Aptitude Assignment

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Percentage Problems:

1. 25% of 200 =
   25100×200=50\(25)(100) \ 200 = 5010025×200=50
   Answer: (b) 50

2. 40% of a number is 80, find the number:
   Let the number be xxx,
   40100×x=80\ (40) (100) \ x = 8010040×x=80
   x=80×10040=200x = \ (80 \ 100) (40) = 200x=4080×100=200
   Answer: (c) 200

3. 75% of a number is 150, find the number:
   75100×x=150\ (75) (100) \ x = 15010075×x=150
   x=150×10075=200x = \ (150 \ 100) (75)= 200x=75150×100=200
   Answer: (b) 200

4. 15% of 120 =
   15100×120=18\ (15) (100) \ 120 = 1810015×120=18
   Answer: (c) 18

5. 30% of a number is 90, find the number:
   30100×x=90\ (30) (100) \ x = 9010030×x=90
   x=90×10030=300x = \ (90 \ 100)(30) = 300x=3090×100=300
   Answer: (c) 300

Percentage Increase/Decrease:

6. Price increase from ₹200 to ₹250:
   250−200200×100=25%\ (250 – 200)(200} \ 100 = 25\%200250−200×100=25%
   Answer: (b) 25%

7. Salary increase from ₹40,000 to ₹50,000:
   50,000−40,00040,000×100=25%\ (50,000 - 40,000)(40,000) \ 100 = 25\%40,00050,000−40,000×100=25%
   Answer: (b) 25%

8. Population decrease from 10,000 to 8,000:
   10,000−8,00010,000×100=20%\ (10,000 - 8,0000)(10,000) \ 100 = 20\%10,00010,000−8,000×100=20%
   Answer: (c) 20%

9. Book price decrease from ₹500 to ₹400:
   500−400500×100=20%\ {500 - 400}{500} \ 100 = 20\%500500−400×100=20%
   Answer: (c) 20%

10. Cost price ₹600, selling price ₹450, find loss percentage:
    600−450600×100=25%\ {600 - 450}{600} \ 100 = 25\%600600−450×100=25%
    Answer: (c) 25%

Percentage Comparison:

11. 30% of 400 vs. 40% of 300
    30100×400=120\ {30}{100} \ 400 = 12010030×400=120
    40100×300=120\ {40}{100} 300 = 12010040×300=120
    Answer: (c) Both are equal

12. A person spends 60% and saves ₹8,000, find total income:
    Savings = 40% of total income
    Let total income = xxx,
    40100×x=8,000\ {40}{100} \ x = 8,00010040×x=8,000
    x=8,000×10040=20,000x = \ {8,000 \ 100}{40} = 20,000x=408,000×100=20,000
    Answer: (c) ₹20,000

13. If A is 20% more than B, B is how much less than A?
    20120×100=16.67%\ {20}{120} \ 100 = 16.67\%12020×100=16.67%
    Answer: (b) 16.67%

14. If sugar price increases by 25%, how much should consumption decrease?
    25125×100=20%\ {25}{125} \ 100 = 20\%12525×100=20%
    Answer: (a) 20%

15. If A's income is 40% more than B's, B's income is what percentage less than A's?
    40140×100=28.57%\ {40}{140} \ 100 = 28.57\%14040×100=28.57%
    Answer: (a) 28.57%

Successive Percentage Change:

16. Increase by 20%, then decrease by 10%:
    20−10−20×10100=8%20 - 10 - \ {20 \ 10}{100} = 8\%20−10−10020×10=8% increase
    Answer: (a) 8% increase

17. Increase by 30%, then decrease by 20%:
    30−20−30×20100=4%30 - 20 - \ {30 \ 20}{100} = 4\%30−20−10030×20=4% increase
    Answer: (a) 4% increase

18. Population increase by 25%, then decrease by 20%:
    25−20−25×20100=5%25 - 20 - \ {25 \ 20}{100} = 5\%25−20−10025×20=5% increase
    Answer: (b) 5% increase

19. Price increase by 40%, then decrease by 30%:
    40−30−40×30100=2%40 - 30 - \ {40 \ 30}{100} = 2\%40−30−10040×30=2% increase
    Answer: (a) 2% increase

20. Salary increase by 20%, then decrease by 10%:
    20−10−20×10100=8%20 - 10 - \ {20 \ 10}{100} = 8\%20−10−10020×10=8% increase
    Answer: (a) 8% increase

Profit & Loss:

21. If profit is 25%, selling price is what percentage of cost price?
    100+25=125%100 + 25 = 125\%100+25=125%
    Answer: (b) 125%

22. Marked price ₹500, 10% discount, 8% profit, find cost price:
    Selling Price = 500−10%500 - 10\%500−10%
    500−50=450500 - 50 = 450500−50=450
    Cost Price = 4501.08=416.67≈420\ {450}{1.08} = 416.67 \ 4201.67=416.67≈420
    Answer: (b) ₹420

23. If profit is 20% of cost price, profit percentage on selling price:
    20120×100=16.67%\ {20}{120} \ 100 = 16.67\%12020×100=16.67%
    Answer: (a) 16.67%

24. Marked price ₹1,200, sold for ₹960, find discount percentage:
    1200−9601200×100=20%\ {1200 - 960}{1200} \ 100 = 20\%12001200−960×100=20%
    Answer: (b) 20%

25. Bought for ₹500, sold for ₹650, find profit percentage:
    650−500500×100=30%\ {650 - 500}{500} \ 100 = 30\%500650−500×100=30%
    Answer: (c) 30%

