Prepp.in

Prepp

Your Personal Exams Guide

- NDA
- CDS
- SSC CGL
- CBSE UGC NET
- IAS
- SSC CHSL
- CTET
- MPSC
- AFCAT
- CSIR UDC NET
- IBPS PO
- UP POLICE
- SSC MTS
- SBI PO
- BPSC
- UPTET
- IBPS RRB
- IBPS CLERK
- IES
- UPSC CAPF
- SSC Stenogr..
- RRB NTPC
- SSC GD
- RBI GRADE B
- RBI Assistant
- DSSSB

UPSC CSE 2024 (Prelims) CSAT Official Paper (28-May-2023)

Total Time: 2 Hour **Total Marks:** 200

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks
1	CSAT (GS Paper II)	80	200

1.) A total of 120 minutes is allotted for the examination.

2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.

3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

CSAT (GS Paper II)

1. Consider the sequence: **(+2.5, -0.83)**

ABC_ _ ABC_ DABBCD_ABCD

Which one of the following completes the sequence?

a. DACB

b. CDAB

c. DCCA

d. DDCA

---

2. This is a SINGLE_ANSWER_MCQ type question. **(+2.5, -0.83)**

a. Option 1

b. Option 2

c. Option 3

d. Option 4

---

3. This is a SINGLE_ANSWER_MCQ type question. **(+2.5, -0.83)**

a. Option 1

b. Option 2

c. Option 3

d. Option 4

---

4. This is a SINGLE_ANSWER_MCQ type question. **(+2.5, -0.83)**

a. Option 1

b. Option 2

c. Option 3

d. Option 4

---

5. This is a SINGLE_ANSWER_MCQ type question. **(+2.5, -0.83)**

a. Option 1

b. Option 2

c. Option 3

d. Option 4

---

6. 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? **(+2.5, -0.83)**

a. (a) 40.5 kg

b. (b) 40.8 kg

c. (c) 41 kg

d. (d) Cannot be determined as data is inadequate

---

7. What is the number of numbers of the form 0.XY, where X and Y are distinct non-zero digits? **(+2.5, -0.83)**

a. (a) 72

b. (b) 81

c. (c) 90

d. (d) 100

---

8. The sum of three consecutive integers is equal to their product. How many such possibilities are there? **(+2.5, -0.83)**

a. (a) Only one

b. (b) Only two

c. (c) Only three

d. (d) No such possibility is there

---

9. 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? **(+2.5, -0.83)**

a. (a) 18

b. (b) 27

c. (c) 54

d. (d) 81

10. 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? **(+2.5, -0.83)**

a. (a) 105

b. (b) 525

c. (c) 945

d. (d) 1050

11. What is the value of X in the sequence 2, 12, 36, 80, 150, X? **(+2.5, -0.83)**

a. (a) 248

b. (b) 252

c. (c) 258

d. (d) 262

12. 15 x 14 x 13 x ... x 3 x 2 x 1 = 3m x n **(+2.5, -0.83)**

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

a. (a) 7

b. (b) 6

c. (c) 5

d. (d) 4

---

13. 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. **(+2.5, -0.83)**

Which one of the following best reflects the practical, rational and lasting solutions?

a. (a) Constructing huge concrete storage tanks and canals across the country

b. (b) Changing the cropping patterns and farming practices

c. (c) Interlinking of rivers across the country

d. (d) Buffer stocking of water through dams and recharging aquifers

---

14. A pie chart gives the expenditure on five different items A, B, Q D and E in a household. If B, C, D and E correspond to 90o, 50o, 45o, and 75o respectively, then what is the percentage of expenditure on item A? **(+2.5, -0.83)**

a. (a) 112/9

b. (b) 125/6

c. (c) 155/9

d. (d) 250/9

15. 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? **(+2.5, -0.83)**

a. (a) m=n

b. (b) m> n

c. (c) m<n

d. (d) Cannot be determined due to insufficient data

16. Consider the following statements : **(+2.5, -0.83)**

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. (a) 1 only

b. (b) 2 only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

17. 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: **(+2.5, -0.83)**

1. p x 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. (a) 1 and 2 only

b. (b) 2 and 3 only

c. (c) 1 and 3 only

d. (d) 1, 2 and 3

---

18. Let p be a two-digit number and q be the number consisting of same digits written in reverse order. If p x q = 2430, then what is the difference between p and q? **(+2.5, -0.83)**

a. (a) 45

b. (b) 27

c. (c) 18

d. (d) 9

---

19. 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? **(+2.5, -0.83)**

a. (a) 1063

b. (b) 1073

c. (c) 1083

d. (d) 1183

---

20. 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? **(+2.5, -0.83)**

a. (a) 15000

b. (b) 12000

c. (c) 9600

d. (d) 5000

---

21. "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." **(+2.5, -0.83)**

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. (a) 1 only

b. (b) 2 only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

22. Q60. 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? **(+2.5, -0.83)**

a. (a) z < x < y

b. (b) x < y < z

c. (c) y < x < z

d. (d) z < y < x

---

23. Consider the following statements in respect of a rectangular sheet of length 20 cm and breadth 8 cm: **(+2.5, -0.83)**

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. (a) 1 only

b. (b) 2 only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

24. What is the remainder when 91x92x93x94x95x96x97x98x99 is divided by 1261? **(+2.5, -0.83)**

a. (a) 3

b. (b) 2

c. (c) 1

d. (d) 0

---

25. 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? **(+2.5, -0.83)**

a. (a) 30 days

b. (b) more than 30 days

c. (c) Less than 30 days or more than 30 days

d. (d) Data is inadequate to draw any conclusion

---

26. 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? **(+2.5, -0.83)**

a. (a) 24

b. (b) 16

c. (c) 12

d. (d) 8

---

27. 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? **(+2.5, -0.83)**

a. (a) 6

b. (b) 8

c. (c) 10

d. (d) 12

---

28. 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. **(+2.5, -0.83)**

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. (a) 1 only

b. (b) 2 only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

29. 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. **(+2.5, -0.83)**

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

a. (a) Only an educated population can best make use of the benefits of economic progress.

b. (b) All economic development should be aimed at the creation of leisure.

c. (c) An increase in the educated population of a country leads to an increase in the happiness of its people.

d. (d) Use of machines should be encouraged in order to create a large leisured population.

---

30. Six lectures A B C D E and F, each of one hour duration, are scheduled between 8:00 am, and 2:00 p.m. **(+2.5, -0.83)**

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

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

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

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

---

31. Consider the Question and two Statements given below: **(+2.5, -0.83)**

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 Statement?

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

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

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

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

---

32. Six Persons A, B, C, D, E and F are sitting equidistant form each other around a circular table (facing the centre of the table). **(+2.5, -0.83)**

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

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

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

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

---

33. 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? **(+2.5, -0.83)**

a. (a) 147

b. (b) 150

c. (c) 294

d. (d) 300

---

34. 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 **(+2.5, -0.83)**

a. (a) 10 minutes slow

b. (b) 5 minutes slow

c. (c) 10 minutes fast

d. (d) 5 minutes fast

35. Five friends P. O, X, Y and Z purchased some notebooks. The relevant information is given below: **(+2.5, -0.83)**

1. Z purchased 8 notebooks more than X did.

2. P and Q together purchased 21 notebooks.

3. O 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. (a) 2,600

b. (b) 2,400

c. (c) 2,360

d. (d) 2,320

36. 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 sits in between B and H. Which one of the following is definitely correct? **(+2.5, -0.83)**

a. (a) B sits in between A and G

b. (b) C sits opposite to G

c. (c) E sits opposite to F

d. (d) None of the above

37. 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: **(+2.5, -0.83)**

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. (a) Only Conclusion-I

b. (b) Only Conclusion-II

c. (c) Both Conclusion-I and Conclusion-III

d. (d) Both Conclusion-I and Conclusion-II

---

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 : **(+2.5, -0.83)**

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. (a) Only Conclusion-I

b. (b) Only Conclusion-II

c. (c) Both Conclusion-III and Conclusion-IV

d. (d) None of the Conclusion follows

---

39. Consider the Question Statements given below in respect of and two three cities P, Q and R in a State: **(+2.5, -0.83)**

