## SSC CGL Main Exam. Practice Set - 2023

1. (d) If the quotient in the first case be $x$.

Then, number $=5 \mathrm{x}+3$
On Squaring, the number $=(5 x+3)^{2}$
$=25 x^{2}+30 x+9$
On dividing by 5 , remainder $=9-5=4$
2. (a) First number $\times$ second number
$=\mathrm{HCF} \times \mathrm{LCM}$
$\Rightarrow 52 \times$ second number $=4 \times 520$
$\Rightarrow$ Second number $=\frac{4 \times 520}{52}=40$
3. (a) $\frac{4 \frac{1}{7}-2 \frac{1}{4}}{3 \frac{1}{2}+1 \frac{1}{7}}=\frac{\frac{29}{7}-\frac{9}{4}}{\frac{7}{2}+\frac{8}{7}}$

$$
=\frac{\frac{116-63}{28}}{\frac{49+16}{14}}=\frac{53}{28} \times \frac{14}{65}=\frac{53}{130}
$$

Again,

$$
\begin{aligned}
& \frac{1}{2+\frac{1}{2+\frac{1}{\frac{25-1}{5}}}}=\frac{1}{2+\frac{1}{2+\frac{5}{24}}} \\
& =\frac{1}{2+\frac{1}{\frac{48+5}{24}}}=\frac{1}{2+\frac{24}{53}} \\
& =\frac{1}{\frac{106+24}{53}}=\frac{53}{130}
\end{aligned}
$$

$\therefore$ Expression $=\sqrt{\frac{53}{130} \div \frac{53}{130}}=1$
4. (c) $\sqrt{\frac{(\sqrt{12}-\sqrt{8})(\sqrt{3}+\sqrt{2})}{5+\sqrt{24}}}$
$=\sqrt{\frac{\sqrt{36}-\sqrt{24}+\sqrt{24}-\sqrt{16}}{5+\sqrt{24}}}$
$=\sqrt{\frac{6-4}{5+\sqrt{24}}}=\sqrt{\frac{2}{5+\sqrt{24}}}$
$=\sqrt{\frac{2}{5+\sqrt{6 \times 4}}}=\sqrt{\frac{2}{5+2 \sqrt{6}}}$
$=\sqrt{\frac{2}{5+2 \sqrt{6}} \times \frac{5-2 \sqrt{6}}{5-2 \sqrt{6}}}$
$=\sqrt{\frac{2(5-2 \sqrt{6})}{25-24}}=\sqrt{2(5-2 \sqrt{6})}$
$=\sqrt{2(3+2+2 \sqrt{6})}$
$=\sqrt{2\left[(\sqrt{3})^{2}+(\sqrt{2})^{2}-2 \sqrt{3} \sqrt{2}\right]}$
$=\sqrt{2(\sqrt{3}-\sqrt{2})^{2}}=\sqrt{2}(\sqrt{3}-\sqrt{2})$
$=\sqrt{6}-2$
5. (d) If each item is multiplied by 8 , their average gets multiplied by 8 .
$\therefore$ Required average
$=8 \times 27=216$
6. (c) $\frac{\mathrm{A}}{\mathrm{B}} \times \frac{\mathrm{B}}{\mathrm{C}}=\frac{3}{4} \times \frac{6}{5}$
$\Rightarrow \frac{\mathrm{A}}{\mathrm{C}}=\frac{9}{10} \Rightarrow \frac{\mathrm{C}}{\mathrm{A}}=\frac{10}{9}$
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$\Rightarrow \frac{\mathrm{A}}{\mathrm{C}}+1=\frac{10}{9}+1$
$=\frac{\mathrm{C}+\mathrm{A}}{\mathrm{A}}=\frac{10+9}{9}=\frac{19}{9}$
$\Rightarrow A:(A+C)=9: 19$
7. (a) Number to be added $=x$ (let)
$\therefore \frac{320 \times 10}{100}+\mathrm{x}=\frac{230 \times 30}{100}$
$\Rightarrow 32+\mathrm{x}=69$
$\Rightarrow x=69-32=37$
8. (d) If the marked price of the product be ₹ 100 , then
C.P. $=₹ 70$
S.P. retailer $=₹ 100$
$\therefore$ Gain per cent
$=\frac{30}{70} \times 100=\frac{300}{7}=42 \frac{6}{7} \%$

