | Explosive action | Animal           |
| (B) Wind             | Animal           | Water            |
| (C) Wind             | Animal           | Explosive action |
| (D) Explosive action | Water            | Animal           |

*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. What should be subtracted from the greatest 7 digit number to get 65,43,210 ?  
(A) 12,34,567      (B) 99,99,999      (C) 12,34,560      (D) 34,56,789
77. If we divide the sum of 45 and 90 by their difference, the answer is  
(A) neither prime nor composite      (B) the least prime number  
(C) the least odd prime number      (D) the least composite number
78. Mr. Sharma bought a cupboard for Rs.3200 and sold it for Rs.3104. Find his loss or profit.  
(A) Profit = Rs.96      (B) Profit = Rs. 104      (C) Loss = Rs. 104      (D) Loss = Rs.96
79. Simply the following and select the correct option.  
(i)  $80 [20 + (175 \div 5) - (28 - 16 \div 4) \div 6]$   
(ii)  $\frac{40}{20} (5 + 90 \div 10 \times 20 + 6 - 2)$
- |     | (i)  | (ii) |
|-----|------|------|
| (A) | 378  | 4080 |
| (B) | 4800 | 3760 |
| (C) | 3300 | 480  |
| (D) | 4080 | 378  |
80. An arc is \_\_\_\_\_  
(A) any part of the radius      (B) any part of the diameter  
(C) any part of a chord      (D) any part of the circumference

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*Space for Rough Work*



81. Last month Sandeep was in school for 116 hours. Each school day is 6 hours long. How many school days was Sandeep in school last month ?
- (A)  $\frac{6}{122}$                       (B)  $\frac{6}{116}$                       (C)  $\frac{116}{6}$                       (D)  $\frac{122}{6}$
82. To get a quotient of 700 and a remainder 48 what number should be divided by 100?
- (A) 748                      (B) 70,048                      (C) 70,000                      (D) 7,048
83. Gopal reads  $\frac{3}{5}$  of a book. He finds that there are still 80 pages left to be read. The total number of pages in the book are
- (A) 100                      (B) 200                      (C) 300                      (D) 400
84. An obtuse angled triangle can have \_\_\_\_\_
- (A) one obtuse angle and two acute angles  
(B) one obtuse angle, one right angle and one acute angle  
(C) one obtuse angle and two right angles  
(D) two obtuse angles and one acute angle
85. The product of the place values of 6 in 438269160, divided by 1000 is
- (A) 36                      (B) 3600                      (C) 60                      (D) 60000
86. In which of the following, the numbers are arranged in ascending order ?
- (A) 57071    50371    53071    57301  
(B) 50371    53071    57071    57301  
(C) 57301    53071    57071    50371  
(D) 50371    53071    57301    57071

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*Space for Rough Work*



87. In a bag, there were 5600 red beads and 6540 white beads. Kavya sold 3680 beads. How many beads were left in the bag ?

- (A) 12140                      (B) 6240                      (C) 4620                      (D) 8460

88. Find P, Q, R and S respectively.

$$\begin{array}{r} P \quad 8 \quad 5 \quad Q \\ - 3 \quad R \quad S \quad 5 \\ \hline 5 \quad 4 \quad 3 \quad 2 \end{array}$$

- (A) IX, XI, IV, II              (B) II, III, VIII, IV              (C) IV, VII, VIII, II              (D) VIII, VII, IV, II

89. The contents in Anaya's school bag are text books 675 g, notebooks 415 g, pencil box 175 g. If the empty bag weights 205 g, calculate how much does the school bag weight with its contents ?

- (A) 1 kg 520 g              (B) 1 kg 470 g              (C) 1 kg 220 g              (D) 2 kg

90. Fill in the blanks.

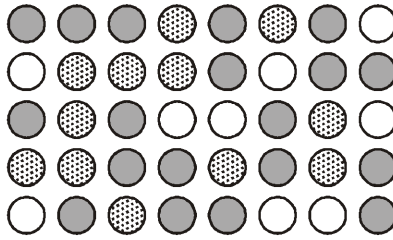
A multiple of a number is P smaller than the number. A multiple of an even number is Q odd. 1 is the R of every number.