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

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

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

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

---

40. 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? **(+2.5, -0.83)**

a. (a) is the grandfather of T

b. (b) is the grandmother of T

c. (c) R is the mother of P

d. (d) T is the granddaughter of Q

---

41. D is a 3-digit number such that the ratio of the number to the sum of its digits is least. What is the difference between the digit at the hundred's place and the digit at the unit's place of D? **(+2.5, -0.83)**

a. (a) 0

b. (b) 7

c. (c) 8

d. (d) 9

---

42. If ABC and DEF are both 3-digit numbers such that A, B, C, D, E, and F are distinct non-zero digits such that ABC+ DEF= 1111, then what is the value of A+B+C+D+E+F ? **(+2.5, -0.83)**

a. (a) 28

b. (b) 29

c. (c) 30

d. (d) 31

---

43. What is the unit digit in the expansion of $(57242)^{9\times7\times5\times3\times1}$? **(+2.5, -0.83)**

a. (a) 2

b. (b) 4

c. (c) 6

d. (d) 8

---

44. What is the remainder when 85 × 87 × 89 × 91 × 95 × 96 is divided by 100? **(+2.5, -0.83)**

a. (a) 0

b. (b) 1

c. (c) 2

d. (d) 4

---

45. There are four letters and four envelopes and exactly one letter is to be put in exactly one envelope with the correct address. If the letters are randomly inserted into the envelopes, then consider the following statements: **(+2.5, -0.83)**

1. It is possible that exactly one letter goes into an incorrect envelope.

2. There are only six ways in which only two letters can go into the correct envelopes. Which of the statements given above is/are correct?

a. (a) 1 Only

b. (b) 2 Only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

46. In how many ways can a batsman score exactly 25 runs by scoring single runs, fours and sixes only, irrespective of the sequence of scoring shots? **(+2.5, -0.83)**

a. (a) 18

b. (b) 19

c. (c) 20

d. (d) 21

---

47. Raj has ten pairs of red, nine pairs of white and eight pairs of black shoes in a box. If he randomly picks shoes one by one (without replacement) from the box to get a red pair of shoes to wear, what is the maximum number of attempts he has to make? **(+2.5, -0.83)**

a. (a) 27

b. (b) 36

c. (c) 44

d. (d) 45

---

48. In India, a majority of farmers are marginal and small, less educated and possess low adaptive capabilities to climate change, perhaps because of credit and other constraints. So, one cannot expect autonomous adaptation to climate change. Even if it was possible, it would not be sufficient to offset losses from climate change. To deal with this, adaptation to climate change is paramount, alongside a fast mitigation response. Another solution is to have a planned or policy-driven adaptation, which would require the government to come up with policy recommendations. Perception is a necessary pre- requisite for adaptation. Whether farmers are adapting agricultural practices to climate change depends on whether they perceive it or not. However, this is not always enough for adaptation. It is important how a farmer perceives the risks associated with climate change. **(+2.5, -0.83)**

Which one of the following statements best reflects the most logical and rational message conveyed by the author of the passage?

a. (a) Adaptation to climate change and mitigation response are basically the responsibilities of the government.

b. (b) Climate change causes a change in government policies regarding land use patters in the country.

c. (c) Risk perceptions of farmers are important for motivating them for taking adaptation decisions.

d. (d) Since mitigation is not possible, governments should come up with policies for quick response to climate change.

---

49. More than half of Indian women and almost a quarter of Indian men of working age suffer from anaemia. According to studies, they are anywhere from 5-15% less productive than they could be, as a result **(+2.5, -0.83)**

thereof. India also has the largest tuberculosis burden in the world, costing 170 million workdays to the country annually. But what is just as important as lost productivity now is lost potential in the future. It is becoming increasingly clear that on many measures of cognitive ability, malnourished Indian children perform, two or three times worse than their adequately nourished peers. For an economy that will be more dependent on highly skilled workers, this poses a significant challenge. And it is one that really should be addressed given India's demographic outlook.

Which one the following statements best reflects what is implied by the passage?

a. (a) Education system must be strengthened in rural areas.

b. (b) Large scale and effective implementation of skill development programme is the need of the hour.

c. (c) For economic development, health and nutrition of only skilled workers needs special attention.

d. (d) For rapid economic growth as envisaged by us, attention should be paid to health and nutrition of the people.

---

50. We often hear about conflicts among different States in India over river waters. Of the 20 major river system, 14 are already water-stressed; 75% of the population lives in water-stressed regions, a third of whom live in water-scarce areas. Climate change, the demands of rising population and the need for agriculture to keep pace, and increased rate of urbanization and industralization will exacerbate water stress. According to the Constitution of India, water is a State subject and not that of the Union, except for regulation of inter-State rivers. Key to ensuring balance between competing demands of various stakeholders is a basin-based approach to allocate water amongst constituent regions and States. Allocating fair share of water to them **(+2.5, -0.83)**

requires assessments based on objective criteria, such as specificities of the river basin, size of dependent population, existing water use and demand, efficiency of use, projected future use, etc. while ensuring the environmental needs of the river and aquifers.

Which one of the following statements best reflects the most rational, practical and immediate action required to ensure fair and equitable allocation of water to different stakeholders?

a. (a) A national, pragmatic, legal and policy framework for water allocation should be made.

b. (b) All river systems of the country should be linked and huge aquifers created.

c. (c) Water channels between regions of water surplus and regions of water deficit should be created.

d. (d) To mitigate water crisis, water demand of sectors such as agriculture and industry should be reduced.

---

51. A, B, C working independently can do a piece of work in 8, 16 and 12 days respectively. A alone works on Monday, B alone works on Tuesday, C alone works on Wednesday; A alone, again works on Thursday and so on. Consider the following statements : **(+2.5, -0.83)**

1. The work will be finished on Thursday.

2. The work will be finished in 10 days.

Which of the above statements is/are correct?

a. (a) 1 Only

b. (b) 2 Only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

52. How many distinct 8-digit numbers can be formed by rearranging the digits of the number 11223344 such that odd digits occupy odd positions and even digits occupy even positions ? **(+2.5, -0.83)**

a. (a) 12

b. (b) 18

c. (c) 36

d. (d) 72

---

53. 125 identical cubes are arranged in the form of cubical block. How many cubes are surrounded by other cubes from each side? **(+2.5, -0.83)**

a. (a) 27

b. (b) 25

c. (c) 21

d. (d) 18

---

54. For any choices of values of X,Y and Z, the 6 digit number of the form XYZXYZ is divisible by : **(+2.5, -0.83)**

a. (a) 7 and 11 only

b. (b) 11 and 13 only

c. (c) 7 and 13 only

d. (d) 7, 11 and 13

---

55. A 3-digit number ABC, on multiplication with D gives 37DD where A, B, C and D are different non-zero digits. What is the value of A+B+C? **(+2.5, -0.83)**

a. (a) 18

b. (b) 16

c. (c) 15

d. (d) Cannot be determined due to insufficient data

---

56. Consider the following in respect of prime number p and composite number c. **(+2.5, -0.83)**

1. $p+c/p-c$ can be even.

2. 2p+c can be odd.

3. pc can be odd.

Which of the statements given above are correct?

a. (a) 1 and 2 only

b. (b) 2 and 3 only

c. (c) 1 and 3 only

d. (d) 1, 2 and 3

---

57. Three of the five positive integers p, q, r, s, t are even and two of them are odd (not necessarily in order). Consider the following : **(+2.5, -0.83)**

1. p + q + r – s - t is definitely even.

2. 2p + q + 2r - 2s + t is definitely odd.

Which of the above statements is/are correct?

a. (a) 1 Only

b. (b) 2 Only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

58. Many people are not eating the right food. For some, it is simply a decision to stick with food they enjoy but which is not too healthy. This is leading to an increase in non-communicable disease. This is turn leads to major burden on our health-care systems that have the potential to derail the economic progress which is essential for the poor to improve their lives. For others, it is about limited access to nutritious food or a lack of affordability, leading to monotonous diets that to not provide the daily nutrients for them to develop fully. Part of the reason nutrition is under threat worldwide is that our food systems are not properly responding to nutritional needs. Somewhere along that long road from farm to fork, there are serious detours taking place. **(+2.5, -0.83)**

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

a. (a) The scheme of Universal Basic Income should be implemented worldwide as a way of poverty alleviation.

b. (b) We must place food-based nutrition at the centre of our policy debate.

c. (c) Nutritional status of food should be improved by creating appropriate genetically modified crops.

d. (d) Using modern food processing technologies, we must fortify food items with required nutrient elements.

---

59. Environmental problems cause health problems. Substantial changes in lifestyle can reduce environmental or health problems, but this idea appears almost impossible to adopt. With environmental problems, individual efforts can be perceived as having a negligible effect and therefore lead to inertia. With health, on the other hand, individual choices can make the difference between life and death, literally. And yet, barring a few, there seems to be the same collective lethargy towards making their choices. **(+2.5, -0.83)**

Which one of the following statements best implies the most rational assumption that can be made from the passage ?

a. (a) We are likely to spend more money on cure than prevention.

b. (b) It is the job of the government to solve our environmental and public health problems.

c. (c) Health can be protected even if environmental problems go on unattended.

d. (d) Loss of traditional lifestyle and the influence of western values led to some unhealthy way of living.