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9. (a) C.P. of the table
$=800 \times \frac{90}{100} \times \frac{85}{100}=₹ 612$
Actual C.P. $=612+13=625$
Profit $=875-625=250$
$\therefore$ Profit per cent
$=\frac{250}{625} \times 100=40 \%$
10. (a) $4200=\frac{29400 \times 6 \times \mathrm{R}}{100}$
$\Rightarrow \mathrm{R}=\frac{4200}{294 \times 6}=\frac{50}{21}=2 \frac{8}{21} \%$
11. (d) If the rate of C.I. be $\mathrm{r} \%$ per annum, then
$A=P\left(1+\frac{R}{100}\right)^{T}$
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$\Rightarrow 8820=8000\left(1+\frac{\mathrm{r}}{100}\right)^{2}$
$\Rightarrow \frac{8820}{8000}=\left(1+\frac{\mathrm{r}}{100}\right)^{2}$
$\Rightarrow \frac{441}{400}\left(\frac{21}{20}\right)^{2}=\left(1+\frac{\mathrm{r}}{100}\right)^{2}$
$\Rightarrow 1+\frac{\mathrm{r}}{100}=\frac{21}{20}$
$\Rightarrow \frac{\mathrm{r}}{100}=\frac{21}{20}-1=\frac{1}{20}$
$\Rightarrow \mathrm{r}=\frac{1}{20} \times 100$
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$\therefore r=5 \%$ per annum
12. (c) C alone can do in
$=\frac{2 \times 10 \times 12 \times 15}{10 \times 12-12 \times 15+10 \times 15}$
$=\frac{240 \times 15}{120-180+150}$
$=\frac{240 \times 15}{90}=40$ days
13. (a) Time taken to fill the $\frac{3}{5}$ of the cistern $=60$ seconds
$\therefore$ Time taken in filling $\frac{2}{5}$ part
कापिएर्ज $=\frac{60 \times 5}{3} \times \frac{2}{5}=40$ seconds
14. (d) Work done in 1 hour by the filling pump $=\frac{1}{2}$

Work done in 1 hour by the leak and the filling pump $=\frac{3}{7}$
$\therefore$ Work done by the leak in 1 hour
$=\frac{1}{2}-\frac{3}{7}=\frac{7-6}{14}=\frac{1}{14}$
Hence, the leak can empty the tank in 14 hours.
15. (d) $\because 1 \mathrm{~m} / \mathrm{sec}=\frac{18}{5} \mathrm{kmph}$
$\therefore \frac{10}{3} \mathrm{~m} / \mathrm{sec}$
$=\frac{18}{5} \times \frac{10}{3}=12 \mathrm{kmph}$
16. (b) Let the speed of boat in still water be x kmph , then
$\frac{12}{x+3}+\frac{12}{x-3}=3$
$\Rightarrow 12\left(\frac{\mathrm{x}-3+\mathrm{x}+3}{(\mathrm{x}+3)(\mathrm{x}-3)}\right)=3$
$\Rightarrow 4 \times 2 \mathrm{x}=\mathrm{x}^{2}-9$
$\Rightarrow x^{2}-8 x-9=0$
$\Rightarrow \mathrm{x}^{2}-9 \mathrm{x}+\mathrm{x}-9=0$
$\Rightarrow \mathrm{x}(\mathrm{x}-9)+1(\mathrm{x}-9)=0$
$\Rightarrow(\mathrm{x}-9)(\mathrm{x}+1)=0$
$\Rightarrow \mathrm{x}=9$ because $\mathrm{x} \neq-1$
$\therefore$ Speed can't be negetive.
Hence, speed of boat in still water $=9 \mathrm{kmph}$
17. (d) The given sequence is based on the following pattern :
$7 \times 8=56$
$8 \times 9=72$
$9 \times 10=90$
$10 \times 11=110$
$11 \times 12=132$
$12 \times 13 \neq 154$, but 156
$\therefore 154$ is the wrong number.
18. (b) $\sqrt{1-\frac{\mathrm{x}^{3}}{100}}=\frac{3}{5}$

Squaring both sides,
$1-\frac{x^{3}}{100}=\frac{9}{25}$
$\Rightarrow \frac{x^{3}}{100}=1-\frac{9}{25}=\frac{25-9}{25}=\frac{16}{25}$
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$\Rightarrow \mathrm{x}^{3}=\frac{16}{25} \times 100=64$
$\therefore \mathrm{x}=\sqrt[3]{64}=\sqrt[3]{4 \times 4 \times 4}=4$
19. (a) $\sqrt{1+\frac{\mathrm{x}}{961}}=\frac{32}{31}$

