



Answer Key to IBPS Clerk Prelims Live Leak Model Question Paper 2017

ANSWER KEY

Q. No.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Ans.	4	2	1	2	4	3	1	1	3	4
Q. No.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
Ans.	1	1	4	3	5	2	5	2	2	5
Q. No.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
Ans.	5	2	4	1	4	4	3	4	5	1
Q. No.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.
Ans.	2	5	4	1	4	2	5	1	2	5
Q. No.	41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
Ans.	2	1	4	3	1	5	4	3	2	3
Q. No.	51.	52.	53.	54.	55.	56.	57.	58.	59.	60.
Ans.	1	3	5	3	2	4	3	2	5	1
Q. No.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.
Ans.	5	2	5	1	4	1	2	2	4	3
Q. No.	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.
Ans.	4	3	3	2	3	3	4	1	5	3
Q. No.	81.	82.	83.	84.	85.	86.	87.	88.	89.	90.
Ans.	1	1	4	5	2	2	1	2	3	3
Q. No.	91.	92.	93.	94.	95.	96.	97.	98.	99.	100.
Ans.	1	3	2	4	1	2	3	5	1	4

SOLUTIONS

Logical Reasoning



1. **Requirement:** Consonant → Vowels → Number

Given Series: P = R 1 5 H M T E 3 B ≤ V N 4 K A 8 W I 6 2 G 3 U H 7 I J Q 9
L Y

Hence, there are 3 such vowels in the above arrangement.

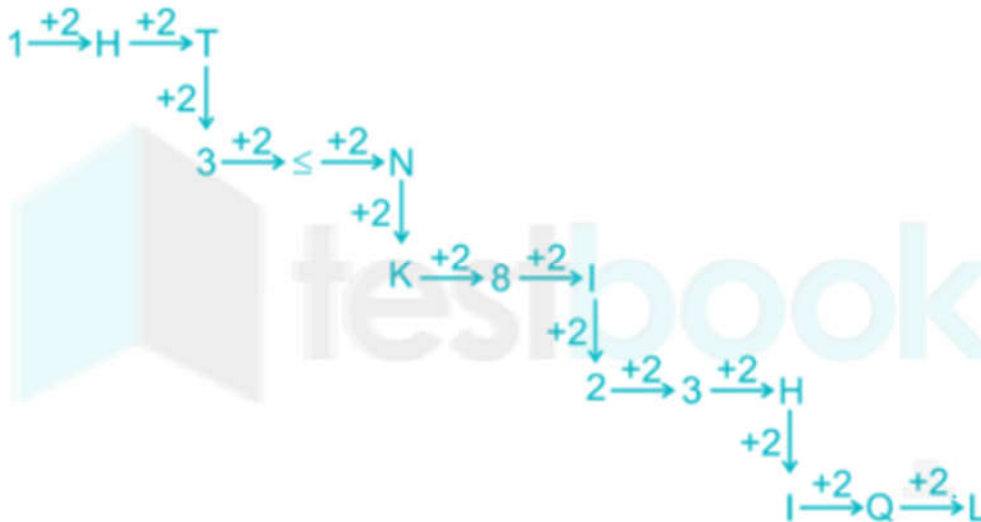
2. **Requirement:** Symbol → Consonant → Consonant

Given Series: P = R 1 5 H M T E 3 B ≤ V N 4 K A 8 W I 6 2 G 3 U H 7 I J Q 9
L Y

There is only 1 such consonant which is immediately preceded by a symbol and immediately followed by a consonant.

3. **Given Series:** P = R 1 5 H M T E 3 B ≤ V N 4 K A 8 W I 6 2 G 3 U H 7 I J Q 9
L Y

The pattern is as follows,



Hence, 23H is the correct answer.



4. **Given Series:** P = R 1 5 H M T E 3 B ≤ V N 4 K A 8 W I 6 2 G 3 U H 7 I J Q 9 L Y

The pattern is as follows,

$$\begin{array}{l} G \xrightarrow{+2} U \xrightarrow{+3} I \\ W \xrightarrow{+1} I \xrightarrow{+1} 6 \\ 7 \xrightarrow{+2} J \xrightarrow{+3} L \\ 5 \xrightarrow{+2} M \xrightarrow{+3} 3 \\ B \xrightarrow{+2} V \xrightarrow{+3} K \end{array}$$

Hence, WI6 doesn't belong to the group.

5. **Given Series:** P = R 1 5 H M T E 3 B ≤ V N 4 K A 8 W I 6 2 G 3 U H 7 I J Q 9 L Y

Twentieth form the right end is N and seventh to the right of N is 6.

Hence answer is 6.

Comprehension Questions (6-10):

Digits in the numbers are to be coded as follows:

Digit	7	3	5	0	2	1	6	4	9	8
Code	N	H	L	T	F	D	R	Q	G	P

Following conditions are to be observed:

Condition No	Condition	Action to be taken
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a	First digit is even and the last digit is odd	Coded as \$ and @ respectively
b	First digit is odd and the last digit is even	Coded as # and % respectively
c	0 is preceded as well as followed by an odd digit	0 is to be coded as ↑
d	0 is preceded as well as followed by an even digit	0 is to be coded as ↓
e	0 is not considered as either even or odd	

6. Here first digit is odd and last digit is even so condition (b) is applicable.

Digit	3	6	2	5	0	0	9	8
Code	#	R	F	L	T	T	G	%

Clearly option 3 is correct.

7. Here no condition is applicable because 0 is not considered either even or odd. Also there is no digit after 0.

digit	1	3	7	5	4	9	0
code	D	H	N	L	Q	G	T

Clearly option 1 is correct.





8. Here first digit is odd and last digit is even so condition (b) is applicable. Also 0 is preceded as well as followed by even digit so condition (d) is applicable.

digit	7	6	2	0	4	8	6
code	#	R	F	↓	Q	P	%

Clearly option 1 is correct.

