## Solutions

1. Ans. B.

As given in the question,
$\delta=><$
\% => =

* $=>\leq$
\$ $=\gg$
(C) $=>\geq$

So,
$B \% T=>B=T$
$T \subset M=>T \geq M$
$M * D=>M \leq D$
Hence,
$B=T \geq M \leq D$
Conclusions
I. $D$ © $B=>D \geq B$ (FALSE)
II. $M * B=>M \leq B$ (TRUE)

Therefore only conclusion II is true.
2. Ans. E.

As given in the question,
$\delta=><$
\% => =

* $=>\leq$
\$ =>>
(C) $=>\geq$

So,
$B \delta A=>B<A$
$A * M=>A \leq M$
$W © M=>W \geq M$
Hence,
$B<A \leq M \leq W$
Conclusions
I. $\mathrm{W} \$ \mathrm{~B}=>\mathrm{W}>\mathrm{B}$ (TRUE)
II. $A^{*} W=>A \leq W$ (TRUE)

Therefore both conclusions I and II are true.
3. Ans. C.

As given in the question,

$$
\begin{aligned}
& \delta=>< \\
& \%=>= \\
& *=>\leq \\
& \$=\gg \\
& \text { © }=>\geq
\end{aligned}
$$

So,
$\mathrm{R} \$ \mathrm{~T}=>\mathrm{R}>\mathrm{T}$
$T$ © $M=>T \geq M$
$M \% J=>M=J$
Hence,
$R>T \geq M=J$
Conclusions
I. $\mathrm{J} \% \mathrm{~T}=>\mathrm{J}=\mathrm{T}$
II. J $\delta T=>\mathrm{J}<\mathrm{T}$

Therefore Either conclusion I or conclusion II is true.
4. Ans. D.

As given in the question,
$\delta=><$
\% => =

* $=>\leq$
\$ =>>
(C) $=>\geq$

So,
H ©K $=>\mathrm{H} \geq \mathrm{K}$
$K \% R=>K=R$
$R \delta N=>R<N$

Hence,
$\mathrm{H} \geq \mathrm{K}=\mathrm{R}<\mathrm{N}$
Conclusions
I. $N$ ©K $=>N \geq H$ (FALSE)
II. $\mathrm{R} \% \mathrm{H}=>\mathrm{R}=\mathrm{H}$ (FALSE)

Therefore Neither conclusion I nor conclusion II is true.
5. Ans. A.

As given in the question,
$\delta=><$
$\%=>=$

* => $\leq$
\$ $=\gg$
(C) $=>\geq$

So,
H*K $=>\mathrm{H} \leq \mathrm{K}$
$K \delta N=>K<N$
$N \$ W=>N>W$
Hence,
H $\leq K W$
Conclusions
I. $\mathrm{N} \$ \mathrm{H}=>\mathrm{N}>\mathrm{H}$ (TRUE)
II. $\mathrm{W} \delta \mathrm{H}=>\mathrm{W}$

Therefore only conclusion I is true.
6. Ans. B.

$G$ is second to the right of $E$.
7. Ans. A.


The Lawyer is second to the left of the Doctor 8. Ans. B.


L is second to the right of scientist.
9. Ans. C.


Only J is the one who is not linked with the profession of diagonally opposite person.
10. Ans. D.


K is the professor.
11. Ans. C.

| A | South Africa | Monday |
| :--- | :--- | :--- |
| B | Australia | Tuesday |
| C | South Africa | Friday |
| D | France | Saturday |
| E | France | Wednesday |
| F | Australia | Thursday |
| G | South Africa | Sunday |

If everyone's trip is delayed by one day, then $B$ will be travelling on Wednesday
12. Ans. A.

| A | South Africa | Monday |
| :--- | :--- | :--- |
| B | Australia | Tuesday |
| C | South Africa | Friday |
| D | France | Saturday |
| E | France | Wednesday |
| F | Australia | Thursday |
| G | South Africa | Sunday |

D travels on Saturday
13. Ans. E.

| A | South Africa | Monday |
| :--- | :--- | :--- |
| B | Australia | Tuesday |
| C | South Africa | Friday |
| D | France | Saturday |
| E | France | Wednesday |
| F | Australia | Thursday |
| G | South Africa | Sunday |

None is true
14. Ans. D.

| A | South Africa | Monday |
| :--- | :--- | :--- |
| B | Australia | Tuesday |
| C | South Africa | Friday |
| D | France | Saturday |
| E | France | Wednesday |
| F | Australia | Thursday |
| G | South Africa | Sunday |

B travel to Australia on Tuesday
15. Ans. C.

| A | South Africa | Monday |
| :--- | :--- | :--- |
| B | Australia | Tuesday |
| C | South Africa | Friday |
| D | France | Saturday |
| E | France | Wednesday |
| F | Australia | Thursday |
| G | South Africa | Sunday |

G is the last one to travel
16. Ans. A.