Squaring both sides,
$1+\frac{x}{961}=\left(\frac{32}{31}\right)^{2}=\frac{1024}{961}$
$\Rightarrow \frac{\mathrm{x}}{961}=\frac{1024}{961}-1=\frac{1024-961}{961}=\frac{63}{961}$
$\Rightarrow \mathrm{x}=63$
20. (b) $x=\frac{4 \sqrt{15}}{\sqrt{5}+\sqrt{3}}$
$=\frac{4 \sqrt{15}(\sqrt{5}-\sqrt{3})}{(\sqrt{5}+\sqrt{3})(\sqrt{5}-\sqrt{3})}$
$=\frac{4 \sqrt{15}(\sqrt{5}-\sqrt{3})}{5-3}$
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$=2 \sqrt{15}(\sqrt{5}-\sqrt{3})=10 \sqrt{3}-6 \sqrt{5}$
$\therefore \frac{\mathrm{x}+\sqrt{20}}{\mathrm{x}-\sqrt{20}}+\frac{\mathrm{x}+\sqrt{12}}{\mathrm{x}-\sqrt{12}}$
$=\frac{10 \sqrt{3}-6 \sqrt{5}+2 \sqrt{5}}{10 \sqrt{3}-6 \sqrt{5}-2 \sqrt{5}}+\frac{10 \sqrt{3}-6 \sqrt{5}+2 \sqrt{3}}{10 \sqrt{3}-6 \sqrt{5}-2 \sqrt{3}}$
$=\frac{10 \sqrt{3}-4 \sqrt{5}}{10 \sqrt{3}-8 \sqrt{5}}+\frac{12 \sqrt{3}-6 \sqrt{5}}{8 \sqrt{3}-6 \sqrt{5}}$
$=\frac{5 \sqrt{3}-2 \sqrt{5}}{5 \sqrt{3}-4 \sqrt{5}}+\frac{6 \sqrt{3}-3 \sqrt{5}}{4 \sqrt{3}-3 \sqrt{5}}$
$60-15 \sqrt{15}-8 \sqrt{15}+30+90$
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$=\frac{-15 \sqrt{15}-24 \sqrt{15}+60}{(5 \sqrt{3}-4 \sqrt{5})(4 \sqrt{3}-3 \sqrt{5})}$
$=\frac{240-62 \sqrt{15}}{60-15 \sqrt{15}-16 \sqrt{15}+60}$
$=\frac{240-62 \sqrt{15}}{120-31 \sqrt{15}}$
$=\frac{2(120-31 \sqrt{15})}{120-31 \sqrt{15}}=2$
21. (c) $\tan \left(\frac{\pi}{2}-\frac{\theta}{2}\right)=\sqrt{3}$
$\Rightarrow \cot \frac{\theta}{2}=\sqrt{3}=\cot 30^{\circ}$
$\Rightarrow \frac{\theta}{2}=30^{\circ} \Rightarrow \theta=60^{\circ}$
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$\therefore \cos \theta=\cos 60^{\circ}=\frac{1}{2}$
22. (a) $\sec \theta+\tan \theta=\sqrt{3}$
$\because \sec ^{2} \theta-\tan ^{2} \theta=1$
$\Rightarrow(\sec \theta-\tan \theta)(\sec \theta+\tan \theta)=1$
$\Rightarrow \sec \theta-\tan \theta=\frac{1}{\sqrt{3}} \ldots$..(ii)
By subtracting (ii) from (i)
$\sec \theta+\tan \theta-\sec \theta+\tan \theta=\sqrt{3}-\frac{1}{\sqrt{3}}$
$\Rightarrow 2 \tan \theta=\frac{3-1}{\sqrt{3}}$
$\Rightarrow \tan \theta=\frac{1}{\sqrt{3}}=\tan 30^{\circ}$
$\Rightarrow \theta=30^{\circ}$
$\therefore \tan 3 \theta=\tan 90^{\circ}=$ undefined
23. (a) $\frac{\mathrm{x}}{\mathrm{b}+\mathrm{c}}=\frac{\mathrm{y}}{\mathrm{c}+\mathrm{a}}$

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$=\frac{x-y}{b+c-c-a}=\frac{x-y}{b-a} ;$
$\frac{y}{c+a}=\frac{z}{a+b}$
$=\frac{y-z}{c+a-a-b}=\frac{y-z}{c-b} ;$
$\frac{z}{a+b}=\frac{x}{b+c}$
$=\frac{z-x}{a+b-b-c}=\frac{z-x}{a-c}$
$\therefore \frac{\mathrm{x}-\mathrm{y}}{\mathrm{b}-\mathrm{a}}=\frac{\mathrm{y}-\mathrm{z}}{\mathrm{c}-\mathrm{b}}=\frac{\mathrm{z}-\mathrm{x}}{\mathrm{a}-\mathrm{c}}$
24. (d) $x^{2}-y z=x^{2}+x y+z x$

$$
=x(x+y+z)
$$



$$
\left[\begin{array}{l}
\because \mathrm{xy}+\mathrm{yz}+\mathrm{zx}=0 \\
\Rightarrow \mathrm{yz}=-\mathrm{xy}-\mathrm{zx}
\end{array}\right]
$$

Similarly,
$y^{2}-z x=y(x+y+z)$
$z^{2}-x y=x(x+y+z)$
$\therefore$ Expression
$=\frac{1}{x(x+y+z)}+\frac{1}{y(x+y+z)}+\frac{1}{z(x+y+z)}$
$=\frac{y z+z x+x y}{x y z(x+y+z)}=0$
25. (c) $\mathrm{x}^{2}+\frac{1}{5} \mathrm{x}+\mathrm{a}^{2}$
$=\mathrm{x}^{2}+2 \cdot \mathrm{x} \cdot \frac{1}{10}+\left(\frac{1}{10}\right)^{2}-\left(\frac{1}{10}\right)^{2}+\mathrm{a}^{2}$
$\therefore a^{2}-\left(\frac{1}{10}\right)^{2}=0 \Rightarrow a^{2}=\left(\frac{1}{10}\right)^{2}$
$\Rightarrow \mathrm{a}=\frac{1}{10}$
26. (c)

