SBI Clerk Prelims 2022





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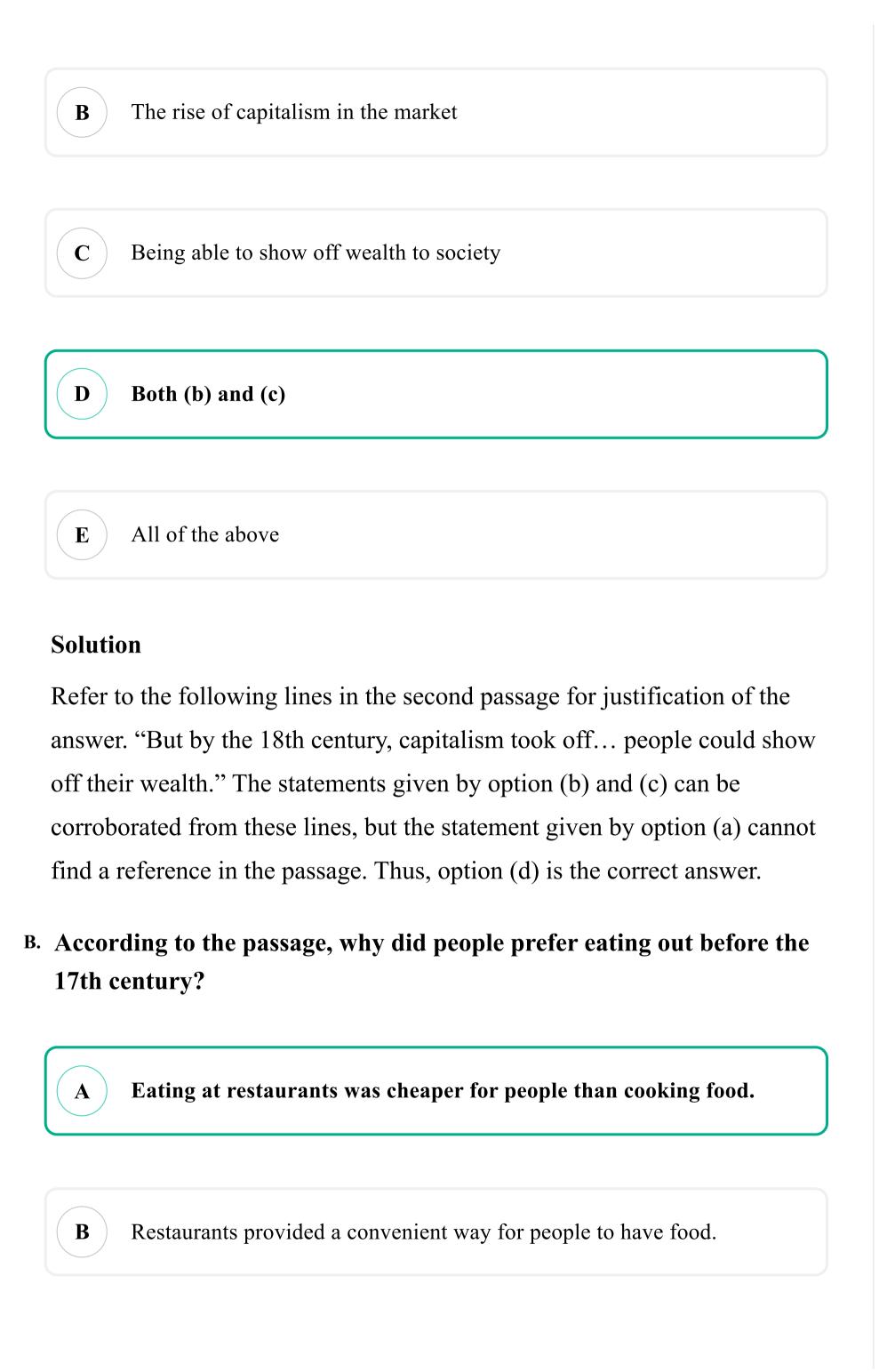
1. Read the passage given below and answer the following questions.

The onset of Covid-19 has brought to a halt an astonishing expansion of restaurants observed in the past decade. But being deprived of restaurants has made people realise how much they value them. Eating out fulfils needs which seem fundamental to human nature. People need to socialise, to seal deals and to peer at their fellow humans.

People have long feasted outside the home. Before the use of coal became widespread in England in the 17th century, preparing food at home involved spending a lot on wood or peat. Today dining out is seen as an indulgence, but it was the cheapest way to eat for most of human history. But by the 18th century, capitalism took off, public spaces became sites of rational dialogue which were open to all. Eating out became less of a communal activity focused on calorie intake and more of a cultural experience—and a place where people could show off their wealth.

By the 20th century, however, cooking at home was becoming ever easier. Average house sizes grew and appliances such as the food processor and the dishwasher reduced preparation and clean-up times. Dining out became relatively more expensive. And yet, a few economic changes ensured that demand for restaurants grew despite rising prices. One of them is immigration. Over the last century the net flow of migrants into rich countries, relative to population, more than quadrupled. Starting a restaurant is a good career move for new arrivals. Migrants also tend to improve the quality of an area's restaurants. Another factor was changing working patterns. Historically poor people have tended to work longer hours than rich ones. But in the latter half of the 20th century the opposite became true. The upshot was that the people with the most money to spend on dining out increasingly needed it most, since they had the least free time. The pandemic has led to many people buying more takeout than before, while others have a newfound love of cooking. That means still further from the utilitarian model of the 18th century and before, and instead doubling down on what they do best: offering those who need to eat a taste of romance, glamour, and love.

A. What compelled rich people to start eating out?





D Both (a) and (b)

E All of the above

Solution

Refer to the following lines in the second paragraph for justification of option (a) as answer. "People have long feasted outside the home... to eat for most of human history." Options (b) and (c) find no mention in the passage as reasons for choosing restaurants over cooking during the time, and thus, are eliminated.

C. What conundrum does the author present against the growth of restaurants the past century?

 \mathbf{A}

Despite the economic instability during the period, restaurants continued to grow.

B

Restaurants were popular despite industrialisation leading to many people becoming poor.

C

The interest in restaurants piqued in the period despite many nations being warridden.



The growth of restaurants despite cooking becoming cheaper and more convenient.

E

The deadly plagues during the period did not dissuade people from going out to eat.

Solution

Refer to the entirety of the third paragraph for justification of option (d) as the answer. None of the other options give a suitable answer to the question.

D. How did migrants contribute to a rise in the growth of restaurants?

A

Migrants added to the population of a country and thus contributed to increased consumption.

B

A significant portion of the migrant population started restaurants in the countries they came to.

C

Countries with a high rate of immigration gave relaxations on items of necessity for the public.



An immigrant population brought with it a different culture, thus reviving interest in cuisine.

 \mathbf{E}

Restaurants cashed up on the opportunity to serve food to an immigrant population for revenues.

Solution

Refer to the following lines in the fourth paragraph for justification of option (b). "One of them is immigration. Over the last century the net flow of migrants... the quality of an area's restaurants."

E. According to the passage, which of the following is true regarding the influence of changing work patterns in the past century?



Poor people stopped eating out as much as they would in the past.

B

Restaurants improved their services to cater to more people for a longer time.

C

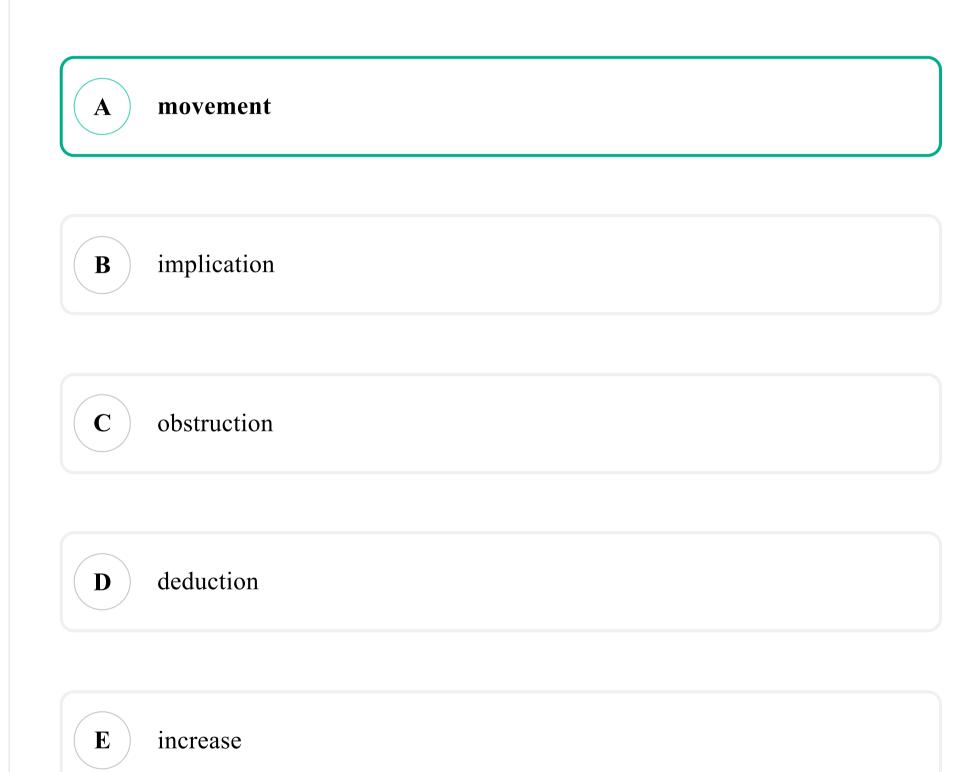
Rich people having more money would want to spend more on their indulgences.

	D People earning more often had less tome to cook food at home.
	E Eating out for luxury became difficult for people due to lack of time.
	Solution
	Refer to the following lines in the fourth paragraph for justification of option (d). "Another factor was changing working patterns. Historically poor people since they had the least free time"
F .	Which of the following words can most appropriately fill the blank given in the passage?
	A coping
	B closing
	C making
	D moving
	E living

Solution

cope – to deal with and attempt to overcome problems and difficulties close – to move so as to bar passage through something make – to bring into being by forming, shaping, or altering material move – to proceed toward a certain state or condition live – to maintain oneself

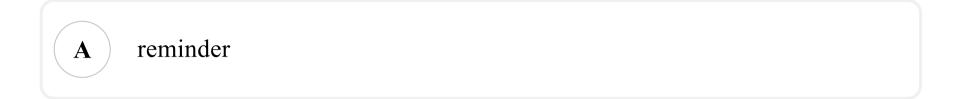
G. Which of the following words is most similar in meaning to the word "flow" as is highlighted in the passage?



Solution

flow – a smooth uninterrupted movement or progress movement – the act or process of moving implication – something implied: such as obstruction – the state of being obstructed deduction – the state or fact of being destroyed increase – made or become greater

H. Choose the word that can most appropriately replace the highlighted word "upshot" in the passage?





$\overline{\mathbf{C}}$





Solution

upshot – the final result
reminder – something that calls a memory or thought to the mind
history – an established record
requirement – something wanted or needed
consequence – a result or effect
condition – a premise upon which the fulfilment of an agreement depends

I. What effect of the pandemic on restaurants has been mentioned by the author in the passage?



A severe lack of essential items has hindered the supply chain of restaurants.

В

The period during the pandemic led to a stop in the growth of restaurants.

 \mathbf{C}

The pandemic has made people realise the allure of eating out at restaurants.

D

Restaurants observe less customers due to a fear of lack of social distancing measures.

E

Due to the continuous waves of the pandemic, restaurants struggle to remain open.

Solution

Refer to the first line of the first paragraph in the passage for justification. "The onset of Covid19 has brought to a halt an astonishing expansion of restaurants observed in the past decade." Although the statement given by option (c) is a correct statement according to the passage, it does not answer the question, which only asks about the **effect of the pandemic on restaurants**. The other statements are simply not mentioned as an issue faced by restaurants in the passage.

2. Study the following information and answer the given questions:

In the given question a part of the sentence is given in italic, which may or may not be grammatically correct. Choose the correct alternative for the highlighted phrase to make the sentence grammatically and logically correct.

