

**✓ SSC GD Maths Practice Set 01 — Solutions (Q1–Q100)**

1. **Answer: B) 1000.** Calculation:  $125 \times 8 = 1000$ .
2. **Answer: A) 90.**  $45\% \text{ of } 200 = 0.45 \times 200 = 90$ .
3. **Answer: B) 40.**  $56 \div 7 \times 5 = 8 \times 5 = 40$ .
4. **Answer: A) 7/12.**  $1/4 + 1/3 = (3 + 4)/12 = 7/12$ .
5. **Answer: D) 300.**  $CP = SP/(1 - \text{loss}\%) = 240/0.8 = 300$ .
6. **Answer: C) 400.**  $CP = SP/(1 + \text{profit}\%) = 500/1.25 = 400$ .
7. **Answer: B) 36.**  $LCM(12,18) = 36$ .
8. **Answer: C) 12.**  $HCF(24,36) = 12$ .
9. **Answer: A) 0.6.** Ratio  $3:5 = 3/5 = 0.6$ .
10. **Answer: B) 15.** Average  $= (10 + 15 + 20)/3 = 45/3 = 15$ .
11. **Answer: B) 2025.**  $45^2 = 2025$ .
12. **Answer: C) 14.**  $\sqrt{196} = 14$ .
13. **Answer: A) 210.** CI for 2 years on 1000 @10%: amount  $= 1000(1.1)^2 = 1210$ ; CI  $= 1210 - 1000 = 210$ .
14. **Answer: D) 150.** Distance  $= 60 \text{ km/h} \times 2.5 \text{ h} = 150\text{km}$ .
15. **Answer: B) 12.**  $15\% \text{ of } 80 = 0.15 \times 80 = 12$ .
16. **Answer: A) 12.**  $0.75 \times 16 = 12$ .
17. **Answer: A) 41.**  $4^2 + 5^2 = 16 + 25 = 41$ .
18. **Answer: B) 50.**  $12.5\% = 0.125$ ;  $0.125 \times 400 = 50$ .
19. **Answer: B) 72.**  $2^3 \times 3^2 = 8 \times 9 = 72$ .
20. **Answer: C) 36.** Perimeter of square  $= 4 \times 9 = 36\text{cm}$ .
21. **Answer: D) 40.** Area rectangle  $= 8 \times 5 = 40$ .
22. **Answer: C) 8.** Work  $= \text{men} \times \text{days} = 8 \times 12 = 96\text{man-days}$ ; with 12 men  $\rightarrow 96/12 = 8\text{days}$ .
23. **Answer: B) 36.**  $18 \div 0.5 = 18 \times 2 = 36$ .
24. **Answer: B) 4.**  $HCF(8,12,20) = 4$ .
25. **Answer: B) 5.**  $2.5\% \text{ of } 200 = 0.025 \times 200 = 5$ .
26. **Answer: A) 450.** SP when CP=500, loss 10%  $\rightarrow 500 \times 0.9 = 450$ .
27. **Answer: C) 8 km/h.** Speed  $= 40 \div 5 = 8\text{km/h}$ .
28. **Answer: A) 1/2.**  $7/14 = 1/2$ .
29. **Answer: B) 3:2.** If  $a:b = 2:3$  then  $b:a = 3:2$ .

30. **Answer: B) 200.**  $500 - 275 - 25 = 200$ .

31. **Answer: C) 12.**  $144 \div 12 = 12$ .

32. **Answer: D) 0.90.** Largest among {0.25, 0.5, 0.75, 0.90} is 0.90.

33. **Answer: D) 100.** 40% of 250 =  $0.4 \times 250 = 100$ .

34. **Answer: C) 90.**  $18 + 27 + 45 = 90$ .

35. **Answer: B) 126.**  $9 \times 14 = 126$ .

36. **Answer: C) 14.**  $3.5 \times 4 = 14$ .

37. **Answer: C) 480.** CP=400, profit 20%  $\rightarrow 400 \times 1.2 = 480$ .

38. **Answer: A) 20.**  $5(6 - 2) = 5 \times 4 = 20$ .

39. **Answer: C) 30.** LCM(5, 10, 15)=30.

40. **Answer: C) 1000.** 1 km = 1000 meters.

41. **Answer: C) 30.**  $3/5$  of 50 =  $0.6 \times 50 = 30$ .

42. **Answer: C) 40.**  $120 \div 3 = 40$ .

43. **Answer: D) 64.**  $8^2 = 64$ .

44. **Answer: B) 12.** Average =  $(8 + 12 + 16)/3 = 36/3 = 12$ .

45. **Answer: B) 60.** Speed =  $180 \div 3 = 60$  km/h.

46. **Answer: A) 1:2.** Ratio 10: 20 = 1: 2.

47. **Answer: C) 500.** SP=450 with 10% loss  $\Rightarrow$  CP =  $450/0.9 = 500$ .

48. **Answer: D) 16.**  $64 \div 4 = 16$ .

