



NAVODAYA VIDYALAYA SAMITI  
Question Paper - Term 1 ( 2024-25)  
CLASS : VII

Time : 3 Hours

Subject : Mathematics

Maximum Marks : 80

Instructions :

1. This question paper contains four sections - A , B , C and D .  
Each part is compulsory.
2. Section - A consists of 8 questions of 1 mark each.
3. Section - B consists of 12 questions of 2 marks each.
4. Section - C consists of 2 questions of 4 marks each.
5. Section - D consists of 8 CBQ with 5 sub questions of 1 mark each.
6. There is an internal choice in some of the questions.

Section- A

- Q.1)  $18 + \dots = 18$
- Q.2) Find  $3/5 \div 1/2$
- Q.3) Choose the correct answer: If two angles are supplementary ,  
then the sum of their measures is ..... ( $90^\circ/ 180^\circ$ )
- Q.4) Find the measure of complement of  $41^\circ$  and  $65^\circ$
- Q.5) A line that intersects two or more lines at distinct points is  
called a .....
- Q.6) Choose the correct answer:  $2x^2y - 15xy^2$  is a .....  
( monomial / binomial / trinomial )
- Q.7) Check  $n = 2$  is a solution of  $7n + 5 = 19$  or not.
- Q.8) Draw a net of a cube.

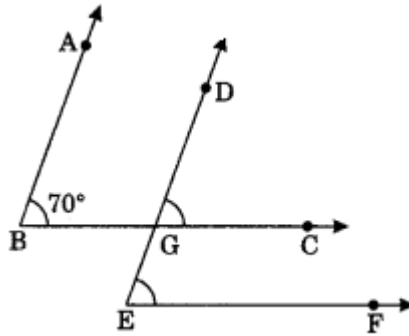
Section - B

- Q.9) Simplify using suitable property  $25 \times ( 12 + 8 )$
- Q.10) Write a pair of integers whose i) sum is -3  
ii) difference is -10
- Q.11) Lipika reads a book for  $7/4$  hours everyday . She reads  
the entire book in 6 days . How many hours in all were  
required by her to read the book ?
- Q.12) Find i)  $11.2 \times 0.15$  ii)  $43.07 \times 100$
- Q.13) Which is greater  $2/7$  of  $3/4$  or  $3/5$  of  $5/8$
- Q.14) A vehicle covers a distance of 43.2 km in 2.4 litres of petrol .  
How much distance will it cover in one litre of petrol ?

Q.15) Write True or False for the following statements .

- (a) The two obtuse angles are complement to each other .
- (b) The two right angles are always supplementary.

Q.16) In the given figure , the arms of two angles are parallel .  
if  $\angle ABC = 70^\circ$  , find (i)  $\angle DGC$  (ii)  $\angle DEF$



Q.17) Find the mean and median of first five prime numbers.

Q.18) Simplify the expression and find the value if x is equal to 2

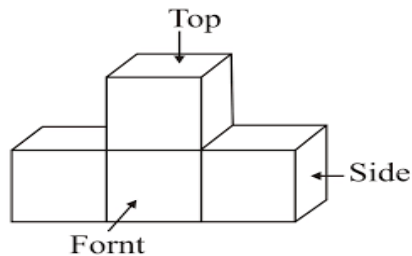
$$3(x + 2) + 5x - 7$$

Q.19) Solve  $3p - 10 = 5$  OR  $4(m + 3) = 18$

Q.20) Draw the nets of Cylinder and Cone

OR

Draw the front view and side view of following figure.



Section -C

Q.21) Simplify the expression and find its value when  $a = 5$   
and  $b = -4$

$$2(a^2 + ab) + 3 - ab$$

Q.22) People of Sundargram planted trees in the village garden .  
Some of the trees were fruit trees. The number of non fruit  
trees were two more than three times the number of fruit  
trees. What was the number of fruit trees planted if the  
number of non fruit trees planted was 77 ?

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Section - D

Q.23) In a quiz (+5) marks are given for every correct answer and (- 2) marks are given for every incorrect answer.