A. A fall in demand is enough to demonstrate that consumers *have forget* about the product and moved on to other products.

\mathbf{A}	has	forgot	about	the	produc	t
		\mathcal{L}			1	

- **B** had forgotten of the product
- C have forgotten about the product
- **D** has forgotten for the product
- **E** No replacement needed

Solution

The correct replacement for the given phrase is option (c)
Here, 'consumers' is plural thus plural verb 'have' should be used. Also,
the structure for present perfect tense is 'has/have+ V3'.

A	is angry at the teacher
В	was angry with the teacher
C	were angry to the teacher
D	is angry with the teacher
E	No replacement needed
olutio)n
he co	rrect replacement for the highlighted phrase is (b)
he giv	ven sentence is in past tense, thus 'was' should be the correct
elping	g verb. "Angry with" is the correct phrasal verb as when directed at
perso	on "angry with" should always be used. If directed at a situation or

3. Study following information and answer given questions:

In each sentence, a word is omitted. Choose the word from the given options that can fit into the blank without changing the intended meaning.

A. With this _ rainfall, we might get flooded out.

A incessant

B irreversible

C indecisive

D amiable

Solution

The correct word that can fit into the given blank is 'incessant'

Incessant: continuing without pause or interruption

Irreversible: not able to be undone or altered.

Indecisive: not providing a clear and definite result.

Amiable: having or displaying a friendly and pleasant manner.

Dormant: having normal physical functions suspended or slowed down for

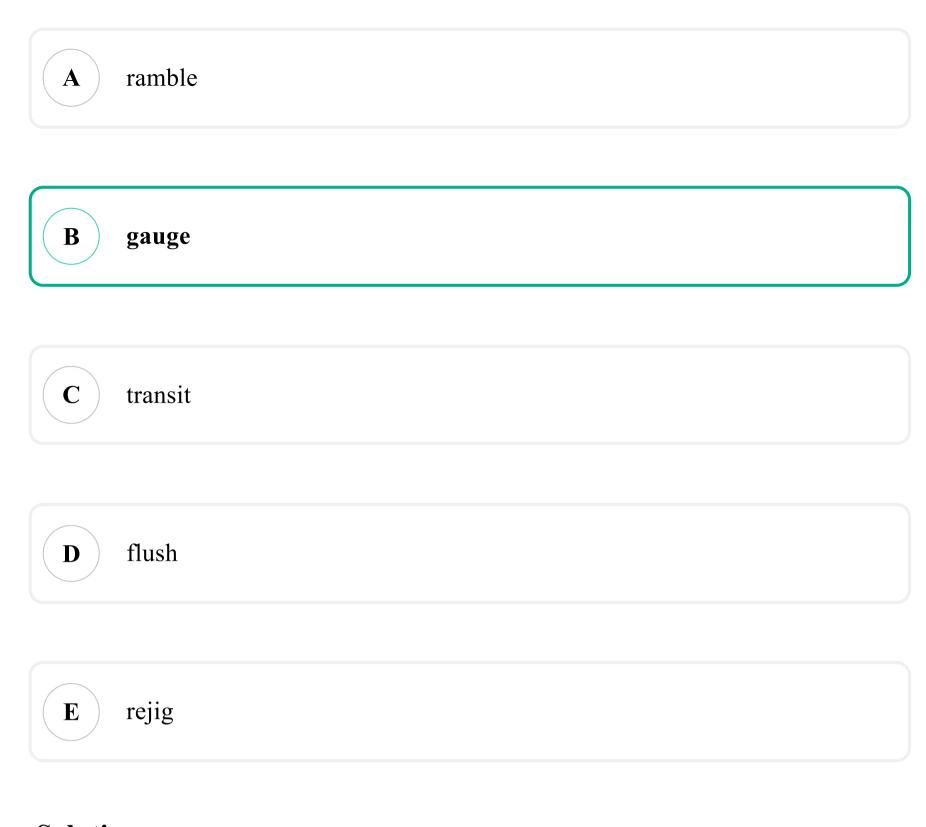
a period of time

valiant A vigorous B appealing robust \mathbf{D} diffusing ${f E}$ **Solution** The correct word for the blank is 'appealing' Valiant: possessing or showing courage or determination. Vigorous: strong, healthy, and full of energy. Appealing: attractive or interesting Robust: strong and healthy; vigorous. Diffusing: spread over a wide area or between a large number of people.

C. If the thermostat does not __the temperature properly, it may not

trigger the heating unit.

B. The plant has a pungent smell which makes it very ___ to bees.



Solution

The correct word for the given blank is 'gauge'

Ramble: walk for pleasure in the countryside.

Gauge: an instrument that measures and gives a visual display of the amount, level, or contents of something.

Transit: an act, process, or example of passing through or over

Flush: become red and hot, typically as the result of illness or strong emotion.

Rejig: organize (something) differently; rearrange.

D. Jeff faced many hardships in life, but he always found a way to be _.





C desperate

D resilient

E pervasive

Solution

The correct word that can fit into the given blank is 'resilient'.

Lethargy: a lack of energy and enthusiasm.

Gloomy: causing or feeling depression or despondency.

Desperate: feeling or showing a hopeless sense that a situation is so bad as to be impossible to deal with.

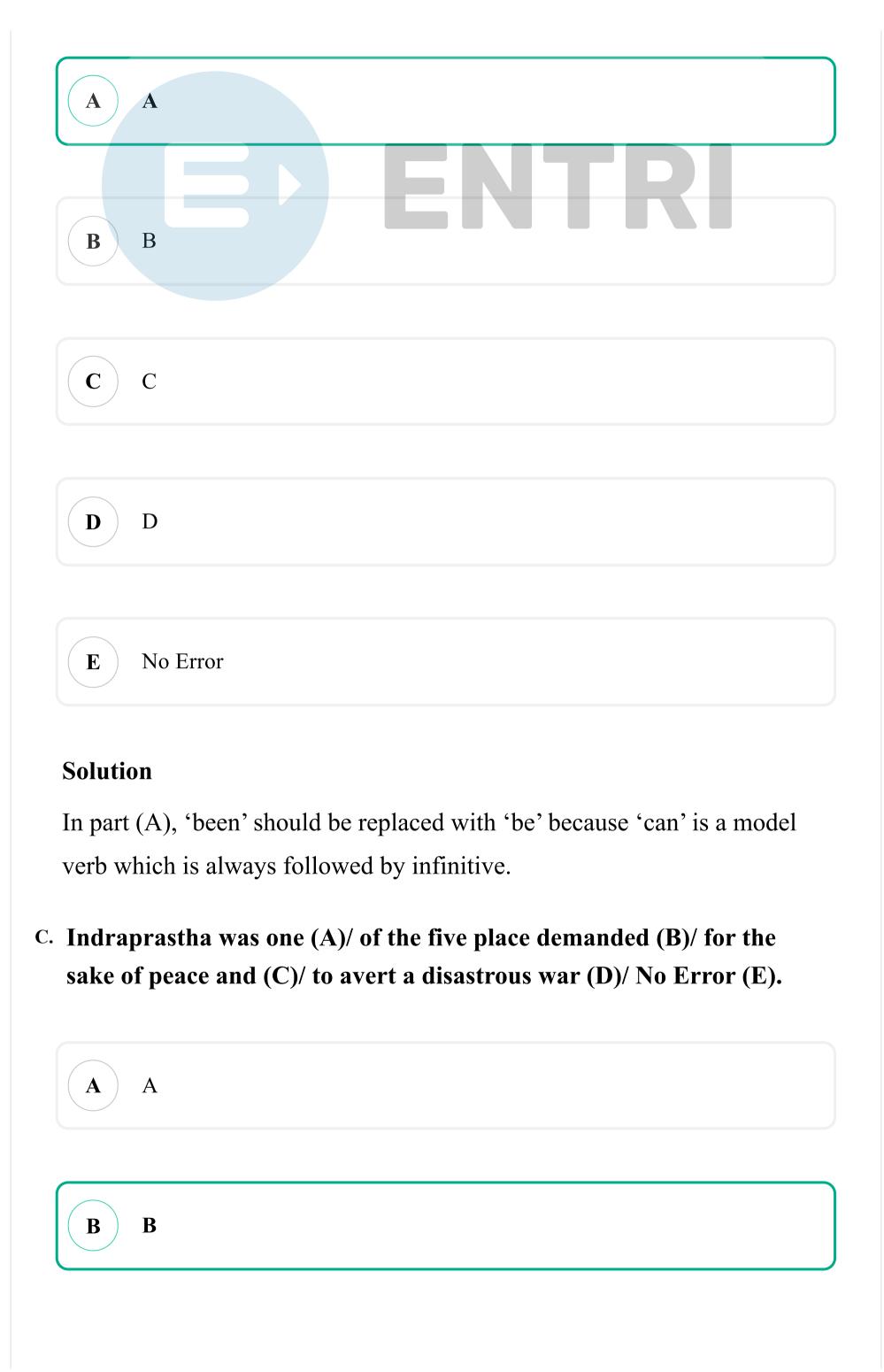
Resilient: able to withstand or recover quickly from difficult conditions.

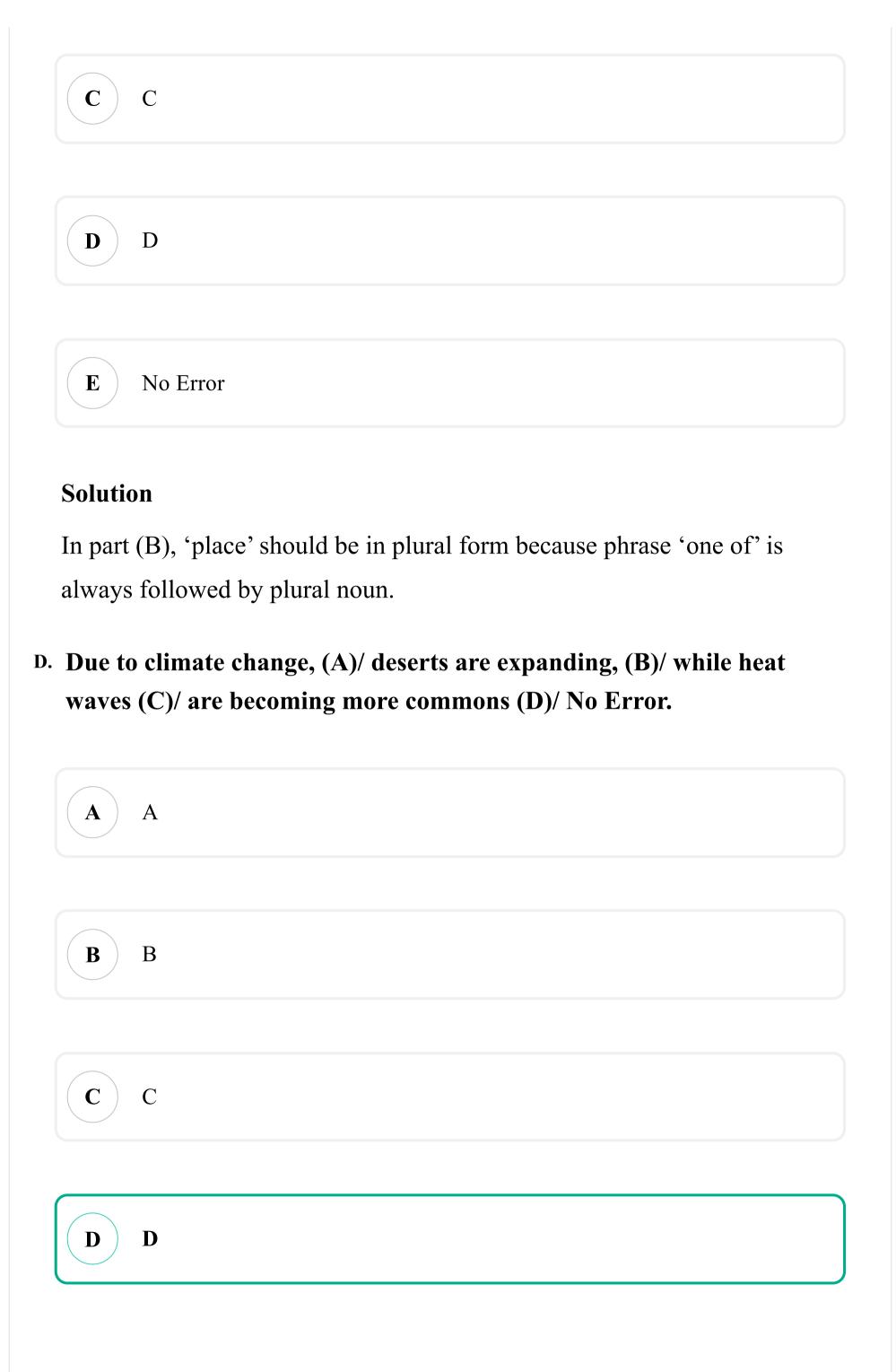
Pervasive: spreading widely throughout an area or a group of people.

