
ISC CLASS XII MATHEMATICS (TEST PAPER 14) - SET 14

Time Allowed: 3 hours

Maximum Marks: 80

SECTION A (Compulsory - 65 Marks)

Question 1 (10×1 Mark = 10 Marks)

1. $\boxed{0}$

2. $\boxed{\frac{3}{4}}$

3. $\boxed{(-\infty, -1] \cup [1, \infty)}$

4. $\boxed{\text{Yes, } R \text{ is transitive.}}$

5. $\boxed{\frac{dy}{dx} = \frac{-2x}{\sqrt{1-x^4}}}$

6. $\boxed{0}$

7. $\boxed{x}$

8. $\boxed{\frac{14}{3}}$

9. $\boxed{0.3}$

10. $\boxed{1.9}$

Question 2 (3×2 Marks = 6 Marks)

1. $\boxed{2 \cos 2x}$

2. $\boxed{6\pi \text{ cm}^2/\text{s}}$

3. $\boxed{\frac{24}{91}}$

Question 3 (4×4 Marks = 16 Marks)

1. $\boxed{0.9651}$

2. $\boxed{e^x \sin x + C}$

3. $\boxed{x^2 + y^2 - 2xy - 2x = 0}$

4. $\boxed{x = 0 \text{ or } x = -(a + b + c)}$

Question 4 (3 × 6 Marks = 18 Marks)

1.
2.
3.

Question 5 (15 Marks)

- (a)
- (b)
- (c)

SECTION B (Optional - 15 Marks)

Question 6 (5 Marks)

1.
2.

Question 7 (10 Marks)

1.
2.

SECTION C (Optional - 15 Marks)

Question 8 (5 Marks)

1.

Question 9 (10 Marks)

1.
2.