



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
कार्यपत्रक / Worksheet (2025-26)

कक्षा /Class: VIII विषय /Subject: Mathematics माह/ Month: _____ अंक/Marks: 40

दिया गया पाठ्यक्रम/Portion covered: Part 2, Chapter 3 (PROPORTIONAL REASONING - II)

विद्यार्थी का नाम/Name of the student: _____

अनुक्रमांक /Roll No. _____ कक्षा/अनुभाग Class /Sec.: _____ दिनांक /Date: _____

I. MULTIPLE CHOICE QUESTIONS:

(10 X 1 M = 10 M)

1. _____ shows different proportions of a whole:
 - a. Bar graph
 - b. Ratio
 - c. Piechart
 - d. None of these
2. To form a pie chart, we need to multiply the fraction with:
 - a. 90°
 - b. 180°
 - c. 270°
 - d. 360°
3. When one quantity increases with the increase of another quantity, then this proportion is called _____ proportion:
 - a. Inverse
 - b. Direct
 - c. Either a or b
 - d. None of these
4. If we increase the speed of a vehicle, then time taken to reach a destination will:
 - a. Decrease
 - b. Increase
 - c. May increase
 - d. All of these
5. $u : v = 4 : 7$ and $v : w = 9 : 7$. If $u = 72$, then what is the value of w ?
 - a. 98
 - b. 77
 - c. 63
 - d. 49
6. A bag has ₹ 785 in the denomination of ₹ 2, ₹ 5 and ₹ 10 coins. The coins are in the ratio of 6: 9: 10. How many coins of ₹ 5 are in the bag?
 - a. 60
 - b. 12
 - c. 45
 - d. 24
7. If $A : B = 7 : 8$ and $B : C = 7 : 9$, then what is the ratio of $A : B : C$?
 - a. 56: 49: 72
 - b. 49: 56: 72
 - c. 56: 72: 49
 - d. 72: 56: 49
8. A ratio equivalent to the ratio 2: 3: 7 is:
 - a. 6: 9: 21
 - b. 1: 2: 3
 - c. 3: 4: 5
 - d. 2: 3: 6
9. In a family of 12 members, the ratio of number of kids: number of parents: number of grandparents :: 3: 2: 1. The number of kids in the family is:
 - a. 8
 - b. 12
 - c. 6
 - d. 4
10. Three numbers are in the ratio 4: 7: 3. If the sum of these numbers is 70, then the smallest number is:
 - a. 20
 - b. 15
 - c. 35
 - d. 14

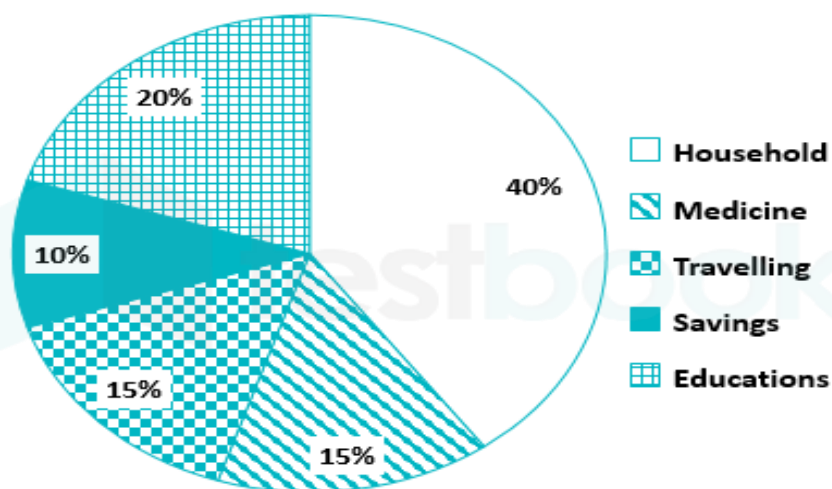
II. SHORT ANSWER TYPE QUESTIONS:

(5 X 2 M = 10 M)

1. The table below gives the information about favourite pets for 30 children in a class. Complete the table.

Favourite Pet	Number of children	Angle in a pie chart
Dog	10	
Cat	8	
Fish	7	
Tortoise	5	

2. Jamia had ₹ 12, 000 in total. Following pie chart shows the amount spent by her.
- Find the amount spent by Jamia on medicine.
 - Find the amount spent by her on travelling.



- Convert the following quantities in to km and also, represent the answer so obtained as ratio:
 - 5, 00, 000 cm
 - 12, 50, 000
- 6 tablespoons of maida, 4 tablespoons of curd, 3 tablespoons of milk and 1 tablespoon of water is mixed to make 560 grams of Jalebi. How much jalebi will be made if we take 24 tablespoons of maida?
- Construct a triangle with angles in the ratio 3: 2: 5.

III. LONG ANSWER TYPE QUESTIONS:

(4 X 3 M = 12 M)

- Akshay is an athlete. He spends 2 hours on Yoga and Meditation, 1 hour on jogging, 6 hours on athletic practice, 2 hours on resting, 3 hours on playing cricket, 2 hours on othe activities and the rest hours on sleeping. Construct a pie chart to show his time spent in a day.
- Four friends Abhinav, Shrut, Vijay and Kabir invested some amount in a ratio of 4: 1: 3: 2 in a start - up. The total amount invested is ₹ 2, 00, 000. If they gained a profit of ₹ 30, 000 and decided to share it in the proportion of amount invested, then find the share of investment done by each friend. Also, find the profit gained by each friend.
- If $5A = 3B = 7C$, then find the ratio of A: B: C. Also, write two more sets which are proportionate to the ratio A: B: C.
- Shakti mixes white, yellow and blue paint to make 1 L light green paint in the ratio of 3: 5: 2. Find the quantity of each paint used.

IV. CASE BASED QUESTIONS:

(2 X 4 M = 8 M)

- Ratio of male to female population of a town in 2020 was 7: 5 and total population in 2020 was 36, 000. The male population increases by 10% and female population increases by 10% in year 2021 as compared to last year.
 - Find the male population in year 2020.
 - Find the female population in year 2020.
 - Find the male population in year 2021.
 - Find the female population in year 2021.
- Manish works in a multinational company and earns ₹ 1, 50, 000 per month. Out of his earnings, he spend $\frac{1}{10}$ th on the food items, $\frac{1}{4}$ th on shopping with family, $\frac{1}{5}$ th of the remaining on education of his two kids and saves the rest of his money.
 - How much money did he spend on the food items?
 - How much money did he spend on the shopping?
 - Calculate the amount spent by Shakti on children's education.
 - How much money did he save?