



- |      |  |                      |       |
|------|--|----------------------|-------|
|      | c) 0   | d) 9                 |       |
| Q.7  | The area of rectangle having length 7cm and breadth 5cm is |                      | (CO2) |
|      | a) $35 \text{ cm}^2$                                       | b) $45 \text{ cm}^2$ |       |
|      | c) $25 \text{ cm}^2$                                       | d) none              |       |
| Q.8  | The side of square is 6 cm, then its perimeter will be     |                      | (CO2) |
|      | a) 18 cm   | b) 36 cm             |       |
|      | c) 24 cm   | d) None              |       |
| Q.9  | 40% of 800 is  |                      | (CO4) |
|      | a) 32  | b) 190               |       |
|      | c) 840   | d) 320               |       |
| Q.10 | What is the percentage of 20 g of 1 kg?                    |                      | (CO4) |
|      | a) 20%   | b) 0.2%              |       |
|      | c) 2%  | d) 0.02%             |       |

## SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- |      |  |       |
|------|--|-------|
| Q.11 | Convert $\log_{10} 0.01 = -2$ into exponential form.                           | (CO1) |
| Q.12 | Calculate $5!$   | (CO1) |
| Q.13 | Write formula of a circle having radius $R$ .                                  | (CO2) |
| Q.14 | Define cover factors of a fabric.  | (CO7) |
| Q.15 | Define random variations.  | (CO6) |
| Q.16 | Change the base of $\log_7 5$ to 10.   | (Co1) |
| Q.17 | Calculate the mean of 1,2,3,4,5,6.   | (CO3) |
| Q.18 | Write the formula for area of a trapezoid.                                     | (CO2) |
| Q.19 | Write formula of surface area of a cylinder having radius $r$ and height $h$ . | (CO2) |

(2)

182531/122531

- Q.20 Find the value of  ${}^7C_4$ . (C05)

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Evaluate  $\text{Log}_2(8 \times 16)$ . (CO1)
- Q.22 The average of 12 observations is 8, later it was observed that one observation 10 is wrongly written as 13. What is the correct average observation? (CO4)
- Q.23 How many litres of pure acid are there in 4 litres of a 10% solution? (CO4)
- Q.24 If  $\text{Log} x + \text{Log} (6+x) = \text{Log} 16$ , find the value of x. (CO1)
- Q.25 The sides of a triangle are 8 m, 10 m and 6 m, then find the area of the triangle. (CO2)
- Q.26 Find the perimeter of a square, if the sum of diagonals is 144cm. (CO2)
- Q.27 Describe different types of variations. (CO6)
- Q.28 The diameter of a circular pond is 40 m. there is a path around this pond of width 5m. Find the area of the path. (CO2)
- Q.29 Describe the uses of control charts. (CO6)
- Q.30 Differentiate between warp cover and weft cover. (CO7)
- Q.31 Find arithmetic mean for the following. (CO3)
- |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| x: | 10 | 11 | 12 | 13 | 14 | 15 |
| F: | 2  | 6  | 8  | 6  | 2  | 6  |
- Q.32 Define mode and find mode of the series. (CO3)
- 15,16,15,13,14,15,14

(3)

182531/122531