- |     | <b>(P)</b> | <b>(Q)</b> | <b>(R)</b> |
|-----|------------|------------|------------|
| (A) | Sometimes  | Never      | Factor     |
| (B) | Never      | Never      | Factor     |
| (C) | Always     | Always     | Multiple   |
| (D) | Never      | Always     | Multiple   |

*Space for Rough Work*



91. What fraction of the circles are shaded ?



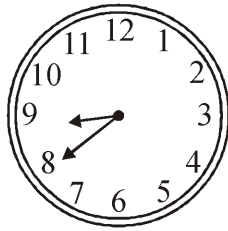
(A)  $\frac{9}{20}$

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

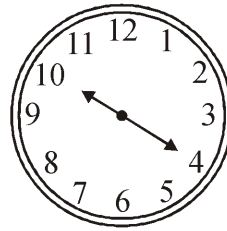
(C)  $\frac{1}{4}$

(D)  $\frac{19}{40}$

92. How long did Varun take to complete his homework ?



Start doing  
homework



Completed  
homework

(A) 1 hr 45 mins

(B) 1 hr 30 mins

(C) 1 hr 50 mins

(D) 1 hr 40 mins

93. Find P, Q, R and S.

(i) 6000 mg = P g

(ii) 500 kg = Q dag

(iii) 20 hg = R kg

(iv) 63 g = S cg

**(P)****(Q)****(R)****(S)**

(A) 60

5000

2

630

(B) 6

50000

2

6300

(C) 600

500

3

3600

(D) 6

500

3

3600

*Space for Rough Work*





94. Find P, Q, R and S respectively.

$$\begin{array}{r}
 \boxed{P} \ 4 \\
 44 \overline{) 625} \\
 \underline{- 4 \ \boxed{S}} \\
 R \ 8 \ 5 \\
 \underline{- 17 \ \boxed{Q}} \\
 \hline
 9
 \end{array}$$

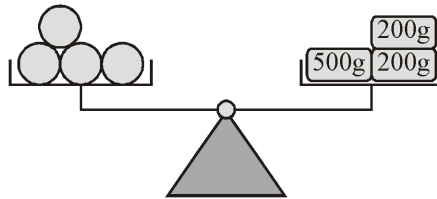
- (A) 1, 6, 1, 4      (B) 1, 4, 6, 1      (C) 1, 4, 1, 6      (D) 4, 1, 1, 6

95. Compare by using '>', '<' or '='.

$$11 \text{ g } 55 \text{ mg} + 22 \text{ g } 287 \text{ mg} + 37 \text{ g } 68 \text{ mg} \quad \boxed{\phantom{00}} \quad 30 \text{ g } 675 \text{ mg} + 56 \text{ g } 675 \text{ mg} + 15 \text{ g } 800 \text{ mg}.$$

- (A) >      (B) <      (C) =      (D) Can't be determined

96. What is the weight of one ball (in g) ?

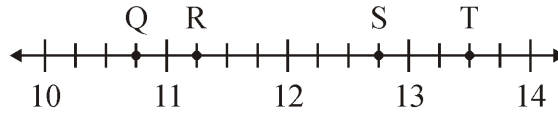


- (A) Two hundred and twenty five      (B) Two hundred and twenty  
 (C) Two hundred twenty five      (D) Two hundred and thirty five

*Space for Rough Work*



97. Use the number line below to answer the question.



Which point is located at  $12\frac{3}{4}$  ?

- (A) Q                      (B) R                      (C) S                      (D) T

98. The given table shows the number of students who preferred different subjects to study in their free time. Study the given table carefully and answer the following questions.

- (i) What fraction of the students preferred English only ?  
 (ii) Which subject is preferred by one-fourth of the students ?  
 (iii) What fraction of the students preferred both Science and Mathematics ?