---

60. The emissions humans put into the atmosphere now will affect the climate in the middle of the century and onwards. Technological change, meanwhile, could make a future transition away from fossil fuels cheap or it might not, leaving the world with a terrible choice between sharply reducing emissions at huge cost or suffering through **(+2.5, -0.83)**

the effects of unabated warming. Businesses that do not hedge against the threat of uncertain outcomes fail. The world cannot afford such recklessness on climate change.

Which one of the following statements best reflects the crucial message conveyed by the author of the passage ?

a. (a) Businesses that cause emissions may need to close down or pay for pollution in future.

b. (b) The only solution is technological development related to the issues of climate change.

c. (c) Waiting to deal with carbon emissions until technology improves is not a wise strategy.

d. (d) Since future technological change is uncertain, new industries should be based on renewable energy sources.

---

61. ABCD is a square. One point on each of AB and CD; and two distinct points on each of BC and DA are chosen. How many distinct triangles can be drawn using any three points as vertices out of these six points ? **(+2.5, -0.83)**

a. (a) 16

b. (b) 18

c. (c) 20

d. (d) 24

---

62. What is the sum of all digits which appear in all the integers from 10 to 100? **(+2.5, -0.83)**

a. (a) 855

b. (b) 856

c. (c) 910

d. (d) 911

---

63. Each digit of a 9-digit number is 1. It is multiplied by itself. What is the sum of the digits of the resulting number? **(+2.5, -0.83)**

a. (a) 64

b. (b) 80

c. (c) 81

d. (d) 100

---

64. A number N is formed by writing 9 for 99 times. What is the remainder if N is divided by 13? **(+2.5, -0.83)**

a. (a) 11

b. (b) 9

c. (c) 7

d. (d) 1

---

65. If p, q, r and s are distinct single digit positive numbers, then what is the greatest value of (p + q) (r + s) ? **(+2.5, -0.83)**

a. (a) 230

b. (b) 225

c. (c) 224

d. (d) 221

---

66. Let x be a positive integer such that 7x + 96 is divisible by x. How many values of x are possible? **(+2.5, -0.83)**

a. (a) 10

b. (b) 11

c. (c) 12

d. (d) Infinitely many

---

67. If 7 ⊕ + 9 ⊕ 10 = 8, 9 ⊕ 11 ⊕ 30 = 5, 11 ⊕ 17 ⊕ 21 = 13, what is the value of 23 ⊕ 4 ⊕ 15 ? **(+2.5, -0.83)**

a. (a) 6

b. (b) 8

c. (c) 13

d. (d) 15

---

68. Elephants are landscape architects, creating clearings in the forest, preventing overgrowth of certain plant species and allowing space for the regeneration of others, which in turn provide sustenance to others, which in turn provide sustenance to other herbivorous animals. Elephants eat plants, fruits and seeds, propagating the seeds when they defecate in other places as they travel. Elephant dung provides nourishment to plants and animals and acts as a breeding ground for **(+2.5, -0.83)**

insects. In times of drought, they access water by digging holes which benefits other wildlife.

Which one of the following statements best reflects the most logical and rational inference that can be drawn from the passage?

a. (a) The home range of elephants needs to be a vast area of rich biodiversity.

b. (b) Elephants are the keystone species and they benefit the biodiversity.

c. (c) Rich biodiversity cannot be maintained in the forests without the presence of elephants.

d. (d) Elephants are capable of regenerating forests with species as per their requirement.

---

69. Good corporate governance structures encourage companies to provide accountability and control. A fundamental reason why corporate governance has moved onto the economic and political agenda worldwide has been the rapid growth in international capital markets. Effective corporate governance enhance access to external financing by firms, leading to greater investment, higher growth and employment. Investors look to place their funds where the standards of disclosure, of timely and accurate financial reporting, and of equal treatment to all stakeholders are met. **(+2.5, -0.83)**

Which of the following statements best reflects the logical inference from the passage given above ?

a. (a) It is an important agenda of the countries around the world to ensure access to good external financing.

b. (b) Good corporate governance improves the credibility of the firms.

c. (c) International capital markets ensure that the firms maintain good corporate governance.

d. (d) Good corporate governance paves the way for robust supply chains.

---

70. To tackle the problem of pollution in cities, policy makers think that drastic actions like temporary use of odd-even number scheme for vehicles, closing schools, factories, construction activities, and banning the use of certain type of vehicles are a way forward. Even then the air is not clean. Vehicles more than 15 years old comprise one percent of the total; and taking them off the road will not make any difference. Banning certain fuels and car types arbitrarily is not proper. Diesel engines produce more PM 2.5 and less CO2 than petrol or CNG engines. On the other hand, both diesel and CNG engines produce more NOx than petrol engines. No one has measured the amount of NOx that CNG engines are emitting. Arbitrary bans on vehicles that have passed mandated fitness tests and periodic pollution tests are unfair. What is needed is the scientific and reliable information about the source of pollutants on a continuing basis and the technologies that will work to reduce pollution from them. **(+2.5, -0.83)**

Which one of the following statements best reflects the most logical and rational implication conveyed by the passage ?

a. (a) Arbitrary curbs on vehicles to reduce pollution are difficult to implement.

b. (b) Knee-jerk reactions cannot but an evidence-based approach will be more effective.

c. (c) A heavy penalty should be enforced on those driving without periodic pollution tests.

d. (d) In the absence of laws to deal with the problem of pollution, the administration tends to make arbitrary decisions.

---

71. Choose the group which is different from the others : **(+2.5, -0.83)**

a. (a) 17, 37, 47, 97

b. (b) 31, 41, 53, 67

c. (c) 71, 73, 79, 83

d. (d) 83, 89, 91, 97

---

72. Consider the following including the Question and the Statements: **(+2.5, -0.83)**

There are 5 members A, B, C, D, E in a family.

Question : What is the relation of E to B ?

Statement-1 : A and B are a married couple.

Statement-2 : D is the father of C.

Statement-3 : E is D's son.

Statement-4 : A and C are sisters.

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

a. (a) Statement-1, Statement-2 and Statement-3 are sufficient to answer the Question.

b. (b) Statement-1, Statement-3 and Statement-4 are sufficient to answer the Question.

c. (c) All four statement together are sufficient to answer the Question.

d. (d) All four statements are not sufficient to answer the Question.

---

73. Consider the following statements : **(+2.5, -0.83)**

1. A is older than B.

2. C and D are of the same age.

3. E is the youngest.

4. F is younger than D.

5. F is older than A.

How many statements given above are required to determine the oldest person/persons ?

a. (a) Only two

b. (b) Only three

c. (c) Only four

d. (d) All five

---

74. If 'ZERO' is written as 'CHUR', then how is 'PLAYER' written ? **(+2.5, -0.83)**

a. (a) SOCAGT

b. (b) SODBGT

c. (c) SODBHT

d. (d) SODBHU

75. A box contains 14 black balls, 20 blue balls, 26 green balls, 28 yellow balls, 38 red balls and 54 white balls. Consider the following statements : **(+2.5, -0.83)**

1. The smallest number n such that any n balls drawn from the box randomly must contain one full group of at least one colour is 175.

2. The smallest number m such that any m balls drawn from the box randomly must contain at least one ball of each colour is 167.

Which of the above statements is/are correct?

a. (a) 1 only

b. (b) 2 only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

76. Food consumption patterns have changed substantially in India over the past few decades. This has resulted in the disappearance of many nutritious foods such as millets. While food grain production has increased over five times since independence, it has not sufficiently addressed the issue of malnutrition. For long, the agriculture sector focused on increasing food production particularly staples, which led to lower production and consumption of indigenous traditional corps/grains, fruits and other vegetables, impacting food and nutrition security in the process. Further, intensive, monoculture agriculture practices can perpetuate the food and nutrition security problem by degrading the quality of land, water and food derived through them. **(+2.5, -0.83)**

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

1. To implement the Sustainable Development Goals and to achieve zero-hunger goal, monoculture agriculture practices are inevitable even if they do not address malnutrition.

2. Dependence on a few crops has negative consequences for human health and the ecosystem.

3. Government policies regarding food planning need to incorporate nutritional security.

4. For the present monoculture agriculture practices, farmers receive subsidies in various ways and government offers remunerative prices for grains and therefore they do not tend to consider crop diversity.