After all letters in reverse order-
TMK DBA UMC RNB OKG
After all word in alphabetical order-
DBA OKG RNB TMK UMC
So the word is TMK.
Hence, option A.
17. Ans. D.

After interchanging the letter-
TKM ADB UMC NBR OKG
After all word in alphabetical order-
ADB NBR OKG TKM UMC
Hence, option D.
18. Ans. B.

After consonant changing to the previous letter-
LJS ACA BLU QAM FJO
So BDA has two vowels.
Hence, option B.
19. Ans. D.

BDA and GKO
So 6 letters are between $D$ and $K$.
Hence, option D.
20. Ans. A.

After consonant change to the next and vowels change to the previous letter-
NLU CEZ DNT SCO HLN
DNT \& HLN it means CMU \& GKO has no vowels after the arrangement.
21. Ans. A.

| Word | Culture | Americals | Unique | Prosperity | The | Behaviourand |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Code | Uin | Ea | Sa | tu | Ab | Ha | Qa | ze |

22. Ans. D.

| Word | Culture | Americals |  | Unique | Prosperity | The | Behaviourand |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Code | Uin | Ea | Sa | tu | Ab | Ha | Qa | Ze |

23. Ans. C.


- Of - mi

24. Ans. C.

| W | Cultur |  |  | Unique |  | YThe |  |  | Behaviourand |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Uin | Ea |  |  | Ab |  |  |  |  |

- Done - no

25. Ans. C.

| Word | Culture | Americals | Unique | Prosperity The | Behaviourland |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Code | Uin | Ea | Sa | tu | Ab | Ha | Qa | ze |

26. Ans. B.
$684+2=884$
$512+2=712$
$437+2=637$
$385+2=585$
$296+2=496$
Now, only 585 is divisible by 3
27. Ans. C.

| 684 | 512 | 437 | 385 | 296 |
| :---: | :---: | :---: | :---: | :---: |
| 864 | 521 | 743 | 853 | 962 |

Hence, 296 becomes the highest number after arrangement.
28. Ans. A.

The second digit of the second lowest number is (385) = 8
The third digit of the highest number is $(684)=4$
Now, according to the question,
Required resultant $=8 / 4=2$
29. Ans. E.

684+1 2=786
$512+12=614$
$437+12=539$
$385+12=487$
$296+12=398$
Hence, 512 becomes the second highest number.
30. Ans. A.


Thus, 296 will become the highest number.
31. Ans. B.
$R$ is the father of $P$


There are three females in the family - T, K \& P.
Males members are - R, N \& M
32. Ans. C.
$M$ is the cousin (brother) of $P$


There are three females in the family - T, K \& P. Males members are - R, N \& M
33. Ans. D.
$T$ is the aunt of $M$.


+ means - male
- means - female

There are three females in the family - T, K \& P.
Males members are - R, N \& M
34. Ans. D.
$T>N(170)>R>Q(160)>P>S$
$S$ is shortest among them.
35. Ans. E.
$T>N(170)>R>Q(160)>P>S$
Only T can have 175 cms
36. Ans. D.

The boy said hurtful things to people but that denotes his action against not what he considered them. he told himself, "that just shows how stupid most people are!" This sentence from the first paragraph explains that the boy considered everyone stupid.
37. Ans. B.

This sentence from the fourth paragraph justifies the answer ""As a sign of your success," his father
responded, "you get to PULL OUT one nail. In fact, you can do that each day that you don't lose your temper even once." The rest three options were the result of performing both the tasks given to him.
38. Ans. E.