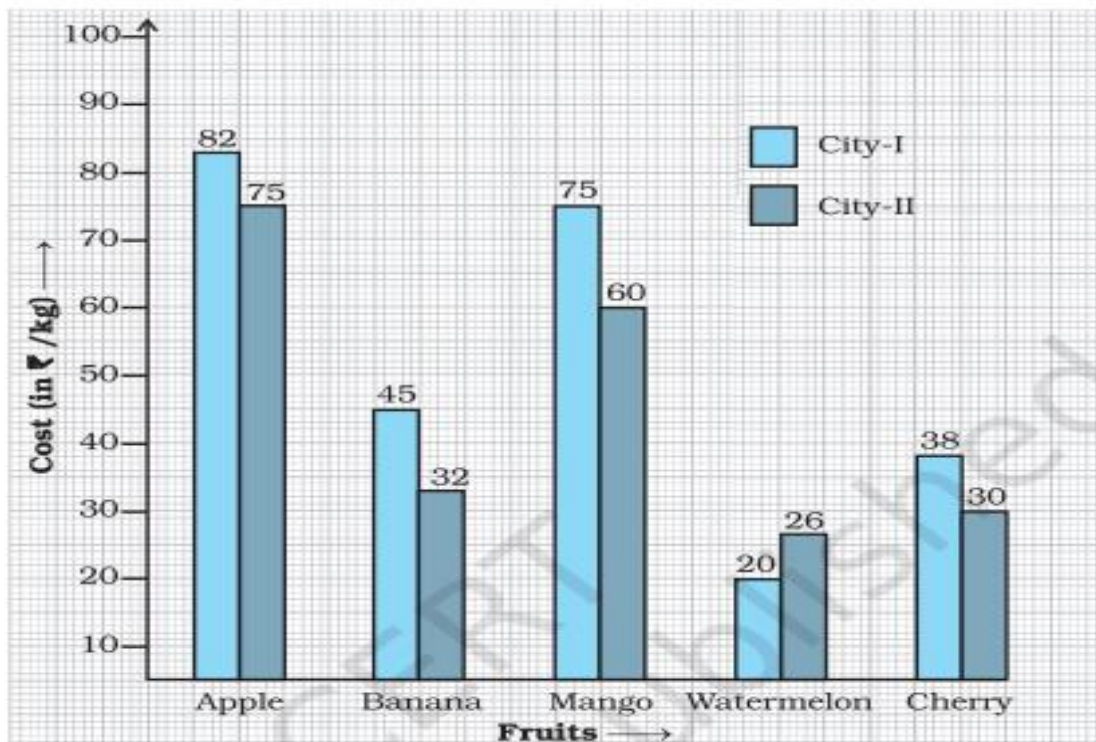
- (i) Team A got 10 correct answers and scored 30 marks.  
How many incorrect answers were given by team A?  
(a) 12 (b) 10 (c) 8 (d) 6
- (ii) Team B got 4 correct answers and scored – 12 marks.  
How many incorrect answers were given by team B?  
(a) 12 (b) 10 (c) 8 (d) 16
- (iii) Team C got 8 incorrect answers and scored 19 marks.  
How many correct answers were given by team C?  
(a) 7 (b) 8 (c) 9 (d) 10
- (iv) Team D got 2 correct answers and 5 incorrect answers.  
What is the score of team D?  
(a) 25 (b) 30 (c) 0 (d) 24
- (v) Which team got the lowest marks?  
(a) D (b) A (c) B (d) C

Q.24) Ramesh ordered a pizza from online site . The pizza have 8 equal parts (slice) . Ramesh ate  $\frac{3}{8}$  part of pizza . His friend Ashish ate  $\frac{4}{8}$  part of pizza and remaining pizza was eaten by his sister Sita.



- (i) If the cost of pizza is Rs. 80 , then Sita's share is  
 (a) Rs. 20      (b) Rs. 10      (c) Rs. 15      (d) Rs. 8
- (ii) Who ate most of the part of pizza ?  
 (a) Ramesh      (b) Sita      (c) Ashish      (d) None of these
- (iii) If the cost of pizza is Rs. 80 , then Ramesh's share is  
 (a) Rs. 30      (b) Rs. 15      (c) Rs. 60      (d) Rs.90
- (iv) The total part of pizza eaten by Ramesh and Ashish is  
 (a)  $\frac{6}{8}$       (b)  $\frac{7}{8}$       (c)  $\frac{5}{8}$       (d) None of these
- (v) Which of the following is equivalent to Ashish's part of pizza ?  
 (a)  $\frac{2}{4}$       (b)  $\frac{1}{2}$   
 (c) Both (a) and (b)      (d) None of these

Q.25) Based on below double bar graph Write the answers of following questions.