$\mathrm{AB}=\mathrm{AC}=15 \mathrm{~cm}$.
$\mathrm{AD} \perp \mathrm{BC} ; \mathrm{AD}=12 \mathrm{~cm}$.
$\therefore \mathrm{BD}=\mathrm{DC}$
In, $\triangle \mathrm{ABD}$
$\mathrm{BD}=\sqrt{\mathrm{AB}^{2}-\mathrm{AD}^{2}}$
$=\sqrt{15^{2}-12^{2}}$
$=\sqrt{(15+12)(15-12)}$
$=\sqrt{27 \times 3}=9 \mathrm{~cm}$.
$\therefore \mathrm{BC}=2 \times \mathrm{BD}=2 \times 9=18 \mathrm{~cm}$.
27. (c) $\angle \mathrm{ABC}+\angle \mathrm{ACB}+\angle \mathrm{BAC}=180^{\circ}$
$\Rightarrow \angle \mathrm{ABC}+\frac{1}{5} \angle \mathrm{ABC}+\frac{3}{5} \angle \mathrm{ABC}=180^{\circ}$
$\Rightarrow \angle \mathrm{ABC}+\frac{4}{5} \angle \mathrm{ABC}=180^{\circ}$
or $\frac{9}{5} \angle \mathrm{ABC}=180^{\circ}$
$\Rightarrow 9 \angle \mathrm{ABC}=180 \times 5$
$\Rightarrow \angle \mathrm{ABC}=100^{\circ}$
28. (b) Here, $\mathrm{L}=38 \mathrm{~m}, \mathrm{~B}=32 \mathrm{~m}$
$\mathrm{w}=$ ?
2
Area of path $=2 \mathrm{w}[\mathrm{L}+\mathrm{B}-2 \mathrm{w}]$
$600=2 \mathrm{w}[38+32-2 \mathrm{w}]$
$300=\mathrm{w}(70-2 \mathrm{w})$
$2 \mathrm{w}^{2}-70 \mathrm{w}+300=0$
$w^{2}-35 w+150=0$
$(\mathrm{w}-30)(\mathrm{w}-5)=0$
$\Rightarrow$ Either w-30 $=0$, w $=30$
But w $=30$
or, $w-5=0, \mathrm{w}=5$
$\therefore \mathrm{w}=5 \mathrm{~m}$ is the width of path.
29. (d) $\pi r+2 r=36$
$\Rightarrow \mathrm{r}\left(\frac{22}{7}+2\right)=36$
$\Rightarrow \mathrm{r}\left(\frac{22+14}{7}\right)=36$
$\Rightarrow \mathrm{r}=\frac{36 \times 7}{36}=7$ metre
Area $=\frac{\pi r^{2}}{2}$
$=\frac{1}{2} \times \frac{22}{7} \times 7 \times 7$
$=77$ sq. metre
30. (a)


Let the side of the equilateral triangle be xcm .
$\therefore \Delta \mathrm{AOB}+\Delta \mathrm{BOC}+\Delta \mathrm{COA}=\Delta \mathrm{ABC}$
$\Rightarrow \frac{1}{2} \mathrm{x} \times 3+\frac{1}{2} \times \mathrm{x} \times 4+\frac{1}{2} \times \mathrm{x} \times 5=\frac{\sqrt{3}}{4} \mathrm{x}^{2}$
$\Rightarrow 6=\frac{\sqrt{3}}{4} \mathrm{x} \Rightarrow \mathrm{x}=\frac{24}{\sqrt{3}}=8 \sqrt{3}$
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$\therefore$ Area of $\triangle \mathrm{ABC}=\frac{\sqrt{3}}{4} \times$ side $^{2}$
$=\frac{\sqrt{3}}{4} \times 8 \sqrt{3} \times 8 \sqrt{3}=48 \sqrt{3}$ sq. cm .
31. (c) Bifurcate and Divide imply similar meanings. Similarly, Loathe and Detest imply similar meanings.
32. (b) Ass is considered as Timid.

Fox is considered as Cunning.
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33. (b) The foot of human being is analogus to the hoof of cow.
34. (c) Respiratory organ of fish is gills. Similarly, lung is the respiratory organ of man.
35. (b) Injury causes pain. Similarly, thunder causes lightning.
36. (c)


## धुाजिजল

Clearly, A is father of E, D and B of which E and D are sons and B's sex is not given and C is B's daughter hence two possibilities exist :
(i) When B is female - then E (and also D) is maternal uncle of C . So option (3).
(ii) When B is male - then E (and also D ) is paternal uncle of C .
Hence C and E are neice and uncle respectively. Option (c) is correct.
37. (c)

| $-\Rightarrow+$ | $+\Rightarrow \times$ |
| :--- | :--- |
| $\div \Rightarrow-$ | $\times \Rightarrow \div$ |

$27 \times 3 \div 6+9-8=$ ?
$\Rightarrow$ ? $=27 \div 3-6 \times 9+8$
$\Rightarrow ?=9-54+8$
$\Rightarrow ?=17-54=-37$
38. (d) Rapid and slow are antonymous to each other.
39. (c) Starting

Point


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40. (a) Today is Wednesday $+4=$ Sunday

Two days after tomorrow
= Sunday $+3=$ Wednesday
41. (c) The given number series is based on the following pattern:
$109-35=74$
$74-28=46$
$46-21=25$
$25-14=11$

$11-7=4$
42. (c) 23

43. (a) The given number series is based on the following pattern :

$$
{ }^{3}-1=0
$$

(2) $)^{3}-2=6$
$(3)^{3}-3=24$
$(4)^{3}-4=60$
$(5)^{3}-5=120$

$(6)^{3}-6=210$
44. (a)


Similarly,

45. (d) There is no ' O ' letter in the keyword, therefore, the words TELEVISION and RENOVATE cannot be formed.

