# $\mp$ CAREER POWER <br> AN IIT/IM ALபMNI CロMPANY <br> <br> IBPS IT OFFICER MOCK <br> <br> IBPS IT OFFICER MOCK <br> <br> REASONING APTITUTDE 

 <br> <br> REASONING APTITUTDE}

1. (1) 16 km
2. (4) West
3. (4) Prashant, Mamta

## Solutions (4-8):

4. (5) From both the statements it is clear that Divya was born in month of July.
5. (5) using both the statements it is found that 'those' is written as 'so'
6. (3) From I, Ajay's rank can be known by using his top and bottom rank. Therefore Sumit's can be found. From II, Ashu's rank can be known by using his top and bottom rank. Therefore Sumit's can be found.
7. (4)
8. (2) From II, A C D B

Solutions (9-13):

| Student | Standard | Subject |
| :--- | :--- | :--- |
| P | V | Geography |
| Q | VII | History |
| R | VI | English |
| S | IV | Maths |
| T | VIII | Hindi |
| V | X | Science |
| W | IX | Sanskrit |

9. (2)
10. (1)
11. (3)
12. (5)
13. (4)
14. (5) MATES, STEAM, TAMES, and TEAMS
15. (3) FEDS = 3 \# \% 5
16. (1) Woman = daughter of Nirmal's wife's grandfather's only child
= daughter of Nirmal's wife's daughter
$=$ Nirmal's wife

## Solutions (17-22):

17. (3)

18. (2)

19. (4)

20. (3)

21. (1)

22. (2)


## Solutions(23-28):

In the first step, the word that comes first in the reverse alphabetical order comes to the first place and the rest of the line shifts rightward. In the next step, the largest number occupies and the next place and the rest of the line shift rightward. This goes on alternately till the words get arranged in the reverse alphabetical order and the numbers in a descending order.
23. (2) Step III: year 92 ultra 1523 strive house 39

Step IV: year 92 ultra 391523 strive house
Step V: year 92 ultra 39 strive 1523 house
Step VI: year 92 ultra 39 strive 2315 house
Step VII: year 92 ultra 39 strive 23 house 15
24. (3) Input:any how 4924 far wide 3469

Step I: wide any how 4924 far 3469
Step II: wide 69 any how 4924 far 34
Step III: wide 69 how any 4924 far 34
Step IV: wide 69 how 49 any 24 far 34
Step V: wide 69 how 49 far any 2434
Step VI: wide 69 how 49 far 34 any 2434
Hence Step V will be the last but one.
25. (4) We can't proceed backward
26. (4) Input: play over 493712 match now 81

Step I: play 81 over 493712 match now
Step II: play 81 over 49 now 3712 match
Step III: play 81 over 49 now 37 match 12
Since the line is already arranged, there will be no $4^{\text {th }}$ step
27. (2) Step II: war 58 box cart 3349 star 24

Step III: war 58 star box cart 334924
Step IV: war 58 star 49 box cart 3324
Step V: war 58 star 49 cart box 3324
Step VI: war 58 star 49 cart 33 box 24
28. (4) Input: shower fall water 34516798 goal

Step I: water shower fall 34516798 goal
Step II: water 98 shower fall 345167 goal
Step III: water 98 shower 67 fall 3451 goal
Step IV: water 98 shower 67 goal fall 3451
Step V: water 98 shower 67 goal 51 fall 34

## Solutions (29-34)

29. (1)
(i) $\mathrm{M}<\mathrm{D}$ (ii) $\mathrm{D}>\mathrm{K}$
(iii) $\mathrm{K} \leq \mathrm{R}$
(iv) $\mathrm{R}>\mathrm{F}$

These relationships can't be of any help. none of the quantities can be compared on their basis.
30. (5) $B \geq K=T>F>H$
31. (2) $W>B \leq F<R=M$
32. (4) $E \leq K=T<N \leq B$
33. (3) $\mathrm{Z}=\mathrm{B} \geq \mathrm{M}<\mathrm{F} \leq \mathrm{R}$
34. (3) $\mathrm{H} \leq \mathrm{T}=\mathrm{N}>\mathrm{F} \leq \mathrm{B}$

