S51. Ans.(c)

Sol. Required central angle $= \frac{22}{100} \times 360$

$= 79.2°$

S52. Ans.(b)

Sol. Total number of items purchased by $P = \frac{90}{36} \times 100$

$= 250$

Required no. of items unsold $= (250 - 90)$

$= 160$

S53. Ans.(a)

Sol. Required no. of item sold $= 121 + 144$

$= 265$

S54. Ans.(a)

Sol. $\frac{80-x}{100-x} = \frac{2}{3}$

$x = 40$

Required no. of items $= 40 + 40$

$= 80$

S55. Ans.(e)

Sol. Item B $= \frac{58}{100} \times 500$

$= 290$

Item A $= (500 - 290) = 210$

Required difference $= (290 - 210) = 80$

S56. Ans.(b)

Sol. $S + R + M = 114$

$S + R = 82$

$M + H = 86$

$\therefore M = 32$

$\therefore$ Required Age $= (86 - 32)$

$= 54$ years.

S57. Ans.(b)

Sol. Distance covered along the stream = $3d$

Distance covered against the stream = $2d$

Let speed of boat in still water = x km/hr

Let speed of current = y km/hr

$\therefore \frac{21}{x+y} = \frac{7}{5}$

$x + y = 15$ ....(i)

And $\frac{3d}{(x+y)} = \frac{90}{100} \times \frac{2d}{x-y}$

$x - y = 9$ ....(ii)

$\therefore x = 12$

$y = 3$

$\therefore$ Rate of current = 3 km/hr

S58. Ans.(c)

Sol. Required probability $= \frac{3}{15} \times \frac{10}{22} = \frac{1}{11}$

S59. Ans.(b)

Sol. Let there investment in Ist year = $5x, 4x, 7x$

Time = 1 year, $\frac{3}{4}$ year, $\frac{1}{2}$ year

Investment in second year = $10x, 4x, 7x$

Time = 1 year, $\frac{3}{4}$ year, $\frac{1}{2}$ year

Ratio of profit = 15 : 6 : 7

Share of B $= \frac{6}{28} \times 14000 = 3000$ Rs.

S60. Ans.(d)

Sol. $\frac{X \times 75 \times 5}{100} + (X + 300)\left[\left(1 + \frac{10}{100}\right)^2 - 1\right] = 4383$

$0.75X + 0.21X + 63 = 4383$

$X = 4500$

$(X + 300) = 4800$

Total investment = 9300 Rs.

S6. Ans.(b)

Sol. $\frac{4X+15}{X} = \frac{19}{4}$

$X = 20$

Total milk = 20

Milk in jar B $= \frac{1}{5} \times 20 = 4$L

S61. Ans.(a)

Sol. Required difference $= (42 + 24 + 14) - (36 + 32 + 24)$

$= 12$ thousand

or 12000

S62. Ans.(d)

Sol. Required difference $= 48000 - 22000 = 26000$

S63. Ans.(d)

Sol. No. of viewers of theatre A in October $= \frac{5}{7} \times \left(\frac{32+24}{2}\right) = 20$ thousand

S64. Ans.(c)

Sol. Total viewers in march 2016 = 100800

Viewers of theatre A in March 2016 = 55000

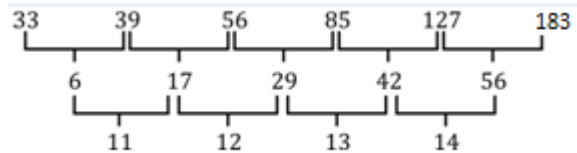Viewers of theatre B in march 2016 = 100800 – 55000 = 45800

Required difference = 45800 – 28000 = 17800

S65. Ans.(d)

Sol. Required ratio $= \frac{(42+14)}{(20+32)} = 14 : 13$

S66. Ans.(c)

Sol.