There is no ' P ' letter in the keyword, therefore, the word RESPITE cannot be formed.
46. (c) Both the Premises are Universal

Affirmative (A-type).
All men are women.


All women are crazy.
A $+\mathrm{A} \Rightarrow \mathrm{A}$ - type of Conclusion
"All men are crazy".
This is Conclusion I.
Conclusion III is the Converse of it.
Conclusion IV is the Converse of Statement Q .
47. (b) The rank of Suresh $=28$ th
$\longrightarrow \mathrm{R} \cdots{ }^{14 \text { Students }} \begin{array}{r}\text { 28th } \\ \mathrm{S} \\ \hline\end{array}$
48. (b) $12 \times 4=48$
$\sqrt{25}=5$
$16 \times 4=64$

$\sqrt{81}=9$
Similarly,
$15 \times 4=60$
$\sqrt{49}=7$
49. (a) Suppose the present age of son $=x$ years

The present age of father
$=2 \mathrm{x}$ years
20 years ago
$(2 \mathrm{x}-20)=12(\mathrm{x}-20)$
or, $2 \mathrm{x}-20=12 \mathrm{x}-240$
or, $12 \mathrm{x}-2 \mathrm{x}=240-20$
or, $10 \mathrm{x}=220$

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$\therefore \mathrm{x}=22$ years
Age of father $=2 x=44$ years
50. (c) Meaningful order of words:
(c) Day
(e) Work
$\downarrow$
(a) Exhaust

(b) Night
$\downarrow$
(d) Sleep
51. (d) There are seven blocks in the given figure.
52. (b) Cabbage is different from beans but both are included in the class "vegetables".

53. (b)

54. (c)


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55. (c)

56. (a)


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57. (c)

58. (d)

59. (a)

60. (c)

61. (c) on the beach will replace in the beach on (Prep.) is used for a surface in (Prep.) is used for an enclosed space Look at the examples given below : I am currently staying in a hotel. The author's name is on the cover of the book.
62. (d) No error.
63. (b) boys will replace boy because -
one of is fol lowed by a Plural Noun/Pronoun Look at the examples given below :

One of my fingers is hurting.
One of them is a crook.
Hence, one of the tallest boys is the right usage
64. (c) destroyed by fire will replace destroyed in fire because -
by (Prep.) indicates the agent after a Passive
Verb as in -
Seeds eaten by the birds -_


> Passive Prep. agent Verb

He was knocked down by a bus. Passive Verb Prep. agent
Hence, was destroyed by fire is the right usage
65. (b) the (Def. Art.) will not be used with justice because -
justice (Noun) is an Uncountable Noun that refers to something in a general sense.
Look at the examples given below :
In the interest of justice, we should treat everyone the same. खुருভিर्स
They are demanding equal rights and justice.
Hence, justice and cares is the right usage
66. (c) The sentence structure is as follows :

It's high time + Subject (you) + Past Verb (went) $\rightarrow$ Refers to the present moment Hence, went is the right usage.
67. (c) emigrant (Noun) : a person who leaves a country to live in another
migratory (Adj.) : wandering from one place to another at different times of the year
immigrant (Noun) : a person who comes to a country to live there
itinerant (Noun) : travelling from place to place, especially looking for a job
Here, emigrant is the right usage.
68. (b) Neither do I nor does my friend is the right usage.

69. (a) Here, the poorer of is the right usage.

There is a comparison between two workers.
70. (c) Negative Sentence $\rightarrow$ Positive Tag

Tag Structure $\rightarrow$ First Auxiliary (will)
Hence, will you is the right usage.
71. (a) Don't speak unless you are spoken to. (Passive). The sentence is in Simple Present Tense (Active). It is also a Complex Sentence with
 The Passive Voice of Verbs with two objects is formed by changing either of the two Objects into the Subject (You), and retaining the other as the Object (someone)

Don't speak until someone speaks to you.

(Active)
(Phrasal)
Don't speak unless you are spoken to

(by someone)

Object
72. (c) Were you frightened by the noise ? (Passive)

The sentence is in Simple Past Tense. (Active)
An Interrogative Sentence beginning with Auxiliary Verb-Did will be converted to a Passive one by first changing it into Assertive, then Passive and finally an Interrrogative one. Sentence $\rightarrow$ Did the noise frighten you ? (Active)

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Step 1 (Assertive) The noise frightened you.
Step 2 (Passive) You were frightened by the noise. Step 3 (Interrogative) Were you frightened by the noise?
73. (a) He likes to be called sir by people. (Passive)

The sentence is in Simple Present Tense. (Active). It also has Double Objects (he, sir)
He likes People to call him sir.
(means people call him sir)

Object Subject Infinitive + Verb Object $\rightarrow$ Active $\begin{array}{rr}\mathrm{He} & \text { likes } \\ \downarrow & \downarrow\end{array}$ to be called $\begin{array}{ccc}\text { sir } & \text { by people. } \\ \downarrow & \downarrow\end{array}$
Subject Infinitive + be + Verb Object Object
$\rightarrow$ Passive
74. (a) Aarati said, "I am in a hurry today." $\rightarrow$ (D.S.)