9. Here by examining the code we can conclude that condition (a) and (c) are applied.

code	\$	Q	R	L	↑	H	@
digit	even	4	6	5	0	3	odd

Here in options 8465031 number is given in this format, so option 3 is true.

10. Here by examining the code we can conclude that only condition (d) is applied.

code	Q	L	P	↓	R	N	T
digit	4	5	8	0	6	7	0

Clearly option 4 is correct.

11. Here we need to find the direction in which Rahul started moving.

?(200m)→ Right(300m)→ Right(500m)→ Left(200m)→ South

Here we need to go back. Let S be the starting point and F be the final point.

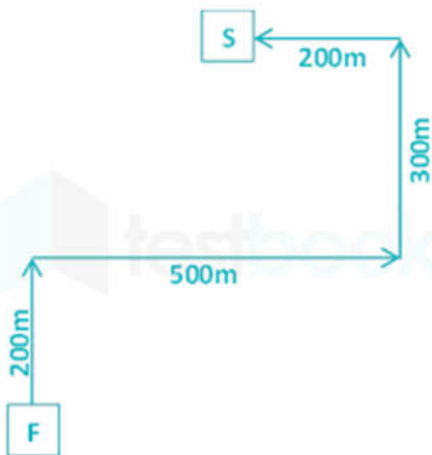
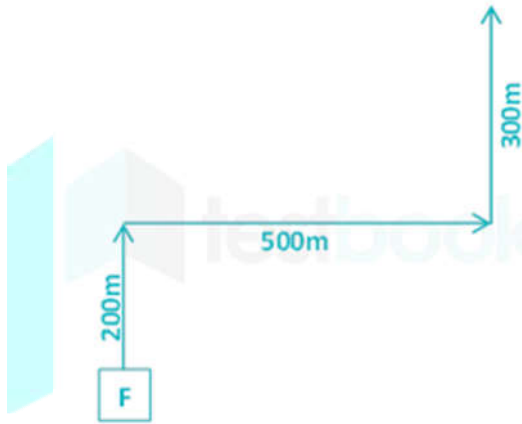


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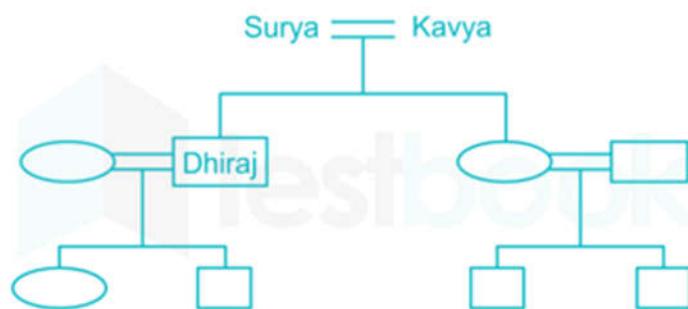


So he must have started towards east in order to face toward south when reach office gate.

Comprehension Questions (12-14):

According to the given information,

Symbol in Diagram	Meaning
○	Female
□	Male
══	Married Couple
—	Siblings
	Difference of A Generation



12. Clearly total members in the family are 10.





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13. Clearly only one grandchild of Kavya is a female.

14. Hence clearly there are four females in a family.

15. According to the question:

1. Row of 40 girls
2. Sujata was shifted to her left by 4 places and her number from the left end to the row became 10. Hence her number before shifting should have been 14 as shown (assume Sujata is facing upwards):



3. Kamala was three places to the right of Sujata's original position. Hence Kamala was at position 17 as shown:



Clearly Kamala was at position 17 from the left, or **position 24 from the right**.

Hence the answer is none of these.

16. **Statements:** $B \geq U < T$; $R \leq U > C$

Conclusions:

I. $T = R \Rightarrow$ False as $U < T$ and $R \leq U \Rightarrow R \leq U < T \Rightarrow R < T$

II. $C < B \Rightarrow$ True as $B \geq U$ and $U > C \Rightarrow B \geq U > C \Rightarrow B > C$





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Hence, only conclusion II is true.

17. **Statements:** $B \geq U < T$; $R \leq U > C$

Conclusions:

I. $R \leq B \Rightarrow$ True as $R \leq U$ and $B \geq U \Rightarrow R \leq U \leq B \Rightarrow R \leq B$

II. $T > C \Rightarrow$ True as $U < T$ and $U > C \Rightarrow T > U > C \Rightarrow T > C$

Hence both the conclusions I and II are true.

18. **Given statement:** $Y < R = T \geq U < W$

Conclusions:

I. $R > W \rightarrow$ as $R \geq U < W \rightarrow$ relation between R and W is not definite, hence false.

II. $Y < T \rightarrow$ as $Y < R = T \rightarrow Y < T$, hence true.

Hence only conclusion II is true.

19. **Statement:** $Q \leq W \leq E = R < T > Y \geq U > O$

Let us check each conclusion one by one.

I) $W = R \rightarrow$ as $W \leq E = R \rightarrow W \leq R \rightarrow$ False

II) $T > Q \rightarrow$ as $Q \leq W \leq E = R < T \rightarrow Q < T \rightarrow$ True

III) $E > O \rightarrow$ as $E = R < T > Y \geq U > O \rightarrow E < T > O \rightarrow$ No clear relation between E and O can be established.

Hence, only conclusion II follows.





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20. Given Statements:

$$P > B = T; E = F; E \geq D > T$$

$$\Rightarrow F = E \geq D > T = B < P$$

Conclusions:

I. $T < F \rightarrow F = E \geq D > T \rightarrow F > T$, hence true.

II. $P > T \rightarrow T = B < P \rightarrow T < P$, hence true.

Hence both the conclusions follows.

