# 许CAREER POWER <br> <br> AN IIT／IM ALபMNI C口MPANY <br> <br> AN IIT／IM ALபMNI C口MPANY <br> <br> SECTION－WISE QUANT SET FOR SIDBI EXAM 

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## QUANTITATIVE APTITUDE

Directions（51－55）：Each of the questions below consists of a question and two statements numbered I and II given below it．You have to decide whether the data provided in the statements are sufficient to answer the questions．Read both the statements and give answer：
1）if the data in statement I alone are sufficient to answer the question，while the data in statement II alone are not sufficient to answer the question．
2）if the data in statement II alone are sufficient to answer the question，while the data in statement I alone are not sufficient to answer the question．
3）if the data either in statement I alone or in statement II alone are sufficient to answer the question．
4）if the data even in both the statements I and II together are not sufficient to answer the question．
5）if the data in both the statements I and II together are necessary to answer the question
51． 3 men and one woman can complete a piece of work in 4 days．How many days will it take for 2 women and 2 men to complete the same work？
I． 5 women can complete the same piece of work in 4 days
II． 2 men and one woman together can complete the same piece of work in 5 days．
Directions（56－60）Following table shows the number of items（in thousands）produced by four different companies（A，B，C and D）and the ratio of sold（S）to unsold（US）items among them．

| Company 0 | A |  | B |  | C |  | D |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year $0^{2}$ | Total | S：US | Total | S：US | Total | S：US | Total | S：US |
| $\mathbf{2 0 0 6}$ | 45.5 | $4: 03$ | 64.8 | $5: 03$ | 42.14 | $4: 03$ | 50 | $3: 02$ |
| $\mathbf{2 0 0 7}$ | 48.6 | $5: 4$ | 70.15 | $3: 02$ | 49.5 | $4: 05$ | 52.7 | $8: 09$ |
| $\mathbf{2 0 0 8}$ | 40 | $2: 3$ | 77.11 | $5: 06$ | 51 | $9: 08$ | 56.4 | $1: 01$ |
| $\mathbf{2 0 0 9}$ | 55 | $3: 2$ | 86.4 | $5: 03$ | 54 | $1: 01$ | 51 | $2: 01$ |
| $\mathbf{2 0 1 0}$ | 64.4 | $3: 4$ | 85 | $8: 09$ | 66.22 | $6: 05: 00$ | 60.5 | $2: 03$ |
| $\mathbf{2 0 1 1}$ | 68 | $5: 3$ | 81.18 | $5: 04$ | 66.8 | $5: 03$ | 62.1 | $3: 02$ |

56．What is the number of items sold by Company A in all six years together？（Answer options are in thousands）
1） 168.4
2） 171.6
3）172．1
4） 173.2
5）None of these

57．What is the average number of items produced by Company D in all six years（Answer options are in thousands）．
1） 54.25
2） 55.45
3） 56.75
4） 57.5
5）None of these

