## SSC CGL Main Exam Practice Set - 2023

1. (b) $0.7+\sqrt{0.16}$
$=0.7+0.4=1.1$
$1.02-\frac{0.6}{24}$
$=1.02-0.025$
$=0.995$
$1.2 \times 0.83=0.996$
फ़ाबिएर्य
$\sqrt{1.44}=1.2$
Hence, the greatest number $=\sqrt{144}$
2. (c) Let the number be 15 x and
$15 y$, where x and y are co -prime.
$\therefore 15 \mathrm{x} \times 15 \mathrm{y}=6300$
$\Rightarrow \mathrm{xy}=\frac{6300}{15 \times 15}=28$
So, two pairs are
$(7,4)$ and $(14,2)$
3. (d) $\frac{2}{2+\frac{2}{3+\frac{6}{\frac{11}{3}}} \times 0.39}$

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=\frac{2}{2+\frac{2}{\frac{33+6}{11}} \times 0.39}
$$

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=\frac{2}{2+\frac{11 \times 2}{39} \times 0.39}
$$

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=\frac{2}{2+\frac{11 \times 2}{39} \times \frac{39}{100}}
$$

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=\frac{2}{2+\frac{11}{50}}=\frac{2}{\frac{100+11}{50}}
$$

$$
=\frac{100}{111}
$$

4. (b) $(16)^{0.16} \times(16)^{0.04} \times(2)^{0.2}$
$=\left(2^{4}\right)^{0.16} \times\left(2^{4}\right)^{0.04} \times(2)^{0.2}$
$=2^{0.64} \times 2^{0.16} \times 2^{0.2}$
$=(2)^{0.64+0.16+0.2}=2$
5. (c) Mean of Ten observations -

Mean of nine observations
Tenth observation
$=10 \times 17-16 \times 9$
$=170-144=26$
6. (c) $\mathrm{a}: \mathrm{b}: \mathrm{c}=2: 3: 4$
$\therefore \frac{\mathrm{a}}{2}=\frac{\mathrm{b}}{3}=\frac{\mathrm{c}}{4}=\mathrm{k}$ (let)
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$\Rightarrow \mathrm{a}=2 \mathrm{k}, \mathrm{b}=3 \mathrm{k}$, and $\mathrm{c}=4 \mathrm{k}$
Given $2 \mathrm{a}-3 \mathrm{~b}+4 \mathrm{c}=33$
$\Rightarrow 2 \times 2 \mathrm{k}-3 \times 3 \mathrm{k}+4 \times 4 \mathrm{k}=33$
$\Rightarrow 4 \mathrm{k}-9 \mathrm{k}+16 \mathrm{k}=33$
$\Rightarrow 11 \mathrm{k}=33 \Rightarrow \mathrm{k}=\frac{33}{11}=3$
$\therefore \mathrm{c}=4 \mathrm{k}=4 \times 3=12$
7. (a) $(A+B) \times \frac{40}{100}=(A-B) \times \frac{60}{100}$
$\Rightarrow 2(\mathrm{~A}+\mathrm{B})=3(\mathrm{~A}-\mathrm{B})$
$\Rightarrow 2 \mathrm{~A}+2 \mathrm{~B}=3 \mathrm{~A}-3 \mathrm{~B}$
$\Rightarrow A=5 B$
$\therefore \frac{2 \mathrm{~A}-3 \mathrm{~B}}{\mathrm{~A}+\mathrm{B}}=\frac{10 \mathrm{~B}-3 \mathrm{~B}}{5 \mathrm{~B}+\mathrm{B}}$
$=\frac{7 \mathrm{~B}}{6 \mathrm{~B}}=\frac{7}{6}$
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8. (c) S.P. of the fan $=\frac{150 \times 80}{100}=₹ 120$
9. (d) Single equivalent discount of two successive discounts of $36 \%$ and
$4 \%=36+4-\frac{36 \times 4}{100}$
$=40-1.44=38.56$
Percentage difference
$=40-38.56=1.44$
$\therefore$ Required difference
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$=500 \times \frac{1.44}{100}=₹ 7.20$
10. (a) Time from 11 May to 10 September, 1987
$=21+30+31+31+10=123$ days
$\therefore$ Time $=123$ days $=\frac{123}{365}$ year
$\therefore$ S.I. $=\frac{7300 \times 123 \times 5}{365 \times 100}=₹ 123$
11. (a) Let the required time be $t$ years.