21. The least possible Venn diagram will be,



Conclusions:

I. Some stores are bags \rightarrow all stores are cabins and no cabin is bag, hence stores cannot be bags. Hence false.

II. Some bats are cabins \rightarrow it's possible but not definite, hence false.

III. Some stores are bats \rightarrow it's possible but not definite, hence false.

Hence none of the given conclusions follows.

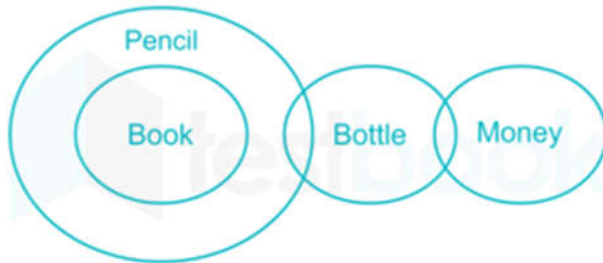
22. The least possible Venn diagram will be,





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Conclusions:

- I. Some money are pencils → it's possible but not definite, hence false.
- II. Some bottles are books → it's possible but not definite, hence false.
- III. No book is bottle → it's possible but not definite, hence false.

Here conclusion II and III form complementary pair, hence either conclusion II or III follows.

23. The statement 'Divyaan is twentieth from the left end and fourteenth from the right end of the row' does not provide any information about Divya.

However, the number of persons in the row = $20 + 14 - 1 = 33$.

Hence, data in statement I alone is not sufficient to answer the question.

The statement 'The number of persons towards the left of Divya is equal to that towards her right' only points out that Divya is in the middle of the row.

Hence, data in statement II alone is not sufficient to answer the question.

Considering both the statements I and II together,

We conclude that Divya is seventeenth from the left end.

Hence, the question can be answered using I and II together but not using I or II alone.





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24. In this question:

- I. 'now or never again' is written as 'ja ka ta sa'. => There is no 'go' in the sentence. So, we can't find the answer with this information.
- II. 'you come again now' is written as 'na ho ka sa' = > There is no 'go' in the sentence. So, We can't find the answer with this information.
- III. 'again go now or never' is written as 'ja ka ta sa tom' => There is no other information about other codes. So, we can't find the answer with this information.

On Combining I and II

'now or never again' is written as 'ja ka ta sa';

'you come again now' is written as 'na ho ka sa'

⇒ There is no 'go' in the sentences. So, we can't find the answer with this information.

On Combining II and III

'you come *again now*' is written as 'na ho *ka sa*'

'*again* go *now* or never' is written as 'ja *ka* ta *sa* tom'

Clearly, "again now" come in both the sentences. So, "again now" is coded as "sa ka" which is also common in both the sentences.

We cannot find the answer with this information.

On Combining III and I

'*now or never again*' is written as '*ja ka ta sa*';

'*again* go *now or never*' is written as '*ja ka ta sa* tom'

Clearly, 'now or never again' is common in both the sentences. So, it is coded as 'ja ka ta sa' which is a common code in both the sentences.

Hence, code for 'go' is 'tom' (Only, code left).

Hence, only III and I are required to answer the question.





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25. In this question:

- I. Manoj visited either on or before Wednesday ⇒ We can't find the answer with this information.
- II. Manoj visited Chennai the day after his mother's visit to his house ⇒ We can't find the answer with this information.
- III. Manoj's mother visited Manoj's house neither on Monday nor on Thursday ⇒ We can't find the answer with this information.

On combining I and II statements

Manoj visited either on or before Wednesday; Manoj visited Chennai the day after his mother's visit to his house.

⇒ We can't find the answer with this information.

On combining II and III statements

Manoj visited Chennai the day after his mother's visit to his house; Manoj's mother visited Manoj's house neither on Monday nor on Thursday.

⇒ That means Mother visited either on Tuesday or Wednesday or Friday or Saturday.

Also, that means Manoj visited Chennai either on Wednesday or Thursday or Friday or Saturday or Sunday.

We can't find the answer with this information.

On combining statements III and I:

Manoj's mother visited Manoj's house neither on Monday nor on Thursday; Manoj visited either on or before Wednesday.

⇒ We can't find the answer with this information.

On combining all the statements:

Manoj visited either on or before Wednesday; Manoj visited Chennai the day after his





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mother's visit to his house and Manoj's mother visited Manoj's house neither on Monday nor on Thursday

⇒ That means Mother visited on either Tuesday or Wednesday or Friday or Saturday. In addition, that means Manoj visited Chennai on either Wednesday or Thursday or Friday or Saturday or Sunday.

⇒ However, we are given that he visited either on or before Wednesday. Hence, he visited on Wednesday.

Hence, we need all the statements to answer the question.

Comprehension Questions (26-30):

7 people: A, B, C, D, E, F and G are sitting in a straight line facing north.

- 1) A is third to the right of G.
- 2) B is an immediate neighbor of A
- 3) C is third to the right of B.

So here total two cases are possible.

Case-1: G _ _ A B _ _ C

Case-2: G _ B A _ C

In case -1 there should be total eight persons but in the question only seven people are given hence only case-2 will be valid.

- 4) Now neither F nor C is sitting at an extreme end.
- 5) D is not an immediate neighbour of C.

Hence we will get the below arrangement,





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26. B is sitting between D and A.

27. G is sitting 2nd to the left of B.

28. E is sitting 2nd to the right of F.

29. G and E are sitting at the extreme ends of the line.

30. A is sitting in middle.

Hence A has as many people sitting to his right as to his left.

Comprehension Questions (31-35):

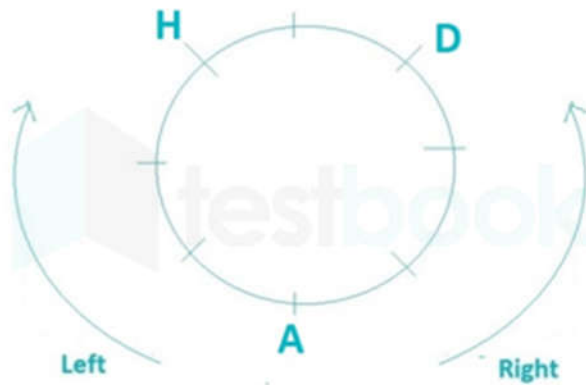
1) D is second to the left of H who is third to the left of A.