Aarati said that she was in a hurry that day. $\rightarrow$ (I.S.)

| $\downarrow \downarrow \downarrow \downarrow \downarrow$ |  |
| :---: | :---: |
| Rep.V.Conj.Pro.H.V. | $\downarrow$ |
| Ext.wd. |  |

(I)
75. (c) They said, "We are practising for the next match." Rep.V Pro Verb (they)(Pr. Cont.)
$\rightarrow$ (D.S.)
They said that they were practising for the next match.

| $\downarrow$ |  |  |
| :---: | :---: | :---: |
| Rep.V.Conj.Pro. | $\downarrow$ | Verb |

(we) (P.Cont.)
$\rightarrow$ (I.S.)
76. (b) He said, "Long may you live!" $\rightarrow$ (D.S.)

He prayed that my life might be long. $\rightarrow$ (I.S.)
Rep.V. Conj. Pro.Noun Moda
(you)
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77. (b) accused (Verb) : said that somebody has done something wrong
condemned (Verb) : expressed/very strong disapproval of
charged (Verb) : accused of doing something wrong (publicly)
Here, accused is the right usage.
78. (c) which (Pro.) : used in questions for asking somebody to be exact about one or more people or things from a limited number
Here, which is the right usage.
79. (c) ulterior (Adj.) : that somebody keeps hidden and does not admit
posterior (Adj.) : at the back of something
interior (Noun) : the inside part of something something
Here, ulterior is the right usage.
80. (b) conscientious (Adj.) : taking care to do things carefully and correctly
Here, conscientious is the right usage.
81. (c) We use get used to doing to talk about the process of something becoming normal for us. Such expressions are followed by Gerunds Here, to driving is the right usage.
82. (c) contradict (Verb) : to say something that somebody else is wrong and the opposite is true controvert (Verb) : to say or to prove that something is not true; refute; rebut; deny; contradict

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subvert (Verb) : to try to destroy the authority of a political, religious system by attacking it
indict (Verb) : to officially charge somebody with a crime
confuse (verb) : to make somebody unable to think clearly or understand something
83. (b) deadly (Adjective) : causing or likely to cause death
virulent (Adjective) : extremely dangerous or harmful and quick to have an effect
defunct (Adjective) : no longer existing, operating or being used

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daring (Adjective) : brave; willing to do dangerous or unusual things, involving danger or taking risks
deceptive (Adjective) : likely to make you believe something that is not true
84. (b) privilege (Noun) : a special right; honour perquisite (Noun) : a special right; perk; privilege; prerogative
incentive（Noun）：something that encourages you to do something
bonus（Noun）：an extra amount of money that is added to a payment
reward（Noun）：something given to somebody because he has done something good．
85．（d）brewery

brewery（N．）：a factory where beer is made
bakery（N．）：a place where bread and cakes are made and／or sold
cloakroom（N．）：a room in a public building where people can leave coats，bags，etc．for a time
tannery（N．）：a place where animal skins are tanned and made into leather．
86．（a）flora
flora（N．）：the plants of a particular area，type of environment or period of time
fauna（N．）：the animals living in an area or in a particular period of history
landscape（N．）：everything you can see when you look across a large area of land
environment（N．）：the conditions that affect the behaviour and development of somebody／ something

87．（a）immigrant
immigrant（ $\mathbf{N}$ ．）：a person who has came to
live permanently in a country that is not his own
emigrant（N．）：a person who leaves his country to live in another
alien（N．）：hostile，strange and frightening； different from what you are used to
visitor（N．）：a person who visits a place or a person
88．（c）hinterland

hinterland（N．）：the area of a country that is away from the coast from the banks of a large river or from the main cities
swamps（N．）：marsh；an area of ground that is very wet or covered with water and in which plants，trees，etc．are growing
marshes（N．）：an area of low land that is always soft and wet because there is nowhere for the water to flow away to
isthmuses（N．）：narrow strip of land，with water on each side，that joins two large pieces of land

Mাपिएर्न
89．（c）aggressive
aggressive（Adj．）：angry，and behaving in a threatening way；ready to attack
creative（Adj．）：having the skill and ability to produce something new，especially a work of art
impatient（Adj．）：annoyed／irritated by somebody／something；waiting to do unpleasant malicious（Adj ．）：having／showing hatred and a desire to harm somebody or hurt his feelings； spiteful；malevolent．
90．（b）lazy（Adjective）：lethargic
diligent（Adjective）：showing care and effort in your work or duties
intelligent（Adjective）：very clever
boastful（Adjective）：talking about yourself in a very proud way
notorious（Adjective）：well－known for being bad
91．（d）careful（Adjective）：very diligent
negligent（Adjective）：failing to give enough care or attention；relaxed；not formal or awkward；non－chalant
inattentive（Adjective）：not paying attention
imprudent（Adjective）：not wise or sensible； unwise

Mাডিिए
insignificant（Adjective）：not big／valuable enough to be considered important
92．（a）sloppy（Adjective）：that shows a lack of care， thought or effort；baggy
neat（Adjective）：tidy and in order；carefully done／arranged；trim
fragrant（Adjective）：having a pleasant smell spruce（Adjective）：neat and clear in appearance
orderly（Adjective）：in arranged manner．
93．（b）ran riot ：to act without restraint or control
－The children ran riot when there was nobody （elders）at home．