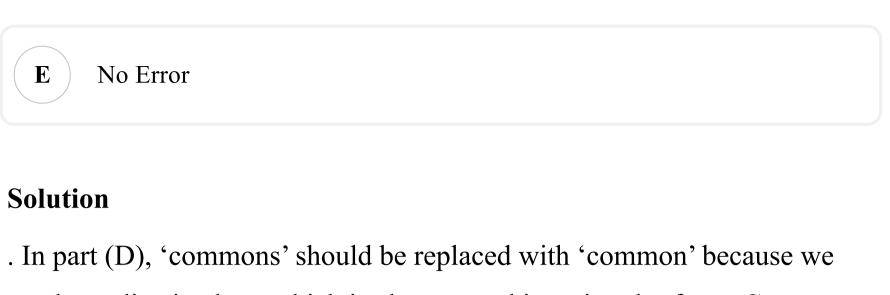
4. Study following information and answer given questions: In each of the following questions, a sentence has been divided into four parts in which one part has an error. Identify the part that has an error and mark that part as your answer. If all parts are error-free then choose 'No Error' as your correct choice. A. Aryabhata noted that (A)/ the luminosity of the (B)/ Moon and other planets are (C)/ due to reflected sunlight (D)/ No Error (E) \mathbf{B} \mathbf{C} D D No Error \mathbf{E} **Solution**

In part (C), helping verbs 'are' should be replaced with 'is' for noun 'luminosity'.

B. Rainbows can been (A)/ observed whenever there (B)/ are water drops in the (C)/ air and sunlight shining (D)/ No Error (E).

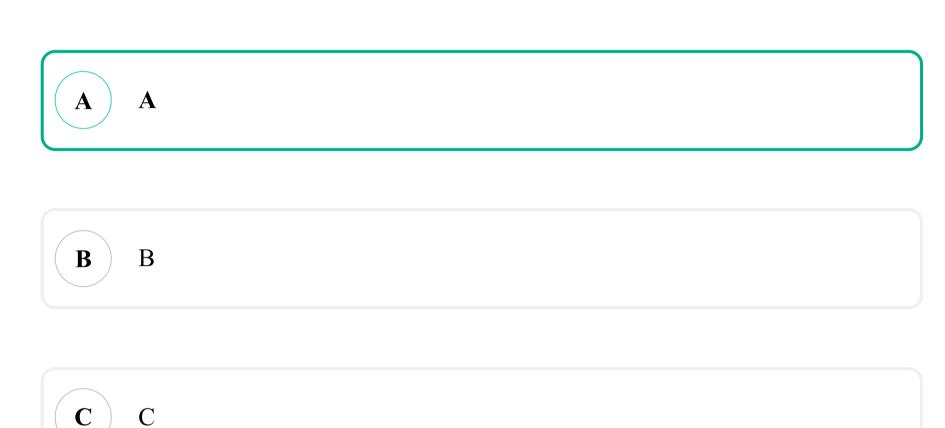






need an adjective here which is always used in a singular form. Commons: the cultural and natural resources accessible to all members of a society

E. The hospital has receive (A)/ funding for medical (B)/ devices and (B)/ clinical studies (D)/ No Error (E).



D D

E No Error

Solution

In part (A), 'receive' should be replaced with 'received' as we use third form of the verb after 'has/have/had'

5. Study the following information and answer the given questions:

In the following questions, five sentences are given. Rearrange these sentences to make a contextually meaningful paragraph then, answer the following questions.

- (A) An insufficient amount of sleep can lead to serious repercussions.
- (B) Also, it loses the abilities to concentrate, think clearly, and process memories.
- (C) Sleep is an essential function that allows your body and mind to recharge and leaves you refreshed.
- (D) For instance, without enough sleep, the brain cannot function properly.
- (E) Healthy sleep also helps the body to remain healthy and stave off diseases.

A. Which is the LAST sentence after rearrangement?

A A			
ВВ			
C C			
D D			
E E			

B. Which is the THIRD sentence after rearrangement?

A A		
B B		
C C		
\mathbf{D} \mathbf{D}		
\mathbf{E} \mathbf{E}		

C. Which is the FIRST sentence after rearrangement?

A A		
B B		
C C		
D D		
E E		

D. Which is the FOURTH sentence after rearrangement?

A A		
B B		
C C		
D D		
E E		

E. Which is the SECOND sentence after rearrangement?

A A		
B B		
C C		
D D		
E E		

6. Study the following information and answer the given questions:

In each question, three words are given in italic, which may or may not be in their correct positions. Choose the correct sequence of words from the given options to make the sentence grammatically correct and meaningful.

A. Blood was analyzed (A)through a/an diagnostic (B)machine to figure out whether the patient was suffering (C)from cancer or the flu.

A BCA		
B CBA		
C ACB		
D BAC		

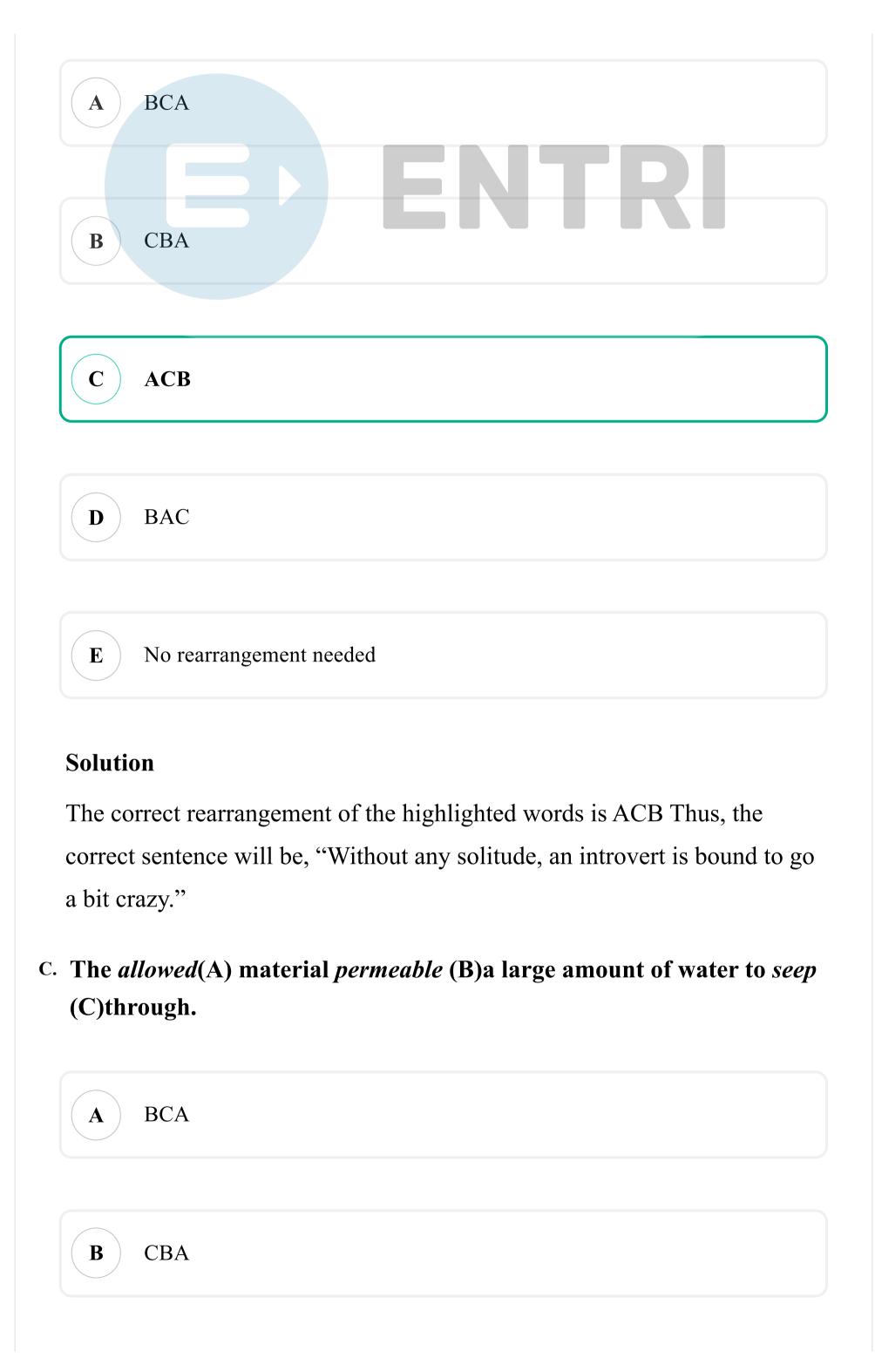
Solution

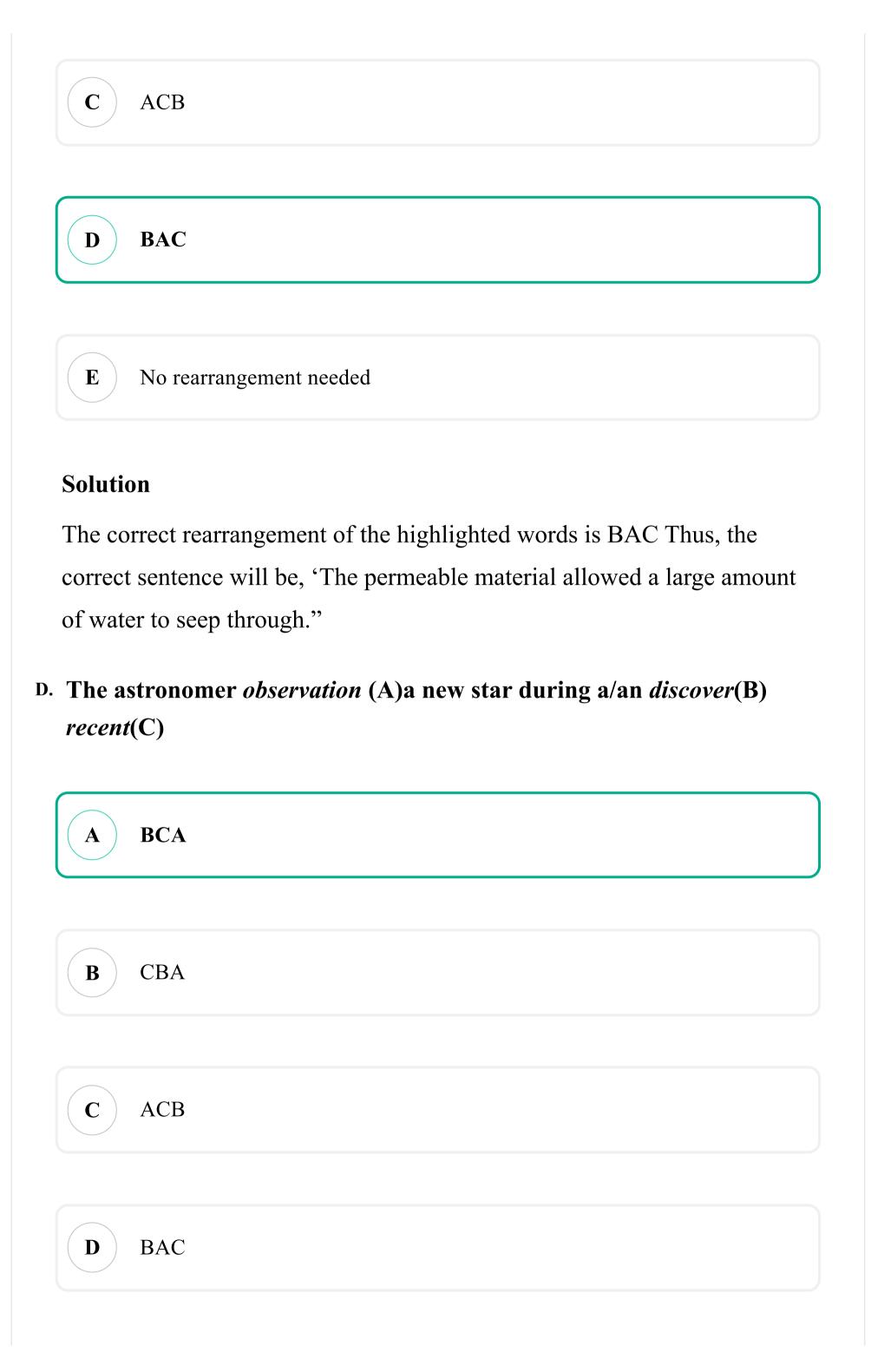
 \mathbf{E}

All the highlighted words in the given sentence are correctly placed. Hence, no rearrangement needed.