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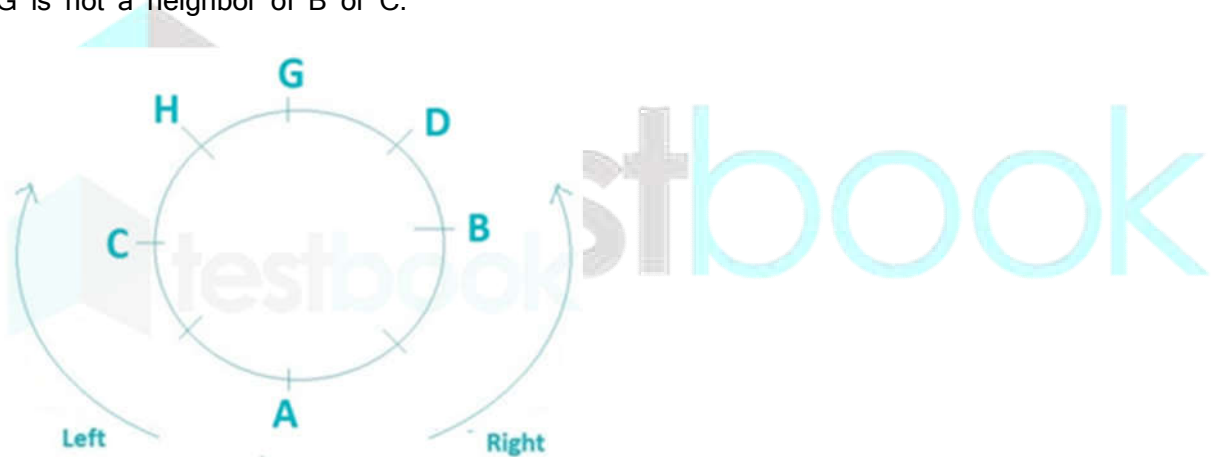
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2) B is fourth to the right of C who is immediate neighbor of H.

⇒ C can't be on immediate left of H then A's position would clash with B's.

G is not a neighbor of B or C.



3) F is not a neighbor of B. ⇒ F sits between C and A; E besides B.



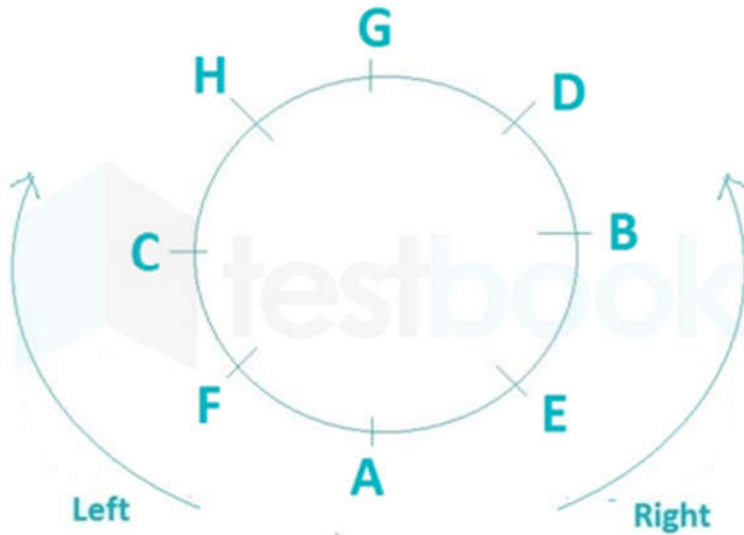
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31. Clearly, out of all options only B sits to the immediate right of E.

32. Clearly, F is 3rd to left of B.

33. Clearly, F is 3rd to right of G.

34. Clearly, only E sits between A and B.

35. Clearly, 3 are sitting between C and B.

Quantitative Aptitude

36. Value of first term





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$$\begin{aligned} & \frac{1}{\sqrt{2}+1} \times \frac{\sqrt{2}-1}{\sqrt{2}-1} \\ &= \frac{\sqrt{2}-1}{(\sqrt{2}+1)(\sqrt{2}-1)} \\ &= \frac{\sqrt{2}-1}{(\sqrt{2})^2-(1)^2} \\ &= \sqrt{2} - 1 \end{aligned}$$

Value of second term

$$\begin{aligned} & \frac{1}{\sqrt{3}+\sqrt{2}} \times \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}-\sqrt{2}} \\ &= \frac{\sqrt{3}-\sqrt{2}}{(\sqrt{3}+\sqrt{2})(\sqrt{3}-\sqrt{2})} \\ &= \frac{\sqrt{3}-\sqrt{2}}{(\sqrt{3})^2-(\sqrt{2})^2} \\ &= \sqrt{3} - \sqrt{2} \end{aligned}$$

