

जब तक आपको यह परीक्षण पुस्तिका खोलने को न कहा जाए तब तक न खोलें

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परीक्षण पुस्तिका अनुक्रम

क्रम संख्या

1924193

## परीक्षण पुस्तिका

सामान्य अध्ययन

प्रश्न-पत्र—II

समय : दो घण्टे

पूर्णांक : 200

A

### अ नु दे श

1. परीक्षा प्रारम्भ होने के तुरन्त बाद आप इस परीक्षण पुस्तिका की पड़ताल अवश्य कर लें कि इसमें कोई बिना छपा, फटा या छूटा हुआ पृष्ठ अथवा प्रश्नांश आदि न हो। यदि ऐसा है, तो इसे सही परीक्षण पुस्तिका से बदल लें।
2. कृपया ध्यान रखें कि OMR उत्तर-पत्रक में उचित स्थान पर रोल नम्बर और परीक्षण पुस्तिका अनुक्रम A, B, C या D को ध्यान से एवं बिना किसी चूक या विसंगति के भरने और कूटबद्ध करने की जिम्मेदारी उम्मीदवार की है। किसी भी प्रकार की चूक/विसंगति की स्थिति में उत्तर-पत्रक निरस्त कर दिया जाएगा।
3. इस परीक्षण पुस्तिका पर साथ में दिए गए कोष्ठक में आपको अपना अनुक्रमांक लिखना है। परीक्षण पुस्तिका पर और कुछ न लिखें।
4. इस परीक्षण पुस्तिका में 80 प्रश्नांश (प्रश्न) दिए गए हैं। प्रत्येक प्रश्नांश हिन्दी और अंग्रेजी दोनों में छपा है। प्रत्येक प्रश्नांश में चार प्रत्युत्तर (उत्तर) दिए गए हैं। इनमें से एक प्रत्युत्तर को चुन लें, जिसे आप उत्तर-पत्रक पर अंकित करना चाहते हैं। यदि आपको ऐसा लगे कि एक से अधिक प्रत्युत्तर सही हैं, तो उस प्रत्युत्तर को अंकित करें जो आपको सर्वोत्तम लगे। प्रत्येक प्रश्नांश के लिए केवल एक ही प्रत्युत्तर चुनना है।
5. आपको अपने सभी प्रत्युत्तर अलग से दिए गए उत्तर-पत्रक पर ही अंकित करने हैं। उत्तर-पत्रक में दिए गए निर्देश देखें।
6. सभी प्रश्नांशों के अंक समान हैं।
7. इससे पहले कि आप परीक्षण पुस्तिका के विभिन्न प्रश्नांशों के प्रत्युत्तर उत्तर-पत्रक पर अंकित करना शुरू करें, आपको प्रवेश प्रमाण-पत्र के साथ प्रेषित अनुदेशों के अनुसार कुछ विवरण उत्तर-पत्रक में देने हैं।
8. आप अपने सभी प्रत्युत्तरों को उत्तर-पत्रक में भरने के बाद तथा परीक्षा के समापन पर केवल उत्तर-पत्रक अधीक्षक को सौंप दें। आपको अपने साथ परीक्षण पुस्तिका ले जाने की अनुमति है।
9. कच्चे काम के लिए पत्रक, परीक्षण पुस्तिका के अन्त में संलग्न हैं।
10. गलत उत्तरों के लिए दण्ड :  
उम्मीदवार द्वारा दिए गए गलत उत्तरों के लिए दण्ड दिया जाएगा।  
(i) प्रत्येक प्रश्न के लिए चार वैकल्पिक उत्तर हैं। उम्मीदवार द्वारा प्रत्येक प्रश्न के लिए दिए गए एक गलत उत्तर के लिए प्रश्न हेतु नियत किए गए अंकों का एक-तिहाई दण्ड के रूप में काटा जाएगा।  
(ii) यदि कोई उम्मीदवार एक से अधिक उत्तर देता है, तो इसे गलत उत्तर माना जाएगा, यद्यपि दिए गए उत्तरों में से एक उत्तर सही होता है, फिर भी उस प्रश्न के लिए उपर्युक्तानुसार ही उसी तरह का दण्ड दिया जाएगा।  
(iii) यदि उम्मीदवार द्वारा कोई प्रश्न हल नहीं किया जाता है अर्थात् उम्मीदवार द्वारा उत्तर नहीं दिया जाता है, तो उस प्रश्न के लिए कोई दण्ड नहीं दिया जाएगा।

जब तक आपको यह परीक्षण पुस्तिका खोलने को न कहा जाए तब तक न खोलें

Note : English version of the instructions is printed on the back cover of this Booklet.

को पर विचार कीजिए :

विकासशील देशों के धारणीय मानव

ने में सहायक हो सकते हैं

परिष्कृत ऊर्जा स्रोत उपलब्ध करा

परिवहन के सुधार के लिए

र ऋण उपलब्ध करा कर

और उपभोग के स्वरूपों को

इत कर

सही है/हैं?

पर्यावरण को

नियंत्रित नहीं

र वनरोपण

स्वन तथा

एगा कि

स्व हो

अपने

की

के

—

**Directions for the following 3 (three) items :**

Read the following **two passages** and answer the items that follow the passages. Your answers to these items should be based on the passages only.

**Passage—1**

The main threat to maintaining progress in human development comes from the increasingly evident unsustainability of production and consumption patterns. Current production models rely heavily on fossil fuels. We now know that this is unsustainable because the resources are finite. The close link between economic growth and greenhouse gas emissions needs to be severed for human development to become truly sustainable. Some developed countries have begun to alleviate the worst effects by expanding recycling and investing in public transport and infrastructure. But most developing countries are hampered by the high costs and low availability of clean energy sources. Developed countries need to support developing countries' transition to sustainable human development.

