Answer Ex–I	SINGLE CORRECT (OBJECTIVE QUESTIONS)

1. D	**2**. A	**3**. C	**4**. A	**5**. D	**6**. C	**7**. C	**8**. D
9. B	**10**. A	**11**. D	**12**. D	**13**. C	**14**. C	**15**. D	**16**. B
17. A	**18**. D	**19**. C	**20**. A	**21**. A	**22**. A	**23**. B	**24**. C
25. D	**26**. B	**27**. D	**28**. C	**29**. B	**30**. D	**31**. B	**32**. B
33. B	**34**. D	**35**. D	**36**. A	**37**. C	**38**. C	**39**. A	**40**. D
41. B	**42**. B	**43**. D	**44**. B	**45**. D	**46**. C	**47**. A	**48**. D
49. A	**50**. D	**51**. D	**52**. C	**53**. B	**54**. A	**55**. B	**56**. D
57. C	**58**. C						

Answer Ex–II	MULTIPLE CORRECT (OBJECTIVE QUESTIONS)

1. A,B,C,D   **2**. A,C   **3**. A,C   **4**. A,B   **5**. A,B   **6**. A,C

Answer Ex–III	SUBJECTIVE QUESTIONS

1. (a) $\left(2, \frac{8}{3}\right)$; **(b)** 4   **2.** (33, 26)   **3.** K = 7 or 31/9   **4.** 1 : 2; Q(–5, – 3)

5. 83x – 35y + 92 = 0   **6.** 2x + y – 1 = 0   **7.** $\left(\frac{7}{2}, \frac{13}{2}\right)$ or $\left(-\frac{3}{2}, \frac{3}{2}\right)$ **9.** y = x^2 and y = 2 – x^2

10. x – y = 0   **11.** 91 sq. units   **12.** 6 units   **13.** $\frac{3}{2}$ sq. units, $\left(3, 3, \frac{3}{4}\right)$, isosceles

14. 3 units   **15.** c = – 4; B(2, 0); D(4, 4)   **16.** x + 5y + 5$\sqrt{2}$ = 0 or x + 5y–5$\sqrt{2}$ =0

17. 400 sq. units   **18.** x – 3y – 31 = 0 or 3x + y + 7 = 0   **19.** 14x + 23 y = 40   **20.** 4

21. x – 5 = 0   **22.** 47   **23.** $0 < \theta < \frac{5\pi}{6} - \tan^{-1} 3$ **24.** 533   **25.** (A)–R ; (B)–S ; (C)–Q

| **Answer Ex–IV** | **ADVANCED SUBJECTIVE QUESTIONS** |

1. (a) 5 ; **(b)** 2 ; **(c)** $\dfrac{3}{2}$ **2.** x + 4y = 4; 5x + 2y = 8   **3.** a = 11, c = 78   **4.** 7x + 24y + 182 = 0 or x = – 2

5. (0, 0) or (0, 5/2)   **6.** 3x + 6y – 16 = 0; 8x + 8y + 7 = 0; 12x + 6y – 11 = 0

7. $x^2 + 4y^2 + 4xy + 4x – 2y – 1 = 0$ **8.** 2x – y + 3 = 0, 2x + y – 7 = 0, x – 2y – 6 = 0

10. $B\left(-\dfrac{2t}{3}, -\dfrac{t}{6}\right), C\left(\dfrac{t}{2}, t\right)$ **11.** $(y_1^2 - \delta^2)x^2 - 2x_1y_1xy + (x_1^2 - \delta^2)y^2 = 0$ **12. (a)** 74 ; **(b)** 50 ; **(c)** 47

13. (a) $\dfrac{50}{7}$; **(b)** $\dfrac{63}{10}$; **(c)** $\dfrac{3}{10}(8\sqrt{5} - 5\sqrt{10})$ **14.** (1, –2), yes $\left(\dfrac{1}{3}, -\dfrac{2}{3}\right)$ **15.** x + y = 1; x + 9y = 1

16. (i) area = 6sq. units, **(ii)** diagonals are $\sqrt{5}$ & $\sqrt{53}$ **17.** $6x^2 - xy - y^2 - x - 12y - 35 = 0$

| **Answer Ex–V** | **JEE PROBLEMS** |

1. (a) D ; **(b)** D   **2.** (4, 1) → (2, 3) → (3, 3) → (0, $3\sqrt{2}$)   **3. (a)** D ; **(b)** A

4. (a) C; **(b)** B; **(c)** B; **(d)** x – 3y + 5 = 0 ; **(e)** 18   **5.** A   **6.** y = 2x + 1, y = – 2x + 1

7. (a) C ; **(b)** C   **8.** (A)–S ; (B)–P,Q ; (C)–R ; (D)–P,Q,S **9.** D   **10.** B

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