$\therefore$ 183 not, 185

$\times 1 + 2), (\times 2 + 3), (\times 3 + 4), (\times 4 + 5), \ldots\ldots\ldots$

$\therefore 67 \times 4 + 5 = 273$, not 275

$\times 0.5 + 0.5), (\times 1 + 1), (\times 1.5 + 1.5), (\times 2 + 2), \ldots\ldots$

$\therefore 9 \times 2 + 2 = 20$ not 21

$\times 3 - 18), (\times 3 - 18), (\times 3 - 18), \ldots\ldots\ldots$

$\therefore 13 \times 3 - 18 = 21$ not 27

Sol. × 2.× 2.5,× 3,× 3.5 … ..

∴ 45 × 3.5 = 157.5 not 157

S71. Ans.(b)

Sol. $\frac{4X+15}{X} = \frac{19}{4}$

$X = 20$

Total milk = 20

Milk in jar B = $\frac{1}{5} \times 20 = 4$L

S72. Ans.(b)

Sol. Ratio of efficiency = $5 \times \frac{5}{6} : 6$

= 25 : 36

Let a man can finish the work in $25x$ days

A woman can finish the work in $36x$ days

$\frac{9}{36x} + \frac{10}{25x} = \frac{13}{40}$

Time taken by 1 women = 72 days

No. of women required to complete the work in 4.5 days

$= \frac{72}{4.5} = 16$

S73. Ans. (b)

	Boys (50)	Girls (35)
Only Badminton	25	14
Badminton + TT	5	7
Only. TT	20	14

S74. Ans. (a) Let cp of mouse = x

Cp of laptop = 15x

Total SP = $16x \times 1.3 = 20.8x$

SP of laptop = $15x \times 1.25 = 18.75x$

SP of mouse = 2.05x, profit = 1.05x = 2100, x = 2000, 15x = 30000

S75. Ans. (c) Let MP of shirt = 100

MP of trouser = 200

Discounted price of shirt = 60

Let discounted price of trouser = x

$60 + x = \frac{70}{100} \times (100 + 200)$

$x = 150$

Discount $= \frac{(200-150)}{200} \times 100 = 25\%$

S76. Ans.(a)

Sol. 8000 → 14000

$7000 \to \frac{14}{8} \times 7000 = 12250$

Then profit made by A in 2014 = $49000 - (14000 + 12250)$

= 22750 Rs.

∴ 14000 → 8000

$22750 \to \frac{8}{14} \times 22750 = 13000$

∴ Required Ratio = 5000 : 13000

= 5 : 13

S77. Ans.(c)

Sol. 6 × A : 4B = 50 : 44

A : B = 25 : 33

A= 25000

B= 33000

$\frac{33000 \times 4}{9000x} = \frac{44}{24}$

X = 8 months

S78. Ans.(d)

Sol. 23000 → 115000

$21000 \to \frac{115000}{23000} \times 21000$

Profit of B in 2012 = 105000

Since profit of all in 2016 is not given, we can't determine the required ratio.

S79. Ans.(d)

Sol. Required % = $\frac{82500-37000}{37000} \times 100$

= 123%

S80. Ans.(b)

Sol. Let investment by C in 2016 = x

$\frac{11000+20000}{20000+x} = \frac{31}{52}$

$x = 32000$

∴ Ratio of their investment = 11 : 20 : 32

Required profit = $\frac{21}{63} \times 445500 = 148500$ Rs.

S81. Ans.(b)

Sol. ∠O = 2 × 55° = 110

x° = 180 - (75° + (90°- 35°))

x° = 50°

so, x < 55°

S82. Ans.(a)

Sol.

$(x^a)c = x^c$

$ac = c$

$a = 1$

$\frac{x^{2b}}{x^a} = x^{5a} \times x^d \times x^b$

Or, 2b - a = 5 + d + b

b = 6a + d

b = 6 + d

so b > d

S83. Ans.(b)

Sol. Let us take the value of a = 1 & b = 1 putting this in the equation we get

x = 1

So, x < 1.5

S84. Ans.(b)

Sol. Probability that both balls are either Red or White

$= \frac{^4C_2 + {}^6C_2}{^{20}C_2} = \frac{6 + 15}{190} = \frac{21}{190}$

Probability that both bolls are of different colours (RWO, RWB, WOB and ROB) = $\frac{(4 \times 6 \times 2)+(4 \times 6 \times 8)+(6 \times 2 \times 8)+(4 \times 2 \times 8)}{^{20}C_3} = \frac{20}{57}$

Quantity I < Quantity II

S85. Ans.(d)

Sol.