শुাভিখর্स
The best option is acted without restraint．
94．（a）to get one＇s own back ：to obtain something again after having lost it；have one＇s revenge
－She finally saw a chance to get her own back． The best option is to get one＇s revenge．
95．（d）to smell a rat ：to suspect that something is wrong about a situation
－I don＇t think this was an accident．I smell a rat．
The best option is to suspect a trick．
96．（a）a sore point with ：a subject that makes you feel angry or upset when it is mentioned
sore ：annoyed；upset and angry कुष्डिर्य
－I tried not to make any reference to his drinking habits．I know it＇s
a sore point with his wife at the moment．
The best option is something which hurts．
97．（b）The misspelt word is obnoxcious
The correct spelling is obnoxious
98. (b) The misspelt word is dictionery

The correct spelling is dictionary
99. (c) SRPQ
100.(b) SRPQ
101.(d) to (Prep.)

Mাভिएर्स
102.(a) nestles (Verb) : located in a position that is protected, sheltered or hidden
103.(a) so (Conj.)
104. (b) take (Verb)
105.(d) bordering (Verb)
106. (b) Samudragupta (335-375 AD) of the Gupta dynasty is known as the Napoleon of India. Historian A V Smith called him so because of his great military conquests known from the 'Prayag Prashasti' written by his courtier and poet Harisena, who also describes him as the hero of a hundred battles. But some leading Indian historians criticise Smith and feel that Samudragupta was a far greater warrior than Napoleon, as the former never lost any battle.
107.(b) There are 8 planets of the solar system that revolve around the sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Pluto was stripped of its planetary status and categorized as a 'dwarf planet' by the International Astronomical Union in 2005.
108.(d) Article 1 in the Constitution states that India that is Bharat, shall be a Union of States. The territory of India shall consist of: The territories of the states, The Union territories and any territory that may be acquired. फुपाடिथर्स
109.(b) Sonar (originally an acronym for Sound Navigation And Ranging) is a technique that uses sound propagation (usually underwater, as in submarine navigation) to navigate, communicate with or detect objects on or under the surface of the water, such as other vessels. Two types of technology share the name "sonar": passive sonar is essentially listening for the sound made by vessels; active sonar is emitting pulses of sounds and listening for echoes. Sonar may be used as a means of acoustic location and of measurement of the echo characteristics of "targets" in the water.

फ़ापिर्स
110. (c) Over 5,000 minors rescued by Mumbai Police so far this year under 'Operation Muskaan', a Ministry of Home Affairs project. It aims to find missing children, and rescue and rehabilitate them. More children were rescued by the Mumbai Police till August of this year than those rescued in the past five years combined.
111. (d) Statutory Liquidity Ratio refers to the amount that the commercial banks require to maintain in the form gold or government approved securities before providing credit to the customers. Here by approved securities we mean, bond and shares of different companies. Statutory Liquidity Ratio is determined and maintained by the Reserve Bank of India in order to control the expansion of bank credit. Statutory liquidity ratio is the amount of liquid assets such as precious metals (Gold) or other approved securities, that a financial institution must maintain as reserves other than the cash. In a growing economy banks would like to invest in stock market, not in Government Securities or Gold as the latter would yield less returns. One more reason is long term Government Securities (or any bond) are sensitive to interest rate changes. But in an emerging economy interest rate change is a common activity. फ़ापिथर्स
112. (b) Bio gas is a clean unpolluted and cheap source of energy in rural areas. It consists of $55-70 \%$ methane which is inflammable. Bio gas is produced from cattle dung in a bio gas plant commonly known as gobar gas plant through a process called digestion. It helps in reducing the deforestation as it arrests for cutting of trees for firewood. It also helps in maintaining ecological balance, in rural sanitation and it needs Lower capital cost and almost cost free maintenance.

कापिधर्स
113. (b) The Forty-second Amendment of the Constitution of India, enacted in 1976, laid down the Fundamental Duties of Indian citizens to the nation. The amendment inserted Article 51A to create a new part called IV-A in the Constitution, which prescribed the fundamental duties to the citizens.
114. (c) A megalith is a large stone that has been used to construct a structure or monument, either alone or together with other stones. Many of these, though by no means all, contain human remains, but it is debatable whether use as burial sites was their primary function. Though generally known as dolmens, the correct term accepted