- (i) What information does the above double bar graph depict?  
(ii) Name the fruits for which cost of 1 kg is smaller in City I compared to City II.  
(a) Apple (b) Banana  
(c) Mango (d) Watermelon  
(iii) What is the difference of rates for apples in both the cities?  
(iv) Find the ratio of the cost of mangoes per kg in City I to the cost of mangoes per kg in City II.  
(v) Write proper scale for the above double bar graph?

Q.26) The lady bus driver wanted to find how many passenger had travelled in her bus. She note down the number of passenger in every route for one day , which is shown below:

Route number	Number of Passenger
1	15
2	17
3	12
4	19
5	10
6	12
7	16
8	8
9	12
10	15

- (i) The total number of passenger travelled in a day is  
(a) 140 (b) 136 (c) 135 (d) 142  
(ii) The range of the data is  
(a) 12 (b) 11 (c) 15 (d) 8  
(iii) What is the mean number of passenger ?  
(a) 15 (b) 13.5 (c) 13.6 (d) 13.8  
(iv) Find the median for the number of passengers.  
(a) 13.5 (b) 12 (c) 15 (d) 19  
(v) The mode for number of passengers is  
(a) 15 (b) 13.5 (c) 8 (d) 12

Q.27) A class VII teacher decided to take a surprise test on chapter “Algebraic expressions”. She entered in the classroom and write some terms on the board and ask some questions.

$3xy$	$7x^2$	$43y^2$
$3x^2$	$5y^2$	$39xy$
$7x^2$	$47xy$	$11y^2$

(i) Identify the unlike terms from the given terms.

- |                        |                          |
|------------------------|--------------------------|
| (a) $3xy, 5y^2, 7x^2$  | (b) $3xy, 39xy, 47xy$    |
| (c) $7x^2, 3x^2, 7x^2$ | (d) $5y^2, 43y^2, 11y^2$ |

(ii) Add all the above terms to form an algebraic expression

- |                            |                            |
|----------------------------|----------------------------|
| (a) $80xy + 10x^2 + 56y^2$ | (b) $59xy + 89x^2 + 17y^2$ |
| (c) $89xy + 59x^2 + 17y^2$ | (d) $89xy + 17x^2 + 59y^2$ |

(iii) Find the sum of the coefficients of  $x^2$

- |        |        |        |        |
|--------|--------|--------|--------|
| (a) 89 | (b) 17 | (c) 19 | (d) 59 |
|--------|--------|--------|--------|

(iv) Find the sum of coefficients of  $xy$

- |        |        |        |        |
|--------|--------|--------|--------|
| (a) 89 | (b) 17 | (c) 59 | (d) 19 |
|--------|--------|--------|--------|

(v) The algebraic expression formed in part (ii) is

- |               |                   |
|---------------|-------------------|
| (a) Monomial  | (b) Binomial      |
| (c) Trinomial | (d) None of these |

Q.28) Sohan worked in the shop where he sells tomatoes in two type of paper bags, one small and one large. A large paper bag contains 10 small paper bag and 20 tomatoes. The total number of tomatoes in large paper bag is given to be 130. Considering ‘t’ tomatoes contain in a small bag, answer the following questions.

(i) The equation that represents the given situation is

- |                      |                      |
|----------------------|----------------------|
| (a) $20t + 10 = 130$ | (b) $130 = 22t + 10$ |
| (c) $10t + 20 = 130$ | (d) $22t = 130$      |

(ii) The variable in equation of part (i) is

- |       |       |       |       |
|-------|-------|-------|-------|
| (a) t | (b) x | (c) y | (d) a |
|-------|-------|-------|-------|

(iii) What is the number of tomatoes in a small paper bag?