So, following these patterns final value will be:

$$\sqrt{2} - 1 + \sqrt{3} - \sqrt{2} + \sqrt{4} - \sqrt{3} \dots + 4 - \sqrt{15}$$

$$\therefore \text{Final value} = 4 - 1 = 3$$

37. Follow **BODMAS** rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is:





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$$\frac{2}{3}\% \text{ of } 600 + x = 50$$

$$\Rightarrow \left(\frac{\frac{2}{3}}{100} \times 600 \right) + x = 50$$

$$\Rightarrow 4 + x = 50$$

$$\Rightarrow x = 50 - 4$$

$$\Rightarrow x = 46$$

38. The given expression,

$$25695.55 + 554786.65 - 145578.20$$

$$\Rightarrow 580482.2 - 145578.20$$

$$\Rightarrow 434904$$

39. I. 20% of 400

$$= \left(\frac{20}{100} \right) \times 400$$

$$= \left(\frac{1}{5} \right) \times 400$$

$$= 80$$

II. 500% of 20

$$= \left(\frac{500}{100} \right) \times 20$$

$$= 100$$

Thus, II is greater

40. Solve the given question, using following laws of indices,





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Laws of Indices: -

1-: $a^m \times a^n = a^{(m+n)}$

2-: $a^m \div a^n = a^{(m-n)}$

3-: $[(a^m)^n] = a^{mn}$

4-: $(a)^{(1/m)} = \sqrt[m]{a}$

5-: $(a)^{(-m)} = 1/a^m$

6-: $(a)^{(m/n)} = \sqrt[n]{a^m}$

7-: $(a)^0 = 1$

Now, the given expression:

$$16^{2.3} \times 4^2 \times 16^{0.2} = 2^?$$

$$\Rightarrow 16^{2.3 + 0.2} \times 4^2 = 2^?$$

$$\Rightarrow 16^{2.5} \times 4^2 = 2^?$$

$$\Rightarrow (4^2)^{2.5} \times 4^2 = 2^?$$

$$\Rightarrow (4)^{5+2} = 2^?$$

$$\Rightarrow 4^7 = 2^?$$

$$\Rightarrow 2^{14} = 2^?$$

On comparing both sides, we obtain

$$? = 14$$

41. The given series is,

$$\rightarrow 9,$$

$$\rightarrow 15 = 9 + 6 \times 1,$$





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$$\begin{aligned} \rightarrow 27 &= 15 + 6 \times 2, \\ \rightarrow 45 &= 27 + 6 \times 3, \\ \rightarrow 69 &= 45 + 6 \times 4, \\ \rightarrow ? &= 69 + 6 \times 5 = 99 \end{aligned}$$

42. The given series is,

$$\begin{aligned} \rightarrow 2916, \\ \rightarrow 972 &= 2916/3, \\ \rightarrow ? &= 972/3 = 324, \\ \rightarrow 108 &= 324/3, \\ \rightarrow 36 &= 108/3, \\ \rightarrow 12 &= 36/3 \\ \therefore ? &= 324 \end{aligned}$$

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43. The given series is,

$$\begin{aligned} \rightarrow 5963, \\ \rightarrow ? &= 5963 - 3^2 = 5954, \\ \rightarrow 5938 &= 5954 - 4^2, \\ \rightarrow 5913 &= 5938 - 5^2, \\ \rightarrow 5877 &= 5913 - 6^2, \\ \rightarrow 5828 &= 5877 - 7^2 \end{aligned}$$





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$\therefore ? = 5954$

44. The given series is:

→ 9,

→ $15 = 9 + 3 \times 2$,

→ $24 = 15 + 3 \times 3$,

The next term will be $(24 + 3 \times 4)$

→ $36 = 24 + 3 \times 4$,

→ $51 = 36 + 3 \times 5$,

→ $69 = 51 + 3 \times 6$,

→ $90 = 69 + 3 \times 7$,

$\therefore 34$ is the wrong term.

45. The given series is,

→ 10,

→ $12 = 10 \times 1 + 2$,

→ $28 = 12 \times 2 + 2 \times 2$,

→ $90 = 28 \times 3 + 2 \times 3$,

→ $368 = 90 \times 4 + 2 \times 4$,

→ $1850 = 368 \times 5 + 2 \times 5$,

→ $11112 = 1850 \times 6 + 2 \times 6$

Thus the wrong number is 1840.





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46. In this question, we're expected to calculate only the approximate value, not the exact value.

∴ We can use approximate values of the given numbers.

$$67.1 \approx 67$$

$$451.89 \approx 450$$

$$403 \approx 402$$

So, the given expression becomes:

$$67 \times 450 \div 402$$

$$= \frac{67 \times 450}{402}$$

$$= 450/6 = 75$$

47. In this type of question, we are expected to calculate **Approximate** value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$15.002 \approx 15$$

$$13.897 \approx 14$$

$$10.334 \approx 10$$

Now, given expression:

$$15.002 \times 13.897 \times 10.334$$

$$\approx 15 \times 14 \times 10$$





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≈ 2100

48. In this type of question, we are expected to calculate **Approximate** value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$4005.33 \approx 4000$$

$$19.89 \approx 20$$

$$1.9 \approx 2$$

∴ Now, given expression:

$$4005.33 \div 19.89 \times 1.9$$

$$\approx (4000/20) \times 2$$

$$\approx 200 \times 2$$

$$\approx 400$$

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49. In this type of question, we are expected to calculate **Approximate** value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$248.65 \approx 250$$

$$2398.59 \approx 2400$$

$$6\frac{2}{5} \text{ of } 248.65 = \text{of } 2398.59$$

$$\Rightarrow \frac{32}{5} \text{ of } 248.65 = \text{of } 2398.59$$





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$$\Rightarrow \frac{32}{5} \times 250 \approx x \times 2400$$

$$\Rightarrow x \approx \frac{1600}{2400} = \frac{2}{3}$$

50. In this type of question, we are expected to calculate **approximate** value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

Let $3.001 \approx 3$, $4.987 \approx 5$ and $1891.992 \approx 1900$

Now, the given expression:

$$\sqrt{10000} + \frac{3.001}{4.987} \text{ of } 1891.992 = ?$$

$$\Rightarrow 100 + \frac{3}{5} \text{ of } 1900 = ?$$

$$\Rightarrow ? = 100 + 1140$$

$$\Rightarrow ? \approx 1240$$

Hence, the required answer in place of question mark is 1240.

