

MEMORY BASED SBI CLERK PRE (SOLUTIONS)
MATHS

36. (a); $81.2 + 52.2 = 133.4$
 37. (a); $66.6 + 99.9 = 166.5$
 38. (c); $149834 - 85973 = 63861$
 39. (b); $33^{7+1} = 33^{7.8+1.2-5}$
 $\therefore ? = 9 - 5 - 1 = 3$
 40. (d); $?^2 = 529 \times 324$
 $\therefore ? = 23 \times 18 = 414$
 41. (d); Total No. of crimes in HP = 36903
 42. (b); Ratio = 210 : 520
 $= 21 : 52$
 43. (e); $= \frac{2119+14220}{16}$
 $= \frac{16339}{16}$
 ≈ 1021
 44. (b); Required $= \frac{628}{1577} \times 100$
 $= 39.82\%$
 45. (c); Required difference = $1577 - 1432 = 145$
 46. (c); $? = 7682 - 4909 = 2773$
 47. (b); $\sqrt{?} = \sqrt{2601} - 14 = 51 - 14 = 37$
 $? = 1369$
 48. (c); $\frac{85}{100} \times 420 + \frac{x}{100} \times 1080 = 735$
 $\Rightarrow x = 35$
 49. (d); 980
 50. (b); $? = 367.5 - 355.2$
 $= 12.3$
 51. (a); Let Required quantity = x
 $\frac{21}{9+x} = \frac{3}{2}$
 $42 = 27 + 3x$
 $3x = 15$
 $x = 5$
 52. (e); Let sum = x
 $x \times \frac{15}{12} \times 7.5 \times \frac{1}{100} - x \times 12.5 \times \frac{8}{12} \times \frac{1}{100} = 3250$
 $\frac{3}{32}x - \frac{x}{12} = 3250$
 $\frac{9x-8x}{96} = 3250$
 $x = 96 \times 3250$
 $x = 312000$
 53. (a); Let men's 1 day work = x
 Let women's 1 day work = y
 $4x + 3y = \frac{1}{6}$ (i)
 $5x + 7y = \frac{1}{4}$ (ii)
 $\therefore$ By solving eqn. (i) and (ii) —
 $y = \frac{1}{78}$ $x = \frac{5}{156}$
 $\therefore$ Required days $= \frac{1}{\frac{1}{78} + \frac{5}{156}} = \frac{1}{\frac{2+5}{156}} = \frac{156}{7} = 22\frac{2}{7}$
 54. (c); Let B invested money for x months.
 $\therefore 5 \times 7 : 7 \times x = 1 : 2$
 $\therefore 35 : 7x = 1 : 2$
 $7x = 35 \times 2$
 $x = 10$ months
 55. (a); Let initial men = 100
 Lost in war $= \frac{10}{100} \times 100 = 10$
 Lost in diseases $= \frac{10}{100} \times 90 = 9$
 Disables $= \frac{81}{100} \times 90 = 8.1$
 $\therefore$ Remaining men = 72.9
 When 72.9 remaining total men = 100
 When 729000 remaining total men = 1000000
 56. (a); When compounded yearly,
 Student = 200
 When compounded half - yearly
 $r = 2\%$, $n = 2$
 $\therefore$ interest = 202
 $\therefore$ difference = 202 - 200
 57. (d); speed of john = 30 km/hr
 Speed of max = 40 km/hr
 Let distance b/w p and m = x km
 $\frac{650-x}{30} = \frac{x}{40} + 3$
 $7x = 2240$
 $x = 320$ km
 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); $\frac{4}{5} = 80\%$
 $(80 - 45) = 35\%$ of the no. = 56
 65% of the no. $= \frac{56}{35} \times 65 = 104$
 61. (b) $\frac{24}{u} + \frac{54}{v} = 6$ (1)
 $\frac{36}{u} + \frac{48}{v} = 8$ (2)
 eqn (1) $\times 3$ - eqn (2) $\times 2$
 $\frac{72}{u} + \frac{162}{v} = 18$
 $\frac{72}{u} + \frac{96}{v} = 16$
 $\frac{u}{66} = 2$
 $u = 132$
 Put in the eqn (1)

$$\frac{24}{u} + \frac{54}{33} = 6$$

$$u = 5.5$$

∴ Speed of the man in still water

$$= \frac{33+5.5}{2} = \frac{38.5}{2}$$

$$= 19.25 \text{ kmph}$$

$$62. (d) \frac{x - \frac{25x}{100}}{y + \frac{250y}{100}} = \frac{6}{5}$$

$$\frac{75x}{350y} = \frac{6}{5}$$

$$75x = 420y$$

$$\frac{x}{y} = \frac{420}{75}$$

$$\frac{x}{y} = \frac{28}{5}$$

$$\frac{x}{y} = \frac{28}{5}$$

$$63. (b) \text{ Required area} = \frac{22}{7} \times 7 \times 7$$

$$= 154 \text{ cm}^2$$

64. (b); Since winning candidate and his rival got 70% of total votes.

$$\therefore 34 + 36 = 70$$

$$\text{Required minimum margin} = 36 - 34 = 2$$

$$65. (d); \text{ Net Change} = 20 - 25 - \frac{25 \times 20}{100}$$

$$= 0 - 5 - 5$$

$$= -10\%$$

$$66. (a); \div 2 - 1 = 23, \div 2 - 1 = 10.5, \div 2 - 1 = 4.25 \dots\dots$$

$$67. (a); 2 + 13 = 15, 15 + 26 = 41, 41 + 39 = 80, 80 + 52 = 132$$

$$\therefore 132 + 65 = 197$$

$$68. (a); 51975 \div 11 = 4725, 4725 \div 9 = 525,$$

$$525 \div 7 = 75, 75 \div 5 = 15,$$

$$15 \div 3 = 5$$

$$69. (b); 4 + 15 = 19, 19 + 30 = 49, 49 + 60 = 109,$$

$$109 + 120 = 229$$

$$70. (b); 840 \div 1 = 840, 840 \div 2 = 420, 420 \div 3 = 140,$$

$$140 \div 4 = 35, 35 \div 5 = 7$$