115. (a) President Ram Nath Kovind inaugurated India's first Artificial Intelligence (AI) school called as Santhigiri Vidyabhavan in Kerala's capital city, Thiruvananthapuram. The AI school is a result of a collaboration between iLearning Engines (ILE) USA and Vedhik eSchool.
116.(b) Coal is an organic sedimentary rock that forms mainly from plant debris. The plant debris usually accumulates in a swamp environment.
117.(b) The femur (pl. femurs or femora), or thigh bone, is the most proximal (closest to the center of the body) bone of the leg in tetrapod vertebrates capable of walking or jumping, such as most land mammals, birds, many reptiles such as lizards, and amphibianssuch as frogs. In vertebrates with four legs such as dogs and horses, the femur is found only in the rear legs. The femur is the largest bone in the human body. The head of the femur articulates with the acetabulum. By most measures the femur is one of the strongest bones in the body. سुர্ভির্स
118. (c) The first Buddhist Council was held at Rajgir in 483 BC during the reign of Ajatasatru. It was presided by Mahakassapa.
119.(b) The British presence in India dates back to the early part of the seventeenth century. On 31 December, 1600, Elizabeth, then the monarch of the United Kingdom, acceded to the demand of a large body of merchants that a royal charter be given to a new trading company, "The Governor and Company of Merchants of London, Trading into the East-Indies." Between 1601 and 1613, merchants of the East India Company took twelve voyages to India, and in 1609 William Hawkins arrived at the court of Jahangir to seek permission to establish a British presence in India. Hawkins was rebuffed by Jahangir, but Sir Thomas Roe, who presented himself before the Mughal Emperor in 1617, was rather more successful. Two years later, Roe gained Jahangir's permission to build a British factory in Surat, and in 1639, this was followed by the founding of Fort St. George (Madras).
120.(a) The Gujarat government has increased the reservations for Other Backward Classes (OBCs) in the state's panchayats and urban local bodies from $10 \%$ to $27 \%$. This decision was made based on recommendations of the K.S Jhaveri Commission, which was formed based on a 2022 Supreme Court order on deciding the level of OBC quotas in Gujarat. फ़ाடिएर्स
121.(c) The National Development Council recognized the need for fixing minimum support price of foodgrains in 1959. However, till the mid 1973 74, Government announced two types of administered prices: Minimum Support Prices and Procurement Prices. The present system was evolved in 1975-76 when MSP for paddy,
coarse cereals, wheat and gram were announced.

Mাভিயিर्स
122.(a) Among the Standing Committees, the three Financial Committees - Committees on Estimates, Public Accounts and Public Undertakings - constitute a distinct group as they keep an unremitting vigil over Government expenditure and performance. While members of the Rajya Sabha are associated with Committees on Public Accounts and Public Undertakings, the members of the Committee on Estimates are drawn entirely from the Lok Sabha.
123.(c) Kullu is a broad open valley formed by the Beas river between Manali and Largi. This valley is famous for its beauty and its majestic hills covered with Pine and Deodar Forest and sprawling Apple Orchards. The economy of Kullu largely depends on tourism, horticulture (apples, plums, pears, and almonds) and handicrafts (shawls, caps, etc.). फुருভिस
124.(c) Newton's third law states that "For every action, there is an equal and opposite reaction." The statement means that in every interaction, there is a pair of forces acting on the two interacting objects. The size of the forces on the first object equals the size of the force on the second object. The direction of the force on the first object is opposite to the direction of the force on the second object. So harder the stone is kicked the harder will be its effect on the hitter
125.(c) Rajasthan Chief Minister Ashok Gehlot has approved an increase in minimum wages for labourers by Rs 26 per day. This increase would be effective from January 1, 2023. He also announced that registered insured employees and their dependent families under the Employees State Insurance (ESI) Scheme of Rajasthan will also get the benefit of Mukhyamantri Chiranjeevi Swasthya Bima Yojana under the ESI category.
126.(b) Hydrogen is a chemical element with symbol H and atomic number 1 . With an average atomic weight of $1.00794 \mathrm{u}(1.007825 \mathrm{u}$ for hydrogen1 ), hydrogen is the lightest element and its monatomic form $\left(\mathrm{H}_{1}\right)$ is the most abundant chemical substance, constituting roughly $75 \%$ of the Universe's baryonic mass. Nonremnant stars are mainly composed of hydrogen in its plasma state. Air is the name given to the atmosphere used in breathing and photosynthesis. Dry air contains roughly (by volume) $78.09 \%$ nitrogen, $20.95 \%$ oxygen,
$0.93 \%$ argon, $0.039 \%$ carbon dioxide, and small amounts of other gases. Air also contains a variable amount of water vapor, on average around $1 \%$. Naturally occurring atomic hydrogen is rare on Earth because hydrogen readily forms covalent compounds with most elements and is present in the water molecule and in most organic compounds. फ़ापिせরर्य
127.(d) The southernmost point of India is Indira Point.
128.(a) Bass Strait is a sea strait separating Tasmania from the south of the Australian mainland, specifically the state of Victoria. Its maximum width is 240 km , its depth is $50-70 \mathrm{~m}$.
129.(b) The acknowledged high priest of the drain theory was Dadabhai Naoroji. It was in may 1867 that Dadabhai Naoroji put forward the idea that Britain was draining India. From then on for nearly half a century he launched a raging campaign against the drain, hammering at the theme through every possible form of public communication. The drain he declared, was the basic cause of India's poverty and the fundamental evil of British rule in India.
130.(c) India emerged champions in the Men's Hockey5s Asia Cup, beating arch-rivals Pakistan 2-0 in a
shootout after both teams were locked at 4-4 in regulation time. With the win, India have booked their place in the FIH Men's Hockey5s World Cup 2024.
131.(a) session layer

फ़ाप्रिएर्स
132.(c) port address
133.(b) Internet
134.(a) Telnet
135.(b) Cryptography
136.(c) Table
137.(b) radix
138.(a) NAND
139. (a) Remote
140.(b) CPU
141.(b) gigabyte
142.(b) Fifth Generation Computers
143.(b) Scanner
144.(d) Worksheets
145.(d) All of the above
146. (a) Booting
147.(c) network
148. (a) Netiquette

149.(a) application layer
150.(c) Directory