- |        |        |       |        |
|--------|--------|-------|--------|
| (a) 15 | (b) 13 | (c) 8 | (d) 11 |
|--------|--------|-------|--------|

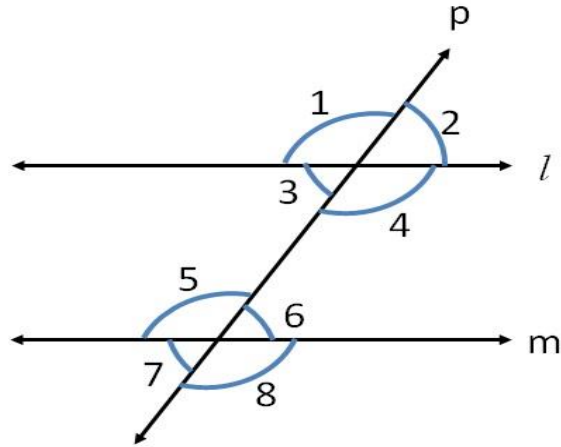
(iv) If large paper bag contains as many as 15 small paper bags and 10 tomatoes, then the equation is

- |                      |                      |
|----------------------|----------------------|
| (a) $10t + 15 = 130$ | (b) $15t = 130$      |
| (c) $10t = 130 + 15$ | (d) $15t + 10 = 130$ |

(v) The number of tomatoes in small paper bag considering the situation in part (iv) is

- (a) 11      (b) 8      (c) 9      (d) 13

Q.29) In a class of VIIA , Mathematics teacher was explaining the concept of Angles made by a transversal with parallel lines as shown in the figure .



In the figure if  $\angle 1 = 120^\circ$ , then write the answers of following questions.

(i)  $\angle 5 =$

- (a)  $60^\circ$       (b)  $120^\circ$       (c)  $100^\circ$       (d) None of these

(ii)  $\angle 3 + \angle 5 =$

- (a)  $100^\circ$       (b)  $120^\circ$       (c)  $180^\circ$       (d) None of these

(iii)  $\angle 3$  and  $\angle 6$  are called

- (a) Vertically opposite angles  
(b) corresponding angles  
(c) alternate interior angles  
(d) angles on same side of transversal

(iv) Is it true  $\angle 5 = \angle 8$

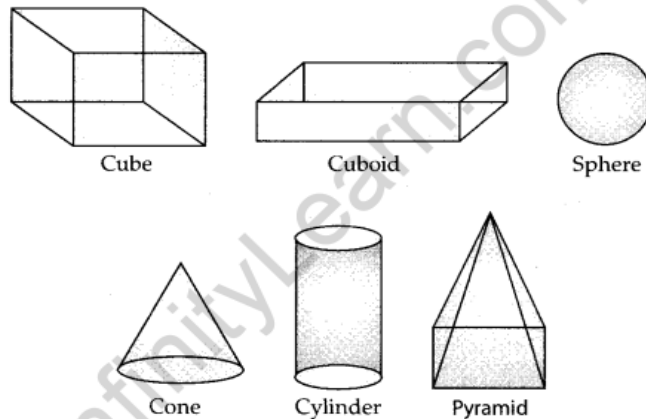
- (a) Yes      (b) No

(v)  $\angle 1 + \angle 7 =$

- (a)  $120^\circ$       (b)  $180^\circ$       (c)  $240^\circ$       (d) None of these

Q.30) Niharika is promoted in class 7. During her school vacation , her mother taught the chapter ' Visualising solid shapes ' and given some questions to write the answers .

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You can also find the answers of following questions.

- (i) The number of vertices in cube are  
(a) 6      (b) 8      (c) 10      (d) 12
- (ii) The number of faces in pyramid are  
(a) 6      (b) 8      (c) 5      (d) 12
- (iii) The number of edges in cuboid are  
(a) 6      (b) 8      (c) 10      (d) 12
- (iv) What cross-section do you get when you give a vertical cut in a cone ?  
(a) Circle      (b) triangle      (c) rectangle      (d) square
- (v) If three cubes of each side 2cm are placed side by side . then what is the length of resulting cuboid ?  
(a) 2cm      (b) 4 cm      (c) 6 cm      (d) None of these

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