Interest is compounded half yearly.
$\therefore$ Time $=2 t$ half years
and rate $=\frac{20}{2}=10 \%$
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$\therefore 1000\left(1+\frac{10}{100}\right)^{2 t}=1331$
$\Rightarrow\left(\frac{11}{10}\right)^{2 t}=\frac{1331}{1000}$
$\Rightarrow\left(\frac{11}{10}\right)^{2 t}=\left(\frac{11}{10}\right)^{3} \Rightarrow 2 t=3$
$\therefore t=\frac{3}{2}$ years or $1 \frac{1}{2}$ years
12. (b) $(\mathrm{A}+\mathrm{B})$ 's 1 day's work $=\frac{1}{18}$

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$(B+C)$ 's 1 day's work $=\frac{1}{9}$
$(\mathrm{A}+\mathrm{C})$ 's 1 day's work $=\frac{1}{12}$
Adding all the above three,
$2(A+B+C)$ 's 1 day's work
$=\frac{1}{18}+\frac{1}{9}+\frac{1}{12}$
$=\frac{2+4+3}{36}=\frac{9}{36}=\frac{1}{4}$
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$\therefore(\mathrm{A}+\mathrm{B}+\mathrm{C})$ 's 1 day's work $=\frac{1}{8}$
$\therefore$ B's 1 day's work $=(\mathrm{A}+\mathrm{B}+\mathrm{C})$ 's 1 day's work - (A + C)'s 1 day's work
$=\frac{1}{8}-\frac{1}{12}=\frac{3-2}{24}=\frac{1}{24}$
Hence, B alone can do the work in 24 days.
13. (b) Part of tank filled in 1 hour when all three pipes are opened
$=\frac{1}{10}+\frac{1}{12}-\frac{1}{6}$
$=\frac{6+5-10}{60}=\frac{1}{60}$
फुप्ञिस
$\therefore$ The tank will be filled in 60 hours.
$\therefore$ One fourth of the tank will be filled in 15 hours $\left[\frac{1}{4} \times 60\right]$ i.e. the tank will be filled at 10 p.m.
14. (c) Part of the tank filled by B and C in half an hour
$=\frac{1}{2}\left(\frac{1}{9}+\frac{1}{12}\right)$
$=\frac{1}{2}\left(\frac{4+3}{36}\right)=\frac{7}{72}$
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Remaining part
$=1-\frac{7}{72}=\frac{72-7}{72}=\frac{65}{72}$
Part of tank filled by three pipes in an hour
$=\frac{1}{6}+\frac{1}{9}+\frac{1}{12}$
$=\frac{6+4+3}{36}=\frac{13}{36}$
$\therefore$ Time to fill remaining part
$=\frac{65}{72} \times \frac{36}{13}=\frac{5}{2}=2 \frac{1}{2}$ hours
15. (b) Speed of train $=\frac{\text { Distance }}{\text { Time }}$
$=\frac{10}{\frac{12}{60}} \mathrm{kmph}$
$=\frac{10 \times 60}{12}=50 \mathrm{kmph}$
New speed $=45 \mathrm{kmph}$
$\therefore$ Required time $=\frac{10}{45}$ hour
$=\frac{2}{9} \times 60$ minutes
$=\frac{40}{3}$ minutes
$=13$ minutes 20 seconds
16. (b) Speed upstream $=\frac{40}{8}=5 \mathrm{kmph}$

Speed downstream $=\frac{36}{6}=6 \mathrm{kmph}$
$\therefore$ Speed of boat in still water
$=\frac{1}{2}(5+6)=5.5 \mathrm{kmph}$
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17. (b) The given sequence is based on the following pattern :

$\therefore$ The value of is 1 .
18. (c) Arithmetic mean $(A M)=\frac{a+b}{2}$

Geometric mean $(G M)=\sqrt{\mathrm{ab}}$
As $\mathrm{AM}>\mathrm{GM}$
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$\frac{a+b}{2}>\sqrt{a b}$
19. (b) $9 \sqrt{\mathrm{x}}=\sqrt{3 \times 2 \times 2}+\sqrt{3 \times 7 \times 7}$
$\Rightarrow 9 \sqrt{x}=2 \sqrt{3}+7 \sqrt{3}=9 \sqrt{3}$
$\therefore \mathrm{x}=3$
20. (c) When $x=6$,
$\frac{4 \times 6}{3}+2 P=12$
$\Rightarrow 8+2 \mathrm{P}=12$
$\Rightarrow 2 \mathrm{P}=12-8=4$
$\Rightarrow \mathrm{P}=2$
21. (b) Let the number of terms be $n$, then

By $t_{n}=a+(n-1) d$
$85=5+(n-1)$
$\Rightarrow \mathrm{n}-1=85-5=80$

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$\Rightarrow \mathrm{n}=81$
$\therefore \sin ^{2} 5^{\circ}+\sin ^{2} 6^{\circ}+\ldots+\sin ^{2} 45^{\circ}+\ldots+\sin ^{2} 84^{\circ}+$ $\sin ^{2} 85^{\circ}$
$=\left(\sin ^{2} 5^{\circ}+\sin ^{2} 85^{\circ}\right)+\left(\sin ^{2} 6^{\circ}+\ldots+\sin ^{2} 84^{\circ}\right)+$ ..... + to ( 40 terms) $+\sin ^{2} 45^{\circ}$
$=\left(\sin ^{2} 5^{\circ}+\cos ^{2} 5^{\circ}\right)+\left(\sin ^{2} 6^{\circ}+\ldots+\cos ^{2} 6^{\circ}\right)+$ $\ldots . .+$ to 40 terms $+\sin ^{2} 45^{\circ}$

