परमाणु ऊर्जा शिक्षा संस्था , मुंबई
Atomic Energy Education Society, Mumbai
Session: 2023 – 24

Class: IX **Subject: MATHEMATICS**

WORKSHEET NO.- 1 – ANSWER KEY

Name of the Chapter: POLYNOMIALS (CHAPTER – 2)

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1. (b)
2. (b)
3. (a)
4. (c)
5. (c)
6. (a)
7. (a)
8. (b)
9. (b)
10. (c)
11. $125a^3 - 27b^3 - 225a^2b + 135ab^2$
12. $(6x + 5)(3x - 2)$
13. $X^2 – 2x^2 + x + \sqrt{3}$
14. $(2x + 3y)(2x - 3y - 1)$
15. $(x-a)(a-b)$
16. $27x^3 + 8+54x^2+36x$
17. 990025
18. $(1-4a)(1+4a+16a^2)$
19. 5
20. $(a-c)(a-2b)$
21. P(0)=2, p(1) = 4,p(2)=4
22. X(x-y)[(x2 + xy+y2) +3y]
23. 7/6
24. $8x^3+12x^2+6x+1$
25. $\sqrt{5}(\sqrt{5}x+2)(\sqrt{5}x+4)$
26. 9120
27. P(-3)=0, therefore p(x) is exactly divisible by (x+3)
28. $(\sqrt{2}a+2\sqrt{2}b+c)(2a^2+8b^2+c^2+4ab+2\sqrt{2}bc+\sqrt{2}ac)$
29. X=0 is the only zero of p(x)
30. $(3x+2)(x/2 + 5)$
31. $(a+x)(ax^2+1)$
32. 45
33. $(1+a+b)(1-a-b)$
34. $(2x + 3y - 4z)(2x + 3y - 4z)$
35. $(2x + 5)(2x + 5)$
36. (x-2),(x+3) and (x-4) are factors of f(x).
37. i. -1 ii. 4/5 iii.-6 iv.-4/25 v.-7
38. -25
39. The values are a= 2 and b = -1
40. A = 6

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