

Marking Scheme of Annual Examination: 2019 - 20

Class – VI

Subject- Mathematics

NOTE: Apart from the method provided in this marking scheme, any other correct method of solving the questions are also acceptable.

Section – A

One mark will be awarded for each correct answer/option.

1. b) 2	(NCERT Pg 53)	2. c) 0.078	(Exemplar Pg 59 Q 15)
3. c) 3	(NCERT Pg 187)	4. a) 2 times	(Exemplar Pg 93 Q 3)
5. a) 6a	(Exemplar Pg 107 Q 3)	6. a) 2:5	(Exemplar Pg 120 Q 1)
7. d) Infinite	(Exemplar Pg 137 Q 3)	8. d) 85^0	(Exemplar Pg 134 Ex 2)
9. c) 0.002	(NCERT Pg 177 Q 5)	10. a) Pictograph	(NCERT Pg 189)
11. Triangle	(Exemplar Pg 139 Q 27)	12. 6	(Exemplar Pg 139 Q 36)
13. 7y	(Exemplar Pg 110 Q 32)	14. Bar graph	(NCERT Pg 196)
15. 0.33	(Exemplar Pg 60 Q 44)	16. 9 cm	(NCERT Pg 213 Q 6)
17. $3x + 8$	(Exemplar Pg 110 Q 30)	18. 1:2	(NCERT Pg 251 Q 7)
19. 24 sq cm	(NCERT Pg 217)	20. yes	(NCERT Pg 255)

Section – B

21. (NCERT Pg 172 Ex 8)
 $0.04 = 4/100 = \mathbf{1/25}$ (1 + 1)
22. (NCERT Pg 213 Q 6)
Perimeter of triangle = Sum of all sides = $3 + 4 + 5 = \mathbf{12\text{ cm}}$ ($\frac{1}{2} + 1 + \frac{1}{2}$ for unit)
23. (NCERT Pg 227 Q 4)
 \therefore Number of mangoes in 1 box = 50 (1 for statements)
 \therefore Number of mangoes in b boxes = $50 \times b = \mathbf{50b}$ (1)
(OR)
(NCERT Pg 233 Q 1, Changed)
For any correct four expressions (4 x $\frac{1}{2} = 2$)
24. (NCERT Pg 248 Ex 1)
Required ratio = $50\text{ m} : 15\text{ m}$ (1)
 $= (50 \div 5) : (15 \div 5) = \mathbf{10 : 3}$ ($\frac{1}{2} + \frac{1}{2}$)
25. (NCERT Pg 263 Q 1)
For name of any four correct symmetrical objects (4 x $\frac{1}{2} = 2$)
(OR)
(NCERT Pg 264)
Correct figure of rectangle (1)
Two lines of symmetry (1)
26. (NCERT Pg 276 Q 1)
For drawing the correct radius ($\frac{1}{2}$)
For correct figure of circle ($1\frac{1}{2}$)

Section – C

27. (NCERT Pg 63 Q 1)
 $\therefore 36 = \mathbf{2 \times 2 \times 3 \times 3}$ and $84 = \mathbf{2 \times 2 \times 3 \times 7}$ (1 + 1)
 $\therefore \text{HCF} = \mathbf{2 \times 2 \times 3 = 12}$ (1)

(OR)

(NCERT Pg 64 Ex 9)

$$\begin{aligned} \therefore 24 &= 2 \times 2 \times 2 \times 3 & \text{and} & \quad 90 = 2 \times 3 \times 3 \times 5 & (1 + 1) \\ \therefore \text{LCM} &= 2 \times 2 \times 2 \times 3 \times 3 \times 5 = \mathbf{360} & & & (1) \end{aligned}$$

28. (NCERT Pg 177 Q 5)

$$26 \text{ kg } 50 \text{ g} = 26 \text{ kg} + 50 \text{ g} = 26 \text{ kg} + (50/1000) \text{ kg} = 26 \text{ kg} + 0.050 \text{ kg} = \mathbf{26.050 \text{ kg}} \quad (1 + 1 + 1)$$

29. (NCERT Pg 213 Q 14)

$$\begin{aligned} \therefore \text{Perimeter of park} &= 2(L + B) = 2(175 \text{ m} + 125 \text{ m}) = 2 \times 300 \text{ m} = 600 \text{ m} & (4 \times \frac{1}{2} = 2) \\ \therefore \text{Cost of fencing @ ₹12 per meter} &= ₹12 \times 600 = \mathbf{₹ 7200}. & (1) \end{aligned}$$

(OR)

(NCERT Pg 219 Ex 17)

$$\begin{aligned} \therefore \text{Length of cloth} &= 2\text{m}, \text{ Breadth of cloth} = 1\text{m } 25\text{cm} = 1\text{m} + (25/100) \text{ m} = 1\text{m} + 0.25\text{m} = 1.25\text{m} & (3 \times \frac{1}{2} = 1\frac{1}{2}) \\ \therefore \text{Area of cloth} &= \text{Length} \times \text{Breadth} = 2\text{m} \times 1.25\text{m} = 2.50 \text{ Sq m} & (3 \times \frac{1}{2} = 1\frac{1}{2}) \end{aligned}$$

30. (NCERT Pg 241 Q 4)

m	4	5	6	7
$m + 10$	14	15	16	17

(4 x 1/2 = 2)

Solution of the equation is **6**.