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\left[\begin{array}{c}
\sin \left(90^{\circ}-\theta\right)=\cos \theta \\
\sin ^{2} \theta+\cos ^{2} \theta=1
\end{array}\right]
$$

$=40+\left(\frac{1}{\sqrt{2}}\right)^{2}=40+\frac{1}{2}=40 \frac{1}{2}$
22. (d) $\cos \theta \cdot \operatorname{cosec} 23^{\circ}=1$

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$\Rightarrow \operatorname{cosec} 23^{\circ}=\frac{1}{\cos \theta}=\sec \theta$
$\Rightarrow \operatorname{cosec} 23^{\circ}=\operatorname{cosec}\left(90^{\circ}-\theta\right)$
$\Rightarrow 23^{\circ}=90^{\circ}-\theta$
$\Rightarrow \theta=90^{\circ}-23^{\circ}=67^{\circ}$
23. (d) $\frac{x^{2}}{y z}+\frac{y^{2}}{z x}+\frac{z^{2}}{x y}$
$=\frac{x^{3}+y^{3}+z^{3}}{x y z}=\frac{3 x y z}{x y z}=3$
24. (b) $\mathrm{n}=7+4 \sqrt{3}=7+2 \times 2 \times \sqrt{3}$


$$
\begin{aligned}
& =4+3+2 \times 2 \times \sqrt{3} \\
& =(2+\sqrt{3})^{2}
\end{aligned}
$$

$\therefore \sqrt{\mathrm{n}}=2+\sqrt{3}$
$\therefore \frac{1}{\sqrt{\mathrm{n}}}=\frac{1}{2+\sqrt{3}}$
$=\frac{1}{2+\sqrt{3}} \times \frac{2-\sqrt{3}}{2-\sqrt{3}}=2-\sqrt{3}$
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$\therefore \sqrt{\mathrm{n}}+\frac{1}{\sqrt{\mathrm{n}}}=2+\sqrt{3}+2-\sqrt{3}=4$
25. (a) $121 \mathrm{a}^{2}+64 \mathrm{~b}^{2}$
$=(11 a)^{2}+(8 b)^{2}$
$\because(x+y)^{2}=x^{2}+y^{2}+2 x y$
$\therefore$ Required expression
$=2 \times 11 \mathrm{a} \times 8 \mathrm{~b}=176 \mathrm{ab}$
26. (b)


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$\mathrm{AD} \perp \mathrm{BC}$
$\mathrm{BD}=\mathrm{DC}=12 \mathrm{~cm}$.
$\mathrm{OC}=\mathrm{OA}=$ Circum-radius
$=\mathrm{rcm}$.
$\mathrm{AD}=\sqrt{\mathrm{AB}^{2}-\mathrm{BD}^{2}}$
$=\sqrt{(12 \sqrt{5})^{2}-(12)^{2}}$
$=\sqrt{144 \times 5-144}$
$=\sqrt{144(5-1)}=\sqrt{144 \times 4}$
$=24 \mathrm{~cm}$.
In $\triangle O C D$,
ख्याগিির্র
$\mathrm{OD}=(24-\mathrm{r}) \mathrm{cm}$.
$\therefore \mathrm{OC}^{2}=\mathrm{OD}^{2}+\mathrm{CD}^{2}$
$\Rightarrow \mathrm{r}^{2}=(24-\mathrm{r})^{2}+12^{2}$
$\Rightarrow \mathrm{r}^{2}=576-48 \mathrm{r}+\mathrm{r}^{2}+144$
$\Rightarrow 48 \mathrm{r}=720$
$\Rightarrow \mathrm{r}=\frac{720}{48}=15 \mathrm{~cm}$.
27. (b)