No rearrangement needed

B. Without any solitude (A) a/an crazy (B) is bound to go a bit introvert(C)







Solution

The correct rearrangement of the highlighted words is BCA Thus, the correct sentence will be, "The astronomer discovered a new star during a recent observation"

E. A wildlife (A)of an eagle was carved (B)out of wood for the sculpture(C) event.

A BCA				
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E No rearrangement needed

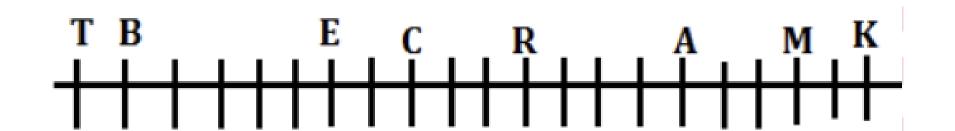
The correct rearrangement of the highlighted words is CBA. Thus, the correct sentence will be, "A sculpture of an eagle was carved out of wood for the wildlife event."

7. Study the following information carefully to answer the given questions:

A certain number of persons sit in a linear row and all of them face towards north direction. Six persons sit between R and M. A sits third to the left of M. C sits three places away from R. One person sits between E and C. E sits to the left of R but not immediate left. The number of persons sit between E and R is same as the number of persons sit between B and E. B is the only neighbour of T. The number of persons sit to the left of T is two less than the number of persons sit to the right of M. K sits at the extreme end.

A. Who among the following sits fifth to the left of K?

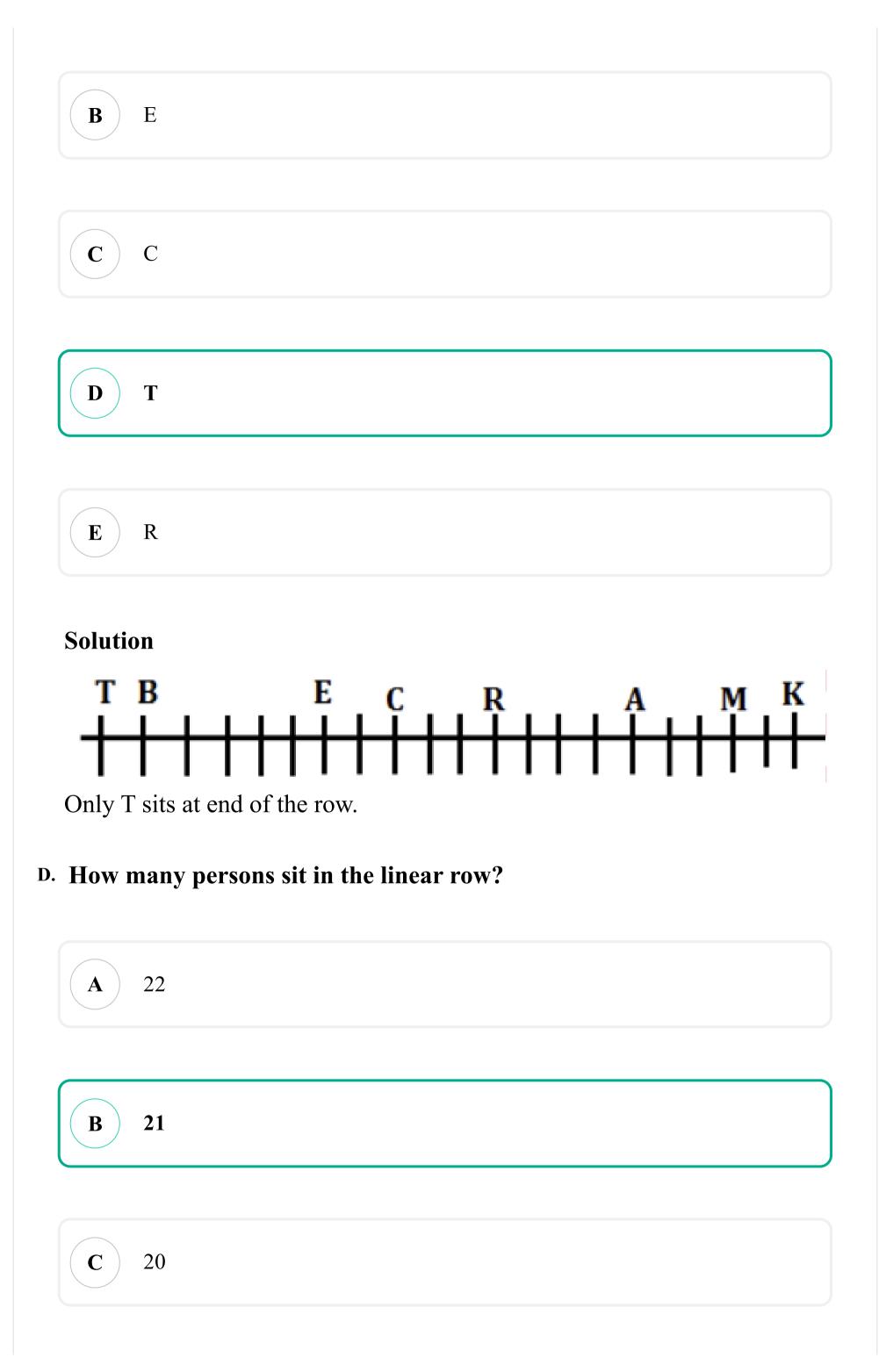
A E
B C
C R
\mathbf{D} A
E None of these



- B. What is the position of E with respect to T?
 - A Sixth to the left
 - **B** Fifth to the right
 - C Sixth to the right
 - **D** Fourth to the left
 - **E** Immediate left



- C. Four of the following five are alike in a certain way and hence form a group. Who among the following does not belong to that group?
 - \mathbf{A} \mathbf{B}



D 23

E 19



8. Study the following information carefully and answer the given questions.

798 X E & M S 4 6 R © 5 U # N Q 2 € H % 6 1 P K 3 A @

A. How many such symbols are there in the given series which are immediately preceded by a consonant and immediately followed by a number?

A None		
B One		
C Two		
D Three		

E Four

Solution

Two - R © 5, H % 6

B. How many such numbers are there in the given series which are immediately preceded by a number and immediately followed by a consonant?

A	None
В	One
C	Two
D	Three
E	Four
Solutio	on
98X, 4	6R, 61P
	among the following letter will be 3rd to the left of 11th letter he left end?
A	K
В	S
\overline{C}	M

	D A
	E None of these
	Solution
	11th letter from left end = R
	3rd to left of $R = S$.
D.	If all the symbols are dropped from the series, which element will be 10th from the right end of the new arrangement?
	A 4
	B 6
	C N
	D Z
	E None of these

If all the symbols are dropped from the series,

7 9 8 X E M S 4 6 R 5 U N Q 2 H 6 1 P K 3 A

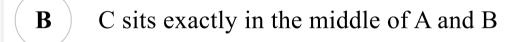
Therefore, 10th from right end will be, N

9. Study the following information carefully to answer the given questions:

Ten persons sit in a parallel row such that five persons sit in each row. In row 1- P, Q, R, S and T sit and face south while in row 2- A, B, C, D and E sit and face north. The persons sit in row 1 face the persons sit in row 2 and vice versa. A faces the one who sits third to the right of T. Two persons sit between A and B. The one who sits second to the left of B faces the one who sits immediate left of P. More than two persons sit between T and R. D sits second to the left of C who doesn't face Q.

A. Which among the following statement(s) is/are true?

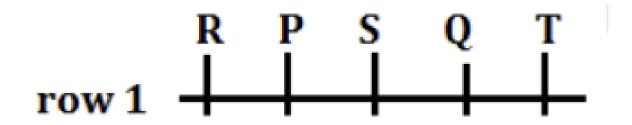
(\mathbf{A})	More than one person sits to the right of B

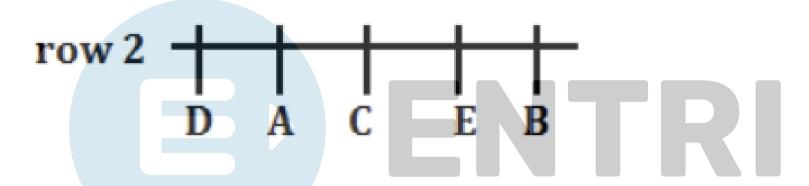


\mathbf{C}	P sits adjacent to C)
. /		

D No one sits between B and E

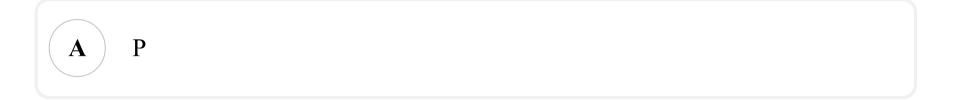
E All are true





No one sits between B and E is true.

B. Four of the following five are alike in a certain way and hence form a group. Who among the following does not belong to that group?

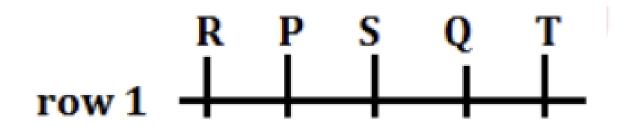


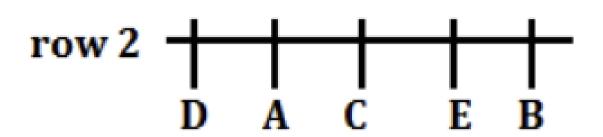






E T				
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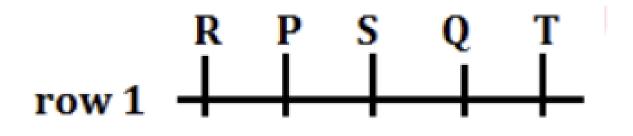
Only T sits at the end of row.

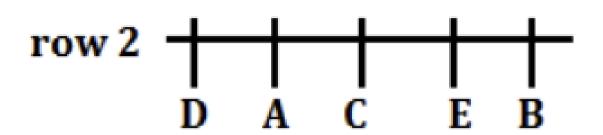
C. Who among the following faces R?





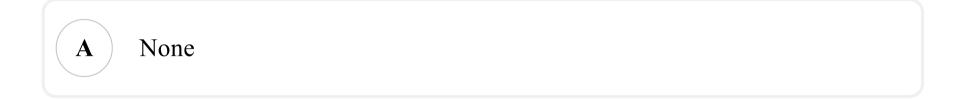
E None of these





D faces R.