1. Unsustainability in production pattern is due to which of the following?

1. Heavy dependence on fossil fuels
2. Limited availability of resources
3. Expansion of recycling

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

2. Consider the following statements :

Developed countries can support developing countries' transition to sustainable human development by

1. making clean energy sources available at low cost
2. providing loans for improving their public transport at nominal interest rates
3. encouraging them to change their production and consumption patterns

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Passage—2**

Unless the forces and tendencies which are responsible for destroying the country's environment are checked in the near future and afforestation of denuded areas is taken up on a massive scale, the harshness of the climatic conditions and soil erosion by wind and water will increase to such an extent that agriculture, which is the mainstay of our people, will gradually become impossible. The desert countries of the world and our own desert areas in Rajasthan are a grim reminder of the consequences of large-scale deforestation. Pockets of desert-like landscape are now appearing in other parts of the



प्र की संख्या ABCDEFG है, किन्तु कि इसी क्रम में हो, जहाँ हर वर्ण किसी ल 1, 2, 4, 5, 7, 8, 9) को । यह संख्या अंक 9 से विभाज्य है। क अंक मिटाने पर, परिणामी संख्या 7 है। मूल संख्या के दाहिने से दो र परिणामी संख्या अंक 5 से ब्या के दाहिने से तीन अंकों को ब्या अंक 4 से विभाज्य है। मूल अंकों को मिटाने पर परिणामी य है। मूल संख्या के दाहिने से परिणामी संख्या अंक 2 से ों से कौन-सा, इस संख्या के का संभव मान है?

नौर वे एक साथ एक बिन्दु पर ता है, जबकि बाद X बाएँ 5 Y दाहिने दोनों मित्र

country including the Sutlej-Ganga Plains and the Deccan Plateau. Where only a few decades back there used to be lush green forests with perennial streams and springs, there is only brown earth, bare of vegetation, without any water in the streams and springs except in the rainy season.

3. According to the passage given above, deforestation and denudation will ultimately lead to which of the following?

1. Depletion of soil resource
2. Shortage of land for the common man
3. Lack of water for cultivation

Select the correct answer using the code given below.

- (a) 1 and 2 only  
 (b) 2 and 3 only  
 (c) 1 and 3 only  
 (d) 1, 2 and 3

4. What is the value of X in the sequence 20, 10, 10, 15, 30, 75, X?

- (a) 105  
 (b) 120  
 (c) 150  
 (d) 225

5. An Identity Card has the number ABCDEFG, not necessarily in that order, where each letter represents a distinct digit (1, 2, 4, 5, 7, 8, 9 only). The number is divisible by 9. After deleting the first digit from the right, the resulting number is divisible by 6. After deleting two digits from the right of original number, the resulting number is divisible by 5. After deleting three digits from the right of original number, the resulting number is divisible by 4. After deleting four digits from the right of original number, the resulting number is divisible by 3. After deleting five digits from the right of original number, the resulting number is divisible by 2. Which of the following is a possible value for the sum of the middle three digits of the number?

- (a) 8  
 (b) 9  
 (c) 11  
 (d) 12

6. Two friends X and Y start running and they run together for 50 m in the same direction and reach a point. X turns right and runs 60 m, while Y turns left and runs 40 m. Then X turns left and runs 50 m and stops, while Y turns right and runs 50 m and then stops. How far are the two friends from each other now?

- (a) 100 m  
 (b) 90 m  
 (c) 60 m  
 (d) 50 m

$$\frac{+ 24}{+ 6} + 6$$

8 और  $8^{12}$  में से कौन-सी संख्या

$$\begin{array}{r} 239 \times 3 \\ 17 \end{array}$$

$$\begin{array}{r} 239 \times 2 \\ 478 \end{array}$$

$$\begin{array}{r} 23 \times 7 \times 2 \\ 74 \\ \sqrt{279 \times 2} \\ = 5, 5, 8 \end{array}$$

प्रकार व्यवस्थित किए हैं, और दूसरी पंक्ति संख्या की दोगुनी है; हली पंक्ति में बनी को दो बार रखने, 3, 7 और 9 में व्यवस्थित में व्यवस्थित

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7. Which date of June 2099 among the following is Sunday?

- (a) 4
- (b) 5
- (c) 6
- (d) 7

8. A bill for ₹1,840 is paid in the denominations of ₹50, ₹20 and ₹10 notes. 50 notes in all are used. Consider the following statements :

1. 25 notes of ₹50 are used and the remaining are in the denominations of ₹20 and ₹10.
2. 35 notes of ₹20 are used and the remaining are in the denominations of ₹50 and ₹10.
3. 20 notes of ₹10 are used and the remaining are in the denominations of ₹50 and ₹20.

Which of the above statements are **not** correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

9. Which number amongst  $2^{40}$ ,  $3^{21}$ ,  $4^{18}$  and  $8^{12}$  is the smallest?

- (a)  $2^{40}$
- (b)  $3^{21}$
- (c)  $4^{18}$
- (d)  $8^{12}$

10. The digits 1 to 9 are arranged in three rows in such a way that each row contains three digits, and the number formed in the second row is twice the number formed in the first row; and the number formed in the third row is thrice the number formed in the first row. Repetition of digits is not allowed. If only three of the four digits 2, 3, 7 and 9 are allowed to use in the first row, how many such combinations are possible to be arranged in the three rows?

- (a) 4
- (b) 3
- (c) 2
- (d) 1



रिच्छेद-2

एक हो जाती है, जब यह समझने की  
रीबी का प्रसार कहाँ तक है। यह  
ने परिभाषा बहुत ही संकीर्ण है कि  
ने गणना करने की क्रिया-पद्धति  
अंदर निहित अपेक्षाकृत अधिक  
'गरीबी को अपर्याप्त आय या  
ने पर अनन्य रूप से निर्भर है।  
कर वर्गीकृत किया जा सकता  
से वंचित होना है, जो मनुष्य  
, तो आय-निर्धनता इसका  
हमारे विचार में, सिर्फ वह  
एक वास्तव में रहता है,  
वृत्त के लिए वास्तविक  
बाधाओं और साथ ही  
है। निम्न आय की  
और वे अन्य पहलू  
प में देखा जाता है,  
तुं जिन चीजों के  
ए जीवन जीते हैं,  
का से संबंधित

क्रिया-पद्धति

सी चीजें

बहुत

न

Directions for the following 4 (four) items :

Read the following two passages and answer the items that follow the passages. Your answers to these items should be based on the passages only.

