

ANSWER KEY

(Objective 2.1)

Qus.	1	2	3	4	5	6	7	8	9	10	11
Ans.	A	C	C	D	C	D	A	B	C	C	D

(Subjective 2.2)

1. 36
2. 1
3. (i) $25x^2 + 40xy + 16y^2$
(ii) $16x^2 - 40xy + 25y^2$
(iii) $4x^2 - 4 + \frac{1}{x^2}$
4. 189
5. 364
6. (i) -281250
(ii) $-\frac{5}{12}$
(iii) -0.018
7. (i) $x^2 + 11x + 28$
(ii) $x^2 + \frac{26}{5}x + 1$
(iii) $P^4 + \frac{63}{4}P^2 - 4$
8. (i) 10812
(ii) 999964
(iii) 1224
9. $(2x^2 + 49a^2 + 14ax)(2x^2 + 49a^2 - 14ax)$
10. $(x - 1)(x + 1)(x^2 + 1)(x^2 + x + 1)(x^2 - x + 1)(x^4 - x^2 + 1)$
11. 3
12. (i) $x^6 + 7x^5 - 3^4 + 5x^2 + \sqrt{2}x + 4$
(ii) $m^7 + 4m^6 + 8m^5 - 3m^2 + 6m - 11$
13. $(x^2 + 5x + 3)(x^2 + 5x + 7)$
14. $(4a - 3b)^3$
15. $(x - y)(x + y)^3$

(Objective 2.3)

Qus.	1	2	3	4
Ans.	C	B	A	B

(Objective 2.4)

1. $(2x - 1)(4x^2 + 2x + 9)$
2. $(x + 1)(x - 1)(x + 3)(x - 2)$
3. $(3z + 10)(z - 3)(3z - 10)$
4. Yes
6. $(x + 1)$ is a factor.
7. $(x - 1)(x - 10)(x - 12)$
8. $(x + 1)(x + 2)(x + 10)$
9. $(y - 1)(y + 1)(2y + 1)$
10. $(z + 2)(2z + 3)(2z + 3)$
11. $(x - 1)(x + 1)(x - 2)(x + 2)$
12. $(x + 1)(x - 14)(x + 3)$