

SHORT ANSWERS

TYPE-I

1. (2)	2. (2)	3. (3)	4. (1)
5. (3)	6. (2)	7. (3)	8. (4)
9. (3)	10. (3)	11. (1)	12. (1)
13. (3)	14. (1)	15. (4)	16. (3)
17. (1)	18. (3)	19. (2)	20. (1)
21. (1)	22. (4)	23. (1)	24. (3)
25. (4)	26. (2)	27. (3)	28. (2)
29. (1)	30. (2)	31. (2)	32. (2)
33. (1)	34. (3)	35. (2)	36. (2)
37. (4)	38. (3)	39. (1)	40. (3)
41. (3)	42. (4)	43. (4)	44. (4)
45. (3)	46. (2)	47. (2)	48. (3)
49. (3)	50. (4)	51. (2)	52. (3)
53. (3)	54. (3)	55. (1)	56. (2)
57. (1)	58. (3)	59. (1)	60. (1)
61. (2)	62. (2)	63. (1)	64. (1)
65. (1)	66. (2)		

TYPE-II

1. (3)	2. (2)	3. (3)	4. (2)
5. (3)	6. (1)	7. (2)	8. (3)
9. (4)	10. (4)	11. (4)	12. (4)
13. (4)	14. (4)	15. (1)	16. (2)
17. (1)	18. (1)	19. (4)	20. (2)
21. (3)	22. (2)	23. (3)	24. (2)
25. (4)	26. (2)	27. (4)	

TYPE-III

1. (1)	2. (2)	3. (3)	4. (4)
5. (4)	6. (4)	7. (3)	8. (2)
9. (2)	10. (1)	11. (1)	12. (3)
13. (3)	14. (3)	15. (1)	16. (1)
17. (2)	18. (1)	19. (2)	20. (3)
21. (4)	22. (4)	23. (2)	24. (1)
25. (3)	26. (3)	27. (2)	28. (1)
29. (3)	30. (1)	31. (3)	32. (4)
33. (1)	34. (1)	35. (3)	36. (4)
37. (2)	38. (3)	39. (4)	40. (4)

TYPE-IV

1. (4)	2. (2)	3. (2)	4. (1)
5. (3)	6. (2)	7. (1)	8. (4)
9. (1)	10. (2)	11. (2)	12. (3)
13. (3)	14. (3)	15. (4)	16. (2)

TYPE-V

1. (1)	2. (4)	3. (1)	4. (4)
5. (4)	6. (2)	7. (3)	8. (1)
9. (3)	10. (4)	11. (2)	12. (1)
13. (3)	14. (2)		

TYPE-VI

1. (1)	2. (2)	3. (3)	4. (2)
5. (2)	6. (3)	7. (1)	8. (3)
9. (2)			

TYPE-VII

1. (2)	2. (3)	3. (2)	4. (3)
5. (2)	6. (1)	7. (2)	8. (4)
9. (4)	10. (3)	11. (3)	12. (1)
13. (3)	14. (2)	15. (3)	

EXPLANATIONS

TYPE-I

1. (2) Using Rule 1,
 $P = ₹ 3000$, $A = ₹ 3993$, $n = 3$ years

$$A = P \left(1 + \frac{r}{100} \right)^n$$

$$\therefore \left(1 + \frac{r}{100} \right)^n = \frac{A}{P}$$

$$\left(1 + \frac{r}{100} \right)^3 = \frac{3993}{3000} = \frac{1331}{1000}$$

$$\left(1 + \frac{r}{100} \right)^3 = \left(\frac{11}{10} \right)^3$$

$$\Rightarrow 1 + \frac{r}{100} = \frac{11}{10}$$

$$\Rightarrow \frac{r}{100} = \frac{11}{10} - 1$$

$$\Rightarrow \frac{r}{100} = \frac{1}{10} \Rightarrow r = \frac{100}{10}$$

$$\therefore r = 10\%$$

2. (2) Using Rule 1,

$$A = 10,000 \left(1 + \frac{2}{100} \right)^4$$

$$= 10,000 \left(\frac{51}{50} \right)^4 = 10824.3216$$

\therefore Interest

$$= 10,824.3216 - 10,000$$

$$= ₹ 824.32$$

3. (3) Using Rule 1,

According to question,

$$2420 = 2000 \left(1 + \frac{10}{100} \right)^t$$

$$\frac{2420}{2000} = \left(\frac{11}{10} \right)^t$$

$$\text{or, } \left(\frac{11}{10} \right)^t = \frac{121}{100}$$

$$\text{or, } \left(\frac{11}{10} \right)^t = \left(\frac{11}{10} \right)^2$$

$$\therefore t = 2 \text{ years}$$

4. (1) Using Rule 1,

Let the required time be n years.
 Then,

$$1331 = 1000 \left(1 + \frac{10}{100} \right)^n$$

$$\left[\therefore P_1 = P \left(1 + \frac{r}{100} \right)^n \right]$$

$$\Rightarrow \frac{1331}{1000} = \left(\frac{10+1}{10} \right)^n$$

$$\Rightarrow \left(\frac{11}{10} \right)^n = \left(\frac{11}{10} \right)^3$$

$$\Rightarrow n = 3$$

5. (3) Using Rule 1,

Let the principal be ₹ P .

$$\therefore 270.40 = P \left(1 + \frac{4}{100} \right)^2$$

$$\Rightarrow 270.40 = P (1 + 0.04)^2$$

$$\Rightarrow P = \frac{270.40}{1.04 \times 1.04} = ₹ 250$$