

**Budha Dal Public School Patiala (24 Sept. 15)**

UNIT - I

Class-VII  
Mathematics

Marks: 90

Time: 3 hrs.

**SECTION - A**

Note: i) All questions are compulsory.

- ii) Section A contains 10 questions. Each carry 2 marks.
- iii) Section B contains 10 questions. Each carry 3 marks.
- iv) Section C contains 10 questions. Each carry 4 marks.

**Section - A**

Q1. Solve :  $5\frac{2}{3} + 2\frac{1}{2}$

Q2. Write a pair of integer whose sum is  $-8$ .

Q3. find arithmetic mean of first 5 whole numbers.

Q4. Express 5cm in metres and kilometres.

Q5. Write the place value of 4 in

- (i) 205.46
- (ii) 246.79

Q6. Divide 32.8 by 0.4

Q7. If  $\triangle ABC \cong \triangle DEF$ , under the correspondence  $ABC \leftrightarrow DEF$ . Write all six corresponding congruent parts of the triangles.

Q8. Find:  $3\frac{1}{5} \div 1\frac{2}{3}$

Q9. Find:  $\frac{1}{4}$  of  $2\frac{3}{4}$

Q10. Sameer purchased  $3\frac{1}{2}$  kg apples and  $4\frac{3}{4}$  kg oranges. What is the total weight of fruits?  
(2×10=20)

Q25. In a classtest containing 10 questions. 4 marks are given for every correct answer and (-2) marks are given for every incorrect answer.

i) Karan attempted all questions but only 8 of his answers are correct what is the total score?

ii) His friend Manav attempted all questions but 5 answers are correct.

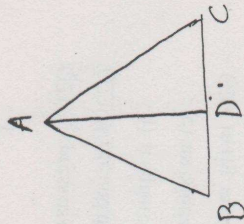
What will be his score?

Q26. In fig.  $AB=AC$  and D is the mid point of BC

i) State the three pairs of equal parts in  $\triangle ADB$  and  $\triangle ADC$

ii) Is  $\triangle ADB \cong \triangle ADC$ ? Give reason

iii) Is  $\angle B = \angle C$ ? Why?



Q27.a) Express in standard form 3905678

b) Simplify :  $(2^0 + 3^0 + 4^0) \times 5^0$

Q28. Solve and arrange in ascending order.

$$\frac{2}{9}, \frac{2}{3}, \frac{8}{21}$$

Q29. i) Write given decimal number in the expanded form

506.53

ii) Solve:  $[(-36) \div] \div 3$

Q30a) The ages of 10 teachers of a school are:

32, 41, 28, 54, 35, 26, 23, 33, 38, 40

i) What is the range of ages of the teachers?

ii) What is the mean age of these teachers?

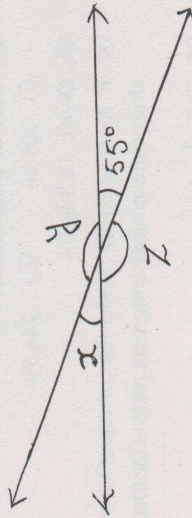
(4×10=40)



**Section - B**

- Q11. Verify:  $18 \times [7 + (-3)] = [18 \times 7] + [18 \times (-3)]$
- Q12. The temperature at 12 noon was  $10^{\circ}\text{C}$  above zero. If it decreases at the rate of  $2^{\circ}\text{C}$  per hour until midnight. At what time would the temperature be  $6^{\circ}\text{C}$  below zero? What would be the temperature at mid night.
- Q13. A car covers a distance of 43.2 km in 2.4 hours. What is the distance covered in 1 hour.
- Q14. Find the mode and median of the data given 16, 13, 12, 19, 14, 12, 14, 13, 14. Are they same?

- Q15. Michael finished colouring a picture in  $\frac{7}{12}$  hours. Muni finished colouring a picture in  $\frac{3}{4}$  hours. Who worked longer? By what fraction was it longer?
- Q16. Find the value of x, y and z



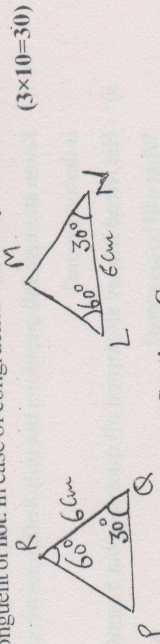
- Q17. Simplify and express in exponential form:

$$\frac{2 \times 3^4 \times 2^5}{9 \times 4^2}$$

- Q18. A piece of wire is of length  $12\frac{3}{4}$  m. If it is cut into two pieces in such a way that the length of one piece is  $5\frac{1}{4}$  m. What is the length of other piece?

- Q19. Find the angle which is equal to its complement.

- Q20. By applying A.S.A. congruence rule state whether pairs of triangles are congruent or not. In case of congruence write in symbolic form.

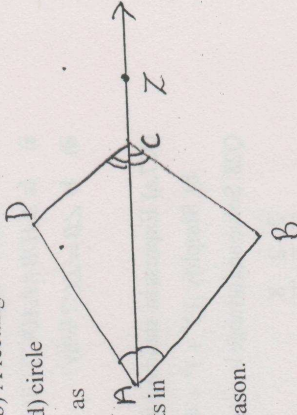


**Section - C**

- Q21. Express as a product of prime factors  $540 \times 64$ .
- Q22. Write and draw the number of line of symmetry for

- a) a square  
b) A rectangle  
c) an equilateral triangle  
d) circle

- Q23. In fig. ray AZ bisect  $\angle DAB$  as



well as  $\angle DCB$

- i) State three pairs of equal parts in  $\triangle BAC$  and  $\triangle DAC$
- ii) Is  $\triangle BAC \cong \triangle DAC$ ? Give reason.
- iii) Is  $CD = CB$ ? Give reason.

- Q24. The performance of a student in Ist term and IInd term. Draw a double bar graph choosing appropriate scale.

Subject	Eng.	Hindi	Maths	S. Science	Science
Ist term	83	73	89	82	71
IInd term	95	63	93	85	77

- a) In which subject the improvement is least?
- b) In which subject the improvement is maximum?