Which of the above assumptions are valid ?

a. (a) 1, 2 and 4 only

b. (b) 2 and 3 only

c. (c) 3 and 4 only

d. (d) 1, 2, 3 and 4

---

77. Read the following passage and answer the items that follow the passages. Your answers to these items should be based on the passages only. **(+2.5, -0.83)**

There is a claim that organic farming is inherently safer and healthier. The reality is that because the organic farming industry is still young and not well-regulated in India, farmers and consumers, alike, are not only confused about what products are best for them, but sometimes use products in ways that could harm them as well. For example, since organic fertilizers are difficult to obtain on a large scale in India, farmers often use farmyard manure, which may contain toxic chemicals and heavy metals. Certain plant sprays, such as Datura flower and leaf

spray, have an element called atropine. If it is not applied in the right dose, it can act on the nervous system of the consumer. Unfortunately, how much and when to use it are not well-researched or regulated issues.

Which one of the following statements best reflects the most logical, rational and practical message conveyed by the author of the passage ?

a. (a) In India, organic farming should not be promoted as a substitute for conventional farming.

b. (b) There are no safe organic alternatives to chemical fertilizers.

c. (c) In India, farmers need to be guided and helped to make their organic farming sustainable.

d. (d) The aim of organic farming should not be to generate huge profits as there is still no global market for its products.

---

78. Read the following passage and answer the items that follow the passages. Your answers to these items should be based on the passages only. **(+2.5, -0.83)**

There is a claim that organic farming is inherently safer and healthier. The reality is that because the organic farming industry is still young and not well-regulated in India, farmers and consumers, alike, are not only confused about what products are best for them, but sometimes use products in ways that could harm them as well. For example, since organic fertilizers are difficult to obtain on a large scale in India, farmers often use farmyard manure, which may contain toxic chemicals and heavy metals. Certain plant sprays, such as Datura flower and leaf spray, have an element called atropine. If it is not applied in the right dose, it can act on the nervous system of the

consumer. Unfortunately, how much and when to use it are not well-researched or regulated issues.

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

1. Organic farming is inherently unsafe for both farmers and consumers.

2. Farmers and consumers need to be educated about eco-friendly food.

Which of the assumptions given above is/are correct?

a. (a) 1 only

b. (b) 2 only

c. (c) Both 1 and 2

d. (d) Neither 1 nor 2

---

79. Read the following passage and answer the items that follow the passages. Your answers to these items should be based on the passages only. **(+2.5, -0.83)**

In India, the segregation of municipal waste at source is rare. Recycling is mostly with the informal sector. More than three-fourths of the municipal budget goes into collection and transportation, which leaves very little for processing/resource recovery and disposal. Where does waste-to-energy fit into all this? Ideally it fits in the chain after segregation (between wet waste and rest), collection, recycling, and before getting to the landfill. Which technology is most appropriate in converting waste to energy depends on what is in the waste (that is biodegradable versus non-biodegradable component) and its calorific value. The biodegradable component of India's municipal solid waste

is a little over 50 per cent, and biomethanation offers a major solution for processing this.

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

a. Generation of energy from municipal solid waste is inexpensive.

b. Biomethanation is the most ideal way of generating energy from municipal solid waste.

c. Segregation of municipal solid waste is the first step in ensuring the success of waste-to- energy plants.

d. The biodegradable component of India's municipal solid waste is not adequate to provide energy from waste efficiently/effectively.

---

80. Read the following passage and answer the items that follow the passages. Your answers to these items should be based on the passages only. **(+2.5, -0.83)**

In India, the segregation of municipal waste at source is rare. Recycling is mostly with the informal sector. More than three-fourths of the municipal budget goes into collection and transportation, which leaves very little for processing/resource recovery and disposal. Where does waste-to-energy fit into all this? Ideally it fits in the chain after segregation (between wet waste and rest), collection, recycling, and before getting to the landfill. Which technology is most appropriate in converting waste to energy depends on what is in the waste (that is biodegradable versus non-biodegradable component) and its calorific value. The biodegradable component of India's municipal solid waste is a little over 50 per cent, and biomethanation offers a major solution for processing this.

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

1. Collection, processing and segregation of municipal waste should be with government agencies.

2. Resource recovery and recycling require technological inputs that can be best handled by private sector enterprises.

Which of the assumptions given above is/are correct ?

a. 1 only

b. 2 only

c. Both 1 and 2

d. Neither 1 nor 2

Answers

1. **Answer: b**

Explanation:

The given sequence: ABC_ _ABC_DABBCD_ABCD We can break this sequence in five sets of 4 elements each. On analysing it in this manner, we can see that the last element moves to the first position in a cyclic manner.

The complete sequence is: ABCD DABC CDAB BCDA ABCD Hence, option (d) is correct.

---

2. **Answer: b**

Explanation:

Placeholder Text

---

3. **Answer: b**

Explanation:

Placeholder Text

---

4. **Answer: b**

Explanation:

Placeholder Text

---

5. **Answer: b**

Explanation:

Placeholder Text

---

6. **Answer: c**

Explanation:

Question looks unsolvable in the first glance due to high number of variables but is easily solvable as we dont need to find each variable but only the desired average.

(A + B + C)/3 = 40 (given)

=> (A + B + C) = 120 .....(i)

(B + D + E)/3 = 42 (given)

=> (B + D + E) = 126 .....(ii)

F = B .....(iii)

From equations (i) and (ii), we get:

A + B + C + B + D + E = 120 + 126

Or A + B + C + D + E + F = 246 (replacing one B with F as F = B from equation iii)

So, average weight of A + B + C + D + E + F = 246/6 = 41

---

7. **Answer: a**

Explanation:

Since, X and Y are distinct non-zero digits - 1 to 9

XY can be arranged in = 9 × 8 ways = 72

(Very very easy question, bad luck for those who miss such question due to lack of time.)

---

8. Answer: c

Explanation:

Let the 3 consecutive integers be x - 1, x, and x + 1

According to the question, sum = product, therefore

$(x - 1) + x + (x + 1) = (x - 1) \times x \times (x + 1)$

$\Rightarrow 3x = x \times (x - 1) \times (x + 1)$

$\Rightarrow x = 0, 2 \text{ or } -2$

Therefore, there are 3 such possibilities.

Hence, option (c) is the correct answer. (Note that taking x, x + 1, x + 2 is only recommended in case of whole numbers and not integers which can be negative)

---

9. Answer: d

Explanation:

The cups will be arranged in a 3 × 3 matrix. We need to remove cases where any one row contains only Tea ie all 3 Teas in a single row.

This can happen in 3 ways - first, second or third row. Therefore 3 cases need to subtracted from total combinations possible.

Total arrangements = 9! /(6! x 3!) (by formula)

Required answer = total arrangements possible - 3 = 84 - 3 = 81

Hence, option (d) is the correct answer.

---

10. Answer: c

Explanation:

There are 9 non-zero digits ie 1, 2, 3, 4, 5, 6, 7, 8 or 9

There are 5 vowels and 21 consonants in English alphabet (capitals only)

The password starts with a vowel and ends with a consonant. So, the digit will come at the middle.

The number of such passwords = 5 × 9 × 21 = 945

Hence, 945 such passwords can be generated.

---

11. Answer: b

Explanation:

We need to break down the numbers into their multiples to observe the pattern clearly :

1 x 1 x 2, 2 x 2 x 3, 3 x 3 x 4, 4 x 4 x 5, 5 x 5 x 6, ...

Next number is 6 x 6 x 7 = 252

Hence, option (b) is the correct answer.

---

12. **Answer: b**

Explanation:

15 × 14 × 13 × 12 × 11 × 10 × 9 × 8 × 7 × 6 × 5 × 4 × 3 × 2 × 1 = 3m × n

Numbers which are multiple of 3 = 15 × 12 × 9 × 6 × 3 = (3 × 5) × (3 × 4) × (3 × 3) × (3 × 2) × 3 = (3x3x3x3x3x3) × (5 ×4 × 2)

Therefore, the maximum value of m is 6.

---

13. **Answer: d**

Explanation:

Option (d) is correct as buffer stocking of water through dams and recharging aquifers would mean that the excess water is being stored above and below ground for later use ie managed and regulated for future consumption during lean season.

Option (a) is incorrect as the passage discusses the temporal aspect of the same- 'too much' water during 120 days and 'too little' for the remaining 245 days and not the spatial or geographical aspect. Canals are solutions for geographical balance/distribution rather than temporal or time variance if rain. Therefore, it is not very suitable.

Option (b) is incorrect as it is too far fetched solution and beyond the scope of the passage.

Option (c) is incorrect as well as mentioned in option a solution.