Passage-1

"In simple matters like shoe-making, we think only a specially trained person will serve our purpose, but in politics, we presume that everyone who knows how to get votes knows how to administer a State. When we are ill, we call for a trained physician, whose degree is a guarantee of specific preparation and technical competence—we do not ask for the handsomest physician, or the most eloquent one : well then, when the whole State is ill should we not look for the service and guidance of the wisest and the best?"

11. Which one of the following statements best reflects the message of the author of the passage?

(a) We assume that in a democracy, any politician is qualified to administer a State.

(b) Politicians should be selected from those trained in administration.

(c) We need to devise a method of barring incompetence from public office.

(d) As voters select their administrators, the eligibility of politicians to administer a State cannot be questioned.

Passage-2

The poverty line is quite unsatisfactory when it comes to grasping the extent of poverty in India. It is not only because of its extremely narrow definition of 'who is poor' and the debatable methodology used to count the poor, but also because of a more fundamental assumption underlying it. It exclusively relies on the notion of poverty as insufficient income or insufficient purchasing power. One can better categorize it by calling it income poverty. If poverty is ultimately about deprivations affecting human well-being, then income poverty is only one aspect of it. Poverty of a life, in our view, lies not merely in the impoverished state in which the person actually lives, but also in the lack of real opportunity given by social constraints as well as personal circumstances—to choose other types of living. Even the relevance of low incomes, meagre possessions, and other aspects of what are standardly seen as economic poverty relate ultimately to their role in curtailing capabilities, i.e., their role in severely restricting the choices people have to lead variable and valued lives.

12. Why is the methodology adopted in India to count the 'poor' debatable?

(a) There is some confusion regarding what should constitute the 'poverty line'.

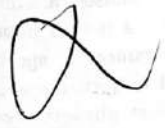
(b) There are wide diversities in the condition of the rural and urban poor.

(c) There is no uniform global standard for measuring income poverty.

(d) It is based on the proposition of poverty as meagre income or buying capacity.

00 m लम्बे वृत्तीय मार्ग में दौड़ते हुए दौड़ लगाते हैं। उनकी चाल 3:2 के अगर उन्होंने एक-साथ एक ही दिशा में है, तो कितनी बार पहला व्यक्ति, दूसरे से गुजरेगा (दौड़ शुरू करने की स्थिति देने में नहीं गिना गया है)?

$v = 3:2$



पता के क्रम को उल्टा कर दिया जाए आया हर वर्ण उस वर्ण को निरूपित स्थान उसने लिया है, तो निम्नलिखित

एक 'LUCKNOW' को निरूपित

Handwritten mapping of letters to positions:

A	B	C	D
26	2	3	4
E	F	G	H
5	6	7	8
I	J	K	L
9	10	11	12
M	N	O	P
13	14	15	16
Q	R	S	T
17	18	19	20
U	V	W	X
21	22	23	24
Y	Z		
25	26		



Handwritten calculations:

$$\frac{300}{10} = 30 \text{ p.}$$

$$\frac{60}{4} = 15$$

$$\frac{300}{20} = 15$$

13. Why is income poverty only one measure of counting the 'poor'?

- (a) It talks of only one kind of deprivation ignoring all others.
- (b) Other deprivations in a human life have nothing to do with lack of purchasing power.
- (c) Income poverty is not a permanent condition, it changes from time to time.
- (d) Income poverty restricts human choices only at a point of time.

14. What does the author mean by 'poverty of a life'?

- (a) All deprivations in a human life which stem not only from lack of income but lack of real opportunities
- (b) Impoverished state of poor people in rural and urban areas
- (c) Missed opportunities in diverse personal circumstances
- (d) Material as well as non-material deprivations in a human life which restrict human choices permanently

15. X and Y run a 3 km race along a circular course of length 300 m. Their speeds are in the ratio 3:2. If they start together in the same direction, how many times would the first one pass the other (the start-off is not counted as passing)?

- (a) 2
- (b) 3
- (c) 4
- (d) 5

16. If the order of the letters in the English alphabet is reversed and each letter represents the letter whose position it occupies, then which one of the following represents 'LUCKNOW'?

- (a) OGXPLMD
- (b) OGXQMLE
- (c) OFXPMLD
- (d) OFXPMLD



प्रश्न और दो कथनों पर विचार कीजिए :

$x$  पूर्णांक है?

value नहीं!

$x/3$  पूर्णांक नहीं है।

$3x$  पूर्णांक है।

और कथनों के बारे में निम्नलिखित में से सही है?

1) कथन-1 ही प्रश्न का उत्तर देने के लिए है

2) कथन-2 ही प्रश्न का उत्तर देने के लिए है

3) -1 और कथन-2, दोनों, प्रश्न का उत्तर लिए पर्याप्त हैं

4) -1 और कथन-2, दोनों, प्रश्न का उत्तर लिए पर्याप्त नहीं हैं

कीमत में 25% वृद्धि की गई। तत्पश्चात् 0% घटा दिया गया और फिर 10% बढ़ा कीमत में परिणामी वृद्धि क्या है?

2x

17. In a tournament of Chess having 150 entrants, a player is eliminated whenever he loses a match. It is given that no match results in a tie/draw. How many matches are played in the entire tournament?

(a) 151

(b) 150

(c) 149

(d) 148

Handwritten calculations for Q17:

$$3\left(\frac{4}{3}\right) = 4$$

$$3(-1) = -3$$

$$3\left(\frac{1}{5}\right) = \frac{3}{5}$$

$$3^2 = 9$$

Other notes:  $\frac{x}{3} \neq \frac{1}{3}$ ,  $\frac{2}{3} = \frac{1}{3}$ ,  $\frac{1}{3} = \frac{1}{3}$ ,  $-\frac{1}{3} = -\frac{1}{3}$ ,  $-\frac{6}{3} = -2$ ,  $3^2 = 9$  (key)

18. How many 3-digit natural numbers (without repetition of digits) are there such that each digit is odd and the number is divisible by 5?

(a) 8

(b) 12

(c) 16

(d) 24

Handwritten calculations for Q18:

$$+25 - 20 = \frac{25 \times 20}{100} = 5$$

$$10 +$$

Handwritten calculations for Q20:

$$100 \rightarrow 125 \rightarrow 100 \rightarrow 110$$

19. Consider the Question and two Statements given below :

Question : Is  $x$  an integer?

Statement-1 :  $x/3$  is not an integer.