51. Let his cost price and selling price be Rs. x .

\therefore His cost price for 1000ml is Rs. x

\therefore His cost price for 1 ml = Rs. $x/1000$

He sells 850ml for Rs. x

\therefore His cost price for 1ml = Rs. $x/850$

\therefore Profit = Selling price - Cost price

\therefore Profit = $x/850 - x/1000 = 150x/850000 = 3x/17000$

Now, profit percentage = Profit/(Cost price) $\times 100 = \frac{\frac{3x}{17000}}{\frac{x}{1000}} \times 100 = \frac{300}{17} = 17\frac{11}{17}\%$





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52. Total number of possible outcomes when two dice are thrown = $6 \times 6 = 36$

Total number of ways in which the outcome total is 7 are (1,6), (2,5), (3,4), (4,3), (5,2), (6,1) = 6 ways.

Total number of ways in which the outcome total is 9 are (3,6), (4,5), (5,4), (6,3) = 4 ways.

\therefore Total number of ways in which the total is 7 or 9 = $6 + 4 = 10$ ways.

\therefore Required probability = $10/36 = 5/18$

53. Amount of alcohol in solution initially = 40% of 5 litres = $(40/100) \times 5 = 2$ litres

Amount of water added = 3 litres

Volume of new solution = $(5 + 3) = 8$ litres

Amount of alcohol in new solution = $(2/8) \times 100 = 25\%$

54. Let the side of the square be s .

Area = side \times side

\Rightarrow Area = s^2

Now, length increases by 40%

\Rightarrow length = $s + 40\%$ of $s = 1.4s$

Breadth increases by 30%

\Rightarrow breadth = $s + 30\%$ of $s = 1.3s$

Area = length \times breadth = $1.4s \times 1.3s$





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$$\Rightarrow \text{Area} = 1.82s^2$$

$$\text{Increase in area} = 1.82s^2 - s^2$$

$$\Rightarrow \text{Increase in area} = 0.82s^2$$

$$\% \text{ increase} = \frac{0.82s^2}{s^2} \times 100\%$$

$$\Rightarrow \% \text{ increase} = 82\%$$

55. We know that,

Speed = Distance/Time

Ratio of distance would be the same as ratio of speed,

Since time is constant,

When dog covers 50 km, deer covers 20 km.

When dog covers $(50 \times 21 = 1050)$ km, deer would cover $(20 \times 21 = 420)$ km.

Hence, the required distance is 420 km.

56. From the given table,

Total number of students studying in Standard V from all states together = $2.5 + 3.2 + 2.3 + 4.8 + 3.1 + 3.3 = 19.2$ lakhs = 1920000

Average number of students studying in Standard V from all states together

$$= \frac{\text{Total number of students in standard V}}{\text{Number of states}}$$

\Rightarrow Average number of students studying in Standard V from all states together = $1920000/6$





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⇒ Average number of students studying in Standard V from all states together = 320000

57. From the given table,

Number of students studying in standard IX of state T = 3.4 lakhs

Total number of students from state T = 3.1 + 3.9 + 4.7 + 4.0 + 3.4 + 4.0 = 23.1 lakhs

% of students from state T studying in standard IX out of all the students studying in State T

$$= \frac{3.4}{23.1} \times 100\%$$

⇒ % of students from state T studying in standard IX out of all the students studying in State T = 14.7186%

Rounded off to two digits of decimal = 14.72%

58. From the given table,

Total number of students studying in standard VI of state P = 2.8 lakhs

Total number of students studying in standard X of State U = 3.8 lakhs

Ratio of number of students studying in standard VI of state P to those studying in standard X of state U = 2.8 : 3.8 = 14:19

59. From the given table,

Total number of students studying in Standard VII from state R = 380000

Total number of students studying in Standard VIII from state S = 340000





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The total number of students studying in Standard VII from state R and standard VIII from state S = 380000 + 340000 = 720000

∴ None of the options match 5) is the correct option.

60. From the given table,

Total number of students in lakhs studying in

$$\text{Standard V} = 2.5 + 3.2 + 2.3 + 4.8 + 3.1 + 3.3 = 19.2$$

$$\text{Standard VI} = 2.8 + 2.9 + 3.2 + 2.4 + 3.9 + 4.2 = 19.4$$

$$\text{Standard VII} = 4.3 + 4.1 + 3.8 + 3.6 + 4.7 + 2.7 = 23.2$$

$$\text{Standard VIII} = 2.9 + 3.0 + 3.5 + 3.4 + 4.0 + 4.1 = 20.9$$

$$\text{Standard IX} = 4.1 + 3.6 + 2.9 + 3.4 + 3.4 + 3.6 = 21$$

$$\text{Standard X} = 4.3 + 2.7 + 3.7 + 4.3 + 4.0 + 3.8 = 22.8$$

Thus standard VII has the highest total number of students from all the states together.

61. We know the formula for compound interest-

$$\Rightarrow CI = \left[P \left\{ \left(1 + \frac{r}{100} \right)^t - 1 \right\} \right]$$

Where,

CI = Compound interest

P = Principal

R = Rate of interest

T = Time period





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Given: Rate of Interest = 7% p.a.

At the end of 2 years, i.e., $t = 2$

$$\Rightarrow CI = \left[3000 \left\{ \left(1 + \frac{7}{100} \right)^2 - 1 \right\} \right]$$

$$\Rightarrow CI = \left[3000 \left\{ \left(\frac{107}{100} \right)^2 - 1 \right\} \right]$$

$$\Rightarrow CI = \text{Rs. } 4,347$$

Thus, amount of compound interest that can be obtained on an amount of Rs. 30,000 = Rs. 4,347.