Percentage Profit & Loss:

26. Selling price ₹800, profit 25%, find cost price.

Cost Price=8001.25=640\ {Cost Price} = \ {800}{1.25} = 640Cost Price=1.25800=640

Answer: (b) ₹640

27. Cost price ₹1,500, loss 20%, find selling price.

Selling Price=1500×80100=1200\ {Selling Price} = 1500 \frac{80}{100} = 1200Selling Price=1500×10080=1200

Answer: (b) ₹1,200

28. Profit ₹200, cost price ₹800, find profit percentage.

200800×100=25%\ {200}{800} \ 100 = 25\%800200×100=25%

Answer: (b) 25%

29. Loss ₹50, cost price ₹250, find loss percentage.

50250×100=20%\ {50}{250} \ 100 = 20\%25050×100=20%

Answer: (c) 20%

30. Selling price ₹900, loss 10%, find cost price.

Cost Price=9000.9=1000\ {Cost Price} = \ {900}{0.9} = 1000Cost Price=0.9900=1000

Answer: (c) ₹1,000

Discount Problems:

31. Marked price ₹1,200, discount 15%, find selling price.

1200−(15100×1200)=1200−180=10201200 - \ (\{15}{100} \ 1200\) = 1200 - 180 = 10201200−(10015×1200)=1200−180=1020

Answer: (c) ₹1,020

32. Marked price ₹800, selling price ₹720, find discount percentage.

800−720800×100=10%\ {800 - 720}{800} \ 100 = 10\%800800−720×100=10%

Answer: (b) 10%

33. Discount ₹100 on ₹500, find discount percentage.

100500×100=20%\ {100}{500} \ 100 = 20\%500100×100=20%

Answer: (c) 20%

34. Selling price ₹450, loss 10%, find cost price.

Cost Price=4500.9=500\ {Cost Price} = \ {450}{0.9} = 500Cost Price=0.9450=500

Answer: (b) ₹500

35. Discount ₹150 on ₹750, find discount percentage.

150750×100=20%\ {150}{750} \ 100 = 20\%750150×100=20%

Answer: (c) 20%

Percentage Increase/Decrease in Area & Volume:

36. Length increased by 20%, width increased by 10%, find percentage increase in area.

20+10+20×10100=32%20 + 10 + \ {20 \ 10}{100} = 32\%20+10+10020×10=32%

Answer: (a) 32%

37. Radius of a circle increased by 10%, find percentage increase in area.

10+10+10×10100=21%10 + 10 + \ {10 \ 10}{100} = 21\%10+10+10010×10=21%

Answer: (c) 21%

38. Side of square increased by 20%, find percentage increase in area.

20+20+20×20100=44%20 + 20 + \ {20 \ 20}{100} = 44\%20+20+10020×20=44%

Answer: (b) 44%

39. Side of square decreased by 10%, find percentage decrease in area.

10+10−10×10100=19%10 + 10 - \ {10 \ 10}{100} = 19\%10+10−10010×10=19%

Answer: (a) 19%

40. Radius of sphere increased by 20%, find percentage increase in volume.

20+20+20+20×20100+20×20100+20×20×2010000=72.8%20 + 20 + 20 + \ {20 \ 20}{100} + \frac{20 \times 20}{100} + \frac{20 \ 20 \ 20}{10000} = 72.8\%20+20+20+10020×20 +10020×20+1000020×20×20=72.8%

Answer: (b) 72.8%

Miscellaneous Problems:

41. 40% of x = 80, find x.

x=80×10040=200x = \(80 \ 100}{40} = 200x=4080×100=200

Answer: (c) 200

42. 25% of 600 =

25100×600=150\ {25}{100} \ 600 = 15010025×600=150

Answer: (b) 150

43. If A is 30% of B, then B is what percentage of A?

B=10030×A=333.33%B = \ {100}{30} \ A = 333.33\%B=30100×A=333.33%

Answer: (c) 333.33%

44. A person spends 75% of income and saves ₹2,500, find income.

Income=2,500×10025=10,000\ {Income} = \ {2,500 \ 100}{25} = 10,000Income=252,500×100 =10,000

Answer: (b) ₹10,000

45. Increase by 10%, then by 20%, find net increase.

10+20+10×20100=32%10 + 20 + \ {10 \ 20}{100} = 32\%10+20+10010×20=32%

Answer: (a) 32%

Final Questions:

46. 50% of 1,000 =

50100×1000=500\ {50}{100} \ 1000 = 50010050×1000=500

Answer: (c) 500

47. Loss 20% on ₹800, find selling price.

Selling Price=800×80100=640\ {Selling Price} = 800 \ \ {80}{100} = 640Selling Price=800×10080=640

Answer: (b) ₹640

48. If price increases by 25%, how much consumption should decrease to maintain the same cost?

25125×100=20%\ {25}{125} \ 100 = 20\%12525×100=20%

Answer: (a) 20%

49. Marked price ₹2,000, discount 20%, find selling price.

2000−(20% of 2000)=2000−400=16002000 - (20\% \ { of } 2000) = 2000 - 400 = 16002000−(20% of 2000)=2000−400=1600

Answer: (b) ₹1,600

50. A man spends 80% of income, saves ₹4,000, find income.

Income=4,000×10020=20,000 = \ {4,000 \ 100}{20} = 20,000Income=204,000×100=20,000

Answer: (c) ₹20,000