Statement-2 :  $3x$  is an integer.

Which one of the following is correct in respect of the Question and the Statements?

(a) Statement-1 alone is sufficient to answer the Question

(b) Statement-2 alone is sufficient to answer the Question

(c) Both Statement-1 and Statement-2 are sufficient to answer the Question

(d) Both Statement-1 and Statement-2 are not sufficient to answer the Question

20. The increase in the price of a certain item was 25%. Then the price was decreased by 20% and then again increased by 10%. What is the resultant increase in the price?

(a) 5%

(b) 10%

(c) 12.5%

(d) 15%

गरणाओं में से कौन-सा/से वैध है/हैं?

1

2

2 दोनों

1 और न ही 2

उद्देश पर आधारित, निम्नलिखित पूर्वधारणाएँ :

देशों को अपनी वर्तमान कृषि तकनीकों में निर्यात करने की आवश्यकता है।

उत्तरी देशों के पास बेहतर आधारिक संरचना है। वे खाद्यान्न की कम बर्बादी करते हैं।

गरणाओं में से कौन-सा/से वैध है/हैं?

1

2

2 दोनों

1 और न ही 2

उद्देश पर आधारित, निम्नलिखित पूर्वधारणाएँ :

पीढ़ियों के लिए पर्याप्त खाद्यान्न उपजाना पूर्ण कार्य होगा।

उत्तरी कृषि, गरीब देशों में खाद्यान्न सुरक्षा और लाभप्रद विकल्प है।

गरणाओं में से कौन-सा/से वैध है/हैं?

1

2

2 दोनों

1 और न ही 2

**Directions for the following 3 (three) items :**

Read the following **passage** and answer the items that follow the passage. Your answers to these items should be based on the passage only.

**Passage**

In some places in the world, the productivity of staples such as rice and wheat has reached a plateau. Neither new strains nor fancy agrochemicals are raising the yields. Nor is there much unfarmed land left that is suitable to be brought under the plough. If global temperature continues to rise, some places will become unsuitable for farming. Application of technology can help overcome these problems. Agricultural technology is changing fast. Much of this change is brought about by affluent farmers in the West/Americas. Techniques developed in the West are being adapted in some places to make tropical crops more productive. Technology is of little use if it is not adapted. In the developing world, that applies as much to existing farming techniques as it does to the latest advances in genetic modification. Extending to the smallholders and subsistence farmers of Africa and Asia the best of today's agricultural practices, in such simple matters as how much fertilizers to apply and when, would lead to a greatly increased availability of food for humanity. So would things like better roads and storage facilities, to allow for the carriage of surpluses to markets and reduce wastage.

21. Based on the above passage, the following assumptions have been made :

1. Development of agricultural technology is confined to developed countries.
2. Agricultural technology is not adapted in developing countries.

Which of the above assumptions is/are valid?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

22. Based on the above passage, the following assumptions have been made :

1. Poor countries need to bring about change in their existing farming techniques.
2. Developed countries have better infrastructure and they waste less food.

Which of the above assumptions is/are valid?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

23. Based on the above passage, the following assumptions have been made :

1. Growing enough food for future generations will be a challenge.
2. Corporate farming is a viable option for food security in poor countries.

Which of the above assumptions is/are valid?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2





इन द्वारा प्रस्तावित नियमों की तरह  
नियम-समुच्चय है जो भूमंडल में  
ते हैं।

कृतिक वरण पृथ्वी पर भावी  
ई कर सकता है, क्योंकि

राह में खड़े पर्यावरणीय  
करने के लिए पूरी तरह  
हो जाएँगी

विलुप्त हो जाएँगी, क्योंकि  
टैनाओं को नहीं झेल

न पाने में जीनोम की  
लोपन हो जाएँगी

प लक्षण है

त्तर चुनिए।

वैज्ञानिक

ता

की

**Directions for the following 4 (four) items :**

Read the following **two passages** and answer  
the items that follow the passages. Your  
answers to these items should be based on  
the passages only.

**Passage—1**

Natural selection cannot anticipate future environments on the earth. Therefore, the set of existing organisms can never be fully prepared for environmental catastrophes that await life. An outcome of this is the extinction of those species which cannot overcome environmental adversity. This failure to survive, in modern terms, can be attributed to the genomes which are unable to withstand geological vagaries or biological mishaps (infections, diseases and so on). In biological evolution on the earth, extinction of species has been a major feature. The earth may presently have up to ten million species, yet more than 90% of species that have ever lived on the earth are now extinct. Once again, the creationist doctrines fail to satisfactorily address why a divine creator will firstly bother to create millions of species and then allow them to perish. The Darwinian explanation for extinct life is once again simple, elegant and at once convincing—organisms go extinct as a function of environmental or biological assaults for which their inheritance deems them ill-equipped. Therefore, the so-called Darwinian theory of evolution is not a theory at all. Evolution happens—this is a fact. The mechanism of evolution (Darwin proposed natural selection) is amply supported by scientific data. Indeed, to date no single zoological, botanical, geological, paleontological, genetic or physical evidence has refuted either of the central two main Darwinian ideas. If religion is not taken into consideration,

Darwinian laws are acceptable just like the laws proposed by Copernicus, Galileo, Newton and Einstein—sets of natural laws that explain natural phenomena in the universe.

31. According to the passage, natural selection cannot anticipate future environments on the earth as

1. species not fully prepared to face the environmental changes that await them will face extinction
2. all the existing species would get extinct as their genomes will not withstand biological mishaps
3. inability of the genome to withstand environmental changes would result in extinction
4. extinction of species is a common feature

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 3 and 4
- (d) 1, 2 and 4

32. The passage suggests that Darwinian theory of evolution is not a theory at all because

- (a) it does not satisfy the creationist doctrine
- (b) extinction is a function of environment and biological assaults
- (c) there are no evidences to refute it
- (d) existence of organisms is attributed to a creator

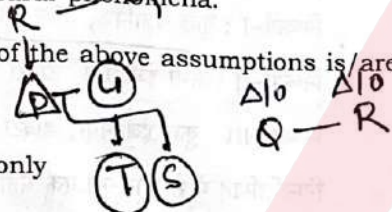


33. With reference to the passage, the following assumptions have been made :

1. Only species that have the ability to overcome environmental catastrophes will survive and perpetuate.
2. More than 90% of the species on the earth are in the danger of getting extinct due to drastic changes in the environment.
3. Darwin's theory explains all the natural phenomena.