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$\mathrm{AB}=\mathrm{AC}$
Point D is the mid-point of side BC .
$\therefore \angle \mathrm{ADB}=90^{\circ}=\angle \mathrm{ADC}$
PD is internal bisector of $\angle \mathrm{ADB}$.
$\therefore \angle \mathrm{PDA}=45^{\circ}$
PQ \| BC
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$\therefore \angle \mathrm{ADQ}=45^{\circ}$
$\therefore \mathrm{PDQ}=45^{\circ}+45^{\circ}=90^{\circ}$
28. (d) Let the breadth of rectangular hall $=x \mathrm{~m}$.
$\therefore$ length $=(x+5) \mathrm{m}$.
Area of hall
$=$ Length $\times$ Breadth
$\Rightarrow 750=(x+5) x$
$\Rightarrow \mathrm{x}^{2}+5 \mathrm{x}-750=0$
$\Rightarrow \mathrm{x}^{2}+30 \mathrm{x}-25 \mathrm{x}-750=0$
$\Rightarrow \mathrm{x}(\mathrm{x}+30)-25(\mathrm{x}+30)=0$
$\Rightarrow(\mathrm{x}-25)(\mathrm{x}+30)=0$
$\Rightarrow \mathrm{x}=25$, as x cannot be negative.
$\therefore$ Length of hall $=\mathrm{x}+5$
$=25+5=30 \mathrm{~m}$.
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29. (a) $\pi r^{2}=\pi \times 5^{2}+\pi \times 12^{2}$
$\Rightarrow r^{2}=25+144=169$
$\Rightarrow r=\sqrt{169}=13 \mathrm{~cm}$
30. (c)


The diameter of the greatest circle inscribed inside a square will be equal to the side of square i.e., 21 cm .
$\therefore$ Radius of the circle $=\frac{21}{2}$
$\therefore$ Area of the circle
$=\pi \times(\text { radius })^{2}$
$=\frac{22}{7} \times \frac{21}{2} \times \frac{21}{2}=\frac{693}{2} \mathrm{~cm}^{2}$.
$=346.5 \mathrm{~cm}^{2}$.
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31. (b) Cloth is woven from thread and mesh is made from wire.
32. (c) Love is antonym of Hate. Similarly, Proud is antonym of Humble.
33. (a) By breathing we intake air and in the same way blood is circulated.
34. (a) Mathematics is based logic. Similarly, experiment establishes or verifies the theory in science.
35. (c) Blinds possess visual defects. Similarly, a person having auditory defect is called Deaf.
36. (d)


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From above figure it is clear that D is grand father (maternal, i.e., mother's father) of A and B.
37. (c)

| $\mathrm{P} \Rightarrow \div$ | $\mathrm{Q} \Rightarrow \times$ |
| :--- | :--- |
| $\mathrm{R} \Rightarrow+$ | $\mathrm{S} \Rightarrow-$ |

16 Q 12 P 6 R 5 S $4=$ ?
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$\Rightarrow$ ? $=16 \times 12 \div 6+5-4$
$\Rightarrow$ ? $=16 \times 2+5-4$
$\Rightarrow$ ? $=32+5-4$
$\Rightarrow ?=37-4=33$
38. (a) Microbe is different from the other three.
39. (a)


## फ्रापिए।

It is clear from the diagram that Raju is facing towards South-East
40. (d) Today is Monday.

Yesterday was Sunday
Sunday - 3 = Thursday.
41. (c) The given number series is based on the following pattern :
$110-11=99$
$99-13=86$
$86-15=71$
$71-17=54$
$54-19=35$
42. (c) 240

43. (b) The given series is based on the following pattern
$125+110=235$
$235+110=345$
$345+110=455$
$455+110=565$
44. (d)

| S | Q | R | G | T |
| :---: | :---: | :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| y | r | w | c | g |

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45. (c) There is no ' C ' letter in the given word.
46. (d) Both the Premises are Universal Affirmative (Atype). These two Premises are not aligned. Now take the Converse of one of the Premises to align them.
47. (a) $\mathrm{B}=2 \mathrm{~A}$
$F=2 B$
$\mathrm{A}=2 \mathrm{C}$
$\mathrm{C}=2 \mathrm{D}$
$\Rightarrow \mathrm{F}=2 \mathrm{~B}=4 \mathrm{~A}=8 \mathrm{C}=16 \mathrm{D}$
$\mathrm{F}>\mathrm{B}>\mathrm{A}>\mathrm{C}>\mathrm{D}$
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Hence second oldest is B .
48. (b) The central number is equal to the sum of the products of diagonally opposite numbers.

## 1st Arrangement

$3 \times 2=6$ and $5 \times 4=20$
And $6+20=26$

## 2nd Arrangement

$4 \times 3=12$ and $6 \times 5=30$
And, $12+30=42$
3rd Arrangement
$4 \times 5=20$ and $7 \times 6=42$
And, $20+42=62$
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49. (b) Weight of new person (using formula) $=w t$. of replaced person $+n \times$ increase in Average $=60+8 \times 1=68 \mathrm{~kg}$
50. (c) Meaningful order in ascending order (of increasing cost) :
(c) Sand
$\downarrow$
(b) Iron
(a) Gold
(d) Diamond

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51. (b) Clearly, the number 4 lies to the opposite of 2.

52. (d) Some blue eyed may be females and vice-versa. Some females may be doctors and vice-versa.

Some blue eyed may be doctors and vice-versa. Some blue eyed females may be doctors.