---

14. **Answer: d**

Explanation:

One of the easiest and quickest question in this paper. Any circle including a pie-chart has sum of internal angles as 360 degrees.

Therefore, Angle A in the pie-chart = 360 – (90 + 50 + 45 + 75) = 100

So, Percentage of expenditure on item A = (100/360) × 100 = (250/9)%

---

15. **Answer: a**

Explanation:

After 20 ml of milk transferred from container X to container Y, Milk in container X = 100 – 20 = 80 ml

Amount of solution in container Y becomes = 100 ml water + 20 ml milk = 120 ml

Ratio of milk in container Y solution = 20 : 120 = 1 : 6

By corollary, ratio of water in Y solution = 5 : 6 (100 : 120)

After 20 ml of milk transferred from container Y to container X, Milk in container X = 80 + 1/6 *20 = 83.33 ml

Amount of water in Y = 5/6 * 100 = 83.33 ml

Thus, m = n

---

16. **Answer: c**

Explanation:

Statement 1:

In 1 minute, Hour hand covers 0.5 degrees. So, at 3.16 pm, hour hand position in degrees = 192x0.5 = 96

In 1 minute, minute hand covers 6 degrees. So, at 3.16 pm ie 16 minutes, minute hand position in degrees = 16x6 = 96

Hence, statement 1 is correct.

Statement 2 is bound to be correct as second hand travels through entire clock in one minute. So, it will coincide with minute hand when it is between 4:58 p.m. and 4:59 p.m.

Thus, both statements 1 and 2 are correct.

---

17. **Answer: d**

Explanation:

Since all statements say "can be", we just need to find one case that is possible for each statement. This is not tough to do as shown below.

p is a prime number. So, p can be 2, 3, 5, 7, 11, 13, ...

q is a composite number. So, q can be 4, 6, 8, 9, 10, ...

Statement 1: p × q can be an odd number, e.g. (3 × 9 = 27). Thus, statement 1 is correct.

Statement 2: q/p can be a prime number, e.g. (4/2 = 2). Thus, statement 2 is correct.

Statement 3: p + q can be a prime number, e.g. (3 + 4 = 7). Thus, statement 3 is correct.

Thus, all the statements 1, 2 and 3 are correct.

---

18. **Answer: d**

Explanation:

The given product p × q = 2430 ...(i)

The last digit is 0, so one two of the digits must be 5 and other one an even number 2, 4, 6 or 8.

Let this unknown digit be x.

So, p = 10x + 5 and q = 50 + x

putting in (i),

(10x + 5) × (50 + x) = 2430

Now, try 2, 4, 6 and 8,

x = 4 (we can easily eliminate others as they will yield either too big or small number than 2430)

Therefore, p = 45 and q = 54

Required difference = q - p = 54 – 45 = 9

---

19. Answer: c

Explanation:

LCM of 6, 9, 12, 15 and 18 = 180

Smallest number greater than 1000 which is a multiple of 180 is 1080.

So, the required number with remainder 3 = 1080 + 3 = 1083

---

20. Answer: a

Explanation:

Since there are only two candidates, if X got 56%, Y got 44%. Difference is of 12%.

Now, Difference is given as 1440 (12% of votes casted). Therefore, total casted votes = 12000

Now, only 80% voted, so total voters = 12000/.80 = 15000

---

21. Answer: c

Explanation:

Statement 1 is correct. The author has said that the right of social order does not come from nature. It comes from convention. Social order is founded on conventions ie social order is emerging from conventions and social order is basis of all other rights. Hence, this statement is correct.

Statement 2 is correct. If we negate this statement, the passage will become false because if rights of man can be exercised without social order, it cannot be called as basis of all other rights. Hence, by negation test we can say that this is correct as per the passage.

---

22. Answer: a

Explanation:

To simplify we write percentages in decimal form,

$0.7x + y = 1.65y$

Or $0.7x = 0.65y$

Or $x/y = 0.65/0.70$, which is less than 1.

Hence, $x < y$ .....(i)

Now, $0.6x + z = 1.65z$

Or $0.6x = 0.65z$

Or x/z = 0.65/0.60, which is greater than 1.

Hence, x > z .....(ii)

From (i) and (ii), we get:

z < x < y

---

23. Answer: c

Explanation:

Statement I: It is not possible to cut a rectangle into exactly 4 square sheets. But the 4 squares don't have to be equal in area. So, we can have 4 squares - 8x8, 8x8, 4x4, 4x4

Statement II: Now we know that by merging two equal area congruent triangles we can form a rectangle. So, we have 5 equal sized rectangles instead of 10 triangles. We can easily cut 1 rectangle into 5 equal sized rectangles.

Hence, both statements 1 and 2 are correct.

---

24. Answer: d

Explanation:

The key to solving this question is knowledge of divisibility tests. We check 1261 with all prime numbers one by one. First hit is 13 (2, 3 & 5 can easily be ruled out. Then try 7 and 11).

Remaining number ie 1261/13 is 97.

1261 = 1 × 13 × 97

Now, 91 is divisible by 13 and 97 itself is present. So, 1261 will completely divide the expression.

Hence, the remainder = 0

---

25. **Answer: d**

Explanation:

Since we have only one equation and 2 variables, it is not possible to solve.

Hence, the data is inadequate to draw any conclusion.

---

26. **Answer: a**

Explanation:

With eight equidistant points on a circle - A, B, C, D, E, F, G, and H. We can have 4 unique diameter lines connecting the opposite points.

We are aware of the property that whenever diameter of a circle is one side and opposite vertex is on the circle, it forms a right angle triangle. Therefore, we can get 6 unique right angle triangle using 6 remaining points.

Since, with each diameter we can form 6 unique triangles, we have total number of right-angled triangles that can be drawn = 4 x 6 = 24

---

27. **Answer: c**

Explanation:

The PIN contains three digits out of – 1, 2, 3, 4, 5, 6, and 7

Case I: The rightmost digit is 1

The possible combinations are: 531, 631, 731, 641, 741, 751 (i.e. 6 possible combinations)

Case II: The rightmost digit is 2

The possible combinations are: 642, 742, 752 (i.e. 3 possible combinations)

Case III: The rightmost digit is 3

The possible combinations are: 753 (i.e. 1 possible combination)

The rightmost digit cannot be more than 3. (due to difference of 2 between each)

So, the total number of possible combinations of the PIN = 6 + 3 + 1 = 10

---

28. Answer: a

Explanation:

The three-digit numbers have been represented by ABC, wherein A, B, and C are non-zero digits.

Using 3 distinct digits we can make 3 × 2 × 1 = 6 three-digit numbers.

So, x will be the sum of these 6 three-digit numbers.

We need to find the two values of x closest to 1000, one just below it (which will be the greatest 3-digit value of x), and the other just above it (which will be the lowest 4-digit value of x).

Now, we have to do a bit of hit and try, so that the value of x reaches close to 1000.

Let the three digits be the minimum possible ones, i.e. 1, 2, and 3.

So, we get x = 123 + 132 + 213 + 231 + 312 + 321 = 1332

This is the least possible value of x. So, statement 1 is correct, but statement 2 is incorrect.

29. **Answer: c**

Explanation:

Option (a) is incorrect: The passage states the premise as machines leading to increase in leisure. Conclusion is that people must be educated properly so that this increased leisure is enjoyable or happy. Now, benefits of economic progress can be multiple besides leisure so the use of "only" here makes us to rule out this choice.

Option (b) is incorrect as it suggests an extreme idea which is not supported by the passage. Use of extreme word "All" should have raised a red flag.

Option (c) is correct. Refer to the last line or the conclusion. It conveys the tone clearly that author is advocating education as one of the solutions that increases happiness. Therefore, we can choose this as the correct answer.

30. **Answer: d**

Explanation:

Since each statement has too little information, neither of the two statements is sufficient alone.

Even after using both statements, we get multiple possible cases. (Even if you identity two different solutions, you can mark the answer as no)

So, Both Statement-1 and Statement-2 are not sufficient to answer the Question

31. **Answer: c**

Explanation:

Since each statement alone has only one equation while solving for two variables generally requires two unique equations, neither of the two statements is sufficient alone.

Now we check if both the statements are sufficient together.

Let the present ages of Manisha and her mother be x and y respectively.

As per statement 1, $y = x + 24$

As per statement 2, $(x + 5)/(y + 5) = 3/5$

Or $5x + 25 = 3y + 15$

Or $3y - 5x = 10$

Or $3(x + 24) - 5x = 10$ (using statement 1)

Or $3x + 72 - 5x = 10$

Or $x = 31$

So, Manisha is 31 years old at present. Both statements together are sufficient to answer the question.