62. If $\frac{3}{5}$ of a cistern is filled in 1 minute, how much more time will be required to fill the rest of it.

$$\frac{3}{5} \text{ of a cistern is filled} = 1 - \frac{3}{5} = \frac{2}{5}$$

$$\frac{3}{5} \text{ of a cistern is filled in } 1 \text{ minute}$$

$$1 \text{ part of cistern is filled in } = \frac{1}{\frac{3}{5}} \text{ minute}$$

$$= \frac{5}{3} \text{ minute}$$

$$\frac{2}{5} \text{ part of cistern will be filled in } = \frac{5}{3} \times \frac{2}{5} \text{ minute}$$

$$= \frac{2}{3} \text{ minutes} = \frac{2}{3} \times 60 = 40 \text{ seconds}$$

63. Let the age of C be x years.

$$\text{Then, B's age} = 3x \text{ years}$$

$$\text{And A's age} = (3x + 5) \text{ years}$$

Given: the total of the age of A, B and C is 47.

$$\text{Thus, } (3x + 5) + 3x + x = 47$$





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$$\Rightarrow 7x + 5 = 47$$

$$\Rightarrow 7x = 42$$

$$\therefore x = 6$$

Therefore, B's age = $3 \times 6 = 18$ years.

64. Average of n numbers = Sum of n numbers $n = (\text{Sum of } n \text{ numbers})/n$

Let the numbers be a , b and c respectively.

$$\text{Average of } a \text{ and } b = (a+b)/2$$

$$\text{Average of } b \text{ and } c = (b+c)/2$$

According to the question, we have

$$\frac{a+b}{2} = \frac{b+c}{2} + 10$$

$$\Rightarrow \frac{a+b}{2} = \frac{b+c+20}{2}$$

$$\Rightarrow a + b = b + c + 20$$

$$\Rightarrow a = c + 20$$

$$\Rightarrow a - c = 20$$

So, the difference between the first and the last numbers = 20

65. Given

$$\Rightarrow A : B = 2 : 3$$

$$\Rightarrow B : C = 5 : 7$$

in order to find $A : B : C$ we need to value of B to be same in both the ratios





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i.e. $A : B = 2 : 3$ or it can be also written as $A : B = 10 : 15$

and similarly $B : C = 5 : 7$ or it can be written as $B : C = 15 : 21$

Clubbing the ratios we get $A : B : C = 10 : 15 : 21$

66. Let $CP = 100m$.

Then $MP = 100m + 50\% \text{ of } 100m$

$= 100m + 50m$

$= 150m$

We then have $SP = MP \times \frac{100 - \text{Discount}\%}{100}$

$\Rightarrow SP = 150m \times (100 - 30)/100$

$SP = 105m$

$\Rightarrow \text{Profit} = SP - CP$

$\Rightarrow \text{Profit} = 105m - 100m = 5m$

$\text{Profit}\% = \frac{\text{Profit}}{CP} \times 100$

$\Rightarrow \text{Profit}\% = 5m \times 100/100m$

$= 5\%$

67. Since there are 10 lamps and there are 2 ways in which each lamp can be either switched on or switched off

\therefore Number of ways in which the 10 lamps can be either switched on or switched off =
 $2 \times 2 \times 2 \times \dots \dots \dots 10 \text{ times} = 2^{10} = 1024$





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∴ There is one way in which none of the lamps are lit and so the hall cannot be illuminated

∴ Total number of ways in which the hall can be illuminated = $1024 - 1 = 1023$

68. Time taken to do the work for Sakshi = 20 days

∴ In one day Sakshi can do $1/20$ of the work.

Given, Tanya is 25 % more efficient than Sakshi

∴ Tanya can do $(1/20 + 25\% \text{ of } 1/20)$ of the work in one day

$$\Rightarrow (1/20) + (25/100) \times (1/20)$$

$$\Rightarrow (1/20) + (1/80) = 1/16$$

Tanya can do $1/16$ of the work in one day

∴ Tanya requires 16 days to complete the work

69. Area of a rhombus = Product of diagonals/2

Given, a rhombus having a side as 10 cm and one diagonal as 12 cm

Using property of rhombus, the sum of the squares of the sides equals the sum of the squares of the diagonals.

$$\therefore 4 \times \text{side}^2 = \text{diagonal}_1^2 + \text{diagonal}_2^2$$

$$\Rightarrow 4 \times 10^2 = 12^2 + \text{diagonal}_2^2$$

$$\Rightarrow \text{diagonal}_2^2 = 400 - 144 = 256$$

$$\Rightarrow \text{diagonal}_2 = 16 \text{ cm}$$

$$\therefore \text{Area of rhombus} = (12 \times 16)/2$$





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⇒ Area of rhombus = 96 sq. cm.

70. While crossing a platform, total distance = length of platform + length of train

Covered by train = 220 + 55 = 275m

∴ Speed = Distance/Time

∴ Speed = 275m/10sec

⇒ Speed = 27.5 m/s

Since, Train is crossing an electric pole, so the distance travelled by train to pass an electric pole is equal to its own length.

As we know that, Speed = Distance/Time

⇒ Time = Distance/Speed

⇒ Time = 55/27.5

⇒ Time = 2 secs

Thus time required to pass electric pole is 2 secs.

English

71. The businessman was not the owner of the coast so options 1 and 2 are eliminated. He had come there solely to relieve his stress and did not know about the fisherman beforehand. Thus option 3 is the correct answer.

72. The businessman was not the owner of the coast so options 1 and 2 are eliminated. He had come there solely to relieve his stress and did not know about the fisherman beforehand. Thus option 3 is the correct answer.





