

This Question Paper contains 20 printed pages.

(Part - A & Part - B)

Sl.No. 0201135

12 (E)

(MARCH, 2018)
(NCERT OTHERS)

પ્રશ્ન પેપરનો સેટ નંબર જેની સામેનું વર્તુળ OMR શીટમાં ઘટ્ટ કરવાનું રહે છે.

Set No. of Question Paper, circle against which is to be darken in OMR sheet.

02

Question Paper Reading 15 Minutes

Part - A : Time : 1 Hour / Marks : 50

Part - B : Time : 2 Hours / Marks : 50

(Part - A)

Time : 1 Hour]

[Maximum Marks : 50

Instructions :

- 1) There are 50 multiple choice type questions in Part - A and all of them are compulsory.
- 2) The questions are serially numbered from 1 to 50 and each carries 1 mark.
- 3) Read each question carefully, select proper alternative and answer in the O.M.R. sheet.
- 4) Separate OMR sheet is given for answering these questions. The answer of each question is to be given by darkening the circle against options (A), (B), (C), (D) . Circle ● representing the most correct answer is to be darken with ball-pen.
- 5) Set No. of Question Paper printed on the upper-most right side of the Question Paper, the same is to be written in the space provided in the OMR sheet and circle depicting the correct set No. is to be darken with ball pen.

- 1) If the value of discriminant of quadratic equation $x^2 - 10x + (2k - 1) = 0$ is 40 then $k =$ _____.

- (A) 7 (B) 8
(C) 15 (D) 10

- 2) A manufacturer of TV sets produced 700 sets in third year and 800 sets in seventh year. Assuming that the production increases uniformly by a fixed number every year find the production in the 1st year.

- (A) 700 (B) 625
(C) 25 (D) 650

Rough Work

- 3) Find the sum of first 15 multiples of 8.
- (A) 1080 (B) 960
(C) 840 (D) 780
- 4) Find the sum of first 1000 positive integers.
- (A) 500501 (B) 500500
(C) 1001000 (D) 100500
- 5) Sides of two similar triangles are in the ratio 4:9. Areas of these triangles are in the ratio _____.
- (A) 81 : 16 (B) 4 : 9
(C) 2 : 3 (D) 16 : 81
- 6) Which of the following triplets is not right triangle.
- (A) 5, 12, 13 (B) 60, 80, 90
(C) 7, 24, 25 (D) 9, 40, 41
- 7) In ΔPQR $\angle Q : \angle R : \angle P = 1 : 2 : 1$. If $PQ = 2\sqrt{6}$ then $PR =$ _____.
- (A) $2\sqrt{3}$ (B) $2\sqrt{6}$
(C) $\sqrt{6}$ (D) $2\sqrt{2}$
- 8) Formula to find the midvalue of the line segment joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$.
- (A) $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$ (B) $\left(\frac{x_1 - x_2}{2}, \frac{y_1 - y_2}{2}\right)$
(C) $\left(\frac{x_1 + y_1}{2}, \frac{x_2 + y_2}{2}\right)$ (D) $\left(\frac{x_1 + y_2}{2}, \frac{x_2 + y_1}{2}\right)$

- 9) The area of a triangle formed by the points P(5, 2), Q(4, 7) and R(+7, -4).
- (A) 2 (B) -2
(C) 4 (D) -4
- 10) If points A(1, 7), B(4, 2) and C(-1, 1) are the vertices of a parallelogram find fourth vertex D.
- (A) (-4, -4) (B) (-4, 4)
(C) (-4, 6) (D) (4, -6)
- 11) Find K if points A(2, 3), B(4, K) and C(6, -3) are collinear.
- (A) -4 (B) 0
(C) -2 (D) 2
- 12) If $\sin A = \frac{3}{4}$ then $\cos A =$ _____.
- (A) $\frac{\sqrt{7}}{4}$ (B) $\frac{4}{5}$
(C) $\frac{3}{5}$ (D) $\frac{\sqrt{7}}{3}$
- 13) If $\tan A = \cot B$ then $A + B =$ _____.
- (A) 0° (B) 90°
(C) 60° (D) 45°
- 14) $9 \sec^2 A - 9 \tan^2 A =$ _____.
- (A) 0 (B) 8
(C) 1 (D) 9

