PRACTICE SET OF QUANTITATIVE APTITUDE FOR SBI CLERK PRELIMS
SOLUTIONS

36. (b); Let required people $= x$
$\therefore \frac{3500+x}{4500} = \frac{11}{9}$
$x = 2000$

37. (c); Total No. = 25000
No. of people from Q and U together = 8000
$\therefore$ Required percentage$= \frac{8000}{25000} \times 100 = 32\%$

38. (a); 18% of the total No. of people $= \frac{18}{100} \times 25000 = 4500$
Required cities = P, S, U

39. (d); Required % $= \frac{4500-3500}{3500} \times 100$
$= \frac{1000}{3500} \times 100$
$= 28.59$
$\approx 29\%$

40. (e); Ratio = 4000 : 5000 = 4 : 5

41. (d); 56 + 5.4 – 3 = 58.4

42. (e); 8063 – 5580 = 2483

43. (a); $(31)^{31-27} = (31)^4 = (961)^2$

44. (a); 746.64

45. (c); 85.26 – 62.25 = 23.01

46. (e); $\frac{996}{40} = 24.9$

47. (a); 683.48 – 569.24
= 114.22

48. (d); $\frac{(2\times999)(2\times588)}{999\times588} = 2 \times 2 = 4$

49. (d); $\frac{\frac{1}{5}+99\times1000}{4} = 24750$

50. (a); $\frac{(52-47)(52+47)}{99} = \frac{5\times99}{99} = 5$

51. (c); (30 + 5 = 35), (35 + 30 = 65), (65 + 35 = 100), (100 + 65 = 165)……..
$\therefore$ 265 + 165 = 430

52. (c); Prime No. series

53. (e); +1, –2, +3, –4
$\therefore$ 14 + 5 = 19

54. (a); $5^5, 4^4, 3^3, 2^2, 1^1$
$\therefore 3^3 = 27$

55. (b); $2 \times 3 = 6, 6 \times 3 = 18, 18 \times 6 = 108$
$\therefore 108 \times 18 = 1944.$

56. (c); Let edge of square $= x$
$\therefore 144x^2 = 400(x-2)^2$
$9x^2 = 25(x^2 + 4 - 4x)$
$9x^2 = 25x^2 + 100 - 100x$
$16x^2 - 100x + 100 = 0$
$\Rightarrow 4x^2 - 25x + 25 = 0$
$4x^2 - 20x - 5x + 25 = 0$
$4x(x-5) - 5(x-5) = 0$
$x = 5, \frac{5}{4}$
$\therefore$ edge = 5 cm
$\therefore$ initially area = 144 × 25 = 3600 cm^2

57. (a); Required weight $= (49 \times 6 + 52 \times 6) - 50 \times 11$
$= 606 - 550$
= 56 kg

58. (b); Let Boys $= x$
Girls $= y$
$\therefore 23.25 = \frac{(30x+20y)}{x+y}$
$23.25x + 23.25y = 30x + 20y$
$6.75x = 3.25y$
$\frac{x}{y} = \frac{13}{27}$

59. (c); Cost Price $= 1080 \times \frac{88}{100} \times \frac{100}{108} = 880$

60. (b); Let fixed charges $= x$
Other charges $= y$
$\therefore x + 10y = 6000$ ……(i)
$x + 25y = 25 \times 360$
$x + 25y = 9000$ ……(ii)
By solving equation (i) and (ii)
$15y = 3000 \Rightarrow y = 200$
$\therefore x + 2000 = 6000$
$x = 4000$
Expense of 40 guests = 4000 + 40 × 200
= 4000 + 8000
= 12000

61. (c); Raju = 10 days
Vicky = 12 days
Tinku = 15 days
Part of the work by all of them in 1 day $= \frac{6+5+4}{60} = \frac{1}{4}$
2 days work $= \frac{1}{2}$
Work Remaining $= 1 - \frac{1}{2} = \frac{1}{2}$
Let the work be completed in x days
$\frac{x}{15} + \frac{x-3}{12} = \frac{1}{2} \Rightarrow \frac{4x+5x-15}{60} = \frac{1}{2}$
$\Rightarrow 9x - 15 = 30$
$\Rightarrow 9x = 45 \Rightarrow x = 5$
$\therefore$ Total days = 5 + 2 = 7 days

62. (c); $66 = \frac{2200\times t\times2}{100}$
$t = \frac{3}{2} = 1\frac{1}{2}$

63. (a); Ratio of their investment = 54000 : 90000
= 3 : 5
B's profit = 3600 – 1800 = 1800
A's profit $= \frac{1800}{5} \times 3 = 360 \times 3 = 1080$
$\therefore$ A's commission = 1800 – 1080 = 720
$\therefore$ % commission $= \frac{720}{3600} \times 100 = 20\%$

64. (b); CP $= \frac{100}{92} \times 1380$
Required price $= \frac{108}{100} \times \frac{100}{92} \times 1380 = 1620$

65. (a); Let no. of rows $= x$
NO. of chairs in each row $= 3x$
$\therefore 3x^2 = 2187$

$x^2 = 729$

$x = 27$

66. (e); Part of the property, widow get $= 1 - \left(\frac{5}{11} + \frac{30}{121}\right)$

$= 1 - \frac{85}{121}$

$= \frac{36}{121}$

$\frac{36}{121}$ of the part $= 3600$

$\therefore$ Full property $= 3600 \times \frac{121}{36} = 12100$

$\therefore$ Share of elder son $= \frac{5}{11} \times 12100$

$= 5 \times 1100$

$= 5500$

Share of younger son $= \frac{30}{121} \times 12100 = 3000$

67. (c); Let initial investments be $5x$ and $7x$

Let B invested money for y months

$\therefore \frac{5x \times 7}{7x \times y} = \frac{1}{2}$

$70 = 7y$

$\therefore y = 10$ months

68. (b); $\frac{4}{5} = 80\%$

(80 – 45) = 35% of the no. = 56

65% of the no. = $\frac{56}{35} \times 65 = 104$

69. (a); Labour's Cost Price $= \frac{4}{9} \times 900 = 400$

Profit on Labour $= \frac{20}{100} \times 400 = 80$

$\therefore$ Marked price $= 900 + 80 = 980$

70. (b); In 1 hour, Subhash can copy $= \frac{50}{10} = 5$ pages

In 1 hour, both can copy $= \frac{300}{40} = 7.5$ pages

$\therefore$ In 1 hour Prakash can copy $= 7.5 - 5 = 2.5$ pages

$\therefore$ Required time $= \frac{30}{2.5} = 12$ hrs.