D. How many persons sit between Q and the one who faces A?

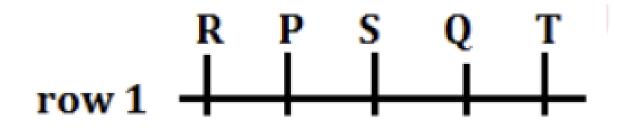


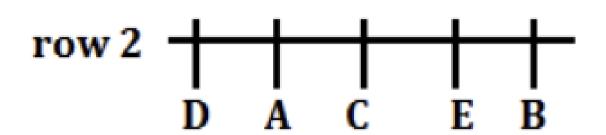






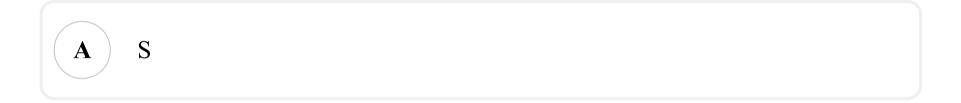






One person sits between Q and the one who faces A.

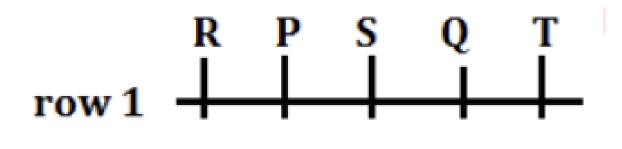
E. Who among the following sits third to the right of Q?

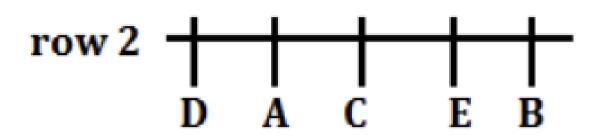




D Either R or S

E Either P or S





R is third to the right of Q.

Study the following information carefully to answer the given questions:

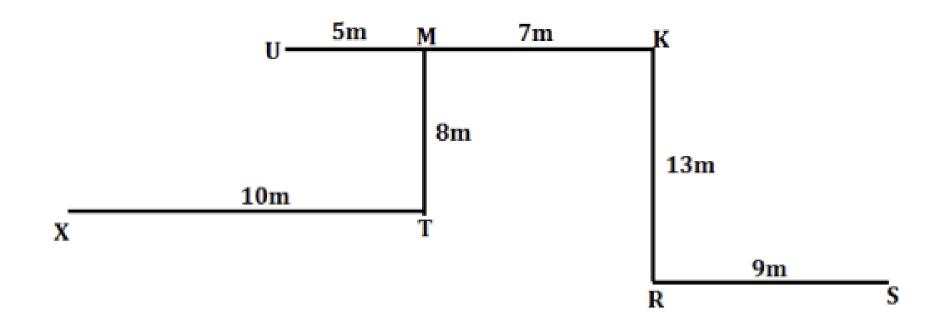
A person starts walking from point X in east direction after walking 10m he stops at point T. From point T, he walks 8m in north and reaches at point M. Now, from point M he walks 5m in west direction and reaches at point U. From there he walks 12m in east direction and reaches at point K which is 13m in north of point R. From point R he walks 9m in east direction and reaches at point S.

A. What is the shortest distance between point U and point T?

A 13m			
\mathbf{B} 5 $\sqrt{13}$	3m		
C 89m			
D √891	n		

Solution

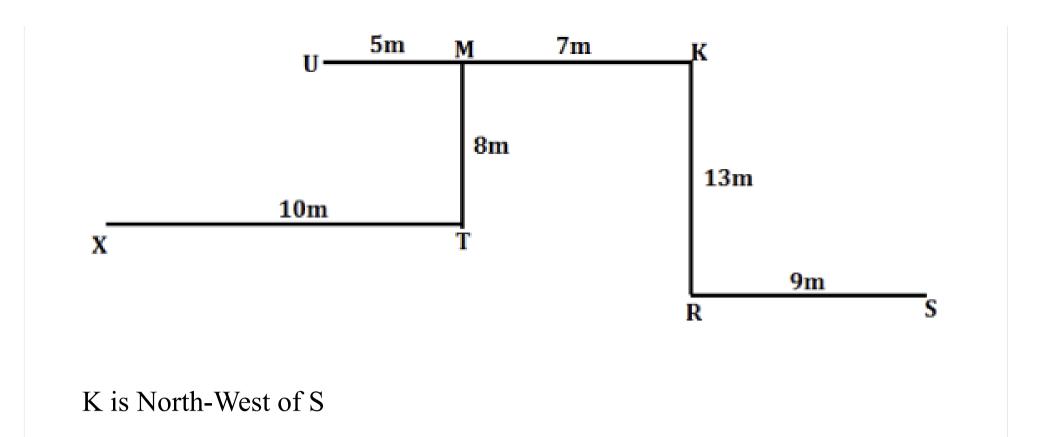
Can't be determined



Required distance = $\sqrt{8^2 + 5^2} = \sqrt{89} \ m$

B. In which direction is point K with respect to point S?

- A North -east
- B South
- C North-west
- **D** South -west
- **E** West



more	than once in the new number thus formed?
A	One
В	Three
C	Two
D	None
E	None of these
Solutio	on
25476	585
After 1 33557	is added to each even digit and 2 is subtracted from each odd digit
So. 3 a	nd 5 appear more than once.

12.

Study the following information carefully to answer the given questions:

In this question, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statement and select the appropriate answer.

A. Statements: $Q \ge E \le T$; Y = I < T; $D > I \ge F$

Conclusions:

I: I < Q

II: D > Y

- **A** If only conclusion I is true
- B If only conclusion II is true
- C If either conclusion I or II is true
- **D** If neither conclusion I nor II is true
- **E** If both conclusions I and II are true

Solution

I: I"Y (True)"

Statements: $M > B \ge V$; $C \le B = Z$; $K \ge J < Z$ Conclusions: I: $V \le Z$ II: $J < C$		
A	If only conclusion I is true	
В	If only conclusion II is true	
C	If either conclusion I or II is true	
D	If neither conclusion I nor II is true	
E	If both conclusions I and II are true	
Solutio	on	
I: V≤Z II: I< <i>C</i>	(True) (False)	

Study the following information carefully and answer the questions given below:

Seven persons P, Q, R, S, T, U and V live on separate floors of 7-floor building but not necessarily in the same order such as ground floor is numbered as 1st floor, just above floor is numbered as 2nd floor and so on until the topmost floor is numbered as 7th floor. P lives on an odd numbered floor but above the 4th floor. Three persons live between P and U. No one lives between R and U. T lives two floors above V who lives just above S's floor.

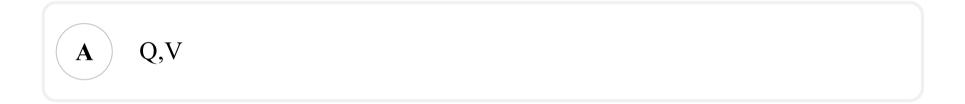
A. How many floors gap between P and Q?

A	One
В	None
C	Two
D	Three
E	More than three

Floors	Persons	
7	Q	
6	T	
5	P	
4	V	
3	S	
2	R	
1	U	

One floor between P and Q.

B. Which among the following pair of persons live on an even numbered floor?



B R,Q

C T,V

D R,P

E None of these

Floors	Persons
7	Q
6	T
5	P
4	V
3	S
2	R
1	U

T and V lives on even numbered floor.

C. How many persons live below V?

A TI	`hree					
------	-------	--	--	--	--	--







Floors	Persons
7	Q
6	Т
5	P
4	V
3	S
2	R
1	U

Three persons live below V.

- D. Which among the following statement is true?
 - I. V lives below U's floor
 - II. No one lives below Q
 - III. Two floors gap between \boldsymbol{U} and \boldsymbol{V}

A	Only III
	· ·

B Both II and III

C All I, II and III

D Only II			

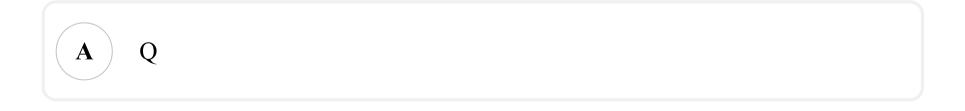
E None is true

Solution

Floors	Persons
7	Q
6	T
5	P
4	V
3	S
2	R
1	U

Two floors gap between U and V is the only true statement.

E. Four of the following five are alike in a certain way and hence they form a group. Who among the following does not belong to that group?



B U

C P

D T	
-----	--

	E S
--	-----

Floors	Persons
7	Q
6	T
5	P
4	V
3	S
2	R
1	U

Except T all are living in odd numbered floor.

Study the following information carefully to answer the given questions:

In the question below some statements are given followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow from the given statements disregarding commonly known facts.

Give answer,

- (a) Either conclusion I or II follows
- (b) Only conclusion II follows
- (c) Only conclusion I follows
- (d) Both conclusions I and II follow
- (e) Neither conclusion I nor II follows