It is mentioned in the first sentence of the second paragraph that the oak trees were as tough as iron. Moreover, in the fourth sentence of the same paragraph it is mentioned that the boy found it easier to control his anger than to hammer the trees. So, both B and D are the correct options.
This means that as the young man would have to put in more effort in hammering the nails, therefore he was more likely to control his anger.
39. Ans. E.

In the first paragraph it is mentioned that everyone left the boy because of his anger. In the last paragraph it is mentioned " a verbal wound is as bad as a physical one". So, both B and D are the correct options.
40. Ans. C.

In the second sentence of the first paragraph, the boy is described as a natural leader because of which everyone wanted him as a part of their team.
41. Ans. C.

Weather means to erode or deplete.
Increment means an increase or addition, especially one of a series on a fixed scale.
Surmount means stand or be placed on top of.
Endurance means the ability to endure an unpleasant or difficult process or situation without giving way.
Vintage means denoting something from the past of high quality, especially something representing the best of its kind.
42. Ans. D.

Accomplishment means to achieve something or move forward.
Quiescence means to rest.
Attainment means the action or fact of achieving a goal
towards which one has worked.
Acquirement means the action of obtaining something.
Boulder means a large rock, typically one that has been worn smooth by erosion.
Talion means punishment that exacts a penalty corresponding in kind to the crime
43. Ans. B.

Extremely means in large amount. insignificantly means in negligible amount.
Miser means a person who hoards wealth and spends as little money as possible.
Avast means stop.
Countenance means support or approval.
44. Ans. B.

Bargain means to make arrangements regarding action to be taken.
Accord means give or grant someone (power, status, or recognition).
Exalt means think or speak very highly of (someone or something).
Dispense means distribute or provide (a service or information) to a number of people.
Liable means likely to do or to be something.
45. Ans. A.

Dwindle means to decrease in number or size. Shrink means the same.
Stout means (of an object) strong and thick.
Lavish means sumptuously rich, elaborate, or luxurious.
anaomaly means something that deviates from what is standard, normal, or expected.
46. Ans. B.
crowded
47. Ans. B.
existence
48. Ans. D.
hazardous
49. Ans. C.

Indolent
50. Ans. E.
influence
51 - 55 The paragraph is about the start up plans, ideas and strategies. Among all the statements, statement B describes startups as the game changers. Statement E talks about laying the foundation of the startup plan at the primary level of college. Statement $F$ talks about many B -schools encouraging students to take up the challenge and establish themselves as beginners.
Statement C talks about the planning part, hence follows. Next should be statement D which explains the reason for launching startups early. A supports both C and D, hence follows.
The correct sequence is BEFCDA.
56. Ans. C.

The appropriate word should be 'applying' because the subject here is 'loans' and one doesn't appear for the loans but apply for it.
57. Ans. D.

The correct spelling is 'natural'
58. Ans. B.

The correct spelling is INFECTIOUS.
Hence Option B is correct
59. Ans. C.

The correct spelling is SEEN.
60. Ans. D.

The correct spelling is STRAIGHT.
61. Ans. D.

The preposition 'to' has been incorrectly used in the sentence and it should be replaced with 'on' to make it grammatically correct and make sense. The correct answer is option (d).
62. Ans. A.

The verb 'were' is used incorrectly in the sentence. It should be replaced with 'was' to make the sentence grammatically correct. The correct answer is option (a). 63. Ans. D.

Since the sentence is in past tense, the verb 'waste' doesn't go well with it and so it should be replaced with its past tense 'wasted'. The correct answer is option (d). 64. Ans. E.

The sentence is grammatically correct and there is no error in it hence the correct answer is option (e).
65. Ans. D.

In the sentence the verb 'fall' has been incorrectly used and it should be replaced with its past tense, 'fell' to make the sentence grammatically correct. The use of words like 'again' and 'third time' indicate the tense in which the sentence should be synced. The correct answer is option (d).
66. Ans. C.

67. Ans. D.

68. Ans. B.
$11 \times 1-2=9$
$9 \times 2-3=15$
$15 \times 3-4=41$
$41 \times 4-5=159$
$159 \times 5-6=789$
69. Ans. C.

The pattern is :
$10000 \div 5=2000$
$2000 \div 5=400$
$400 \div 5=80$
$80 \div 5=16$
$16 \div 5=3.2$
$3.2 \div 5=\mathbf{0 . 6 4}$
Hence Option C is correct
70. Ans. C.