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53. (c)

54. (d) И O I ¿己 I M

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55. (d)

56. (b)


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57. (c)

58. (d)

59. (c)


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60. (a) It is difficult to balance the ball and the jar in the position as shown in Answer Figure (a).
61. (b) principal will replace principle because principle (Noun) : a general rule that someone's behaviour or idea is based on

Principal (Adj.) : a chief/important person/thing Look at the examples given below : His principal interest in life was money. We follow the principle that everyone should be treated equally. फ़ाভि氏র্ज Hence, analyse thoroughly the principal causes is the right usage
62. (b) a little rain will replace little rain because little is a Negative Adj. and means not much a little is an Affirmative Adj. that means some Look at the examples given below :
He had little money. (not much money)
He had a little money. (some money)
Hence, there was a little rain is the right usage.
63. (b) than will replace when because -

No sooner - than is the correct Correlative.
No sooner introduces the event that occurred first.
Look at the examples given below :
No sooner had I closed my eyes than I fell
First Event Next Event
asleep.
No sooner did I arrived at the station than

the train came.

Next Event.
Hence, than it began is the right usage
64. (b) travelling will replace to travel because avoid (Verb) always agrees with a Gerund (- ing Verb) and not an Infinitive.
Look at the examples given below :
She avoids to do her homework. ( $\times$ )

Inf.
She avoids doing her homework. ( $\checkmark$ )

> Gerund

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65. (c) is will replace are because -
when a Plural Noun is pl aced wi th a Singular Subject (one, each, etc.) with of, the Verb will be Singular.
Look at the example given below :
Only one of his employees is sincere at work. Only one of his students is awarded the 'Scholar award'.
Hence, that is interesting is the right usage.
66. (a) International News is compared to National News.
Hence, National is the right usage.
67. (a) to make a tag, the first Auxiliary (has) will be used.
Hence, hasn't he? is the right usage.
68. (b) components (Noun) : one of several parts of which something is made
compounds (Noun) : a thing consisting of two or more separate things combined together Here, components is the right usage.
69. (d) No improvement

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 must have-expresses an opinion about an earlier (Past) situation, based on evidence.- Dinosaurs were very big; they must have eaten a lot.

70. (c) nor (Conj., Adv.) : used before a Positive Verb to agree something Negative that has just been said.

- She doesn't like them and nor does he.
- I'm not going and nor is he.

Hence, nor do I is the right usage.
71. (c) Who is looked for by him ? (Passive) The sentence is in Simple Present Tense. (Active) फुणापिएन
72. (b) He was seen picking up a gun by someone. (Passive)
The sentence is in Simple Past Tense. (Active)
73. (b) The end of this exercise is being reached by us. (Passive)
The sentence is in Present Continuous Tense. (Active)
74. (a) I said to my friend, "Can I borrow your

$$
\begin{array}{lll}
\text { Rep.V. } & \begin{array}{c}
\text { Modal Pro. } \\
\text { (Verb) }
\end{array} & \text { (I) }
\end{array}
$$

dictionary for one day ?" $\rightarrow$ (D.S.)
I asked my friend if I could borrow


Rep.V. Conj. Pro. Modal Verb
(I) (Verb)
his dictionary for one day $\rightarrow$ (I.S.)
$\downarrow$
Pro.
(your)
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(a) Mother said, "Gaurav, you will be eligible for

Rep.V. Pro. Modal
(Gaurav)
voting when you are $18 . " \rightarrow$ (D.S.).
Pro. H.V
(Gaurav)
Mother told "Gaurav that he would be eligible for $\begin{array}{cccc}\downarrow & \downarrow & \downarrow & \downarrow \\ \text { Rep.V. } & \text { Conj. Pro. Modal } \\ & & \text { (you) (will) }\end{array}$
voting when he was 18 ". $\rightarrow$ (ISS.)
H.V.
76. (d) "So help me Heaven," he cried, "I will never


Rep.V.
never to steal again (I.S.)
Inf. Verb
(S. Pre)

Another way of conversion -
He prayed to Heaven to help him in his resolve not to steal again.
77. (b) watching is the Direct Object of the Verb-enjoy

Here, watching is the right usage.
78. (c) Here, is elected is the right usage.
79. (d) Here, living is the right usage.
80. (b) recover (Verb) : to regain after illness, a setback or a shock, etc.