Solutions (35-40):


Row 2
35. (3)
36. (5)
37. (2)
38. (1)
39. (5)
40. (4)

Solutions(41-45):
41. (2) In case of severe drought, food, water and fodder are of immediate importance rather than money. Hence II follows and I does not.
42. (2) Action I may pose problem but keeping a vigil on them will make the task easier.
43. (2) I is illogical because Vitamin E capsule is also useful even if less effective. Action II is more useful and effective.
44. (2) War cannot be an answer to such problems, but dialogue can.
45. (5) By exploiting the recognition of the West, India can certainly hasten its economic growth. Hence I follows. The opportunity to emerge as a super power should not be missed. Hence II follows.

## Solutions(46-50):

46. (1) II may be an assumption of the speaker. But certainly it is not a conclusion.
47. (1) Improvement in the manufacturing facilities will automatically enhance the quality of its product and reduce the cost. These two things are important to compete in the market. Hence I follows. II may be an assumption but it not a conclusion.
48. (4) I is extreme case. Privatisation is not the only option. II is very generalize statement, it cannot be concluded.
49. (2) With the limited resources and overpopulation it is very hard to provide decent quality of life. Hence II follows.
50. (3) As Mr. X is one of the candidates for the post of Director, he will either be selected or rejected.

## NUMERICAL ABILITY

51. (2); let B is turned off after ' $x$ ' min

Cistern fills in 30 min , this means pipe A works for 30
min.
$37 \frac{1}{2}=\frac{75}{2} \mathrm{~min}$
$\frac{30}{\frac{75}{2}}+\frac{x}{45}=1 ; \mathrm{x}=9 \mathrm{~min}$
52. (4); Length $=3 \mathrm{x}$, breadth $=4 \mathrm{x}$
$3 \mathrm{x} \times 4 \mathrm{x}=7500$
$\mathrm{x}=25$
$\mathrm{L}=75, \mathrm{~B}=100$
Perimeter $=2(75+100)=350$
Cost $=350 \times 0.25=87.5$
53. (3); $(12 \mathrm{~m}+16 \mathrm{~B}) 5=(13 \mathrm{~m}+24 \mathrm{~B}) 4$
$1 \mathrm{M}=2 \mathrm{~B}$
$(7 M+10 B) x=(12 M+16 B) 5$
24.B. $x=40$. B. 5
$x=8 \frac{1}{3}$
54. (1); $\mathrm{D}=\mathrm{P}\left(\frac{r}{100}\right)^{2}$
$16=\mathrm{P}\left(\frac{10}{100}\right)^{2}$
$\mathrm{P}=1600$
S. I $=\frac{1600 \times 10 \times 2}{100}=320$

New S. I $=1600\left(1+\frac{5}{100}\right)^{4}-1600$
$=344.81$
Difference $=24.81$
55. (2); Time taken by $\mathrm{A}=\frac{0.9}{27} \times 60=2 \mathrm{~min}$

Time taken by $B=\frac{0.9}{36} \times 60=1.5 \mathrm{~min}$

$$
\text { L.C.M of }(2,1.5)=6 \mathrm{~min} .
$$

56. (3); I. 3 men alone can do the work in $\frac{5 \times 4}{3}=\frac{20}{3}$ days.

Now, with the help of the question's information, one woman alone can do the work in
$=\frac{1}{4}-\frac{3}{20}=\frac{1}{10}$ ie, 10 days
$\therefore$ two women together can do the same work in 5 days.
II. $4(3 \mathrm{M}+\mathrm{W})=5(2 \mathrm{M}+\mathrm{W}) \Rightarrow \mathrm{W}=2 \mathrm{M}$

One the relationship between $M$ and $W$ is known, the required number of days can be determined. Hence, either statement I alone or II alone is sufficient to answer the question.
57. (5); Let the bigger and the smaller no. be $B$ and $S$ respectively. Then
I. $\frac{3 B}{5}=\mathrm{S}$
II. $\frac{B}{2}=\mathrm{S}-5$