A. Statements:

Some bank is not money

Only a few interest is money

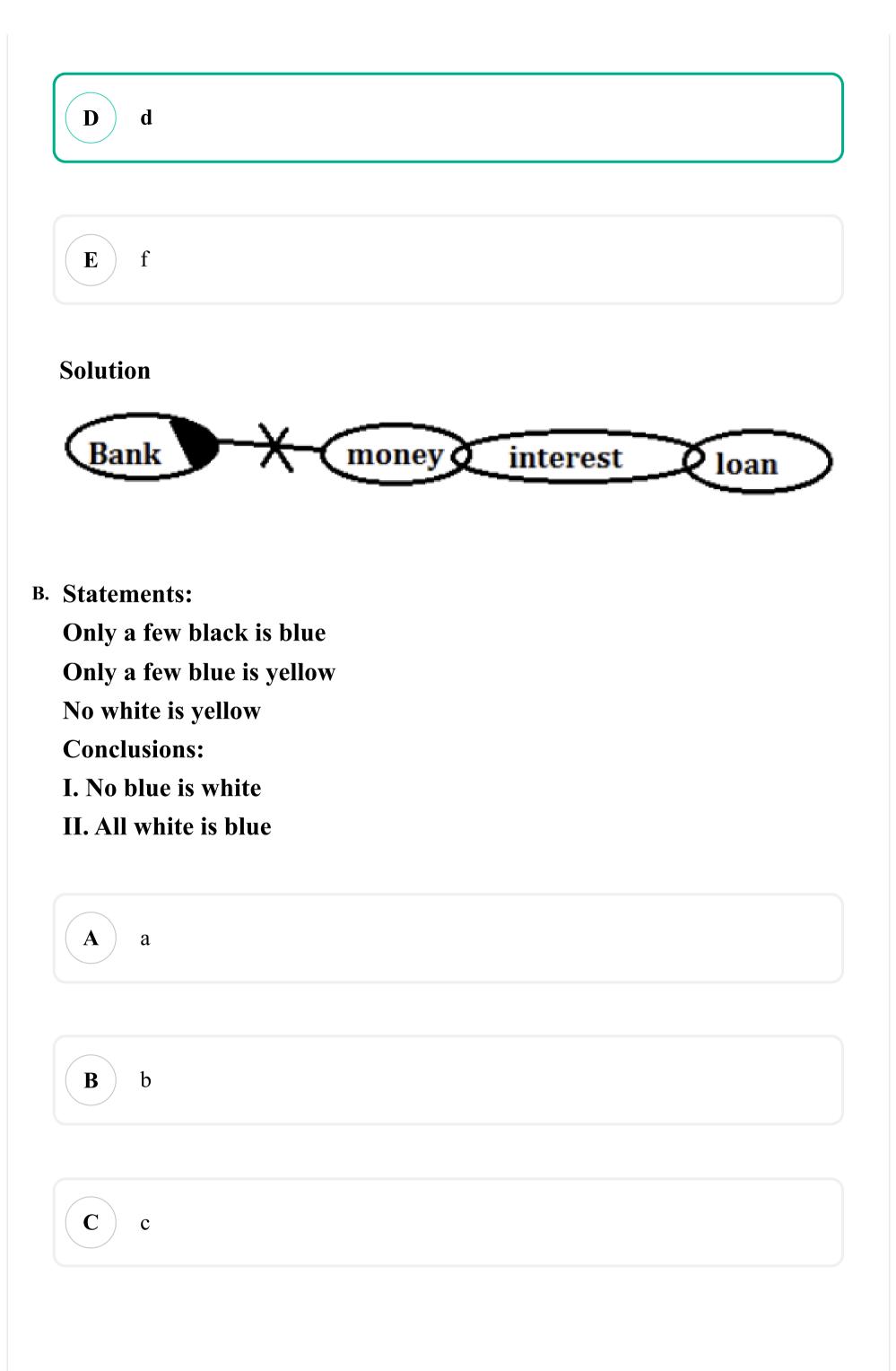
Some loan is interest

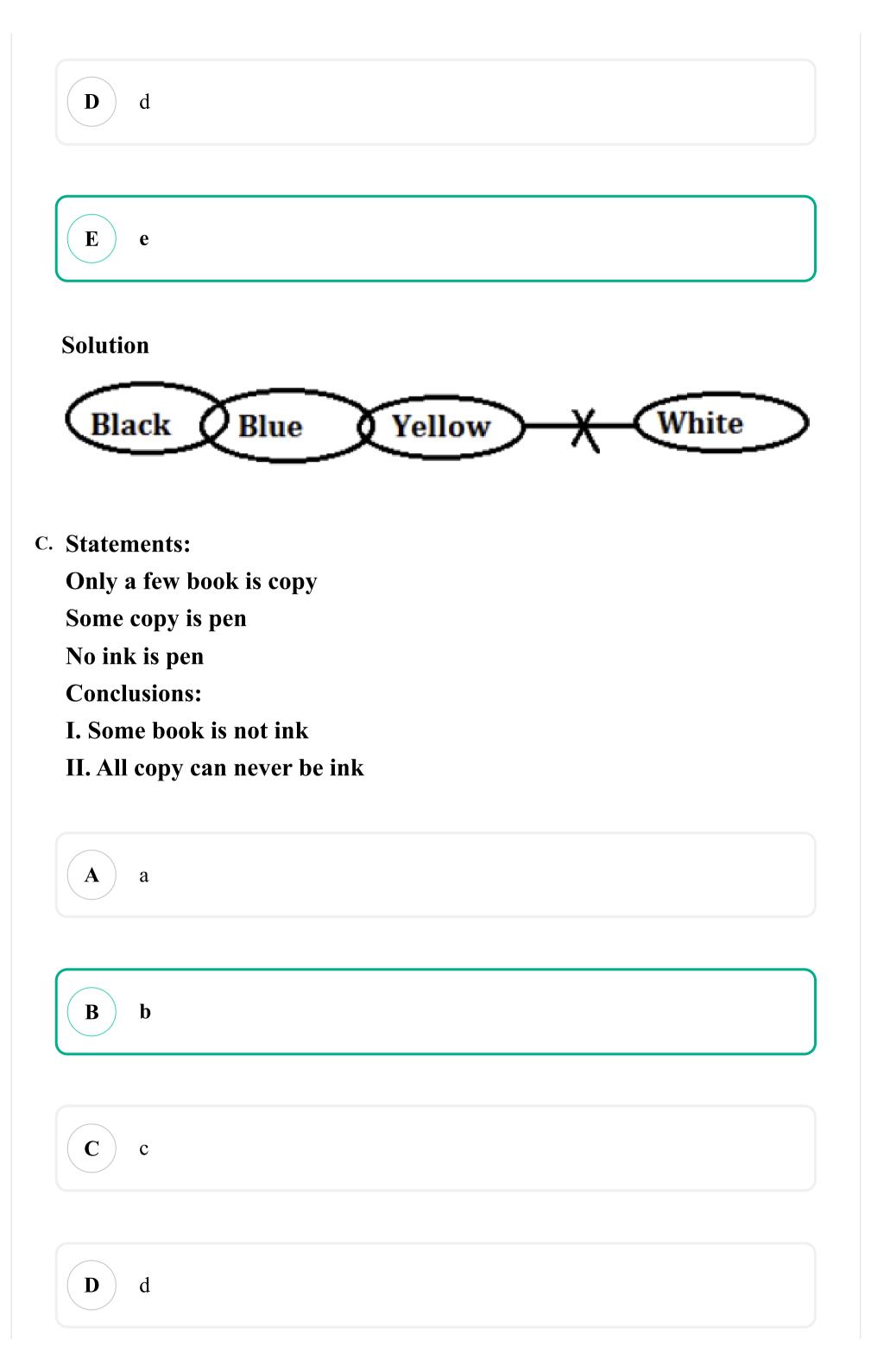
Conclusions:

- I. Some interest is not money
- II. Some loan can be bank

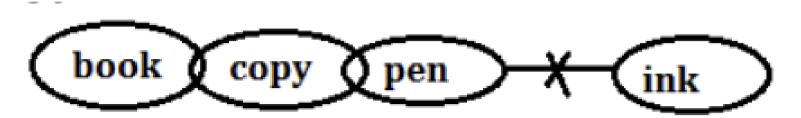








E e



Study the following information carefully and answer the questions given below:

Seven persons A, B, C, D, E, F and G are sitting around a circular table and all are facing towards the centre but not necessarily in the same order. F sits two places away from A. C sits 2nd to the left of B who does not sit near A and F. G sits 2nd to the right of D who does not sit near C. More than one person sits between A and E (From both sides).

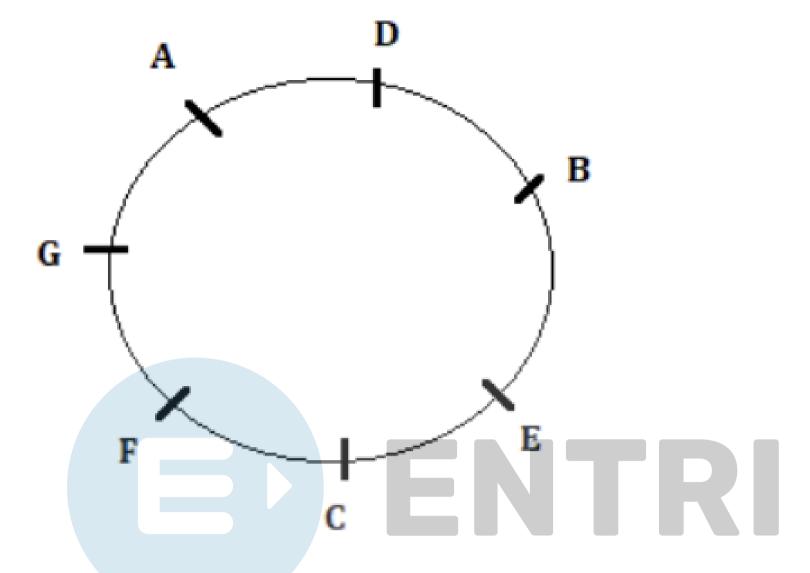
A.	How many	persons	sit between	G and E,	, when	counted	from	right of
	E?							

A On	ne		
B Tv	vo		





E Three



Three persons sit between G and E when counted from right of E.

B. Who among the following person sits 4th to the right of G?

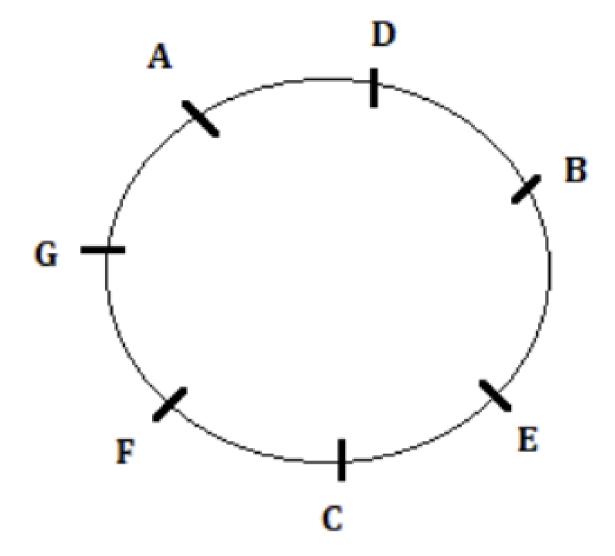
A E

B B

C A

D C

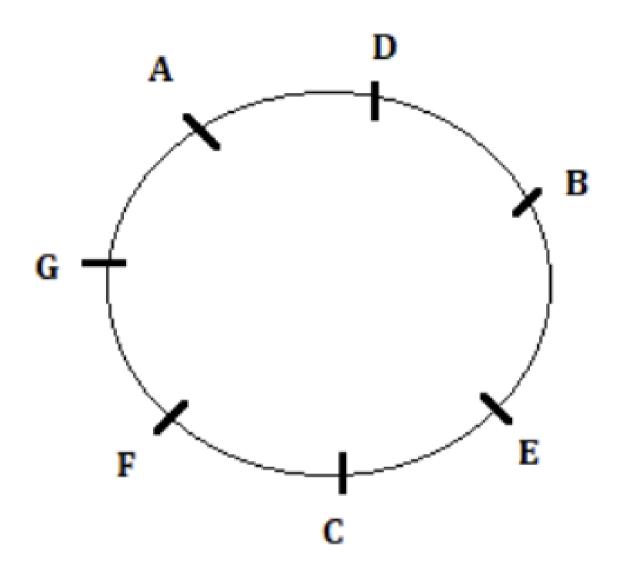
E None of these



B sits fourth to the right of G.

C. What is the position of F with respect to D?

- A 3rd to the left
- **B** 2nd to the left
- C 3rd to the right
- **D** 2nd to the right



F sits third to the right of D.

D. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?

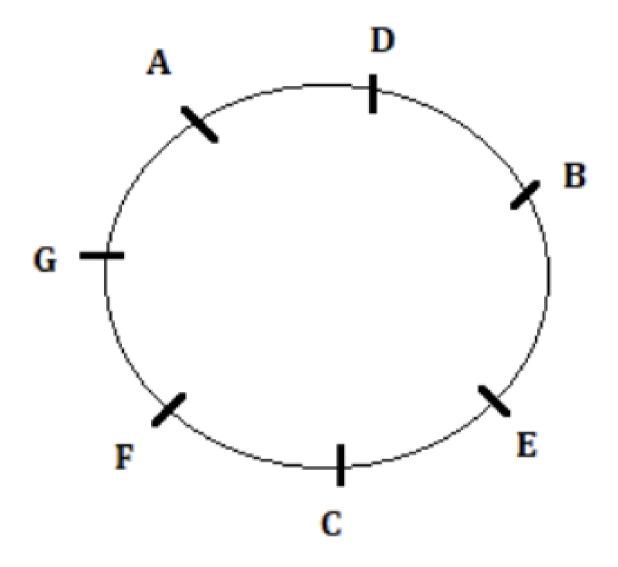
A D,F

B A,C

 $\left(\mathbf{C} \right)$ G,B

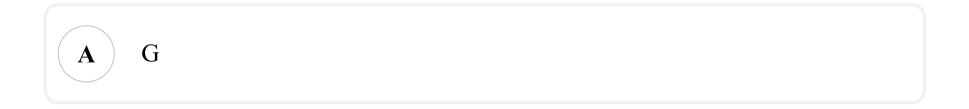






Except, E,C, in all other pair, second person is third to the right of first person.

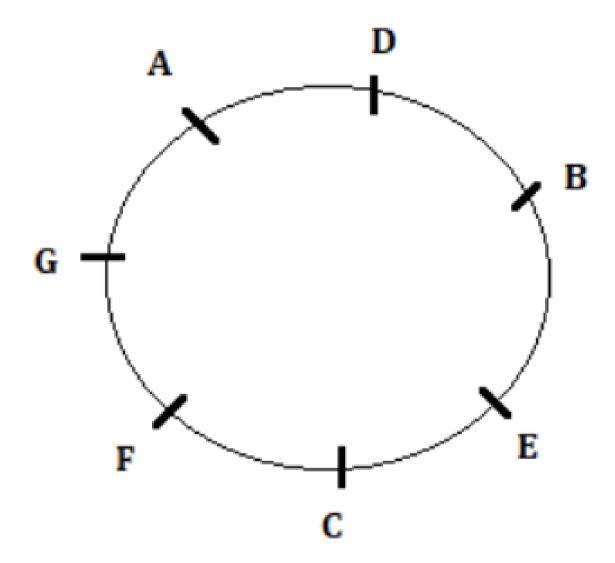
E. Who among the following person is an immediate neighbour of B?











E is immediate neighbour of B.

