

Atomic Energy Education Society
Annual Examination 2025-26
Marking Scheme

Class: VII

Sub: Mathematics

Max. Marks: 80

Section-A (Each MCQ carries 1mark)

Q. No	Correct Answers	Q. No	Correct Answers
1	b) 1	11	b) 12
2	a) 300	12	d) 9
3	a) BC=PQ	13	b) median
4	d) Triangles ABD and ACB are congruent	14	a) 25
5	d) All of these	15	d) All of these
6	a) AAA	16	b) perpendicular bisector
7	b) A negative number	17	a) 12
8	a) 350	18	b) 20°
9	c) 79	19	d) A is false and R is true.
10	d) 0.37	20	d) Assertion-false, Reason-true

Section-B (Each question carries 2 marks)

21. $2z + 12 = 50 - 2$, $2z + 12 = 48$ [2]
 22. a) 1.0807 b) 1.7 [1+ 1]
 23. a) – 720, b) 1520 [1, 1]
 24. $y + 3y = 12 + 8$, $y = 5$ [2]
 25. Correct construction

Section-C (Each question carries 3 marks)

26. Mean = $\frac{\text{Sum of all observations}}{\text{Total number of observations}} = \frac{87.39}{9} = 9.71 \text{ litres.}$

Arranging the given the data into ascending order,

3.09, 5.6, 6.5, 7.4, 8, 11.3, 12.1, 12.9, 22.5

The median = 8

[3]

27. Area of one square tile = $0.5 \times 0.5 = 0.25$ sq. units [1]

$$\text{No. of square tiles needed} = \frac{\text{Area of floor}}{\text{Area of one tile}} = \frac{(6.25 \text{ sq. units})}{0.25 \text{ sq. units}} = 25 \quad [2]$$

28. $\frac{1}{2}$ marks for each correct representation ($6 \times \frac{1}{2} = 3$).

29. (a) $32^\circ\text{C} + (-5^\circ\text{C}) \times 10 = 32^\circ\text{C} - 50^\circ\text{C} = -18^\circ\text{C}$ [2X 1 $\frac{1}{2}$]

(b) $32^\circ\text{C} - (-8^\circ\text{C}) = 40^\circ\text{C}$;

Time required = $40^\circ\text{C} \div 5^\circ\text{C} = 8$ hrs.

30. Correct prime factorization, LCM = 1800, HCF = 90 [1, 1, 1]

31. When $m = 6$, $5m = 30$ or any three different equations, (1 mark for each equation.)

Section-D (Each question carries 5 marks)

32. Proper proof for the congruence with the mention of the congruence criterion. [3]

Getting the alternate interior angles equal by CPCT and hence proving $AD \parallel BC$. [2]

33. a) $234.45 \div 15 = 15.63$ km , b) $468.90 \div 15.63 = 30$ litres [2 $\frac{1}{2}$ + 2 $\frac{1}{2}$]

34. a) correct perpendicular bisector construction, [2]

correct measurement 3.5cm each

b) correct angle construction and bisection [3]

35. i) $5 \times 4 + (-2) \times 6 = 20 - 12 = 8$ [2 $\frac{1}{2}$]

ii) $5 \times 5 + (-2) \times 5 = 25 - 10 = 15$ [2 $\frac{1}{2}$]

Section-E Case Study based (Each question carries 4 marks)

36. a) $12 = 2 \times 2 \times 3$, $18 = 2 \times 3 \times 3$ [1]

b) Least time = 36 minutes [1]

c) Cyclist A = 3 rounds, Cyclist B = 2 rounds [2]

d) Cyclist B covers 1600m [2]

37. a) Yes [1]

b) RHS condition [1]

c) $PQ = DE$, $QR = EF$, $PR = DF$ (any two ans) [2]

OR

c) correct diagrams of the right angled triangles. [2]

38. i) Jammu, ii) Bengaluru, iii) Mumbai, iv) Approx. 20°C . [4× 1]
