

**Answer Ex-I****SINGLE CORRECT (OBJECTIVE QUESTIONS)**

- |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 1. B  | 2. D  | 3. A  | 4. C  | 5. A  | 6. B  | 7. C  |
| 8. B  | 9. D  | 10. B | 11. B | 12. D | 13. A | 14. A |
| 15. B | 16. A | 17. B | 18. B | 19. C | 20. A |       |

**Answer Ex-II****MULTIPLE CORRECT (OBJECTIVE QUESTIONS)**

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|--------|------|-------|-------|---------|---------|---------|
| 1. C   | 2. C | 3. D  | 4. A  | 5. C    | 6. A    | 7. C    |
| 8. B,C | 9. A | 10. D | 11. C | 12. A,D | 13. A,D | 14. A,B |
15. B,D

**Answer Ex-III****SUBJECTIVE QUESTIONS**

1.  $7x^2 + 12xy - 2y^2 - 2x + 4y - 7 = 0$ ;  $\sqrt{\frac{48}{5}}$       2.  $a^2 = 25/2$ ;  $b^2 = 16$
4.  $(-1, 2)$ ;  $(4, 2)$  &  $(-6, 2)$ ;  $5x - 4 = 0$  &  $5x + 14 = 0$ ;  $\frac{32}{3}$ ; 6; 8;  $y - 2 = 0$ ;  
 $x + 1 = 0$ ;  $4x - 3y + 10 = 0$ ;  $4x + 3y - 2 = 0$ .
5.  $x + y \pm 3\sqrt{3} = 0$       6.  $3x + 2y - 5 = 0$ ;  $3x - 2y + 5 = 0$       11.  $\frac{\left(x - \frac{1}{3}\right)^2}{\frac{1}{9}} + \frac{(y-1)^2}{\frac{1}{12}} = 1$
13.  $(x^2 + y^2)^2 (a^2y^2 - b^2x^2) = x^2y^2 (a^2 + b^2)^2$       17.  $\frac{x^2}{a^4} + \frac{y^2}{b^4} = \frac{1}{a^2 + b^2}$       20.  $\frac{x^2}{49} + \frac{y^2}{36} = 1$ ;  $\frac{x^2}{9} - \frac{y^2}{4} = 1$

**Answer Ex-IV****ADVANCED SUBJECTIVE QUESTIONS**

2.  $y = \frac{5}{12}x + \frac{3}{4}$ ;  $x - 3 = 0$ ; 8 sq. unit      5.  $(15, 10)$  and  $(3, -2)$  and 30 sq. units
6.  $(-4, 3)$  &  $\left(-\frac{4}{7}, -\frac{3}{7}\right)$       7.  $\frac{150}{\sqrt{481}}$       8.  $4\left(\frac{x^2}{a^2} - \frac{y^2}{b^2}\right) = 3$       10. ab

**Answer Ex-V****JEE PROBLEMS**

1. (a) A; (b) D; (c) B      2. D      3. A      4. A      5.  $\frac{x^2}{9} - \frac{y^2}{4} = \left(\frac{x^2 + y^2}{9}\right)^2$
6. A, C      7. (a) A, (b) C, (c) C,      8. (a) A;      (b) (A)–P, Q; (B)–P, Q; (C)–Q, R; (D)–Q, R
9. (a) B;      (b) B      10. (A)–P; (B)–S, T; (C)–R; (D)–Q, S
11. A,B      12. B      13. A      14. 2