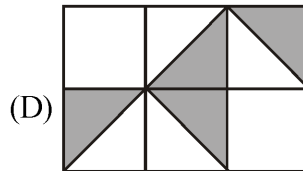
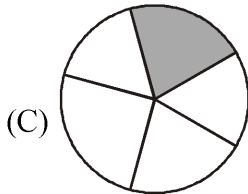
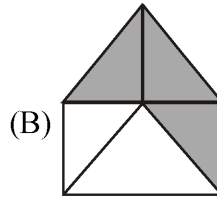
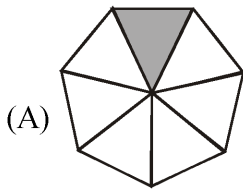
Subjects	Number of students
Science	18
Mathematics	10
English	6
Hindi	15
Computer	11

- |     |                |             |                 |
|-----|----------------|-------------|-----------------|
|     | <b>(i)</b>     | <b>(ii)</b> | <b>(iii)</b>    |
| (A) | $\frac{1}{10}$ | Hindi       | $\frac{7}{15}$  |
| (B) | $\frac{1}{10}$ | English     | $\frac{11}{15}$ |
| (C) | $\frac{1}{10}$ | Computer    | $\frac{7}{15}$  |
| (D) | $\frac{2}{10}$ | Hindi       | $\frac{4}{15}$  |

*Space for Rough Work*



99. Shaded fraction  $\frac{1}{4} + \frac{1}{12}$  is represented by which of the following figures ?



100. Dinesh made a chocolate pie, a cream pie, and an apple pie that were the same size and shape for a celebration. After the celebration the following amounts of pie were remaining :

(i)  $\frac{5}{8}$  of the chocolate pie

(ii)  $\frac{1}{6}$  of the cream pie

(iii)  $\frac{1}{4}$  of the apple pie

What fraction of a whole pie is remaining ?

(A)  $\frac{7}{24}$  of a pie

(B)  $\frac{7}{18}$  of a pie

(C)  $\frac{25}{24}$  pie

(D)  $\frac{19}{10}$  pie

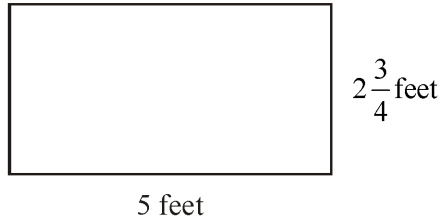
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*Space for Rough Work*



101. Arun has a rectangular rug. The diagram below shows the dimensions of Arun's rug.

**Arun's Rug**



What is the area of Arun's rug ?

(A)  $7\frac{3}{4}$  square feet

(B)  $10\frac{3}{4}$  square feet

(C)  $13\frac{3}{4}$  square feet

(D)  $15\frac{1}{2}$  square feet

102. Mr. Saini put together 5 bags of pens. He put 19 black pens and 12 red pens in each bag. Which expression shows the total number of pens Mr. Saini put into bags ?

(A)  $(5 \times 19) + 12$

(B)  $5 \times (19 + 12)$

(C)  $5 + (19 \times 12)$

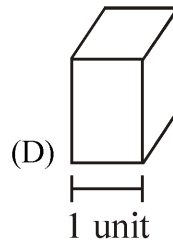
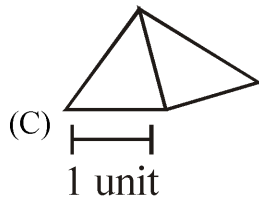
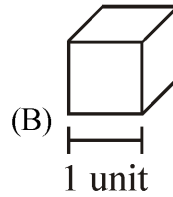
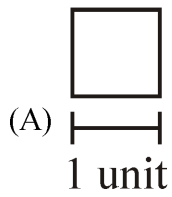
(D)  $(5 + 19) \times 12$

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*Space for Rough Work*



103. Which figure most likely has a volume of 1 cubic unit ?



104. 46070 paise = Rs. \_\_\_\_\_

(A) Rs. 460.70

(B) Rs. 46.070

(C) Rs. 4607.00

(D) Rs. 4.607

105. The smallest 4 digit number formed by using the digits 0, 3, 5, 6 is \_\_\_\_\_.

(A) 0356

(B) 6530

(C) 6035

(D) 3056

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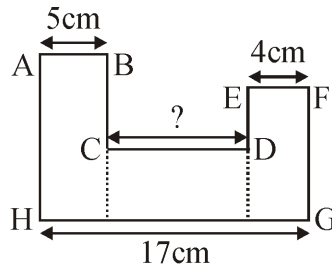
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**Question No. 106 – 120 are of Integer Answer Type Question.**