Or, $\mathrm{S}-\frac{B}{2}=5$
Combining both the above equations, we get $B=50$ and $S$ $=30$
Hence, both the statements together are required for answering the questions.
58. (1); I. Ratio of interest $=\frac{100}{10 \times 2}=5 \%$

From statement II, we do not know the borrowed amount, so the rate of interest can't b determined. Therefore, only statement I alone is sufficient to answer the question.
59. (5); Combing both the statements together, marked

Price of the article $=2500 \times \frac{128}{100} \times \frac{100}{80}=r s .4000$
60. (5); If we combine both the statement together, the speed with stoppage can be found out and then the person stops how long per hour can be determined. In this case the person stops for 15 min in an hour.
61. (4); $\frac{1}{2} \times 30 \%$ of $4200=630$
62. (1); Number of female players who play lawn tennis
$=22 \%$ of 2000
$=440$
Number of male player who play rugby $=13 \%$ of 4200 $-10 \%$ of 2000
$=346$
Req. number $=440-346=94$
63. (3); Number of females players who play Cricket $=40 \%$ of 2000
$=800$
Number of male player who play Hockey $=10 \%$ of
$4200-15 \%$ of 2000
$=420-300=120$
Ratio $=800: 120$
$=20 \quad: 3$
64. (2); Total player who play football cricket and lawn tennis $=(25+17+35) \%$ of 4200
$=77 \%$ of 4200
$=3234$
Total female player who play football, cricket and lawn tennis
$=(22+13+40) \%$ of 2000
$=75 \%$ of 2000
$=1500$
Total male $=$ Total Players - Female players

$$
\begin{aligned}
& =3234-1500 \\
& =1734
\end{aligned}
$$

65. (1); $\frac{346}{1050} \times 100=33 \%$ (approx)
66. (1); $11 \%$ of $5 \mathrm{Cr}=5,500,000$

No of average voter required for other political
Parties $=\frac{550000}{5}=11$ lakh
67. (3); In 1995.
68. (1); No of valid votes in $1998=\frac{2.24}{44.80} \times 100=5$

No of valid votes in $1990=\frac{1.228}{30.7} \times 100=4$
Req. \% decrease $=\frac{5-4}{5} \times 100=20 \%$
69. (4); Total no. of seats in each year $=182$
$66_{3}^{2} \%$ of $182=121.32$, which is only in 2002
70. (5); Without knowing the total no. of valid votes in each year, it can't be determined.
71. (5); Ratio of expenditure to income will be least in that year, where the \% profit is maximum.
72. (2); Profit\%=70\%

Income $=(100+70) \%$ of Expenditure
$=\frac{170}{100} \times 150$
= 255 lakh
73. (2); 1999; Profit\%>100
74. (3);
75. (4);
76. (2).total no of readers form city A and city B