Which of the above assumptions is/are valid?

- (a) 1 only  
 (b) 1 and 2 only  
 (c) 3 only  
 (d) 1, 2 and 3



Passage—2

With steady economic growth, higher literacy and increasing skill levels, the number of Indian middle-class families has gone up exponentially. Direct results of the affluence have been changes in dietary patterns and energy consumption levels. People have moved to a higher protein-based diet like milk products, fish and meat, all of which need significantly more water to produce than cereal-based diets. Increasing use of electronic and electric machines/gadgets and motor vehicles needs more and more energy and generation of energy needs water.

34. Which one of the following statements best reflects the crux of the passage?

- (a) People should be persuaded to continue with the mainly Indian traditional cereal-based diets.
- (b) India needs to focus on developing agricultural productivity and capacity for more energy generation in the coming years.
- (c) Modern technological developments result in the change of cultural and social behaviour of the people.
- (d) Water management practices in India need to change dramatically in the coming years.

35. How many seconds in total are there in  $x$  weeks,  $x$  days,  $x$  hours,  $x$  minutes and  $x$  seconds?

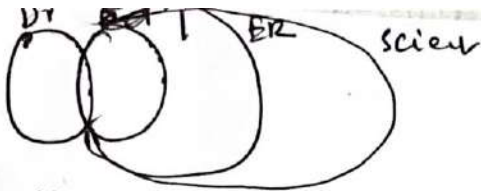
- (a)  $11580x$
- (b)  $11581x$
- (c)  $694860x$
- (d)  $694861x$

36.  $P, Q, R, S, T$  and  $U$  are six members of a family.  $R$  is the spouse of  $Q$ .  $U$  is the mother of  $T$  and  $S$  is the daughter of  $U$ .  $P$ 's daughter is  $T$  and  $R$ 's son is  $P$ . There are two couples in the family. Which one of the following is correct?

- (a)  $Q$  is the grandfather of  $T$
- (b)  $Q$  is the grandmother of  $T$
- (c)  $R$  is the mother of  $P$
- (d)  $T$  is the granddaughter of  $Q$

842x7  
 22901x7  
 2080721  
 15





37. Consider the Question and two Statements given below in respect of three cities P, Q and R in a State :

Question : How far is city P from city Q?

Statement-1 : City Q is 18 km from city R.

Statement-2 : City P is 43 km from city R.

Which one of the following is correct in respect of the Question and the Statements?

- (a) Statement-1 alone is sufficient to answer the Question
- (b) Statement-2 alone is sufficient to answer the Question
- (c) Both Statement-1 and Statement-2 are sufficient to answer the Question
- (d) Both Statement-1 and Statement-2 are not sufficient to answer the Question

38. Two Statements followed by four Conclusions are given below. You have to take the Statements to be true even if they seem to be at variance from the commonly known facts. Read all the Conclusions and then decide which of the given Conclusions logically follows/follow from the Statements, disregarding the commonly known facts :

Statement-1 : All pens are books.

Statement-2 : No chair is a pen.

Conclusion-I : All chairs are books.

Conclusion-II : Some chairs are pens.

Conclusion-III : All books are chairs.

Conclusion-IV : No chair is a book.

Which one of the following is correct?

- (a) Only Conclusion-I
- (b) Only Conclusion-II
- (c) Both Conclusion-III and Conclusion-IV
- (d) None of the Conclusions follows

39. Three Statements followed by three Conclusions are given below. You have to take the Statements to be true even if they seem to be at variance from the commonly known facts. Read all the Conclusions and then decide which of the given Conclusions logically follows/follow from the Statements, disregarding the commonly known facts :

Statement-1 : Some doctors are teachers.

Statement-2 : All teachers are engineers.

Statement-3 : All engineers are scientists.

Conclusion-I : Some scientists are doctors.

Conclusion-II : All engineers are doctors.

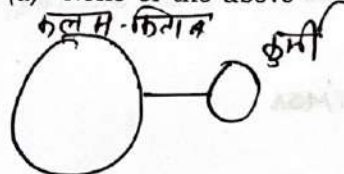
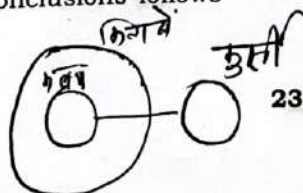
Conclusion-III : Some engineers are doctors.

Which one of the following is correct?

- (a) Only Conclusion-I
- (b) Only Conclusion-II
- (c) Both Conclusion-I and Conclusion-III
- (d) Both Conclusion-I and Conclusion-II

40. Eight students A, B, C, D, E, F, G and H sit around a circular table, equidistant from each other, facing the centre of the table, not necessarily in the same order. B and D sit neither adjacent to C nor opposite to C. A sits in between E and D, and F sits in between B and H. Which one of the following is definitely correct?

- (a) B sits in between A and G
- (b) C sits opposite to G
- (c) E sits opposite to F
- (d) None of the above





**Directions for the following 4 (four) items :**

Read the following **two passages** and answer the items that follow the passages. Your answers to these items should be based on the passages only.

**Passage—1**

For two or three generations past, ever-increasing numbers of individuals have been living as workers merely, not as human beings. An excessive amount of labour is rule today in every circle of society, with the result that man's spiritual element cannot thrive. He finds it very difficult to spend his little leisure in serious activities. He does not want to think; or he cannot even if he wants to. He seeks not self-improvement, but entertainment which would enable him to be mentally idle and to forget his usual activities. Therefore, the so-called culture of our age is dependant more on cinema than on theatre, more on newspapers, magazines and crime stories than on serious literature.