Study the following information carefully to answer the given questions:

A family has three generation. F is son in law of D who has only one sibling. H is brother-in-law of T and spouse of D. H has no siblings. S is niece of E who is brother of G. G is daughter of T's sibling.

A. Who among the following is daughter of F?

A D				
B G				
C S				

D Either D or S

E Either G or S

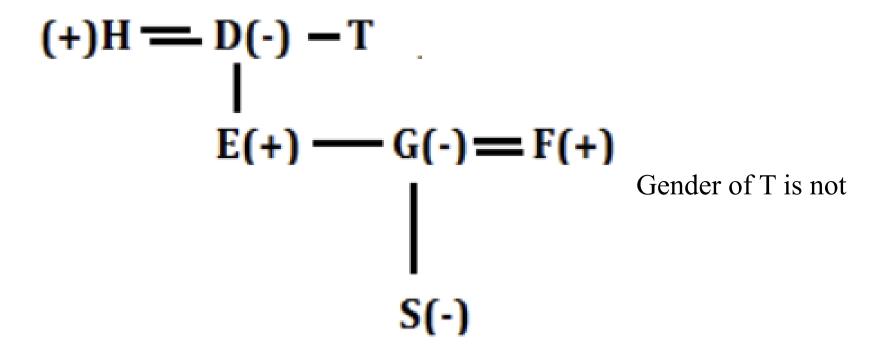
(+)H — D(-) — T

$$E(+)$$
 — $G(-)$ = $F(+)$
 $S(-)$

S is daughter of F.

B. How T is related to E?

- A Sister
- B Aunt
- C Uncle
- D Brother
- E Can't be determined



provided, so relation cannot be determined.

A	Four		
В	Two		
C	One		
D	Three		
E	More than three		
olutio F	n		
D R	AWINGS		

fifth and eighth letter from the left end of the word 'NECESSITY', then which of the following will be the fourth letter of the meaningful word thus formed. If more than one word is formed mark Z as your answer. If no meaningful word is formed, mark X as your answer? N E B S X \mathbf{D} Z **Solution** First, second, fifth and eighth letter = N, E, S, T More than one word can be formed, so Z is correct answer.

18. If we form a four-letter meaningful word by using the first, second,

19. A can do a work in 24 days and B can do the same work in 18 days. If A starts work alone and after four days B joined him, then find in how many days total work will be completed?

 \mathbf{A} $10\frac{4}{7}$ days

 $oxed{B}$ 12 $rac{4}{7}$ days

 \mathbf{C} 14 $\frac{4}{7}$ days

 \mathbf{D} 12 $\frac{3}{7}$ days

 \mathbf{E} 12 $\frac{2}{7}$ days

Solution

Total work = 72 unit (LCM of 24 & 18)

Efficiency of A =
$$\frac{72}{24}$$
 = 3 unit/day

Efficiency of B =
$$\frac{72}{18}$$
 = 4 unit/day

Total work done by A in four days = $3 \times 4 = 12$ units

Remaining work =
$$72 - 12 = 60$$
 units

Required days =
$$\frac{60}{(4+3)}$$
 + 4 = 12 $\frac{4}{7}$ days

ı

20. P invested Rs.21000 in a business and after few months Q joined him with Rs.28000. At the end of a year profit share of P and Q is equal. Find after how many months B joined the business.

 \mathbf{A}

 $\left(\mathbf{B}\right)$ 2

C 3

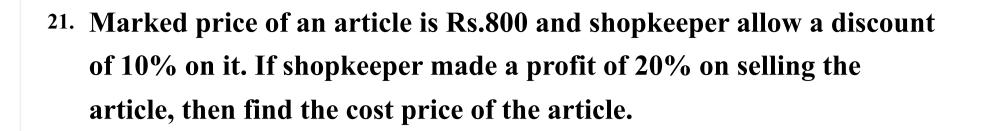
 $\left(\mathbf{D}\right)$ 5

 $\left(\mathbf{E}\right)$ 6

Solution

Let Q joined business after 't' months

 $ATQ - \frac{21000 \times 12}{28000 \times (12 - t)} = \frac{1}{1}$ 9 = 12 - t t = 3t = 3 months



A Rs. 720

B Rs. 640

C Rs. 700

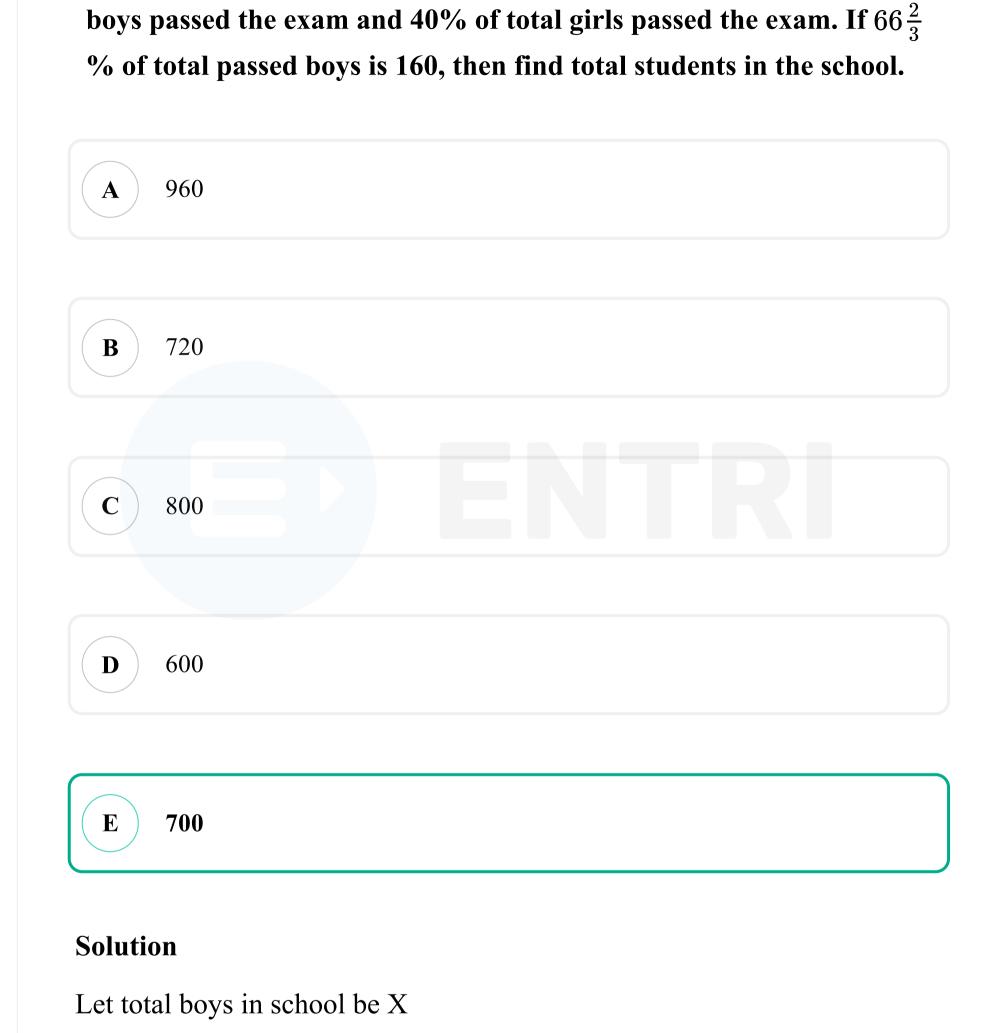
D Rs. 600

(**E**) Rs. 400

Solution

Selling price of the article = $800 imes rac{90}{100} = Rs. 720$

Cost price of the article = $720 imes rac{100}{120} = Rs.600$



22. In a school total 360 students passed the exam, while 60% of total

So, total passed boys in school =
$$X \times \frac{60}{100} = \frac{3X}{5}$$

$$\frac{ATQ - \frac{3X}{5} \times \frac{2}{3} = 160$$

$$\frac{2X}{5} = 160$$

$$X = 400$$

Total girls passed in school

$$=(360-160\times\frac{3}{2})=120$$

Total girls in school =
$$120 \times \frac{100}{40} = 300$$

So, total students in school =
$$(400 + 300) = 700$$

23.	Sum of squares of three consecutive numbers is 1085. Find the largest number
	A 19
	B 20
	C 18
	D 21
	E 22
	Solution

Let three consecutive numbers be (n-1), n and (n+1) respectively

ATQ –
$$(n-1)^2 + n^2 + (n+1)^2 = 1085$$
 $3n^2 + 2 = 1085$
 $3n^2 = 1083$
 $n^2 = 361$
so, $n = 19$
largest number = $(19+1) = 20$

Three students Ria, Ram and Pooja got total 74 marks in an exam. The ratio of marks obtained by Ria to Pooja is 4:5 and the ratio of marks obtained by Pooja to Ram is 3:2. Find the total marks score by Ram.

A 30

B 20

C 24

D 28

E 40

Solution

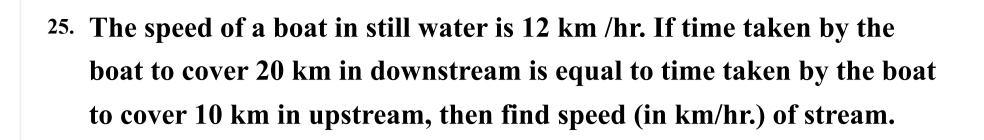
The ratio of marks obtained by Ria, Pooja and Ram respectively,

Ria: Pooja = 4:5

Pooja: Ram = 3:2

Ria: Pooja: Ram = 12:15:10

So, marks score by Ram = $74 imes \frac{10}{12+15+10} = 20$



 $\left(\mathbf{A}\right)$

B 4

 $\left(\begin{array}{c} \mathbf{C} \end{array}\right)$ 6

 $\left(\begin{array}{c} \mathbf{D} \end{array}\right)$ 3

 $\left(\mathbf{E}\right)$ 5

Solution

Let speed of stream be 'y' km/hr.

ATQ –

$$\frac{20}{(12+y)} = \frac{10}{(12-y)}$$

$$24 - 2y = 12 + y$$

$$3y = 12$$

$$y = 4$$

A	40	
В	30	
C	32	
D	44	
E	48	

Let present age of A and B be 'a' & 'b' respectively

Given,
$$a - b = 14$$

$$a = 14 + b --- (i)$$

$$\frac{a-12}{b-12} = \frac{2}{1}$$

$$a - 12 = 2b - 24$$

$$a = 2b - 12 ---- (ii)$$

Form (i) & (ii) we get

$$14 + b = 2b - 12$$

$$b = 26$$

So, present age of A = 26 + 14 = 40 years

27. A shopkeeper marked price of an article at Rs. 2450 and he allows two successive discounts of 20% & x% on it. If selling price of the article is Rs. 1470, then find the value of x?

 $\left(\mathbf{A}\right)$ 12.5

B 25

 $\left(\begin{array}{c} \mathbf{C} \end{array}\right)$ 15

D 10

 $\left(\begin{array}{c}\mathbf{E}\end{array}\right)$ 24

Solution

ATQ -

$$2450 \times \frac{(100-20)}{100} \times \frac{(100-x)}{100} = 1470$$

$$1960 \times \frac{(100-x)}{100} = 1470$$

$$\frac{(100-x)}{100} = \frac{3}{4}$$

$$x = 25$$

·	gether.	1440, tnen	ind the t	otai amoun	t invested by	A an
A	Rs. 5400					
В	Rs. 9000					
C	Rs. 4800					
D	Rs. 9600					
E	Rs. 4500					

Let each A and B invested Rs. X

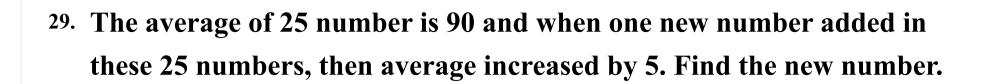
$$X \times \frac{18 \times 5}{100} - X \times \frac{12 \times 5}{100} = 1440$$

$$X \times \frac{30}{100} = 1440$$

$$X = 4800 \text{ Rs}.$$

So, total amount invested by A and B = 4800 + 4800 = 9600 Rs.