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recover agrees with Prep.-from
Here, from is the right usage.
81. (d) watching is the Direct Object of the Verbenjoy.
Here, watching is the right usage.
82. (c) adamant (Adjective) : firm or determined not to change your mind
stubborn (Adjective) : determined not to change your mind; obstinate
timid (Adjective) : not brave; shy and nervous arrogant (Adjective) : behaving in an unpleasant way

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angry (Adjective) : having strong feeling about something you dislike
83. (c) constant (Adjective) : happening all the time
invariable (Adjective) : never changing; unchanging; happening always
usual (Adjective) : normal
universal (Adjective) : done by all the people similar (Adjective) : being the same
84. (a) sweet (Adjective) : having a taste like sugar or a pleasant smell. फुणा্िিर्य
dulcet (Adjective) : sounding sweet and pleasant
dull (Adjective) : not interesting or exciting
hard (Adjective) : tough; solid, firm or stiff sour (Adjective) : having a taste like a lemon
85. (a) corroborate
corroborate (V.) : confirm; to provide evidence/
information that supports a statement
implicate (V.) : to show/suggest that somebody is involved in something bad/criminal; incriminate जुणप্仑িर्य
designate (V.) : to say officially that somebody/
something has a particular character/name; to describe in a particular way
extricate (V.) : to escape/enable to escape from a difficult situation
86. (b) ridicule
ridicule (N.) : mockery ; unkind remarks that make fun of somebody/ something or make him/ it look silly
discrimination (N.) : the practice of treating somebody or a particular group in society less fairly than other
satire (N.) : a way of criticizing a person, an idea or an institution in which you use humour to show his/its faults/weaknesses
contempt ( $\mathbf{N}$.) : the feeling that somebody/ something is without value and deserves no respect at all
87. (a) contagious

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contagious (Adj.) : easily spread from one person to another (disease)
infectious (Adj.) : easily spread; caused by infection
epidemic (N.) : a large number of cases of a particular disease happening at the same time in a particular community
endemic (Adj.) : regularly found in a particular place or among a particular group of people and difficult to get rid of.
88. (d) choir

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choir (N.) : a group of people who sing together (in church services/public performances)
coir (N.) : rough material made from the shells of coconuts, used for making ropes, for covering flowers, etc.
quorum (N.): the smal 1 est number of people who must be at a meeting before it can begin/ decisions can be made
quire (N.) : four sheets of paper folded to make eight leaves
89. (a) immigrant

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immigrant (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
90．（a）fail（Verb）：not to succeed
accomplish（Verb）：achieve；to succeed in doing or completing something
improper（Adjective）：dishonest／morally wrong；inappropriate
disagreeable（Adjective）：not nice or enjoyable；unpleasant；rude and unfriendly
scatter（Verb）：to dispense；to throw，drop or move in different directions
91．（d）arranged（Adjective）：planned and organised in advance
disorderly（Adjective）：showing lack of control；publicly violent or noisy；untidy； deranged धुण्विर्य chaotic（Adjective）：lack of order；in a state of complete confusion and lack of order
organized（Adjective）：carefully planned and arranged
adjusted（Adjective，Verb）：to change slightly to make it more suitable；adopted
92．（a）soothe（Verb）：calm；to make somebody who is anxious，upset，etc．feel calmer
provoke（Verb）：to cause a particular reaction or have a particular effect ；to say／do something that you know will annoy somebody so that it may react in an angry way；goad
incite（Verb）：to encourage to do something violent
smoother（Verb）：to make smooth or smoother ；become smooth
entice（Verb）：to persuade
फ्रापिएय
93．（c）pay through his nose ：to pay too much money for something
－We paid through the nose for that vacation． The best option is pay an extremely high price
94．（b）reading between the lines ：looking for or discovering a meaning；something that is not openly stated
－Reading between the lines of the letter，she realised that her friend was in great trouble．
The best option is understanding the sense rather than the actual words．खुण ভिए
95．（d）to beat a retreat ：to go away or back quickly， especially to avoid something unpleasant
－The dog beat a retreat to its own yard． The best option is to run away in fear．
96．（c）at one＇s wits＇end ：to be so worried by a problem that you do not know what to do next； to be puzzled
－I＇ve tried every possible source but without success，and now
I＇m at my wits＇end．
The best option is to get puzzled

97．（d）The misspelt word is sympathatic The correct spelling is sympathetic
98．（b）The misspelt word is bureaucretic The correct spelling is bureaucratic
99．（c）SQPR
100．（b）SRPQ
खुपिएय
101．（a）According to the author，religion is essentially a personal matter．
102．（d）Keep up our nation＇s prestige
103．（b）The author thinks that in the modern times people＇s needs have increased．
104．（c）The worst thing about modern science is that it has contributed to the decline of our values．
105．（b）The author holds that the perfect remedy for man＇s evil propensities is a religious sense．
106．（a）＂Satyameva Jayate＂（Truth Alone Triumphs）is a mantra from the ancient Indian scripture Mundaka Upanishad．Upon independence of In－ dia，it was adopted as the national motto of In－ dia．It is inscribed in Devanagari script at the base of the national emblem．The emblem and words＇Satyameva Jayate＇are inscribed on one side of all Indian currency．The emblem is an adaptation of the Lion Capital of Asoka which was erected around 250 BC at Sarnath，near Varanasi in the north Indian state of Uttar Pradesh．खुणिधिर्स
107．（c）Pulsars are spinning neutron stars that have jets of particles moving almost at the speed of light streaming out above their magnetic poles．These jets produce very powerful beams of light．
108．（c）At its core，sovereignty is typically taken to mean the possession of absolute authority within a bounded territorial space．There is essentially an internal and external dimension of sovereignty．Internally，a sovereign government is a fixed authority with a settled population that possesses a monopoly on the use of force．It is the supreme authority within its territory． Externally，sovereignty is the entry ticket into the society of states．