$$
=56000 * \frac{112}{100}+72000 * \frac{117}{100}
$$

$=62720+84240=146960$
77. (1). $\mathrm{Dx}=81000 * 113 \cdot 5 / 100=91935$
$D y=75000 * 113.2 / 100=84900$,
Difference $=91935-84900=7035$
78. (5). number of readers of Magazine X from City F in 2014 $=60000 * 116 / 100$
$=69600$
total number of readers of Magazine Y from City F in
2014
$=50000 * 111 / 100$
$=55500$
Req. $\%=\frac{69600}{55500} \times 100=125.4$
79. (3) number of readers of Magazine Y from city A in 2014
$=118 \%$ of $61000=71980$
Similarly form city B $=74750$
Similarly form city $C=61820$
Similarly form city D $=84900$
Similarly form city $\mathrm{E}=89200$
Similarly form city $\mathrm{F}=55500$
SUM $=71980+74750+61820+84900+89200+55500=$ 438150
AVERAGE $=\frac{438150}{6}=73025$
80. (2). total number of readers of Magazine $X$ from City B in 2014
$=72000^{*} 117 / 100=84240$
the total number of readers of magazine $X$ from City F in
2013
$=60000$
$\%$ MORE $=\frac{84240-60000}{60000} \times 100=40.4 \%$
81. (3) C.I for $1^{\text {st }}$ year $=S$. I for Ist year
$=10 \%$ of $3000=300$
$P$ for $2^{\text {nd }}$ year $=(3000+300)-1000=2300$
C. I for $2^{\text {nd }}$ year $=$ S.I of 2300 at $10 \%$
$=230$
P for $3^{\text {rd }}$ year $=(2300+230)-1000$
$=1530$
C.I for $3^{\text {rd }}$ year $=10 \%$ of 1530
= 153
Total amount pay at the end of $3^{\text {rd }}$ year
$=1530+153$
$=1683$
82. (4) for half yearly $\mathrm{R}=10 \%, \mathrm{~T}=4$ year
C.I for 2 years $=P\left[\left(1+\frac{20}{100}\right)^{2}-1\right]$
$=P\left[(1.2)^{2}-1\right]=P[0.44]$
C.I for 2 years and calculated half yearly
$=P\left[\left(1+\frac{10}{100}\right)^{4}-1\right]$
$=P\left[(1.1)^{4}-1\right]=P[1.4641-1]$
$=\mathrm{p}(0.4691)$

Now
$P(0.4641)-.P(0.44)=482$
$P(0.0241)=482$
$P=20,000$
83. (5)

| Efficiency |  | Days |  |
| :--- | :--- | :--- | :--- |
| 4 | A | 16 |  |
| 5 | B | $64 / 5$ | LCM 64 |
| 2 | C | 32 |  |

$(A+B+C)$ work together for 4 days $=4 X(4+5+2)=44$
C work alone, last 3 days $=3 \mathrm{X} 2=6$
Remaining work done by $(B+C)=(64-50) / 7$
$=14 / 7=2$ days
Total days $=4+3+2$
$=9$ days
84. (3) Let A complete the work in $x$ days
\& B complete the work in y days
So, By Ist case
$2 / x+9 / y=1$ $\qquad$
\& By IInd case
$3 / x+6 / y=1$ $\qquad$
From Ex. (i) \& (ii)
$y=15$ days
85. (5) Efficiency

| roup | $=$ | $2{ }^{\text {nd }}$ group |
| :---: | :---: | :---: |
| 2 mX 1 hr |  | 3 M X 1.5 h |

$4 \mathrm{~m}=9 \mathrm{M}$
Or $38 \mathrm{~m}=9 / 4 \times 38 \mathrm{M}=9 / 2 \mathrm{X} 19 \mathrm{M}$
$\frac{M_{1} \times D_{1} \times H_{1}}{W_{1}}=\frac{M_{2} \times D_{2} \times H_{2}}{W_{2}}$
$\frac{38 \times 6 \times 12}{1}=\frac{57 M \times 8 \times x}{2}$
9
86. (5)
$117 \longrightarrow+272$
87. (4):

88. (4):

89. (1): series is $6,6 * 1-2=4$
$4 * 2-4=4$
4*3-6=6
$6 * 4-8=16$
$16 * 5-10=70$
90. (5):

91. (3): Suppose the no. $=X \Rightarrow(63-36) X=3834 \quad \therefore X=$ $\frac{3834}{27} \Rightarrow 142$
92. (2): Suppose Manish Added Rs. $X$ to the borrowed money then,

$$
\begin{align*}
& \quad \frac{(1150+x) \times 9 \times 3}{100}-\frac{1150 \times 6 \times 3}{100}=274.95 \\
& 1150+x=1785 \tag{1}
\end{align*}
$$

93. (4): We have $\frac{\mathrm{S}-1}{\mathrm{G}-1}=\frac{3}{4} \Rightarrow 4 \mathrm{~S}-3 \mathrm{G} \Rightarrow 1$