41. The passage is based on the idea that
- man should not work hard
  - the great evil of our age is overstrain
  - man cannot think well
  - man cannot care for his spiritual welfare
42. Man does not seek self-improvement because he
- is not intellectually capable
  - has no time to do so
  - is distracted by materialism
  - loves amusement and is mentally idle

**Passage—2**

The demographic dividend, which has begun in India and is expected to last another few decades, is a great window of opportunity. The demographic dividend is basically a swelling in the working age population, which conversely means that the relative ratio of very young and very old will, for a while, be on the decline. From the experience of Ireland and China, we know that this can be a source of energy and an engine of economic growth. The demographic dividend tends to raise a nation's savings rate since in any nation, it is the working age population that is the main saver. And since the savings rate is an important driver of growth, this should help elevate our growth rate. However, the benefits of demographic dividend depend on the quality of the working age population. And this implies bringing back the importance of education, acquisition of skills and human capital.

43. Which of the following would invariably happen in a country, when the demographic dividend has begun to operate?
- The number of illiterate people will decrease.
  - The ratio of very old and very young will decrease for a while.
  - Population growth rate will quickly stabilize.

Select the correct answer using the code given below.

- 1 and 2 only
- 2 only
- 1 and 3 only
- 1, 2 and 3



44. With reference to the passage, which of the following inferences can be drawn?

1. Demographic dividend is an essential condition for a country to rapidly increase its economic growth rate.
2. Promotion of higher education is an essential condition for a country for its rapid economic growth.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

45. Five friends P, Q, X, Y and Z purchased some notebooks. The relevant information is given below :

1. Z purchased 8 notebooks more than X did.
2. P and Q together purchased 21 notebooks.
3. Q purchased 5 notebooks less than P did.
4. X and Y together purchased 28 notebooks.
5. P purchased 5 notebooks more than X did.

If each notebook is priced ₹40, then what is the total cost of all the notebooks?

- (a) ₹2,600
- (b) ₹2,400
- (c) ₹2,360
- (d) ₹2,320

46. A man started from home at 14:30 hours and drove to village, arriving there when the village clock indicated 15:15 hours. After staying for 25 minutes, he drove back by a different route of length 1.25 times the first route at a rate twice as fast reaching home at 16:00 hours. As compared to the clock at home, the village clock is

- (a) 10 minutes slow
- (b) 5 minutes slow
- (c) 10 minutes fast
- (d) 5 minutes fast

47. A person X wants to distribute some pens among six children A, B, C, D, E and F. Suppose A gets twice the number of pens received by B, three times that of C, four times that of D, five times that of E and six times that of F. What is the minimum number of pens X should buy so that the number of pens each one gets is an even number?

- (a) 147
- (b) 150
- (c) 294
- (d) 300

$$\frac{2}{5} = \frac{21-x}{5}$$

$$\frac{2}{5} = \frac{21-x}{5}$$



48. Six persons A, B, C, D, E and F are sitting equidistant from each other around a circular table (facing the centre of the table).

Consider the Question and two Statements given below :

Question : Who is sitting on the immediate left of A?

Statement-1 : B is sitting opposite to C and D is sitting opposite to E.

Statement-2 : F is sitting on the immediate left of B.

Which one of the following is correct in respect of the Question and the Statements?

- (a) Statement-1 alone is sufficient to answer the Question
- (b) Statement-2 alone is sufficient to answer the Question
- (c) Both Statement-1 and Statement-2 are sufficient to answer the Question
- (d) Both Statement-1 and Statement-2 are not sufficient to answer the Question

49. Consider the Question and two Statements given below :

Question : What is the age of Manisha?

Statement-1 : Manisha is 24 years younger than her mother.

Statement-2 : 5 years later, the ages of Manisha and her mother will be in the ratio 3 : 5.

Which one of the following is correct in respect of the Question and the Statements?

- (a) Statement-1 alone is sufficient to answer the Question
- (b) Statement-2 alone is sufficient to answer the Question
- (c) Both Statement-1 and Statement-2 are sufficient to answer the Question
- (d) Both Statement-1 and Statement-2 are not sufficient to answer the Question

50. Six lectures A, B, C, D, E and F, each of one hour duration, are scheduled between 8:00 a.m. and 2:00 p.m.

Consider the Question and two Statements given below :

Question : Which lecture is in the third period?

Statement-1 : Lecture F is preceded by A and followed by C.

Statement-2 : There is no lecture after lecture B.

Which one of the following is correct in respect of the Question and the Statements?

- (a) Statement-1 alone is sufficient to answer the Question
- (b) Statement-2 alone is sufficient to answer the Question
- (c) Both Statement-1 and Statement-2 are sufficient to answer the Question
- (d) Both Statement-1 and Statement-2 are not sufficient to answer the Question

परिच्छेद-2

के हम बड़े हो चुके हैं, हममें कम रोमांच यह इसलिए है कि हमारे पास पहले से ही यह इसलिए है कि हम देने के आनंद की साथ ही पाने के आनंद की पूर्णता को भी, र पैने होते हैं, उनके दुःख तीव्र होते हैं, या बहुत पीछे तक नहीं देख पाते। उनके ते हैं, क्योंकि अभी उन्होंने हर विचारार्थ जोड़ना नहीं सीखा है। सम्भवतः हम अधिक आशंकित, अत्यधिक संशयी हैं। नैयाँ घट जाँँ अगर हम उनके विषय में में आने वाली खुशी का आनंद अधिक

सन्दर्भ लेते हुए निम्नलिखित कथनों में सही है?

लिए उपहारों से रोमांचित महसूस नहीं है।

बयस्कों के कम रोमांचित महसूस करने अधिक कारण हो सकते हैं।

रह पता नहीं है कि बयस्क उपहारों से क्यों महसूस करते हैं।

म करने या प्रेम किए जाने के आनंद देने की कम क्षमता होती है।

Directions for the following 3 (three) items :

Read the following two passages and answer the items that follow the passages. Your answers to these items should be based on the passages only.

Passage-1

In an economic organization, allowing mankind to benefit by the productivity of machines should lead to a very good life of leisure, and much leisure is apt to be tedious except to those who have intelligent activities and interests. If a leisured population is to be happy, it must be an educated population, and must be educated with a view to enjoyment as well as to the direct usefulness of technical knowledge.

51. Which of the following statements best reflects the underlying tone of the passage?

- (a) Only an educated population can best make use of the benefits of economic progress.
- (b) All economic development should be aimed at the creation of leisure.
- (c) An increase in the educated population of a country leads to an increase in the happiness of its people.
- (d) Use of machines should be encouraged in order to create a large leisured population.