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

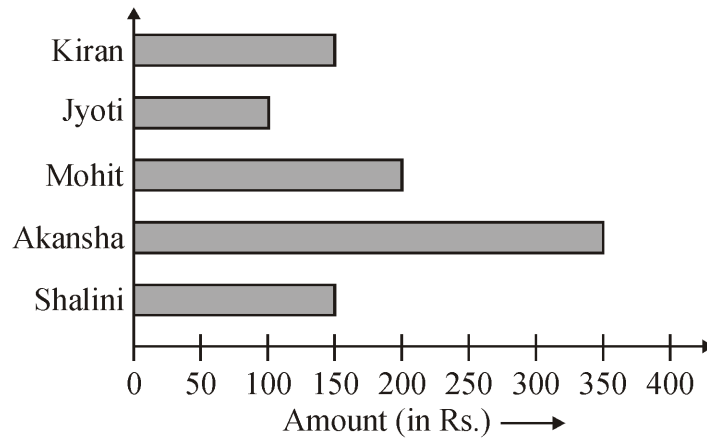
- 106. What % of 75 minutes is 15 minutes?
- 107. How many times would the digit, 2, be written if you wrote down all the whole numbers from 1 to 100 ?
- 108. Ravi covered a distance of 1000 metres in 10 minutes. How much did he cover in 30 seconds?
- 109. How many multiples of 10 are there from 20 to 150 ?
- 110. The given figure is made up of three rectangles. Find the length of CD.



*Space for Rough Work*

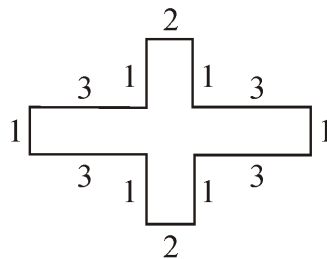


111. The bar graph shows the savings of five children. Akansha needs to save another \_\_\_\_\_ so that she has twice as much money as Mohit.



112. Think of a number. Multiply it by 12. Add 6. Multiply by 3. Subtract 9. Divide by 11. The result is 27. What is the number?

113. What is the perimeter of the following figure?



*Space for Rough Work*



114. Tanya put one "S" on the calendar to show the date of her first basket ball game in January. Tanya's second basket ball game is exactly 15 days later. What is the date of her second basket ball game ?

January						
S	M	T	W	T	F	S
						1
2	3	4	5	S 6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

115. What number am I ?

- ◆ I am a two-digit even number.
- ◆ I am a common multiple of 6 and 7.
- ◆ I have a total of 12 factors.

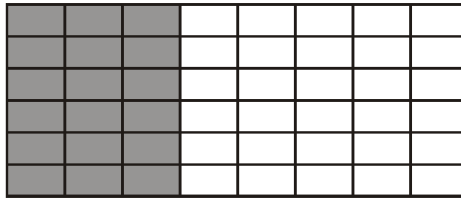
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*Space for Rough Work*





116. The given picture is shaded to represent a fractional number.



How many of the stars in the group below must be shaded to represent a fraction with the same value of above unshaded fractional number ?



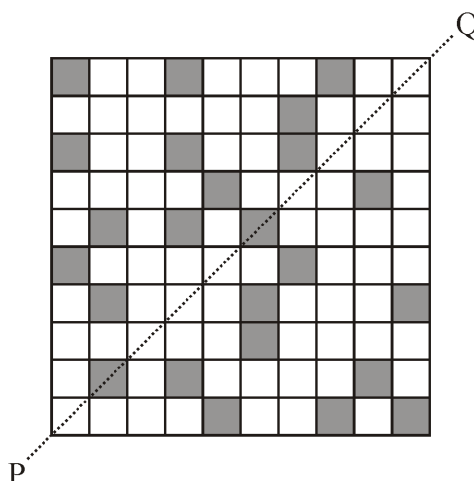
117. If 3 is a factor of  $x$  and 72 is a multiple of  $x$ , then the least possible value of  $x$  is ?

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*Space for Rough Work*



118. What is the minimum number of squares that must be shaded so that the line PQ becomes the line of symmetry?



119. Study the pictograph showing the number of students qualified in various sports.

Sports	Number of students
Football	  
Cricket	    
Tennis	 
Badminton	   
Each  stands for 10 students	

How many more students qualified in Badminton and Football altogether than in Cricket?

120. Find the difference between XC and LX in Roman numbers.

*Space for Rough Work*