And $\frac{S+1}{G+1}=\frac{10}{13} \Rightarrow 13 \mathrm{~S}-10 \mathrm{G} \Rightarrow-3$
Solving (1) \& (2), we have, $\mathrm{S}=19$ years.
94. (4): Required distance $=2000\left(\frac{15}{40}\right)=750 \mathrm{~m}$
95. (1): $15 \times 4=1020 \quad \therefore 18 \times 6=$
$\frac{1020}{15 \times 4}(18 \times 6)=1836$ Rs.
96: (4)
I. $x^{2}+9 x+20=0 \Rightarrow x^{2}+5 x+4 x+20=0 \Rightarrow$
$x(x+5)+4(x+5)=0 \Rightarrow(x+5)(x+4)=0 \Rightarrow$
$x=-5$ or -4
II. $y^{2}+7 y+12=0 \Rightarrow y^{2}+3 y+4 y+12=0 \Rightarrow$
$y(y+3)+4(y+3)=0 \Rightarrow(y+4)(y+3)=0 \Rightarrow$
$y=-3 o r-4$
clearly $x \leq y$
98. (3): I. $x^{2}=529 \Rightarrow x=\sqrt{529} \Rightarrow \pm 23$
II. $y=\sqrt{529} \Rightarrow y=+23$

Clearly $\mathrm{x} \leq \mathrm{y}$
99. (4): $1 . x^{2}+13 x=-42 \Rightarrow x^{2}+13 x+42=0 \Rightarrow$
$x^{2}+7 x+6 x+42=0 \Rightarrow x(x+7)+6(x+7)=0 \Rightarrow$
$(x+6)(x+7)=0 \Rightarrow x=-6 o r-7$
II. $y^{2}+16 y+63=0 \Rightarrow y^{2}+9 y+7 y+63=0 \Rightarrow$
$y(y+9)+7(y+9)=0 \Rightarrow(y+9)(y+7)=0 \Rightarrow$
$y=-9 o r-7$
Clearly $x \geq y$
100. (1): I. $2 x+3 y=14$
II. $4 x+2 y=16$

Multiplying by 2 in equation 1 and solving both eqn. together
$4 x+64=28 \quad 4 x+24=16$ then $y=3$
From eqn. I $y=3, x=\frac{5}{2}$, clearly $x<y$
101. (5); Industrial products are linked to the demand position.
102. (5); "Industry differs significantly in some very important aspects. These references are with regard to processes and techniques of production and nature, marketing pattern and pricing of products."
103. (1); Refer to first paragraph of the passage.
104. (5); Higher output input ratio.
105. (3); Guage means estimate or determine the amount, level, or volume of.
So, Assess is the word which is similar in meaning to it.
106. (5); Refer to third paragraph of the passage.
107. (3); Narrative.
108. (3); Fair means considerable according to the passage.
109. (2); Premise means a previous statement or proposition from which another is inferred or follows as a conclusion. So, Assumption is the word which is similar in meaning to it.
110. (1); Refer to third paragraph of the passage.

For question (111-115); The correct sequence to form meaningful sequence is CFDBAE.
111. (4); A
112. (2); D
113. (3); F
114. (5); E
115. (3); C
116. (3); 'Final' is the correct use.
117. (3); 'Abstain' is the correct use

Abstain means restrain oneself from doing or enjoying something.
118. (3); 'Key' is the correct use.

Key means of crucial importance.
119. (1); 'However’ is the correct use.
120. (1); 'Ease' is the correct use.
121. (3); Change 'shall' to 'should' as sentence starting in past should stay in past.
122. (3); Change 'has' to 'had' as sentence starting in past should stay in past.
123. (4); Change 'do' to 'did' as sentence starting in the past should stay in the past.
124. (1); Change 'would have' to 'have'.

Formula: If+ Past Perfect, Sub+ would+ have $+V_{3}$
125. (4); Change 'break' to 'broke'
126. (2); Replace 'was planning' with 'had planned'.
127. (3); Replace 'We have no fewer than a thousand students in our College' with 'We have no less than a thousand students in our College'.
128. (3); Replace 'stretched in the ditch out' with 'outstretched in the ditch'
129. (3); Replace 'why did you not speak' with 'why you did not speak'
130. (5); No improvement.
147. (4); Disputes means a disagreement or argument. So, Quarrel is the word which is similar in meaning to it.
148. (5); Might means great power or force, as of a nation or army. So, Power is the word which is similar in meaning to it.
149. (2); Foremost means most prominent in rank, importance, or position. So, Unimportant is the opposite in meaning to it.
150. (4); Terrible means extremely bad or serious. So, Delectable is the opposite in meaning to it.

