

SUMMATIVE ASSESSMENT - III - 2016-2017
MATHEMATICS
(English Medium)
PRINCIPALS OF EVALUATION

Class : VI

Section - I

1. The length of a rectangular field = 60 m |
- By the problem, breadth of the field = $\frac{1}{2} \times 60\text{m} = 30\text{m}$ | 1 Mark
- \therefore Area of the rectangular field = length \times breadth sq. units | $\frac{1}{2}$ Mark
- $= 60 \times 30\text{ sq.m.}$ |
- $= 1800\text{ sq.m}$ | $\frac{1}{2}$ Mark
2. Natural objects which have two or more than two lines of symmetry are :
- 1) Water melon | 1 Mark
- 2) Apple | 1 Mark
- [For any other correct answers marks should be awarded]
3. The smallest number, having four different prime factors is $2 \times 3 \times 5 \times 7$ | 1 Mark
- i.e. 210 | 1 Mark
4. Cost of one note book = ₹ 15
- Number of note books that Chandana bought = 12
- Amount that Chandana has to pay to the shopkeeper = ₹ 15×12 | $\frac{1}{2}$ Mark
- Number of note books that Waseela bought = 10
- Amount that Waseela has to pay to the shopkeeper = ₹ 15×10 | $\frac{1}{2}$ Mark
- \therefore Total amount that Chandana and Waseela have to pay to the
- shopkeeper = ₹ $15 \times 12 + ₹ 15 \times 10$ | $\frac{1}{2}$ Mark
- $= ₹ 15 [12 + 10]$ |
- $= ₹ 15 \times 22$ |
- $= ₹ 330$ | $\frac{1}{2}$ Mark

Section - II

5. Ratio of Rahul's marbles to Tushar's marbles = 2 : 3 1 Mark
Total parts = 2 + 3 = 5 1 Mark
Total number of marbles = 25 1 Mark
 \therefore Tushar's share of Marbles = $25 \times \frac{3}{5}$
 $= 15$ 1 Mark
6. (i) $(-6) - (5) - (+2) = -6 - 5 - 2$ 1 Mark
 $= -13$ 1 Mark
(ii) $(-3) + (-6) + (-24) = -3 - 6 - 24$ 1 Mark
 $= -33$ 1 Mark
7. The number of blades that a fan has = 3 1 Mark
Number of fans = n (say) 1 Mark
The number of blades for ' n ' fans = $3 \times n$ 1 Mark
 $= 3n$ $\frac{1}{2}$ Mark
 \therefore The required rule = $3n$ $\frac{1}{2}$ Mark
8. i) $1\frac{2}{7} = \frac{7 \times 1 + 2}{7} = \frac{7 + 2}{7} = \frac{9}{7}$ 1 Mark
ii) $3\frac{2}{8} = \frac{8 \times 3 + 2}{8}$ 1 Mark
 $= \frac{24 + 2}{8}$
 $= \frac{26}{8}$
iii) $10\frac{2}{9} = \frac{9 \times 10 + 2}{9}$ 1 Mark
 $= \frac{90 + 2}{9}$
 $= \frac{92}{9}$

$$\text{iv) } 8\frac{7}{9} = \frac{9 \times 8 + 7}{9}$$

$$= \frac{72 + 7}{9} = \frac{79}{9}$$

1 Mark

9. i) No. of sides of the polygon = 5 |
 Name of the polygon = Pentagon | 1 Mark
- ii) No. of sides of the polygon = 4 |
 Name of the polygon = Quadrilateral | 1 Mark
- iii) No. of the polygon = 6 |
 Name of the polygon - Hexagon | 1 Mark
- iv) No. of sides of the polygon = 3 |
 Name of the polygon = triangle | 1 Mark

Section - III

10. Length of the piece of land = $5m$ |
 Breadth of the piece of land = $4m$ | 1 mark
- Area of the piece of land = length breadth sq. units 1 Mark
- $$= 5 \times 4 \text{ sq. meters} \quad 2 \text{ Mark}$$
- $$= 20 \text{ sq. meters}$$
- Area of each square flower bed = 1 sq. metre 1 Mark
- Area of 5 square flower beds = 5 sq. metres 1 Mark
- \therefore Area of remaining part of the land = $20 - 5$ sq. metres 1 Mark
- $$= 15 \text{ sq. metres} \quad 1 \text{ Mark}$$
- (or)
- i) Income for 15 months = ₹ 18000 1 Mark
- Income for 1 month = ₹ $\frac{18000}{15}$ 1 Mark
- \therefore Income for 7 months = ₹ $\frac{18000}{15} \times 7$ |
 $= ₹ 1200 \times 7$ | 2 Marks
 $= ₹ 8400$ |

ii) No. of months required to earn ₹ 18000 = 15 1 Mark

No. of months required to earn ₹ 1 $\frac{15}{18000}$ 1 Mark

\therefore No. of months required to earn ₹ 3000 = $\frac{15}{18000} \times 30000$ 2 Marks
= 25

11. Length of the room = 12m

Breadth of the room = 15m 1 Mark

Height of the room = 18 m

The H.C.F. of 12, 15, 18 will give us the length of the tape which can measure all the three dimensions of the room exactly. 2 Marks

$12 = 2 \times 2 \times \begin{pmatrix} 3 \\ 3 \\ 3 \end{pmatrix}$ 3 Marks
 $15 = \begin{pmatrix} 3 \\ 3 \\ 3 \end{pmatrix} \times 5$
 $18 = 2 \times 3 \times \begin{pmatrix} 3 \\ 3 \\ 3 \end{pmatrix}$

H.C.F. of 12, 15 and 18 is 3 1 Mark

\therefore The length of the longest tape that can measure
all the three dimensions of the room exactly = 3 meters 1 Mark

(or)

The cost of petrol per litre = ₹ 70 2 Marks

No. of litres petrol sold in a day = 750 2 Marks

Money that petrol bunk gets for a day = ₹ 750 × 70 2 Marks

= ₹ 52500 2 Marks

12. i) An angle smaller than right angle is acute angle. [True] 1 Mark

ii) A right angle measures 180° . [False] 1 Mark

Correct statement : A right angle measures 90° . 2 Marks

iii) A straight angle measures 90° [False] 1 Mark

Correct statement : A straight angle measures 180° . 2 Marks

iv) An angle whose measure lies between 180° and 360° is a reflex angle. [True] 1 Mark

(or)

For construction


4 Marks

Writing steps of construction

2 Marks



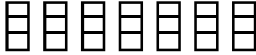

$MN = 12 \text{ cm}$, $AB = 4 \text{ cm}$, $3AB = 3 \times 4 \text{ cm} = 12 \text{ cm} = MN$

2 Marks

13. Scale :  5 votes

Note : Any symbol can be taken for scale.

Pictograph

Symbol	Number of votes
Sun	
Pot	
Tree	
Watch	

(or)

For construction

5 Marks

For writing steps of construction

3 Marks

PART - B

14. C

26. C

15. C

27. C

16. C

28. C

17. B

29. C

18. B

30. D

19. D

31. B

20. C

32. D

21. A

33. D

22. B

23. A

24. A

25. B