1



A 220

B 240

C 280

 $\left(\mathbf{D}\right)$ 300

E 320

Solution

Sum of the 25 numbers = $25 \times 90 = 2250$

When a new number added then total = $(90 + 5) \times 26 = 2470$ So, new

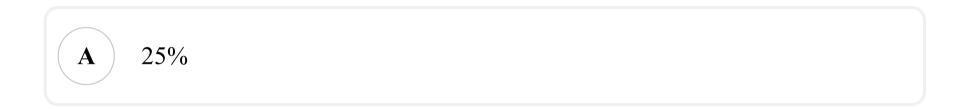
number = 2470 - 2250 = 220

30. Study following information carefully and answer given questions:

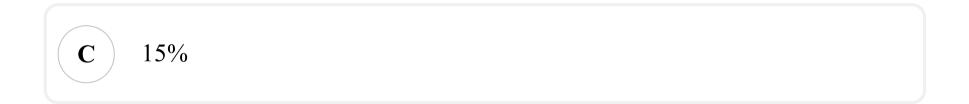
The table given below shows total number of patients admitted in three (A, B and C) different hospitals in three different months. Read the data carefully and answer the questions.

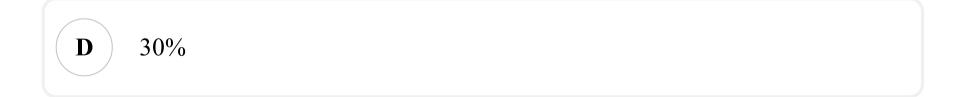
Hospitals	March	April	May
A	1505	2800	2864
В	3676	1976	2228
С	2456	2804	2408

A. Total patients admitted in A in March is what percent (approximate) of total patients admitted in all three hospitals in May.











Required percentage =

$$\frac{1505}{(2864+2228+2408)} imes 100 = \frac{1505}{7500} imes 100 = 20.06 pprox 20 \%$$

B. If $\frac{1}{4}$ th of total patients admitted in B in March are female and 60% of total patients admitted in A in April are female, then find the difference between total male patients admitted in A in April and in B in March together and total patients admitted in C in May.



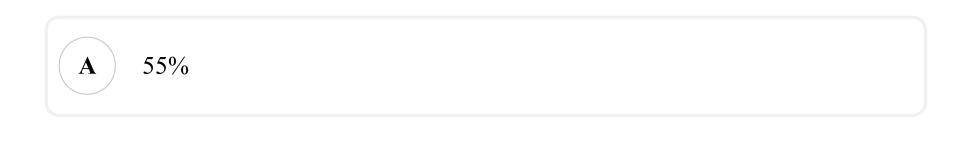




Solution

Total male patients admitted in A in April = $2800 \times \frac{40}{100} = 1120$ Total male patients admitted in B in March = $3676 \times \frac{3}{4} = 2757$ Required difference = (1120 + 2757) - 2408 = 1469

C. Total patients admitted in A in May is what percent (Approximate) of total patients admitted in B & C in April?

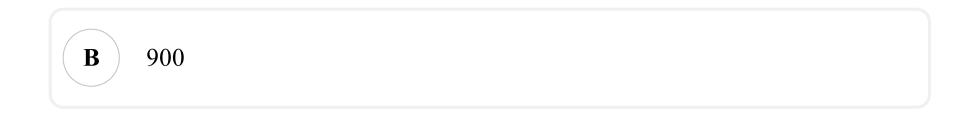


Solution

Total patients admitted in B & C in April =
$$(1976 + 2804) = 4780$$

Required percentage = $\frac{2864}{4780} \times 100 = 59.91 \approx 60 \%$

D. Out of total patients admitted in C in March, 956 are female. If total male patients admitted in C in June are 20% more than total male patients admitted in C in March and total patients admitted in June in C are 872 more than total patients admitted in B in May, then find total female patients admitted in C in June.

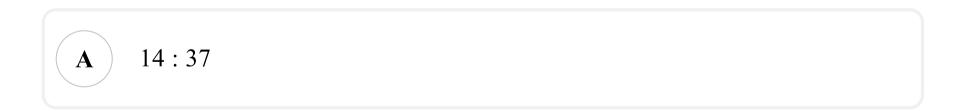




Solution

Total male patients admitted in C in March = 2456 - 956 = 1500So, total male patients admitted in C in June = $1500 \times \frac{120}{100} = 1800$ Total female patients admitted in C in June = (2228 + 872) - 1800 = 1300

E. Find ratio of total patients admitted in A in April to total number of patients admitted in all three hospitals in May.



D 28:77

 $\left(\begin{array}{c}\mathbf{E}\end{array}\right)$ 75:28

Solution

Required ratio = 2800 : (2864 + 2228 + 2408) = 2800 : 7500 = 28 : 75

31. Study following information and answer given questions:

Find the wrong number in the following number series:

A. 215, 200, 250, 175, 275, 150, 300









Solution

Wrong number = 215

Pattern of series –

There are two alternate series

One is
$$-225 + 25 = 250$$

$$250 + 25 = 275$$

$$275 + 25 = 300$$

Second is
$$-200 - 25 = 175$$

$$175 - 25 = 150$$

B. 550, 4400, 110, 440, 24, 44, 4.4

A 24

B 550

C 4400

D 4.4

 $\left(\begin{array}{c}\mathbf{E}\end{array}\right)$ 44

Solution

Wrong number = 24

Pattern of series –

There are two alternate series

One is $-550 \div 5 = 110$

$$110 \div 5 = 22$$

$$22 \div 5 = 4.4$$

Second is $-4400 \div 10 = 440$

$$440 \div 10 = 44$$

C. 146, 145, 149, 122, 138, 15, 49

A 138

B 122

C 15

D 146

E 149

Solution

Wrong number = 15

Pattern of series –

$$146 - 1^3 = 145$$

$$145 + 2^2 = 149$$

$$149 - 3^3 = 122$$

$$122 + 4^2 = 138$$

$$138 - 5^3 = 13$$

$$13 + 6^2 = 49$$

D. 1.7, 3.0, 5.6, 9.5, 14.7, 21.8, 29

 \mathbf{A} 3.0

B 9.5

C 21.8

D 14.7

E 29

Solution

Wrong number = 21.8

Pattern of series –

1.7 + 1.3 = 3.0

3.0 + 2.6 = 5.6

5.6 + 3.9 = 9.5

9.5 + 5.2 = 14.7

14.7 + 6.5 = 21.2

21.2+7.8 = 29

E. 27, 48, 80, 134, 221, 355, 538

 $\left(\mathbf{A}\right)$ 27

B 355

 \mathbf{C} 80

D 134

E 538

Solution

Wrong number = 355

Pattern of series –

32. Study the following information and answer given questions:

What will come in the place of question mark in following questions.

A. 274 - 141 = ? + 98



 $\left(\mathbf{B}\right)$ 31

 $\left(\mathbf{C} \right)$ 37

D 33

E 35

Solution

$$? = 274 - 141 - 98$$

$$? = 35$$

B. 36% of $250 + 26 \div 2 \times ? = 207$

 $\left(\mathbf{A}\right)$





$$rac{36}{100} imes 250 + rac{26}{2} imes? = 207 \ 13 imes? = 207 - 90 \ ? = 9$$

c.
$$240 \times 2.5 + 65 \times \frac{2}{13} = ?^2 - \sqrt{225}$$

$$\left(\begin{array}{c}\mathbf{B}\end{array}\right)$$
 24

$$\left(\begin{array}{c}\mathbf{C}\end{array}\right)$$
 23

(\mathbf{D})	27
\ /	

E 25

Solution

$$600 + 10 + 15 = ?^{2}$$

? = 25

D.
$$4080 \div (? + 17) = 10^2 + 2$$





$$\left(\begin{array}{c} \mathbf{C} \end{array}\right)$$
 51

$$\left(\mathbf{D}\right)$$
 15

$$4080 \div (? + 17) = 10^{2} + 2$$

$$\frac{4080}{100+2} = (? + 17)$$

$$? = 23$$

E. $25 \% \text{ of } 256 + \frac{\sqrt[4]{256}}{4} \times 8 = ? + 10$

- **A** 64
- B 62
- **C** 60
- **D** 56
- **E** 82

$$\frac{256}{4} + \frac{4}{4} \times 8 = ? + 10$$

$$64 + 8 = ? + 10$$

33. Study the following information and answer given questions:

What will come in the place of question mark in following questions.

A.
$$2\frac{4}{7} + 4\frac{1}{3} - 3\frac{2}{3} + \frac{16}{21} = ?$$



$$oldsymbol{B}$$

$$\left(\begin{array}{c} \mathbf{C} \end{array}\right)$$
 3

$$\left(\mathbf{D}\right)$$

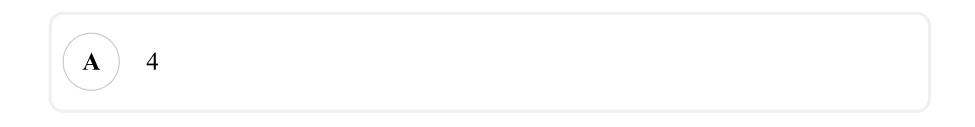
$$\left(\mathbf{E}\right)$$

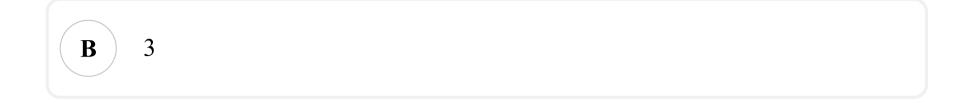
$$2\frac{4}{7} + 4\frac{1}{3} - 3\frac{2}{3} + \frac{16}{21} = ?$$

$$(2+4-3)+(rac{4}{7}+rac{1}{3}-rac{2}{3}+rac{16}{21})$$

$$? = 3 + 1$$

B.
$$(0.9)^2 \times 10 + 2.9 = ? + 132 \div 12$$





$$oxed{\mathbf{C}}$$
 2

Solution 8.1 + 2.9=? +11

? = 0

C. 26% of 50 of $5 \div 26 = ?$

C 3.5

D 1.5

 $oxed{\mathbf{E}}$ 2

Solution

 $\frac{26}{100} \times 50 \times 5 \times \frac{1}{26} = ?$? = 2.5

D. $(132 + 72) \div 12 \times 17 = ? + 9^2$

A 208

B 287

C 370

D 179

E 168

Solution

$$\frac{204}{12} \times 17 = ? + 81$$

$$289 = ? + 81$$

$$? = 208$$

E. $0.26 \times 50 + 13^2 = ?$



B 181

C 180

D 189

 $\left(\begin{array}{c}\mathbf{E}\end{array}\right)$ 188

$$\frac{26}{100} \times 50 + 169 = ?$$

$$13 + 169 = ?$$

F. $30 \div \frac{5}{12} + \sqrt{144} \times 20 = ?$

(A) 118

B 156

 $\left(\mathbf{C}\right)$ 208

D 256

E 312

Solution

 $30 \times \frac{12}{5} + 12 \times 20 = ?$? = 312

G. 60% of 700 - 450 = ? - 85% of 120

A 84

 \mathbf{B} 48



$$\frac{60}{100} \times 700 - 450 + \frac{85}{100} \times 120 = ?$$

$$420 - 450 + 102 = ?$$

$$? = 72$$

H.
$$945 \div 35 \times 20 = ?$$

$$\left(\mathbf{B}\right)$$
 550

$$\left(\mathbf{C}\right)$$
 560

$$\left(\begin{array}{c}\mathbf{D}\end{array}\right)$$
 570

E 580

Solution

$$\frac{945}{35} \times 20 = ?$$

$$? = 540$$

I. $31.5 \div 3.5 \times 12 - 8 = ?^2$

A 10

 \mathbf{B} 25

C 75

D 100

 $\left(\begin{array}{c}\mathbf{E}\end{array}\right)$ 50

Solution

$$31.5 \div 3.5 \times 12 - 8 = ?^2$$

$$\frac{31.5\times12}{3.5} - 8 = ?^2$$

$$100 = ?^2$$

?=10







(https://play.google.com/store/apps/details? id=me.entri.entrime)