क्यापिएय
109．（b）Electron microscopes are used to observe a wide range of biological and inorganic specimens including microorganisms，cells，large molecules，biopsy samples，metals，and crystals． An electron microscope uses a beam of electrons to illuminate a specimen and produce a magnified image．An electron microscope（EM） has greater resolving power than a light－powered optical microscope because electrons have wavelengths about 100，000 times shorter than visible light photons．The electron microscope uses electrostatic and electromagnetic＂lenses＂ to control the electron beam and focus it to form an image．Industrially，the electron microscope
is often used for quality control and failure analysis.

काजिएर्य
110. (a) In an effort to boost bilateral trade and reduce reliance on the US dollar, India has settled its first-ever crude oil payment to the United Arab Emirates (UAE) in local currency.
The deal was facilitated under the 'local currency settlement' (LCS) system between state-owned Abu Dhabi National Oil Company and the Indian Oil Corporation. The deal is the second transaction under the LCS. The first deal took place in July, and involved the sale of 25 kg of gold from a leading UAE gold exporter to a buyer in India.

ত্যা|্ডির্স
111. (b) The best way for a bank to avoid loss is to accept only sound collateral. In lending agreements, collateral is a borrower's pledge of specific property to a lender, to secure repayment of a loan. The collateral serves as protection for a lender against a borrower's default - that is, any borrower failing to pay the principal and interest under the terms of a loan obligation. If a borrower does default on a loan (due to insolvency or other event), that borrower forfeits (gives up) the property pledged as collateral - and the lender then becomes the owner of the collateral. In a typical mortgage loan transaction, for instance, the real estate being acquired with the help of the loan serves as collateral. Should the buyer fail to pay the loan under the mortgage loan agreement, the ownership of the real estate is transferred to the bank. The bank uses a legal process called foreclosure to obtain real estate from a borrower who defaults on a mortgage loan. Collateral, especially within banking, traditionally refers to secured lending (also known as asset-based lending).
112. (a) Galvanization) is the process of applying a protective zinc coating to steel or iron, in order to prevent rusting. Although galvanization can be done with electrochemical and electrodeposition processes, the most common method in current use is hot-dip galvanization, in which steel parts are submerged in a bath of molten zinc.

कुणिएिर्ज
113. (c) Governments and laws derive their legitimacy form the consent of the people. It means majority of the people.
114. (c) The scenes depicted in the Ajanta paintings are mostly didactic, devotional, and ornamental, with scenes from the Jataka stories of the Buddha's former existences as a bodhisattva), the life of the Gautama Buddha, and those of his veneration. The two most famous individual painted images
at Ajanta are the two over-life size figures of the protective bodhisattvas Padmapani and Vajrapani on either side of the entrance to the Buddha shrine on the wall of the rear aisle. फुणाप्仑िय
115. (a) Lake Ohrid is a lake which spans the border between the southwestern part of North Macedonia and eastern Albania. It is one of Europe's deepest and oldest lakes.
Scientists have uncovered what may be one of Europe's earliest sedentary communities. Dating back 8,000 years, the homes built on stilts could be the oldest lakeside settlement ever found in Europe. Radiocarbon dating from the site puts it at between 6000 and 5800 BC .
116. (b) Weathering is the breaking down of rocks, soils and minerals as well as artificial materials through contact with the Earth's atmosphere, biota and waters. Weathering occurs in situ, or "with no movement."

फ्याप्डिय
117. (b) Chromosomes are long, stringy aggregates of genes that carry heredity information. They are composed of DNA and proteins and are located within the nucleus of our cells. Chromosomes determine everything from hair color and eye color to sex. Whether you are a male or female depends on the presence or absence of certain chromosomes. Human cells contain 23 pairs of chromosomes for a total of 46 . There are 22 pairs of autosomes and one pair of sex chromosomes.
118. (b) Kumara Gupta

फ्राप्ििर्य
119. (b) The first train in India had become operational on 22 December 1851 for localized hauling of canal construction material in Roorkee. A year and a half later, on 16 April 1853, the first passenger train service was inaugurated between Bori Bunder in Bombay and Thane. Covering a distance of 34 kilometres, it was hauled by three locomotives, Sahib, Sindh, and Sultan. This was soon followed by opening of the first passenger railway line in North India between Allahabad and Kanpur on March 3, 1859.
120.(b) Sulabh International founder, Padma Bhushan recipient, and social worker Bindeshwar Pathak passed away at the age of 80 . फुणाগि氏র্स Pathak was the founder of Sulabh International, an India-based social service organisation which works to promote human rights, environmental sanitation, waste management and reforms through education.
121.(a) Madan Mohan Malaviya raised Rs. 50,000 rupees to acquire the Hindustan Times along with the help of nationalist leaders Lajpat Rai and M. R. Jayakar and industrialist G. D. Birla, who paid most of the cash. Due to involvement of Lala

Lajpat Rai with Punjab National Bank. Malaviya received much needed funds from the bank to revive the paper.