Note: Usually in case we have two equations with relationship with two variables, we can get a solution, so we can confidently mark yes without solving but both equations should not be able to be simplified to the same equation. In any case, stop calculating once you are sure of getting an answer to save time. Make it a habit.

---

32. Answer: d

Explanation:

Neither of the two statements is sufficient alone due to lack of information. In such questions we need a lot of data points to arrive at a unique solution. Now only option c and d remain.

Even on combining the two statements, we are unsure about position of A relative to others. So, we can mark d as both not sufficient to answer the Question.

---

33. Answer: c

Explanation:

Now, this is a classical problem, but with a twist pens with A B C D E and F - all should be even. Otherwise, we could have solved by simply taking LCM, ie LCM of 2, 3, 4, 5, and 6 = 60

but now we have to check all values, B C D E F

number of pens with B = 60/2 = 30

number of pens with C = 60/3 = 20

number of pens with D = 60/4 = 15 (an odd number)

number of pens with E = 60/5 = 12

number of pens with F = 60/6 = 10

Now since adding is not an option, we can simply multiply by 2 convert odd numbers to even. Therefore A becomes 60 × 2 = 120

Similarly doubling all and adding we get total number of pens bought by X = 120 + 60 + 40 + 30 + 24 + 20 = 294

---

34. Answer: d

Explanation:

While solving this question, ignore village clock timing in initial calculations as it is faulty. If you use that information initially, you will get wrong answer or get confused. Total time taken by the man to come back home = 14:30 to 16:00 = 90 minutes

now subtract time for which he stayed in the village ie 25 minutes.

therefore, total travelling time = 90 – 25 = 65 minutes

using, time speed distance formula, total time t1 + t2 = (distance 1/speed 1) + (distance 2/speed 2)

65 = d/s + 1.25d/2s

solving we get, d/s = 65x2/3.25 = 40

So, the man took 40 minutes to reach to the village.

So, the correct time = 14:30 + 40 minutes = 15:10 hours

Therefore, the village clock is 15:15 – 15:10 = 5 minutes fast.

---

35. Answer: a

Explanation:

As per the information provided in the question:

Statement 1 -> Z = X + 8 ....(i)

Statement 2 -> P + Q = 21 ....(ii)

Statement 3 -> Q = P – 5 ....(iii)

Statement 4 -> X + Y = 28 ....(iv)

Statement 5 -> P = X + 5 ....(v)

Total number of Books = P + Q + X + Y + Z

Solving equations ii and iii, we get:

P = 13

Q = P – 5 = 8

Using above result and equation v, we get:

X = P – 5 = 8

Using above result and equation i, we get:

Z = X + 8 = 16

Using iv, we get: Y = 28 – 8 = 20

So, P + Q + X + Y + Z = 13 + 8 + 8 + 20 + 16 = 65

So, total cost of all the notebooks = 65 × 40 = Rs. 2600

There is no shortcut in this problem. If the options had very large differences, then we could simply have eliminated 3 options on basis of equations i, ii and iv, which gives 21+28+ x + 8 = so minimum 58 (x will be minimum 1). Now, 58x40 = 2320. So, answer can be this or any number bigger than this. Similarly, we can calculate upper limit quickly too. But in this question, this approach is futile.

---

36. Answer: d

Explanation:

The various possible circular arrangements, as per the information provided in the passage, have been depicted below:

We can see that none of (a), (b), or (c) is definitely correct.

---

37. Answer: c

Explanation:

We can draw the following possible Venn diagrams based on the given two statements:

We can see that conclusions I and III follow.

---

38. Answer: d

Explanation:

Conclusion I contradicts with statement 1& 2

Conclusion II contradicts with statement 2

Conclusion III contradicts with statement 2

Conclusion I contradicts with statement 1& 2

---

39. Answer: d

Explanation:

As we do not know the **relative** positions of P and Q, we cannot find the distance between them, even after using the information in both the statements.

---

40. Answer: d

Explanation:

Draw the family tree as per the information provided in the question.

---

41. Answer: c

Explanation:

Let the three-digit number be XYZ.

This number is such that (100X + 10Y + Z) / (X + Y + Z) is the least possible.

For 100, this ratio is 100/1 = 100 For 101, this ratio is 101/2 = 50.5 For 109, this ratio is 109/10 = 10.9 For 110, this ratio is 110/2 = 55

For 119, this ratio is 119/11 = 10.81 For 129, this ratio is 129/12 = 10.75

So, we can see that in 100-199 range, this ratio will be the least for 199, which is 199/19 = 10.47 Similarly, in 200-299 range, this ratio will be the least for 299, which is 299/20 = 14.95 Similarly, in 300-399 range, this ratio will be the least for 399, which is 399/21 = 19

We can see this ratio is slowly increasing. For 999, it would be 999/27 = 37 So, this ratio is the least for 199.

The difference between the digit at the hundred's place and the digit at the unit's place = 9 – 1 = 8 Hence, option (c) is correct.

---

42. Answer: d

Explanation:

ABC + DEF = 1111, wherein A, B, C, D, E, and F are distinct non-zero digits. We may get a resultant of 1111 if:

C + F = 11, say 2 + 9 = 11

B + E = 10, say 3 + 7 = 10

A + D = 10, say 4 + 6 = 10

We can double check this by adding 432 + 679 = 1111 So, A + B + C + D + E + F = 4 + 3 + 2 + 6 + 7 + 9 = 31

Hence, option (d) is correct.

---

43. **Answer: a**

Explanation:

$(57242)^{9\times7\times5\times3\times1} = (57242)945$

The unit digit of the resultant number only depends on the unit digit of the given number 57242, i.e. 2. Now, we know that:

$2^1 = 2$

$2^2 = 4$

$2^3 = 8$

$2^4 = 16$ (unit digit 6)

$2^5 = 32$ (unit digit 2)

.

.

.

And so on.

So, 2 has a cyclicity of 4. Exponent of any number ending in 2 will produce a number that will end in 2, 4, 8, or 6.

Now, 945 = 944 + 1

944 is divisible by 4. So, the last digit of $(57242)945$ will be the same as that of $(57242)1$, which is 2. Hence, option (a) is correct.

---

44. **Answer: a**

Explanation:

In 85 × 87 × 89 × 91 × 95 × 96 there are two 5's (in 85 and 95) and a 4 (in 96).

We know that, 5 × 5 × 4 = 100

So, the given expression is completely divisible by 100. So, remainder will be zero. Hence, option (a) is correct.

---

45. Answer: b

Explanation:

Statement 1:

If one letter is placed in an incorrect envelop, then the letter that belonged to that envelop must have also been placed in an incorrect envelop. So, it's not possible that only one letter gets placed in an incorrect envelop. Either no letter will get misplaced, or at least two letters will get misplaced.

So, Statement 1 is incorrect.

Statement 2:

We need to place two letters in correct envelops and two in incorrect envelops.

We can choose the two letters to be placed in correct envelops in 4C2 ways, i.e. 6 ways. The remaining two letters will automatically get chosen to get placed in each other's envelops (i.e. incorrect envelops).

So, Statement 2 is correct. Hence, option (b) is correct.

---

46. Answer: b

Explanation:

Let the singles taken and the fours and the sixes scored by the batsman be x, y and z respectively. So, as per the question:

$x + 4y + 6z = 25$, wherein $x, y, z \geq 0$

If no six has been hit, i.e. $z = 0$ $x + 4y = 25$

So, the possible values of (x, y) may be (1, 6), (5, 5), (9, 4), (13, 3), (17, 2), (21, 1), (25, 0), i.e. 7 possible ways.

If one six has been hit, i.e. $z = 1$ $x + 4y = 19$

So, the possible values of (x, y) may be (3, 4), (7, 3), (11, 2), (15, 1), (19, 0), i.e. 5 possible ways.

If two sixes have been hit, i.e. $z = 2$ $x + 4y = 13$

So, the possible values of (x, y) may be (1, 3), (5, 2), (9, 1), (13, 0), i.e. 4 possible ways.

If three sixes have been hit, i.e. $z = 3$ $x + 4y = 7$

So, the possible values of (x, y) may be (3, 1), (7, 0), i.e. 2 possible ways.

If four sixes have been hit, i.e. $z = 4$ $x + 4y = 1$

So, the possible values of (x, y) may be (1, 0), i.e. 1 possible way.

So, total number of possible ways = 7 + 5 + 4 + 2 + 1 = 19 Hence, option (b) is correct.

---

47. Answer: d

Explanation:

Raj has ten pairs of red, nine pairs of white and eight pairs of black shoes in a box. So, he has 20 red shoes, 18 white shoes, and 16 black shoes.