(1)

31. (NCERT Pg 252 Q 14)

$$\therefore \text{The two parts are } 3 \text{ and } 2 \quad \therefore \text{Sum of the parts} = 3 + 2 = 5 \quad (1)$$

$$\therefore \text{Sheela's share} = \frac{3}{5} \times 20 = \mathbf{12 \text{ pens}} \text{ and} \quad (1)$$

$$\text{Sangeeta's share} = \frac{2}{5} \times 20 = \mathbf{8 \text{ pens}} \quad (1)$$

(OR)

(NCERT Pg 259 Q 11)

$$\text{Runs made by Anish in 1 over} = 42/6 = 7 \quad \text{and} \quad (1)$$

$$\text{Runs made by Anup in 1 over} = 63/7 = 9 \quad (1)$$

$$\therefore 9 > 7$$

$$\therefore \mathbf{Anup} \text{ made more runs per over.} \quad (1)$$

32. (NCERT Pg 190 Ex 4)

(3 x 1 = 3)

a) **50** people preferring blue colour. b) **30** people liked green colour. c) **White** is least popular colour

33. (NCERT Pg 268 Q 4)

(3 x 1 = 3)

(a) Isosceles triangle (b) Equilateral triangle (c) Scalene triangle

34. (NCERT Pg 158 Q 5)

(3 x 1 = 3)

Construction of \overline{AB} , Cutting off \overline{AC} and Measuring the \overline{BC}

Section – D

35. (NCERT Pg 179 Ex 14)

$$\text{Weight of apples} = 4 \text{ kg } 90 \text{ g} = 4.090 \text{ kg} \quad (1)$$

$$\text{Weight of grapes} = 2 \text{ kg } 60 \text{ g} = 2.060 \text{ kg} \quad (1)$$

$$\text{Weight of mangoes} = 5 \text{ kg } 300 \text{ g} = 5.300 \text{ kg} \quad (1)$$

$$\text{Total weight of the fruits} = 4.090 + 2.060 + 5.300 = \mathbf{11.450 \text{ kg}} \quad (1)$$

(OR)

(NCERT Pg 179 Q 1)

$$280.69 + 25.2 + 38 - 3 - 2 = 305.89 + 38 - 3 - 2 = 343.89 - 3 - 2 \quad (1 + 1)$$

$$= 340.89 - 2 = \mathbf{338.89} \quad (1 + 1)$$

36. (NCERT Pg 67 Q 8)

The given numbers are 6, 15 and 18

Working of finding the LCM of 6, 15 and 18 (2)

2	6	15	18
3	3	15	9
3	1	5	3
5	1	5	1
	1	1	1

$$\therefore \text{LCM} = 2 \times 3 \times 3 \times 5 = 90 \quad (1)$$

\therefore 90 is the least number which is completely divisible by 6, 15 and 18

$$\therefore \text{required number} = 90 + 5 = \mathbf{95}. \quad (1)$$

37. (NCERT Pg 203 Q 2)

Correct scale and details on X and Y-axis ($\frac{1}{2} + \frac{1}{2}$)

Correct bar graph ($6 \times \frac{1}{2} = 3$)

38. (NCERT Pg 218 Ex 16)

$$\text{Area of floor} = 4 \text{ m} \times 3 \text{ m} = 12 \text{ Sq m} \quad (1)$$

$$\text{Side of square tile} = 50 \text{ cm} = (50/100)\text{m} = 0.5 \text{ m} \quad (1)$$

$$\text{Area of 1 square tile} = 0.5 \text{ m} \times 0.5 \text{ m} = 0.25 \text{ Sq m} \quad (1)$$

$$\text{Number of tiles} = \text{Area of floor} / \text{Area of 1 tile} = 12 / 0.25 = \mathbf{48 \text{ tiles}} \quad (1)$$

39. (NCERT Pg 256 Q 4)

$$\therefore 25 \text{ cm} : 1 \text{ m} = 25 \text{ cm} : 100 \text{ cm} = 1 : 4 \text{ and } ₹ 40 : ₹ 160 = 1 : 4 \quad (1 + 1)$$

\therefore Given ratios are in proportion as both ratios are equal. (1)

Middle terms – **1 m, Rs 40** ; Extreme terms – **25 cm, Rs 160** (1)

40. (NCERT Pg 279 Q 1)

For drawing a labeled line segment PQ (1)

For drawing of another line l and proper use of compass (1)

For correct labeled copy of line segment PQ (1)

For steps of construction in short (1)

(OR)

(NCERT Pg 286 Q 3)

For drawing a labeled line segment AB of length 10.3 cm

(1)

For drawing the correct arcs both side the line segments

(1)

For drawing the perpendicular bisector of line segment AB

(1)

For steps of construction in short

(1)