58．The number of items sold by Company D in the year 2009 is what percentage of the number of items which remain unsold by Company D in the year 2006？
1） $58.82 \%$
2） $80 \%$
3） $120 \%$
4） $150 \%$
5） $170 \%$
2）if $p>q$
1）If $p<q$
3）if $p \leq q$
4）if $p \geq q$
5) if $q=p$ or the relationship can't be established.
61. I. $p^{2}-7 p=-12 \quad$ II. $q^{2}-3 q+2=0$
62. I. $12 p^{2}-7 p=-1$ II. $6 q^{2}-7 q+2=0$
63. I. $p^{2}+12 p+35=0 \quad$ II. $2 q^{2}+22 q+56=0$
64. I. $p^{2}-8 p+15=0 \quad$ II. $q^{2}-5 q=-6$
65. I. $2 p^{2}+20 p+50=0 \quad$ II. $q^{2}=25$
66. The radii of the bases of cylinder and a cone are in the ratio of $5: 4$ and their heights are in the ratio $4: 5$. Find the ratio of their volumes.
A. $5: 4$
B. $4: 15$
C. $15: 4$
D. $4: 5$
E. None of these
67. There are 3 red balls, 4 blue balls and 5 white balls. 2 balls are chosen randomly. Find probability that 1 is red and the other is white.
A. $5 / 22$
B. $5 / 23$
C. $7 / 22$
D. $4 / 9$
E. None of these
68. A does a work in 15 days, and $B$ does the same work in 16 days. A and B started the work, and after 6 days B left. A completed the remaining work. Find the total number of days after which the work will be completed?
A. 7 days
B. $83 / 4$ days
C. 9 days
D. $93 / 8$ days $\quad$ E. None of these
69. A man can row $93 / 5 \mathrm{~km} / \mathrm{hr}$ in still water and he finds that it takes him twice as much time to row up than as to row down the same distance in river. The speed ( $\mathrm{km} / \mathrm{hr}$ ) of the current is
A. 2
B. $21 / 2$
C. $31 / 5$
D. 5
E. None of these
70. A bike during a fog passes a man who was walking at the rate of $3 \mathrm{~km} / \mathrm{hr}$ in the same direction. He could see the bike for 4 min and it was visible to him up to a distance of 100 m . What was the speed of the bike?
$\begin{array}{lll}\text { A. } 41 / 3 \mathrm{~km} / \mathrm{hr} & \text { B. } 42 / 3 \mathrm{~km} / \mathrm{hr} & \text { C. } 41 / 2 \mathrm{~km} / \mathrm{hr}\end{array}$
D. $4 \mathrm{~km} / \mathrm{hr}$
E. None of these
71. A train normally covers a certain distance at a speed of 60 $\mathrm{km} / \mathrm{hr}$. However, if it were to halt for a fixed time interval in each hour its average speed reduced to $50 \mathrm{~km} / \mathrm{hr}$. What is the time interval for which the train halt in each hour?
(a) 10 minutes
(b) 20 minutes
(c) 6 minutes
(d) 12 minutes
(e) none of these
72. The average age of all the 100 employees in an office is 29 years, where $2 / 5$ employees are ladies and the ratio of average age of men to women is $5: 7$. The average age of female employees is:
(a) 18 years
(b) 35 years
(c) 25 years
(d) 30 years
(e) none of these
73. In the 75 liters of mixture of milk and water, the ratio of milk and water is $4: 1$. The quantity of water required of make the ratio of milk and water 3:1 is:
(a) 1 litre
(b) 3 litres
(c) 4 litres
(d) 5 litres
(e) none of these
74. Rs. 69 were divided among 115 students so that each girl gets 50 paise less than a boy. Thus each boy received twice the paise as each girl received. The no. of girls in the class is:
(a) 92
(b) 42
(c) 33
(d) 23
(e) 48
75. $A$ and $B$ are partners in a business. They invest in the ratio $5: 6$, at the end of 8 months A withdraws. If they receive
profits in the ratio of 5:9, find how long B's investment was used?
(a) 12 months
(b) 10 months
(c) 15 months
(d) 14 months
(e) 18 months

Direction (76-80) : In a sports event there are three categories of race ( $100 \mathrm{~m}, 200 \mathrm{~m}, 400 \mathrm{~m}$ ). Total 200 athletes participated in that event. The number of athletes who participated only in 100 m race is $30 \%$ of total number of athletes, and among them $1 / 3$ rd are females. Number of athletes who participated in 200 m race only is $15 \%$ of total number of athletes and among them 40\% are females. Number of athletes who participated only in 400 m race is $1 / 4$ of total number of athletes and among them half are females. Number of athletes who participated in 100 m and 200 m race but not in 400 m race is $1 / 10$ of total number of athletes and among them $1 / 4$ are females. Number of athletes who participated in 100 m and 400 m race but not in 200 m is $7.5 \%$ of total number of athletes and among them $8 / 15$ are females. Number of athletes who participated in all three categories is $1 / 20$ of total number of athletes and among them $1 / 5$ are females. Number of female atheletes who participate 200 m and 400 m race but not in 100 m race is $8 / 15$ of rest.
76. What is the number of female athletes who participated in exactly two categories of race?