To find the maximum number of attempts we need to visualize the worst-case scenario. Let Raj draw all white and black shoes, which amounts to 18 + 16 = 34 shoes.

Now, if he picks any two shoes, they are certainly going to be red. However, we also need to ensure that the red shoes picked by him make a pair, i.e. there should be one red shoe for left foot and one red shoe for right foot. For this to happen we need to pick 11 red shoes.

So, maximum number of attempts to get a red pair of shoes = 34 + 11 = 45 Hence, option (d) is correct.

---

48. Answer: c

Explanation:

Option (a) is incorrect. While the passage suggests that government involvement could be beneficial, it does not state outright that these are exclusively the government's responsibilities. The farmers' perception and adaptation practices are also considered important.

Option (b) is incorrect. The passage doesn't provide information regarding climate change causing changes in government policies specifically about land use patterns. The author's focus is on the adaptation to climate change and potential policy intervention to support that adaptation.

Option (c) is correct This option aligns well with the passage. The author discusses that the farmers' perception of the risks associated with climate change is important for adaptation. However, the author also states that perception alone is not enough for adaptation. However, it's worth noting that the author emphasizes that perception alone is not sufficient for adaptation and suggests that there may be a need for planned or policy-driven adaptation strategies by the government.

Option (d) is incorrect. The passage does not state that mitigation is not possible. It talks about the necessity of adaptation alongside a fast mitigation response. Hence, this Option does not correctly reflect the author's message.

---

49. Answer: d

Explanation:

Options (a) and (b) are incorrect as the focus of the passage seems to be nutrition and not education or skills.

Option (c) is incorrect. The word "only" is a red flag and when we check the statement, it comes to be extreme and unfounded as per the passage.

Option (d) is correct as the author hints at the impact of health issues like anemia and tuberculosis on productivity, the effect of malnutrition on cognitive abilities in children, etc.

---

50. Answer: a

Explanation:

Option (a) is correct and best choice as passage mentions water being state subject, need for policy of basin based approach with assessment.

Options (b) and (c) are incorrect as interlinking etc are beyond the scope of passage.

Option (d) is incorrect as question is asking action required to ensure fair and equitable allocation of water specifically.

---

51. Answer: a

Explanation:

A, B, C working independently can do a piece of work in 8, 16 and 12 days respectively ie in 1 day, 1/8, 1/16 and 1/12 of total work.

Now, 1/8 + 1/16 + 1/12 = 13/48

So, in 9 days, 39/48 work done.

On 10th day, A works. so, 39/48 + 1/8 = 45/48

so, work not finished on 10th day and gets finished by 11th day which is a Thursday (Assuming First day is Monday and work started by A)

Hence, option (a) is the correct answer.

---

52. Answer: c

Explanation:

We have 4 odd and 4 even positions and there are 4 odd numbers (1, 1, 3, 3) and 4 even numbers (2, 2, 4, 4).

Number of ways these 4 odd numbers can be arranged in 4 positions = 4!/(2 × 2) = 6 (2 pairs of similar numbers hence extra 2 in denominator as permutations are halved)

Therefore, Number of ways 4 even numbers (2, 2, 4, 4) can be arranged is also 6

So, total ways = 6 × 6 = 36

Hence, option (c) is the correct answer.

---

53. Answer: a

Explanation:

Length, breadth and height all have 5 cubes. Now outer 2 cubes will be exposed to air, so the inner/protected cube has Length, breadth and height as 3 cubes. So, total number of cubes = 3 x 3 x 3 = 27

---

54. **Answer: d**

Explanation:

XYZXYZ = XYZ*1000 + XYZ = XYZ (1000 + 1) = XYZ × 1001

As, 1001 = 7 × 11 × 13

So, this must be divisible by 7, 11 and 13.

(note - numbers like 101, 111, 1001, 1111, 10001, 11111 are exam favourites, practice these)

---

55. **Answer: a**

Explanation:

37DD can be written as 3700 + 10D + D = 3700 + 11D

Now, ABC x D = 3700 + 11D

or ABC = 3700/D + 11 ...(i)

Now, 3700/D should be a whole number. So, possible values of D are 1, 2, 4, and 5.

Now put these 4 values and check ABC value.

If D = 4, ABC = 925 + 11 = 936. (Rest all are rejected as they violate conditions given)

So, A + B + C = 9 + 3 + 6 = 18

Hence, option (a) is correct.

---

56. **Answer: d**

Explanation:

Prime numbers are always odd (except 2) and here p could be 2. Composite number can be odd or even.

In this question, "can be" is used, so even if one possibility exists, statements are true. So, one way is to find just one legit solution for each and mark the answer as (d).

1. p+c and p-c can both be even, so the answer can be odd

2. 2p is even c can be odd, so the answer can be odd

3. p and c can both be odd, so the answer can be odd

---

57. Answer: a

Explanation:

When we add or subtract even number of odd numbers, (ex - 5-3 or 3+7) we always get even number as answer. Also, doing addition & subtraction on even numbers always yields even number, so p + q + r - s - t will always be even.

Now, the problem with Statement 2 (2p + q + 2r – 2s + t) is that we don't know how many of the two odd numbers are converted to even numbers by multiplying with 2. So, the resulting expression can be odd if there is only 1 odd number left.

(You can put values to verify this and check)

So, statement 2 is incorrect. Hence, option (a) is the correct answer.

---

58. Answer: b

Explanation:

Crux is the most important or difficult part of a problem i.e. main point of the passage that is explicitly stated by the author.

Option (a) is incorrect. Although this can be inferred from the passage, it is not explicitly stated by the author. Hence, we can rule this option out.

Option (b) is correct as passage discusses lack of nutrition and various reasons surrounding it. When author talks about farm to fork, he is suggesting policy level course correction.

Option (c) and Option (d) are incorrect as they discuss ideas which are beyond the scope of the passage

---

59. Answer: a

Explanation:

As mentioned earlier in this doc, Imply means to "to indicate or suggest something without actually stating it," and infer commonly means "to guess or use reasoning to come to a conclusion based on what has been suggested. Option (a) is correct. This option is not directly addressed but hinted in the passage. The passage discusses the difficulty in adopting substantial changes in lifestyle to reduce environmental or health problems, ie people avoiding prevention.

Option (b) is incorrect as government job or role is not hinted in the passage.

Statement (c) is incorrect. Author hints that going after health should be logical than environmental problems but the given statement means entirely different thing which is not hinted/suggested.

Statement (d) is incorrect as too far fetched.

---

60. Answer: c

Explanation:

Option (a) is incorrect. Passage says "Businesses that do not hedge against the threat of uncertain outcomes fail." This line cannot be extrapolated to say that

businesses would need to close down or pay for pollution in future.

Option (b) is incorrect: the statement is using extreme terms ("only solution") which cannot be inferred from the passage.

Option (c) is correct: The passage says, "Technological change, meanwhile, could make a future transition away from fossil fuels cheap or it might not..." This is the main message of the author wherein he prods us to act faster and not wait.

Option (d) is incorrect: This statement is too specific and we know that inference is a more generic statement drawn from the given statement/s.

---

61. Answer: c

Explanation:

As none of the 3 points are collinear, the number of distinct triangles can be found using the formula = 6C3 = (6 × 5 × 4) / (3 × 2 × 1) = 20

Directions for the following 3 (three) item :

---

62. Answer: b

Explanation:

There are total 91 numbers and 9 groups of 0 to 9 (in singles digits) and 10 groups of 1 to 9 each (in doubles digits) and 100.

We know that sum of first n natural numbers = n (n + 1) / 2

So, sum of 1 to 9 = 9 × 10/2 = 45

Sum = 19 × 45 = 855

Adding 1 from 100, we get answer as 856.

63. **Answer: c**

Explanation:

The Number is 111111111 - It is divisible by 9 (by divisibility rule)

Sum of digits of 111111111x111111111 will also be divisible by 9, therefore, answer will be the option which is a multiple of 9, i.e. 81. So, answer is option (c).

---

64. **Answer: a**

Explanation:

In remainder questions, we can check the pattern of remainders to arrive at required answer.

Remainder 1 (9/13) = 9

Remainder 2 (99/13) = 8

Remainder 3 (999/13) = 11

Remainder 4 (9999/13) = 2

Remainder 5 (99999/13) = 3

Remainder 6 (999999/13) = 0

Remainder 7 (9999999/13) = 9

Therefore, after this, the pattern repeats.

Remainder 99 = 11 (as per pattern)

Hence, answer is option (a).

65. **Answer: b**

Explanation:

To maximize the value of (p + q) (r + s), we pick 4 biggest digits - 6, 7, 8, and 9.