ऊुणाषির্স
122.(d) Official Opposition is a term used in India to designate the political party which has secured the largest number of seats in the Lower House of parliament (Lok Sabha) but is not a part of the ruling party or coalition. A political party is officially accorded the status of an opposition party in Lok Sabha, only if it secures at least 10 percent of the seats.
123.(c) Separated from the Bay of Bengal by a narrow spit, Chilika is one of India's largest brackish water coastal lakes. Located south of the mouth of the Mahanadi River in unspoilt Odisha, this lake was once a bay of the ocean until it was silted up by monsoon tides. The lake is an important habitat and breeding ground for both resident and migratory and aquatic birds, most notably flamingoes.

फुप्रिিर्य
124.(a) In particle physics, fundamental interactions (sometimes called interactive forces or fundamental forces) are the ways that elementary particles interact with one another. An interaction is fundamental when it cannot be described in terms of other interactions. The four known fundamental interactions are electromagnetism, strong interaction ("strong nuclear force"), weak interaction ("weak nuclear force"), and gravitation. All are non-contact forces. Gravitation is by far the weakest of the four interactions. The weakness of gravity can easily be demonstrated by suspending a pin using a simple magnet (such as a refrigerator magnet). The magnet is able to hold the pin against the gravitational pull of the entire Earth.
125.(c) The multilateral naval exercise Malabar 2023 commenced at Sydney in Australia. Indian Navy's indigenous frontline warships INS Sahyadri and INS Kolkata is participating in the 11-day event.

खुण্িির্স
Ships and aircraft from the US Navy, Japan Maritime Self Defence Force and the Royal Australian Navy are also participating in the exercise. MALABAR series of maritime exercise commenced in 1992 as a bilateral exercise between Indian Navy and US Navy.
126.(d) Iron is a chemical element with the symbol Fe and atomic number 26. It is a metal in the first transition series. It is the most common element (by mass) forming the planet Earth as a whole, forming much of Earth's outer and inner core. It is the fourth most common element in the Earth's crust. Wrought iron is the purest form of iron. It contains less than $0.25 \%$ carbon.
127.(b) Apart from four main fishing harboursMangalore (Karnataka), Kochi (Kerala), Chennai (Tamil Nadu), Vishakhapatnam (Andhra Pradesh), and Roychowk in Kolkata (West Bengal)-twenty-three minor fishing harbors and ninety-five fish-landing centers are designated to provide landing and berthing facilities to fishing craft. फुणाগ্ভির্ন
128.(a) Jabalpur: Narmada; Paris: Seine; London: Thames; and Lahore: Ravi River flows on the north-western side.
129.(b) The first two metals to be used widely were gold and copper. The use of copper in antiquity is of more significance than gold as the first tools, implements and weapons were made from copper. From 4,000 to 6,000 BC was the Chalcolithic period which was when copper came into common use. By 3600 BC the first copper smelted artifacts were found in the Nile valley and copper rings, bracelets, chisels were found. By 3000 BC weapons, tools etc. were widely found. Tools and weapons of utilitarian value were now within society, however, only kings and royalty had such tools; it would take another 500 years before they reached the peasants. फुणড্ভिन्ब
130. (a) One District One Product (ODOP) program, an initiative under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, launched its collaboration with the Ministry of Rural Development in New Delhi.
DPIIT, Rural Development Ministry jointly launched 'One District One Product' Wall at SARAS Ajeevika Store.
131.(a) prior to
132.(b) transmission control protocol
133. (a) Wireless Transport Layer Security
134. (c) A field that aims to develop intelligent machines
135.(d) All of the above
136. (d) DML (Data Manipulation Langauge)
137.(d) C\#
138.(a) Ultra Large Scale Integration

139. (a) Super Computers
140.(b) Complex Instruction Set Computer
141.(a) Topology
142. (c) template
143.(c) Asymmetric Digital Subscriber Line
144.(c) Virtual memory
145.(d) All of the Above
146.(c) $\mathrm{Ctrl}+$ Shift + C
147. (c) $\mathrm{Ctrl}+$ Home and $\mathrm{Ctrl}+$ End
148.(b) Switch Mode Power Supply

ख्याप्िए
149.(a) Multi-tasking
150.(b) Centralized data processing