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73. The businessman told the fisherman that he should work harder in catching fish that would help him to expand his business and lead a carefree life. Thus the most appropriate answer is option 3 as it is the gist of the suggestion that he gave.
74. The fisherman thought in a different way and had different perceptions of life and work. He knew he could rest and enjoy without working hard. This is implicitly mentioned in the paragraph. Thus option 2 is the correct answer.
75. The word 'fluster' most closely means a panic or anxiety. Thus option 3 is the correct answer.
76. 'Discerned' means to find out or notice. Thus option 3 is the correct answer.
77. All the options except 4 have parts of the words which the businessman told him. Option 4 has the entire thing stated by the businessman thus being the correct answer.
78. The meaning of the word 'savoring' is enjoying making option 1 the correct answer.
79. It is clear from the story that neither of them were correct as both thought in extremes and a proper balance is required in life to enjoy rest after working hard. Thus option 5 is the correct answer.
80. The perception is clear from the last two paragraphs where each of them express their views. The businessman believed in money to remove all the worries of life and then rest whereas the fisherman believed it could be enjoyed without earning as well. It rests on the person's way of perceiving life.
81. The verb before the second blank is 'take'. Thus, 'treatment' and 'operation' cannot be the answer for the second blank eliminating options 3 and 4. Consequently option 5 is eliminated too. A 'vaccine' is taken for prevention of the disease and not its cure.





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Thus, option 1 - 'prevent, cure' are the best words to fill the blanks.

82. Options 3, 4 and 5 can be clearly eliminated on the grounds that the prepositions given in them to fill up the first blank do not suit in the context given. Only the prepositions given in the first two options satisfy the sense of direction and place required by the given sentence. Among the remaining two options, option 2 can be eliminated because if we use 'remained' to fill up the second blank, it doesn't make sense in the context - the truck drivers cannot 'remain' in their death race. Hence, the correct answer is 'through, involved'.

83. The intensity of the kid's crying can be best described with the word 'profusely' meaning 'excessively' and a person is held in an embrace and not grasp or grip. Thus 'profusely, embrace' is the correct answer.

84. The first blank must be filled by a movie genre keeping in mind that it has ghosts. Thus 'horror, scary' is the best fit answer.

85. One needs to cook food to eat and groceries to prepare the food. Thus option 2 is the correct answer.

86. There is an error in the form of the tense in the second part of the sentence. The simple future tense is constructed as: will + base form of the verb (irrespective of number and person). Eg: They will organise the event.

Thus, 'will puts' must be changed to 'will put' to make the sentence grammatically correct.

87. The present continuous tense is only used for temporary activities.

E.g. *Kamal is trying on new clothes in the changing room.*

E.g. *Juno's kids are all eating apples.*





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However, something like ownership is not a temporary activity. The sentence, in fact, states a fact about the ownership of the property. Thus we must use the simple present tense.

The error is therefore in part 1 of the sentence and the corrected sentence is:
He owns a property worth millions on the outskirts of the city.

88. The conjunction 'while' has been wrongly used in this sentence. You use 'while' to indicate one of two things:

1. At the same time. E.g. *He was captain of the football team while at college.*
2. To show contrast. E.g. *His wife wanted to go to the museum while he wanted to watch cricket.*

In the sentence above, there is no contrast. Also, even though the action of stepping down and term ending will happen simultaneously, there is a deeper connection - one of cause and effect. First his term will end and because of that he will step down. So we would rather use the adverb 'when'.

The error is therefore in part 2 of the sentence and the corrected sentence is:
He will step down when his term ends in August.

89. When the pronouns 'either' and 'neither' are to be used in a sentence, they should take the singular verb after them.

E.g. *Either dress is good.*

E.g. *Neither button suits this dress.*

Thus, the correct answer is "*Neither of my grandparents speaks Bengali.*"

90. The error in the third part of the sentence is the mistake in the verb form, wherein the verb should be replaced with 'rose' instead of 'rised'. Therefore changing the sentence to 'He woke up even before the sun rose in the sky.' is more appropriate since the past tense form of the verb 'rise' is 'rose'.





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91. 'Spell out' is a phrasal verb which means 'to explain something in great detail' and fits the context which is telling us what a plan is. Hence 'spell' is the most appropriate. 'Explains' could have been used had the blank not been followed by 'out'.
92. 'Goal' has already been used in the sentence and therefore we ignore it. 'Target' means a person, object, or place selected as the aim of an attack. Also its scope is smaller than 'objective' and is a bit informal and 'aim' is similar to goal and is meant in a broad sense and does not suit the adjective 'specific'. 'Objectives' is the most appropriate as its scope is less than a 'goal' and also fits the formal context.
93. We want to convey that India liked the Soviet concept so much that we adopted it. Of the given words, 'got' can be eliminated as the Soviets didn't give it to us. At the same time, it is not a tangible thing that we 'took' by force, so this can also be eliminated'. According to the context we want to use for the blank, we cannot use 'planned' either. 'Have' is out of also not a good enough word to convey the meaning. This leaves us with 'borrowed'. We usually borrow tangible things like money and tools. This doesn't mean we can't borrow concepts like Five Year Plans. To 'borrow an idea' or 'borrow a concept' is to use an idea originally by someone else. Option 2 - 'borrowed' is therefore the best fit for the blank.
94. 'Specify' means to identify clearly and definitely and 'exemplify' means illustrate or clarify by giving an example. The previous part of the sentence talks about attaining of objectives and uses 'not only' which hints that the next part is also having a similar meaning. This lead us to our answer 'achieved' which is similar to 'attain'.
95. 'Basis' means the underlying support or foundation for an idea, argument, or process. 'Clarification' means an explanation. 'Classification' means the action or process of classifying something. Now the latter two are very specific and can't be used with the given information. 'Basis' however fits the context as we have understood that the perspective plan is broader than five year plan but the objectives are set for the latter





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only and it provides the direction and lays the foundation for the long term action.

96-100.

The first sentence should introduce the characters of the passage and that is done in B. The second sentence should describe the activity in line with the first sentence as in D. The third sentence A emphasizes on a particular activity from D as seen from the words 'do the same'. The fourth sentence E specifies the relation between the activities of Shobha and Shukumar. The concluding sentence is C as it talks about the nature of Shukumar directly following from the comparison of their activities in the previous sentence.

The correct order is BDAEC.