## Test Answer

| 1. (a) | 2. (d) | 3. (d) | 4. (e) | 5. (e) | 6. (c) | 7. (d) | 8. (b) | 9. (b) | 10. (a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11. (c) | 12. (e) | 13. (d) | 14. (e) | 15. (c) | 16. (a) | 17. (c) | 18. (b) | 19. (d) | 20. (c) |
| 21. (a) | 22. (b) | 23. (b) | 24. (c) | 25. (d) | 26. (d) | 27. (b) | 28. (d) | 29. (a) | 30. (e) |
| 31. (b) | 32. (d) | 33. (c) | 34. (c) | 35. (c) | 36. (e) | 37. (b) | 38. (a) | 39. (e) | 40. (d) |
| 41. (b) | 42. (b) | 43. (b) | 44. (b) | 45. (e) | 46. (a) | 47. (a) | 48. (d) | 49. (b) | 50. (c) |
| 51. (b) | 52. (d) | 53. (c) | 54. (a) | 55. (b) | 56. (c) | 57. (e) | 58. (a) | 59. (e) | 60. (e) |
| 61. (d) | 62. (a) | 63. (c) | 64. (b) | 65. (a) | 66. (a) | 67. (c) | 68. (a) | 69. (d) | 70. (e) |
| 71. (e) | 72. (b) | 73. (b) | 74. (c) | 75. (d) | 76. (b) | 77. (a) | 78. (e) | 79. (c) | 80. (b) |
| 81. (c) | 82. (d) | 83. (e) | 84. (c) | 85. (e) | 86. (e) | 87. (d) | 88. (d) | 89. (a) | 90. (e) |
| 91. (c) | 92. (b) | 93. (d) | 94. (d) | 95. (a) | 96. (d) | 97. (c) | 98. (c) | 99. (d) | 100. (a) |
| 101. (e) | 102. (e) | 103. (a) | 104. (e) | 105. (c) | 106. (e) | 107. (c) | 108. (c) | 109. (b) | 110. (a) |
| 111. (d) | 112. (b) | 113. (c) | 114. (e) | 115. (c) | 116. (c) | 117. (c) | 118. (c) | 119. (a) | 120. (a) |
| 121. (c) | 122. (c) | 123. (d) | 124. (a) | 125. (d) | 126. (b) | 127. (c) | 128. (c) | 129. (c) | 130. (e) |
| 131. (d) | 132. (b) | 133. (c) | 134. (d) | 135. (a) | 136. (b) | 137. (c) | 138. (d) | 139. (c) | 140. (d) |
| 141. (b) | 142. (d) | 143. (a) | 144. (b) | 145. (e) | 146. (a) | 147. (d) | 148. (e) | 149. (b) | 150. (d) |
| 151. (a) | 152. (b) | 153. (d) | 154. (c) | 155. (a) | 156. (a) | 157. (b) | 158. (b) | 159. (b) | 160. (a) |
| 161. (b) | 162. (a) | 163. (d) | 164. (a) | 165. (e) | 166. (a) | 167. (a) | 168. (b) | 169. (a) | 170. (e) |
| 171. (c) | 172. (a) | 173. (b) | 174. (b) | 175. (b) | 176. (a) | 177. (d) | 178. (c) | 179. (c) | 180. (d) |
| 181. (a) | 182. (e) | 183. (b) | 184. (b) | 185. (d) | 186. (c) | 187. (a) | 188. (d) | 189. (d) | 190. (a) |
| 191. (b) | 192. (d) | 193. (d) | 194. (c) | 195. (c) | 196. (c) | 197. (b) | 198. (e) | 199. (c) | 200. (b) |