71. Ans. C.

Required difference
$=58550 * 24 / 100-48860 * 18 / 100$
= 14052 - 8795
= 5257
72. Ans. B.

Total number of candidate's qualified from Delhi in 2009 and 2013
$=35480 * 12 / 100+32620 * 24 / 100=4258+7829=$ 12087
73. Ans. B.

Difference in number of candidates that appeared from Mumbai
In 2010, $=10000$
In 2011, $=9710$
In 2012, = 1410
In 2013, = 6130
In 2014, $=21960$
In 2015, = 18170
So in 2012 minimum difference appeared from mumbai.
74. Ans. D.

Total number of candidates qualified in the competitive examination from Ranchi in 2011?
$=27960 * 18 / 100=5032$
75. Ans. B.

In $2009=35480 * 12 / 100=4258$
In $2010=18450 * 15 / 100=2767$
In $2011=28960 * 18 / 100=5212$
In $2012=38750 * 14 / 100=5425$
In $2013=32620 * 24 / 100=7829$
In $2014=42580 * 10 / 100=4258$
In $2015=35460 * 16 / 100=5674$
So maximum number of candidates the qualified from Delhi in 2013.
76. Ans. B.
$6^{4} \div\left(6^{2}\right)^{3} \times 6^{3}=6^{(?-5)}$
$6^{4-6+3}=6^{(?-5)}$
$6^{1}=6^{(?-5)}$
?- $5=1$
?= 6
Hence option $B$ is correct.
77. Ans. C.
$18 \%$ of $400=72$
Thus $42 \%$ of $?+72=219$
$42 \%$ of ? $=219-72=147$
$?=(147 \times 100) / 42=350$
Hence option C is correct
78. Ans. C.
$\frac{16 \% \times 550}{? \% \times 500}=2.5$
$\frac{11 \times 16}{? \times 10}=2.5$
$?=\frac{11 \times 16}{2.5 \times 10}$
? $=7.04$
Hence Option C is correct
79. Ans. D.
$(25)^{2}+(35)^{2}-(30)^{2}=? \times 5$
$625+1225-900=$ ?x 5
? = 190
80. Ans. B.
$[(1664 \div 4) \times 7.5] \div 20--->3120 \div 20$
$=156$
81. Ans. A.

$$
\begin{aligned}
& 3^{8.9} \times 27^{7.2} \div 81^{4.6}=3^{?} \\
& 3^{8.9} \times(3)^{3 \times 72} \div 3^{4 \times 4.6}=3^{?}
\end{aligned}
$$

$$
\frac{3^{8.9+21.6}}{3^{18.4}}=3^{?}
$$

$$
3^{30.5-18.4}=3^{?}
$$

$$
3^{12.1}=3^{?}
$$

? $=12.1$
82. Ans. B.
$1268.02-1097.20-294.75+389.66=$ ?
$=1268.02+389.66-(1097.20+294.75)$
$=1657.68-1391.95$
$=265.73$
83. Ans. C.
$1134+256-$ ? $=1444$
1390-? = 1444
? = - 54
84. Ans. E.
$43 \%$ of $586=341.2$ - ?
$\frac{43}{100} \times 586=341.2-$ ?
$43 \times 5.86=341.2-$ ?
$251.98=341.2-$ ?
$?=341.20-251.98$
? $=89.22$
85. Ans. C.
$16 \% \times 550$
$? \% \times 500=2.5$
$\frac{11 \times 16}{? \times 10}=2.5$
$?=\frac{11 \times 16}{2.5 \times 10}$
$?=7.04$
Hence Option C is correct
86. Ans. C.

Ram + Hari + Shyam $=120 \times 3=360 \mathrm{~kg}$
Ram + Hari + Shyam + Ajit $=116 \times 4=464 \mathrm{~kg}$
Ajit $=104 \mathrm{~kg}$
Yogesh $=104+6=110 \mathrm{~kg}$
Ram + Shyam + Ajit + Yogesh $=102 \times 4=408 \mathrm{~kg}$
Then Hari - Yogesh $=56 \mathrm{~kg}$
Hari $=166 \mathrm{~kg}$
87. Ans. A.