Passage-2

If presents bring less thrill now that we are grown up, perhaps it is because we have too much already; or perhaps it is because we have lost the fullness of the joy of giving, and with it the fullness of the joy of receiving. Children's fears are poignant, their miseries are acute, but they do not look too forward nor too far backward. Their joys are clear and complete, because they have not yet learnt always to add 'but' to every proposition. Perhaps we are too cautious, too anxious, too sceptical. Perhaps some of our cares would shrink if we thought less about them and entered with more single-minded enjoyment into the happiness that come our way.

52. With reference to the passage, which one of the following statements is correct?

- (a) It is not possible for adults to feel thrilled by presents.
- (b) There can be more than one reason why adults feel less thrilled by presents.
- (c) The author does not know why adults feel less thrilled by presents.
- (d) Adults have less capacity to feel the joy of loving or being loved.



53. The author of the passage is against

- (a) worrying too much about the past and future
- (b) being in the habit of thinking about presents
- (c) not being thrilled by new things
- (d) giving and receiving joy only partially

54. Let  $A$ ,  $B$  and  $C$  represent distinct non-zero digits. Suppose  $x$  is the sum of all possible 3-digit numbers formed by  $A$ ,  $B$  and  $C$  without repetition.

Consider the following statements :

1. The 4-digit least value of  $x$  is 1332.
2. The 3-digit greatest value of  $x$  is 888.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

55. There is a numeric lock which has a 3-digit PIN. The PIN contains digits 1 to 7. There is no repetition of digits. The digits in the PIN from left to right are in decreasing order. Any two digits in the PIN differ by at least 2. How many maximum attempts does one need to find out the PIN with certainty?

- (a) 6
- (b) 8
- (c) 10
- (d) 12

56. There are eight equidistant points on a circle. How many right-angled triangles can be drawn using these points as vertices and taking the diameter as one side of the triangle?

- (a) 24
- (b) 16
- (c) 12
- (d) 8

57. 24 men and 12 women can do a piece of work in 30 days. In how many days can 12 men and 24 women do the same piece of work?

- (a) 30 days
- (b) More than 30 days
- (c) Less than 30 days or more than 30 days
- (d) Data is inadequate to draw any conclusion

58. What is the remainder when

$$91 \times 92 \times 93 \times 94 \times 95 \times 96 \times 97 \times 98 \times 99$$

is divided by 1261?

- (a) 3
- (b) 2
- (c) 1
- (d) 0

59. Consider the following statements in respect of a rectangular sheet of length 20 cm and breadth 8 cm :

1. It is possible to cut the sheet exactly into 4 square sheets.
2. It is possible to cut the sheet into 10 triangular sheets of equal area.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

60. When 70% of a number  $x$  is added to another number  $y$ , the sum becomes 165% of the value of  $y$ . When 60% of the number  $x$  is added to another number  $z$ , then the sum becomes 165% of the value of  $z$ . Which one of the following is correct?

- (a)  $z < x < y$
- (b)  $x < y < z$
- (c)  $y < x < z$
- (d)  $z < y < x$



परिच्छेद-2

एक पवित्र अधिकार है जो अन्य सभी है। तथापि, यह अधिकार प्रकृति से नहीं इसको परिपाटियों पर आधारित होना

द्वेद का सन्दर्भ लेते हुए निम्नलिखित कथनों का/से सही है/हैं?

दियाँ मनुष्य के अधिकारों के स्रोत हैं।

के अधिकारों का केवल तभी प्रयोग किया जाता है, जब एक सामाजिक व्यवस्था हो।

कूट का प्रयोग कर सही उत्तर चुनिए।

1

2

2 दोनों

1 और न ही 2

X और Y ने एक निर्वाचन में भाग लोनों ने मतदान किया और कोई अवैध 11. NOTA (उपर्युक्त में से कोई नहीं) का था। मतदान में पड़े कुल मतों का 56% तला और वह 1440 मतों से जीत गया। में मतदाताओं की कुल कितनी संख्या है?

80 x 56

$$\frac{x \times 80}{100} \times \frac{56}{100}$$

$$= \frac{x \times 80}{100} \times \frac{44}{100} + 1440$$

$$44x + 144000 = 12$$

Directions for the following 3 (three) items :

Read the following two passages and answer the items that follow the passages. Your answers to these items should be based on the passages only.

Passage-1

The majority of people who fail to accumulate money sufficient for their needs, are generally, easily influenced by the opinions of others. They permit the newspapers and the gossiping neighbours to do their thinking for them. Opinions are the cheapest commodities on the earth. Everyone has a flock of opinions ready to be wished upon by anyone who will accept them. If you are influenced by opinions when you reach decisions, you will not succeed in any undertaking.

61. Which one of the following is implied by the passage?

- (a) Most of the people do not accumulate money for their needs.
- (b) Most of the people never fail to accumulate money for their needs.
- (c) There are people who fail to accumulate money for their needs.
- (d) There is no need to accumulate money.

62. What is the main idea of the passage?

- (a) People should not be influenced by the opinions of others.
- (b) People should accumulate as much money as they can.
- (c) People should neither give nor accept the opinions.
- (d) People will succeed in any undertaking if they do not accept any opinion at all.

Passage-2

"The social order is a sacred right which is the basis of all other rights. Nevertheless, this right does not come from nature, and must therefore be founded on conventions."

63. With reference to the above passage, which of the following statements is/are correct?

- 1. Conventions are the sources of rights of man.
- 2. Rights of man can be exercised only when there is a social order.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

64. Two candidates X and Y contested an election. 80% of voters cast their vote and there were no invalid votes. There was no NOTA (None of the above) option. X got 56% of the votes cast and won by 1440 votes. What is the total number of voters in the voters list?

- (a) 15000
- (b) 12000
- (c) 9600
- (d) 5000

$$2^2 \times 5$$

$$\times 4 \times 5$$

7 पर विचार कीजिए :

16 बजे और अपराह्न 3:17 बजे के बीच घंटे की सूई और मिनट की सूई मिलती है।

बजे और अपराह्न 4:59 बजे के मिनट की सूई और सेकण्ड की सूई मिलती है।

-सा/से सही है/हैं?

m l दूध है और Y में n l दूध निकालकर Y में मिलाकर, Y का दूध में मिलाया जाता है से निर्दिष्ट होता है कि दूध होता है, तो ?