49. **Answer: D) 36.** Area square with side 6:  $6^2 = 36$ .

50. **Answer: B) 10.**  $0.2 \times 50 = 10$ .

51. **Answer: D) 27.**  $3^3 = 27$ .

52. **Answer: A) greater.** Compound interest  $\geq$  simple interest for same rate/time (strictly greater if rate/time > 0).

53. **Answer: C) 36.** Train 300 m in 30 s  $\Rightarrow$  speed =  $300/30 = 10$  m/s =  $10 \times 18/5 = 36$  km/h.

54. **Answer: C) 144.**  $12 \times 12 = 144$ .

55. **Answer: C) 0%.** Selling at CP  $\rightarrow$  profit = 0%.

56. **Answer: A) 25? — Correct option is D) 40.** (From question: "A number divided by 5 gives 8. The number is:"  $\rightarrow 5 \times 8 = 40$ . Option D is 40.)

57. **Answer: B) 45.** LCM(9, 15)=45.

58. **Answer: D) 25%.** Savings =  $(2000 - 1500)/2000 \times 100 = 25\%$ .

59. **Answer: C) 30.** Area triangle =  $\frac{1}{2} \times 10 \times 6 = 30$ .

60. **Answer: B) 63.**  $9 \times 7 = 63$ .

61. **Answer: C) 70.**  $18 + 22 + 30 = 70$ .

62. **Answer: C) 11.**  $\sqrt{121} = 11$ .

63. **Answer: D) 75.** 25% of 300 = 75.

64. **Answer: A) 6.** 6 is a factor of 48.

65. **Answer: C) 20.**  $500 \div 25 = 20$ .

66. **Answer: D) 60.**  $2/3$  of 90 = 60.

67. **Answer: D) 60.**  $15 \times 4 = 60$ .

68. **Answer: C) 10%.** Profit% =  $(880 - 800)/800 \times 100 = 80/800 \times 100 = 10\%$ .

69. **Answer: C) 75.**  $10^2 - 5^2 = 100 - 25 = 75$ .

70. **Answer: C) 2.** Smallest prime number is 2.

71. **Answer: C) 66.**  $6 \times 11 = 66$ .

72. **Answer: B) 32.**  $14 + 18 = 32$ .

73. **Answer: C) 160.** Distance =  $4 \times 40 = 160$ km.

74. **Answer: C) 24.** LCM(4,6,8)=24.

75. **Answer: A) 810.** CP=900, loss10%  $\Rightarrow 900 \times 0.9 = 810$ .

76. **Answer: B) 12.5.** Average =  $(5 + 10 + 15 + 20)/4 = 50/4 = 12.5$ .

77. **Answer: B) 5.**  $45 \div 9 = 5$ .

78. **Answer: C) 8.**  $3.5 + 4.5 = 8$ .

79. **Answer: A) 28%.** Successive discounts 20% & 10%  $\Rightarrow$  overall =  $1 - (0.8 \times 0.9) = 0.28 = 28\%$ .

80. **Answer: C) 9.**  $0.6 \times 15 = 9$ .

81. **Answer: A) 64.**  $4^3 = 64$ .

82. **Answer: C) 60.** 75% of 80 =  $0.75 \times 80 = 60$ .

83. **Answer: A) 5.** By Pythagoras  $\sqrt{4^2 + 3^2} = \sqrt{16 + 9} = \sqrt{25} = 5$ .

84. **Answer: C) 9.**  $72 \div 8 = 9$ .

85. **Answer: C) 48.**  $3/4$  of 64 = 48.

86. **Answer: C) 154.** Area =  $\pi r^2 = \pi \times 7^2 \approx 153.94 \approx 154$ .

87. **Answer: D) 690.**  $600 \times 1.15 = 690$ .

88. **Answer: C) 20.**  $1/5$  of 100 = 20.

89. **Answer: B) 544.**  $1000 - 456 = 544$ .

90. **Answer: D) 12.**  $\text{LCM}(2,3,4,6)=12$ .

91. **Answer: A) 21.**  $7 + 7 \times 2 = 7 + 14 = 21$ (BODMAS).

92. **Answer: D) 1/5.** Smallest among  $\{1/2,1/3,1/4,1/5\}$  is  $1/5$ .

93. **Answer: D) 150.**  $30\% \text{ of } 500 = 150$ .

94. **Answer: C) 98.** For square with diagonal  $d$ : area =  $d^2/2 = 14^2/2 = 196/2 = 98$ .

95. **Answer: C) 20%.** Profit =  $240 - 200 = 40$ . Profit% =  $40/200 \times 100 = 20\%$ .

96. **Answer: C) 20.**  $6^2 - 4^2 = 36 - 16 = 20$ .

97. **Answer: C) 4.** Time =  $100 \div 25 = 4$ hours.

98. **Answer: D) 10.** HCF(20,30)=10.

99. **Answer: D) 9.** 9 is composite ( $3 \times 3$ ).

100. **Answer: C) 143.**  $11 \times 13 = 143$ .