Speed downstream $=(10.2 \times 60) / 18=34 \mathrm{kmph}$ Speed of boat in still water $=34-3.5=30.5 \mathrm{kmph}$
Rate upstream $=30.5-3.5=27 \mathrm{kmph}$

Required time $=121.5 / 27=4.5 \mathrm{hrs}$
Hence option A is correct
88. Ans. C.

When difference between the compound interest and simple interest on a certain sum of money for 2 yr at $\mathrm{r} \%$
rate is Rs. $\mathcal{X}$, then the sum is given by
$\operatorname{sum}=\frac{\text { difference } \times 100}{(\text { Rate })^{2}}=\frac{42 \times 10000}{5 \times 5}=$ Rs. 16800
89. Ans. A.

Suppose that numbers are $x$ and $y$
From question
$2 x+3 y=126$
$3 x+2 y=144$
By Eq. (i) and Eq. (ii)
We get.....
$x=36, y=18$
Smaller number $=18$
90. Ans. B.

## Let nishant capital is $\mathbf{x}$

$(8500 \times 36) /(x \times 24)=15 / 12$
$\mathrm{x}=10200$
91. Ans. B.

Mohan=232 marks
Suresh=(232-56=)176marks
Sonal got $40 \%$ marks $=(176+24=200)$
$100 \%$ marks $=(100 \times 200) / 40=500$
92. Ans. D.

Combine efficiency of thre pipes $=1 / 4+1 / 6-1 / 3$

$$
\begin{aligned}
& =(3+2-4) / 12 \\
& =1 / 12
\end{aligned}
$$

so required times= 12 hours.
93. Ans. B.

42 years
Let the common ratio be x
$\therefore$ The percentages of
father's, mother's and daughter's are $7 x, 6 x, 2 x$
respectively.
According to the question
$6 x-2 x-24$
$4 x=24$
$x=6$
$\therefore$ father's present age $=7 \times 6=42$ years
94. Ans. B.

CP of first item = Rs. 52000
Selling price of second item
$=52000 \times 0.75 \times 1.4=54600$
His overall profit $=54600-52000=2600$
95. Ans. B.
'3:2'
Let same profit be Rs 15 .
$10 \%=$ Rs 15 for item $A \Rightarrow C P$ of item $A=150$ Rs
$15 \%=$ Rs 15 for item $B \Rightarrow C P$ of item $B=100$ Rs
Ratio $=150: 100=3: 2$
96. Ans. A.

Let the speed $=x \mathrm{~km} / \mathrm{h}$
New speed $=3 / 4 \times \mathrm{km} / \mathrm{h}$
Time difference $=74 \times \frac{4}{3 x}-\frac{75}{x}=1$
$25 / x=1$
$\Rightarrow \mathrm{x}=25 \mathrm{~km} / \mathrm{h}$
97. Ans. D.
$\because 12$ men can do a piece of work in 56 days.
$\therefore 1$ man can do a piece of work in $56 \times 12$ days
$\therefore 28$ men can do a piece of work in $=\frac{56 \times 12}{28}=24$ days
98. Ans. B.

Let $X$ be the number
$20 \%$ of $X=20 \times X / 100=X / 5$
$4 / 5$ of $X=4 X / 5$
$20 \%$ of a number is 2499 less than the $(4 / 5)^{\text {th }}$ of the
same number
Hence $\mathrm{X} / 5=4 \mathrm{X} / 5-2499$
$3 X / 5=2499$
$X=833 \times 5=4165$
$2 / 7^{\text {th }}$ of $X=2 / 7 \times(4165)=2 \times 595=1190$
99. Ans. A.

Let fraction will be $x / y$
$\frac{300 \% x}{250 \% y}=\frac{9}{10}$
$\frac{300 x}{250 y}=\frac{9}{10}$
$\frac{6 x}{5 y}=\frac{9}{10}$
$\frac{x}{y}=\frac{9 \times 5}{10 \times 6}$.
$\frac{x}{y}=\frac{3}{4}$
100. Ans. B.

Let the SP of perfume be Rs $x$. $\backslash$
Discount = 25\%
Now, according to the question,
$75 \%$ of $\mathrm{x}=$ Rs 5895
$\Rightarrow \mathrm{x} \times \frac{75}{100}=$ Rs 5895
$\Rightarrow \mathrm{x}=\operatorname{Rs}\left(\frac{5895 \times 100}{75}\right)=\operatorname{Rs} 7860$