नहीं किया

B, C, C, D संगत

65. What is the smallest number greater than 1000 that when divided by any one of the numbers 6, 9, 12, 15, 18 leaves a remainder of 3?

(a) 1063

(b) 1073

(c) 1083

(d) 1183

66. Let  $p$  be a two-digit number and  $q$  be the number consisting of same digits written in reverse order. If  $p \times q = 2430$ , then what is the difference between  $p$  and  $q$ ?

(a) 45

(b) 27

(c) 18

(d) 9

67. Consider the following statements in respect of two natural numbers  $p$  and  $q$  such that  $p$  is a prime number and  $q$  is a composite number :

1.  $p \times q$  can be an odd number.

2.  $q/p$  can be a prime number.

3.  $p + q$  can be a prime number.

Which of the above statements are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

68. Consider the following statements :

1. Between 3:16 p.m. and 3:17 p.m., both hour hand and minute hand coincide.

2. Between 4:58 p.m. and 4:59 p.m., both minute hand and second hand coincide.

Which of the above statements is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

69. There are two containers X and Y. X contains 100 ml of milk and Y contains 100 ml of water. 20 ml of milk from X is transferred to Y. After mixing well, 20 ml of the mixture in Y is transferred back to X. If  $m$  denotes the proportion of milk in X and  $n$  denotes the proportion of water in Y, then which one of the following is correct?

(a)  $m = n$

(b)  $m > n$

(c)  $m < n$

(d) Cannot be determined due to insufficient data

70. A pie chart gives the expenditure on five different items A, B, C, D and E in a household. If B, C, D and E correspond to  $90^\circ$ ,  $50^\circ$ ,  $45^\circ$  and  $75^\circ$  respectively, then what is the percentage of expenditure on item A?

(a)  $\frac{112}{9}$

(b)  $\frac{125}{6}$

(c)  $\frac{155}{9}$

(d)  $\frac{250}{9}$



प्रश्न के लिए बहुत से अनुसंधान  
के नहीं हो सकते

प्रश्न के लिए कोई भी अनुसंधान  
महत्व का होता है

प्रश्न के लिए कोई भी अनुसंधान  
सकता है

प्रश्न के लिए कोई भी अनुसंधान  
महत्व का होना चाहिए

सबसे अच्छा समाधान कैसे  
पै और तंत्र लचीला  
इस पर ध्यान दिया  
1 दिनों (जून से  
सर्षा का 75%)  
'अत्यल्प' जल  
को इस तरह  
भर जल का

तर्कसंगत  
नेबिम्बित

टंकियों

में

**Directions for the following 3 (three) items :**  
Read the following **two passages** and answer  
the items that follow the passages. Your  
answers to these items should be based on  
the passages only.

**Passage—1**

To encourage research is one of the functions  
of a university. Contemporary universities have  
encouraged research, not only in those cases  
where research is necessary, but on all sorts  
of entirely unprofitable subjects as well.  
Scientific research is probably never completely  
valueless. However silly and insignificant it may  
seem, however mechanical and unintelligent  
the labours of the researchers, there is always  
a chance that the results may be of value to  
the investigator of talent, who can use the facts  
collected for him by uninspired but industrious  
researchers as the basis of some fruitful  
generalization. But where research is not  
original, but consists in the mere  
rearrangement of existing materials, where its  
object is not scientific but literary or historical,  
then there is a risk of the whole business  
becoming merely futile.

71. The author's assumption about scientific  
research is that

- (a) it is never very valuable
- (b) it is sometimes very valuable
- (c) it is never without some value
- (d) it is always very valuable

72. According to the author

- (a) not many research results can be of  
value to an intelligent investigator
- (b) a research result is always valuable  
to an intelligent investigator
- (c) any research result can be of value  
to an intelligent investigator
- (d) a research result must always be  
of some value to an intelligent  
investigator

**Passage—2**

How best can the problems of floods and  
droughts be addressed so that the losses are  
minimal and the system becomes resilient?  
In this context, one important point that needs  
to be noted is that India gets 'too much' water  
(about 75% of annual precipitation) during  
120 days (June to September) and 'too little' for  
the remaining 245 days. This skewed water  
availability has to be managed and regulated  
for its consumption throughout the year.

73. Which one of the following best reflects  
the practical, rational and lasting  
solution?

- (a) Constructing huge concrete storage  
tanks and canals across the  
country
- (b) Changing the cropping patterns  
and farming practices
- (c) Interlinking of rivers across the  
country
- (d) Buffer stocking of water through  
dams and recharging aquifers

74. If

$$15 \times 14 \times 13 \times \dots \times 3 \times 2 \times 1 = 3^m \times n$$

where  $m$  and  $n$  are positive integers, then what is the maximum value of  $m$ ?

- (a) 7
- (b) 6
- (c) 5
- (d) 4

75. What is the value of  $X$  in the sequence 2, 12, 36, 80, 150,  $X$ ?

- (a) 248
- (b) 252
- (c) 258
- (d) 262

76. One non-zero digit, one vowel and one consonant from English alphabet (in capital) are to be used in forming passwords, such that each password has to start with a vowel and end with a consonant. How many such passwords can be generated?

- (a) 105
- (b) 525
- (c) 945
- (d) 1050

77. There are 9 cups placed on a table arranged in equal number of rows and columns out of which 6 cups contain coffee and 3 cups contain tea. In how many ways can they be arranged so that each row should contain at least one cup of coffee?

- (a) 18
- (b) 27
- (c) 54
- (d) 81

78. The sum of three consecutive integers is equal to their product. How many such possibilities are there?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) No such possibility is there

79. What is the number of numbers of the form  $0.XY$ , where  $X$  and  $Y$  are distinct non-zero digits?

- (a) 72
- (b) 81
- (c) 90
- (d) 100

80. The average weight of  $A, B, C$  is 40 kg, the average weight of  $B, D, E$  is 42 kg and the weight of  $F$  is equal to that of  $B$ . What is the average weight of  $A, B, C, D, E$  and  $F$ ?

- (a) 40.5 kg
- (b) 40.8 kg
- (c) 41 kg
- (d) Cannot be determined as data is inadequate