Now either try all combinations or directly pick combination where two numbers are most similar/closest. So, the required answer = (6 + 9) (7 + 8) = 15 × 15 = 225. Hence, answer is (b).

---

66. **Answer: c**

Explanation:

If 7x + 96 is divisible by x, It means that 96/x is a whole number

So, x is a factor of 96 ie 1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, and 96 = 12 possible values. Hence (c) is correct.

---

67. **Answer: a**

Explanation:

7 + 9 + 10 = 26 | Sum of digits 2 + 6 = 8

9 + 11 + 30 = 50 | Sum of digits 5 + 0 = 5

11 + 17 + 21 = 49 | Sum of digits 4 + 9 = 13

23 + 4 + 15 = 42 | Sum of digits 4 + 2 = 6

Hence (a) is correct.

---

68. **Answer: b**

Explanation:

Option (a) is incorrect as this statement is beyond the scope of the passage.

Option (b) is correct as this line can be inferred from the passage and represents the crux of the passage as well.

Option (c) is incorrect as the statement is framed like a definitive statement and we cannot be sure whether rich biodiversity is not possible at all without elephants. It can be ruled out as extreme statement.

Option (d) is incorrect because of the mention of "as per their requirement" which cannot be deduced from the passage.

---

69. **Answer: c**

Explanation:

Option (a) is incorrect as this is too far fetched. Passage merely hints at this.

Option (b) is incorrect: The passage mentions “Investors look to place their funds where the standards of disclosure, of timely and accurate financial reporting” ie credibility. Therefore, this line is mere restatement of the passage and An inference is not a restatement of any of the information/statements. So, this is not a suitable choice.

Option (c) is correct: This line can be inferred from the passage's line "why corporate governance has moved onto the economic and political agenda worldwide has been the rapid growth in international capital markets".

Option (d) is incorrect: There is no direct mention of supply chains in the passage ie outside the scope of the passage.

---

70. **Answer: b**

Explanation:

Imply means to “to indicate or suggest something without actually stating it,”. Imply and infer are opposites, like a throw and a catch. To imply is to hint at something, but to infer is to make an educated guess. The speaker does the implying, and the listener does the inferring.

Option (a) is incorrect as author does not hint at implementation difficulty.

Option (b) is correct: Author mentions "arbitrariness" and gives several examples hinting at the "knee-jerk" reactions and the last line of passage (which is also conclusion) makes this implication amply clear from the author.

Option (c) is incorrect as the author leaves no hint to suggest heavy fines etc.

Option (d) is incorrect as the author is not hinting at absence of laws.

---

71. **Answer: d**

Explanation:

All numbers except 91 in above options are prime number. So, this group is different from the others.

Hence, option (d) is correct.

Directions for the following 3 (three) item :

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

---

72. **Answer: c**

Explanation:

Statements 1, 2 and 3 alone are not sufficient, as we cannot find a link between B and E in these statements.

Statements 1, 3 and 4 alone are not sufficient, as we cannot find a link between B and E in these statements.

Now we are left with 2 choices, we try to find a solution, if we can, (c) is correct.

By statement 2 and 4, we know D is male and father of two females A & C.

By statement 3, we know D also has a son E

By statement 1, we know relationship of B with all members of this known family ie E is the brother-in-law of B. Hence, option (c) is correct.

---

73. Answer: d

Explanation:

We need to find relationship between all 6 persons with respect to each other.

Statement 1 and 2 , give us relationship between A & B and C & D respectively.

Statement 4 and 5 are needed to establish relationship between these two groups and F. Including statement 3, we have complete information.

Hence, all statements are needed and option (d) is correct.

---

74. Answer: d

Explanation:

ZERO is written as CHUR.

Z + 3 = C

E + 3 = H

R + 3 = U

O + 3 = R

Therefore, for PLAYER -

P + 3 = S

L + 3 = O

A + 3 = D

Y + 3 = B

E + 3 = H

R + 3 = U

Hence, option (d) is correct.

Easier way to solve - in ZERO, R = U. In PLAYER, Last letter is also R, therefore last letter of answer = U, hence only option (d) can be correct.

---

75. Answer: c

Explanation:

To find out the minimum possible number of balls that should be drawn from the box such that the balls drawn must contain one full group of at least one colour, find the maximum number of balls that we can draw without selecting a full group of any colour.

ie we draw one less from each colour, 13 black balls + 19 blue balls + 25 green balls + 27 yellow balls + 37 red balls + 53 white balls = 174 balls in total.

Now, if we pick any one more ball (of any colour) that group will be complete. So, the value of n = 174 + 1 = 175.

To find out the minimum possible number of balls that should be drawn from the box such that the balls drawn must contain at least one ball of each colour, we must maximise number of balls without any balls of a particular colour.

As the number of black balls is the least, we can maximise possible number of balls without selecting a black ball. So, we have 20 blue balls + 26 green balls + 28 yellow balls + 38 red balls + 54 white balls = 166 balls in total.

Since now only black balls are left, adding any black ball fulfills our need = 166 + 1 = 167

---

76. Answer: b

Explanation:

The premise of the passage is "malnutrition due to changed consumption pattern" while conclusion "monoculture has led to changed consumption pattern and malnutrition". Now, any statement that links these two and strengthens the conclusion can be taken as a vallid assumption. Also, you can test using "Negation Test".

Statement 1 is an incorrect assumption: The passage does not make any reference to Sustainable Development Goals or zero-hunger goal. It only mentions how the change in consumption patterns and focus on stable crops have affected nutrition security. Therefore, this option is beyond the scope of this passage.

Statement 2 is a correct assumption: this statement effectively links the premise and conclusion.

Statement 3 is a correct assumption: The passage mentions, “disappearance of many nutritious foods such as millets”, “food grain production has increased over five times since independence, it has not sufficiently addressed the issue of malnutrition”.

Statement 4 is an incorrect assumption: It fails the negation test and also beyond the scope of the passage.

---

77. **Answer: c**

Explanation:

Option (a) is incorrect as conventional farming is not being promoted by the author or being compared to organic farming. So, it can be ruled out as most logical & rational message.

Option (b) is incorrect as it is an extreme statement. Passage mentions only a few issues with organic alternatives like datura spray which cannot be extrapolated to say that no safe organic alternatives to chemical fertilizers.

Option (c) is correct: The conclusion of the passage mentions, "The reality is that because the organic farming industry is still young and not well-regulated in India, farmers and consumers, alike, are not only confused about what products are best for them, but sometimes use products in ways that could harm them as well." The passage explains this through example as well. Therefore, we can infer that In India, farmers need to be guided and helped to make their organic farming sustainable. (conclusion is more specific statement, while an inference is a more generic statement drawn from the given statement/s.)

Option (d) is incorrect as this is beyond the scope of the passage.

---

78. **Answer: b**

Explanation:

Statement 1 is an incorrect assumption:

The premise of the passage is that organic farming is new & unregulated. Conclusion is that due to this it is not necessary that organic is definitely better in all

cases. Therefore, by both Negation & general test as seen in question 1, we can see that it is not a valid assumption.

Statement 2 is correct :

as we know that assumptions are most often general statements, not specific statements. Further, valid assumptions strengthen or support the conclusion, which we can see by author's concern in the passage "...farmers and consumers, alike, are not only confused about what products are best for them, but sometimes use products in ways that could harm them as well.."

---

79. **Answer: c**

Explanation:

Crux is the most important or difficult part of a problem i.e. main point of the passage that is explicitly stated by the author.

Option (1) is incorrect as it beyond the scope of the passage, expenses are not discussed.

Option (2) is incorrect: The usage of "most ideal" is a red flag and so we check whether author puts it so explicitly and also if this is the main point. As the passage mentions "major" solution and not "most ideal", we can rule this out.

Option (3) is correct: The passage begins with premise that “In India, the segregation of municipal waste at source is rare.” Further, the conclusion which advocates biomethanation necessitates segregation. Hence we see that this given statement ties the passage together and captures the main idea.

Option (4) is incorrect as again, this statement is beyond the scope of the passage.

---

80. **Answer: d**

Explanation:

The passage discusses the current state of municipal waste management in India and emphasizes the importance of segregation, recycling, and processing for resource recovery. However, it does not explicitly suggest that:

Collection, processing, and segregation of waste should solely be handled by government agencies. The passage mentions the informal sector's role in recycling, indicating that waste management involves various stakeholders.

Resource recovery and recycling require technological inputs best managed by private enterprises. The passage highlights the need for technological solutions like biomethanation but does not specify that the private sector is exclusively suited for this.

Therefore, neither assumption is explicitly supported by the passage.