	A	B
	CP	CP
MP →	1.4 CP	1.4 CP
SP →	1.4 CP × 0.75	1.4CP × 0.80

Profit = (1.4 × 0.75 CP + 1.4 × 0.80 CP) - 2CP

34 = 0.17CP

CP = 200

1.25x - x = 25
0.125x = 25
x = 200
So, quantity I = Quantity II

S86. Ans.(d)
Sol. $36\sqrt{x} + 32\sqrt{x} = \frac{68}{11} \times x$
$$68\sqrt{x} = \frac{68}{11} \times x$$
$$\sqrt{x} = 11$$
$$x = 121$$
S87. Ans.(a)
Sol. $9 + 100 + 64 + 16 \approx 190$
S88. Ans.(b)
Sol. $\approx 19 \times 19 + 19$
$$\approx 19 \times 20$$
$$\approx 380$$
S89. Ans.(d)
Sol. $1235 + 6 \times 15 = 53 \times \sqrt{x}$
$$\sqrt{x} = 25$$
$$x = 625$$
S90. Ans.(e)
Sol. $\frac{2850}{50} = 57$

S91. Ans.(c)
Sol. The quantity of each gradient A & B in the mixture is not known, so, the cost price of the mixture cannot be found out from the available statements. Hence profit percentage cannot be known.

S92. Ans.(d)
Sol. In the question asked, there are two unknowns (work rate of men and work rate of women). Three statements will form three distinct equations. In the question itself, one equation is formed. So, any one of the given statements is sufficient. Therefore, any two of three statements can be dispensed with.

S93. Ans.(c)
Sol. Statement I gives the same equation as statement III , so any one of these 2 statements can be dispensed with.

S94. Ans.(d)
Sol. In I the amount spent on food and on medicine, education has been indicated in percentage, but nothing has been mentioned for savings amount. In II, the amount spent on food has been given in Rupees and in III, the amount spent on medicine & education has been given in Rupees. So, combining the percentage value of I and rupees value of II or the percentage value of I and its rupees value of III, the amount saved can be found out. So either II or III can be dispensed with.

S95. Ans.(c)
Sol. From statement III CP is known. So, by using any of the remaining statements we can get the answer. So either I or II can be dispensed with.
Solution (96-100)
Total employees (450)
        Officers – 200

Clerks – 250

HRM (50)	Off – 10 Clerk – 40
Computer – Skills (90)	Off – 20 Clerk – 70
Financial skills (87)	Off – 40 Clerk – 47
HRM + CS (45)	Off – 20 Clerk – 25
HRM + FS (130)	Off – 80 Clerk – 50
C5 + F5 (21)	Off – 12 Clerk – 9
All (27)	Off – 18 Clerk – 9

S96. Ans.(b)
Sol. Required Officers taking training in HRM = 10 + 80 + 18 + 20 = 128
S97. Ans.(d)
Sol. Clerks training in CS but not in HRM = 70 + 9 = 79
S98. Ans.(e)
Sol. Employees taking training in FS but not in HRM = 87 + 21 = 108
S99. Ans.(a)
Sol. Required Clerks = 47+ 50 + 9 + 9 = 115
S100. Ans.(c)
Sol. Required % $= \frac{20+20}{200} \times 100 = 20\%$

Prepp

Latest Sarkari jobs, Govt Exam alerts, Results and Vacancies

▶ Latest News and Notification

▶ Exam Paper Analysis

▶ Topic-wise weightage

▶ Previous Year Papers with Answer Key

▶ Preparation Strategy & Subject-wise Books

To know more **Click Here**

www.prepp.in