1) 20
2) 21
3) 23
4) 24
5) 25
77. What is the difference between the total number of male athletes and the number of female athletes who participated in exactly one category?
1) 61
2) 63
3) 65
4) 65
5) 67
6) 69
78. What is the ratio of the total number of athletes who participated in 200 m and 400 m race but not in 100 m race to the male athletes among them?
1) $15: 11$
2) $15: 8$
3) $15: 7$
4) $15: 13$
5) $8: 7$
79. What is the number of male athletes who participated in at most two categories of race?
1) 104
2) 106
3) 108
4) 110
5) 112
80. The number of male athletes who participated in all three categories of race is what percentage of total number of female athletes?
1) $10 \%$
2) $20 \%$
3) $30 \%$
4) $40 \%$
5) None of these

Directions (Q. 81-85): Study the following pie-chart carefully to answer these questions: Percentage wise distribution of players who play five different sports.
Total players are 4200, out of which female players are equal to 2000

81. What is the average number of players (both male and female) who play Football and Rugby together?

1) 620
2) 357
3) 230
4) 630
5) None of these
82. What is the difference between the number of female players who play Lawn Tennis and the number of male players who play Rugby?
1) 94
2) 84
3) 220
4) 240
5) None of these
83. What is the ratio of the number of female players who play Cricket to the number of male players who play Hockey?
1) $20: 7$
2) $4: 213) 20: 3$
3) $3: 20$
4) None of these
84. What is the total number of the male players who play Football, Cricket and Lawn tennis together?
1) 1,724
2) 1,7343$) 1,824$
3) 1,964
4) None of these
85. The number of male players who play Rugby is approximately what percentage of the total number of players who play Lawn Tennis?
1) 33
2) 39
3) 26
4) 21
5) 43

Directions (86-90): Study the following graphs which show the number of workers of different categories of a factory for two different years. The total number of workers in 1998 was 2000 and in 2000 was 2400.

86. In which of the categories is the number of workers same in both the year?
(1) P
(2) S
(3) R
(4) T
(5) U
87. Find the percentage increased in the number of workers in categories U in 2000 form 1998.
(1) $125 \%$
(2) $133 \frac{1}{3} \%$
(3) $150 \%$
(4) $166 \frac{1}{3} \%$
(5) $170 \%$
88. What is the total number of increased workers for the categories in which the number of workers has been increased?
(1) 568
(2) 382
(3) 408
(4) 168
(5) 525
89. Which categories have shown decrease in the number of workers from 1998 to 2000?
(1) P
(2) Q and S
(3) R and S
(4) T
(5) U and Q
90. Find the maximum difference between the number of workers of any two categories taken together for any one year and that of any two for the other year.
(1) 656
(2) 416
(3) 636
(4) 392
(5) 450
91. A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is:
A. $1 / 13$
B. $2 / 13$
C. 1/26
D. $1 / 52 \quad$ E. None of these
92. A bag contains 4 white, 5 red and 6 blue balls. Three balls are drawn at random from the bag. The probability that all of them are red, is:
A. 1/22
B. 3/22
C. 2/91
D. $2 / 77$
E. None of these
93. Two cards are drawn together from a pack of 52 cards. The probability that one is a spade and one is a heart, is:
A. $3 / 20$
B. $29 / 34$
C. $47 / 100$
D. $13 / 102$
E. None of these
94. One card is drawn at random from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen and King only)?
A.1/13
B. $3 / 13$
C. $1 / 4$
D. $9 / 52$
E. None of these
95. A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?
A. $3 / 4$
B.4/7
C.1/8
D. $3 / 7$
E. None of these

Directions (96-100) : What should come in place of the question mark (?) in the following number series?
96. 1548 516 $129 \quad 43$ ?
(1) 11
(2) 10.75
(3) 9.5
(4) 12
(5) None of these
97. 949189.8 ? $22.776 \quad 11.3886 .8328$
(1) 48.24
(2) 53.86
(3) 74.26
(4) 56.94
(5) None of these
98. $121 \quad 144 \quad 190 \quad 259$ ? 466
(1) 351
(4) 328
(2) 349
(3) 374
(5) None of these
99. 14

$$
\text { (1) } 3168
$$

$43.5 \quad 264$ ? 76188
(4) 1590
(2) 3176
(3) 1587
100. 41164
(1) 104244
(2) 94644
(3) 94464
(4) 102444
(5) None of these


