All India Civil Services Coaching Centre

(Under the aegis of Government of Tamil Nadu)

General Studies: Paper II – CSAT
Answer Key Explanation

Maximum Questions: 80   **Maximum Marks: 200**

1. Ans. (c)

Explanation :

Choice (a) sounds reasonable enough but not as the right answer. Choice (b) many not be acceptable because that reason doesn't serve the purpose. Choice (c) says one should be aware of the mythological antecedents and stories about the origins of the temples. But listening to a discourse is only half the story. So, choice (d) is ruled out and choice (c) is the right answer.

2. Ans. (d)

Explanation :

Ambarisha and Dhruva did penance there and it was the place where Lord Krishna was born. Other two reasons are irrelevant. Answers (a), (b) and (c) are wrong and only answer (d) is right.

3. Ans. (c)

Explanation :

There are two choices which are right. Statements (3) and (4) are clearly inadequate and irrelevant answers. The other two Statements (1) and (2) are right. Thus, option (c) is right.

4. Ans. (a)

Explanation :

The paradox is stated in Statement 1. It is stated in the passage that improvements cannot be forced on a willing person, hence the spirit of improvement is not always the spirit of liberty.

5. Ans. (d)

Explanation :

The passage does not talk about the superiority of West over the East. First and second statements are not mentioned in the passage.

6. Ans. (b)

Explanation :

Suppose Jinny lived for x years, Therefore by given condition

$$\frac{x}{6} + \frac{x}{12} + \frac{x}{7} + 5 + \frac{x}{2} + 4 = x$$

So, total age of Jinny comes out to be 84 years.

So, Jinny's age when she got married

$$= \frac{x}{6} + \frac{x}{12} + \frac{x}{7}$$

$$= \frac{84}{6} + \frac{84}{12} + \frac{84}{7} = 33 \text{ years.}$$

7. Ans. (d)

Explanation :

Let he mix 3 kg, 4 kg and 5 kg of dry fruits

Therefore the cost will be = $(3 × 80 + 4 × 100 + 5 × 120) = 1240$

Now, he sells at 50% profit

Therefore selling price of 12 kg $= 1240 × 1.5 = 1860$

So, the selling price of 1 kg

$= \dfrac{1860}{12}$

= Rs. 155

8. Ans. (b)

Explanation :

New no. of rollers x $= \dfrac{552 \text{ x } 56}{448} \text{ x } \dfrac{27}{23} = 81$

$\Rightarrow$ Required difference = 81 − 56 = 25

9. Ans. (c)

Explanation :

Let M, W and C be the weekly wages for a man, a woman and a child respectively.

$\Rightarrow$ 20M + 30W + 36C = 780 — (I)

Since their wages are proportional to the work done by them per week,

$\Rightarrow$ M : W : C = 3 : 2 : 1

i.e. M = 3C and W = 2C

Using this in equation (I)

156C = 780 or C = 5, W = 10, M = 15

$\Rightarrow$ In 4 weeks (one month)

15 men will earn: 4 × 15 × 15 = 900

21 women will earn: 4 × 21 × 10 = 840

30 children will earn: 4 × 30 × 5 = 600

Total wages = 900 + 840 + 600 = Rs. 2340

10. Ans. (b)

Explanation :

Time lost in 48 hrs. 48 ×1.5 = 72 minutes

As the watch owner adjusts 36 minutes, effective time lost in 48 hours = 36 minutes

For the watch to show the right time, it should loose 12 hrs.

$\therefore \dfrac{12 \text{ x } 60}{36}$ x 2 = 40 days.

11. Ans. (d)

Explanation :

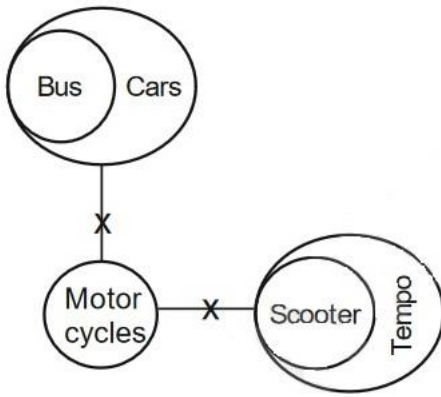From the above depiction, I is sitting in the middle of the row.

12. Ans. (c)

Explanation :
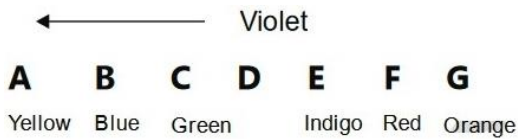
B is sitting between J and I.

13. Ans. (c)

Explanation :
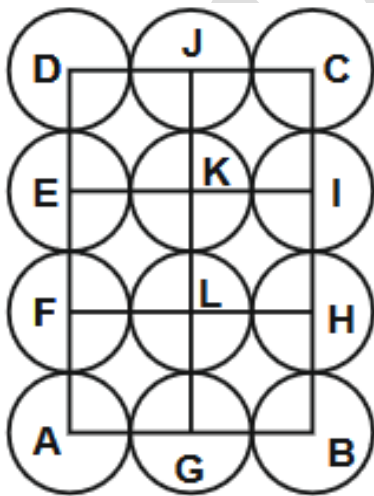
⇒ (2) and (4) follow.

14. **Ans. (c)**

Explanation :

Hence, colour of cap worn by F is Red.

15. **Ans. (c)**

Explanation :

Number of squares formed

= AFLG, GBHL, LHIK, FLKE, KICJ, KEJD, AEIB, FHCD

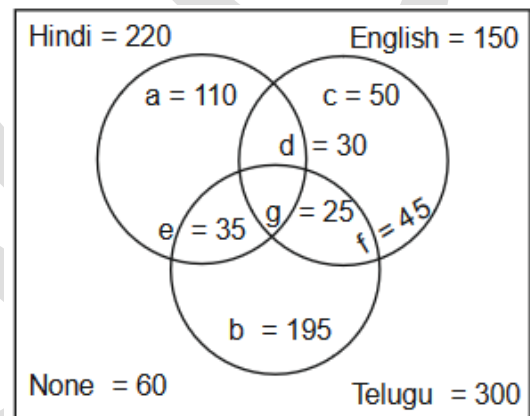So, total of 8 squares will be formed.

16. **Ans. (c)**

Explanation :

As, $(5 \times 4) + (3 \times 2) + 2 = 28$

Same as, $(8 \times 4) + (8 \times 1) + 2 = 42$

Hence, 1 will be come in place of question mark

17. **Ans. (c)**

Explanation :

Number of people, who speak atmost one language

= a + b + c + None

= 110 + 50 + 195 + 60 = 415

18. **Ans. (c)**

Explanation :

Statement 1 is correct. The author has mentioned about various methods of adaptation to climate change – both natural and man-made solutions.

Among the nature based solutions, the author has discussed tree planting which can prevent landslips as mentioned in the lines, "...there is also scope for "nature-based solutions" such as tree planting to help prevent landslips,

restoring wetlands to act as sponges for heavy rainfall and planting crop varieties that are more resilient to higher temperatures and water shortages." Therefore, this answer option is correct.

Statement 2 is correct. According to th author, donors have tended to focus on those renewable projects which are profitable. However, despite tending to focus on profits, the author agrees that renewable projects too help in reducing the greenhouse gases, thus helping in adaptation.

The author has discussed the importance of renewable projects in the concluding line, "...donor efforts through "climate finance" have tended to focus on projects, such as renewable energy plants, that reduce greenhouse gas emissions but also turn a profit."

19. **Ans. (d)**

Explanation :

Option (a) is incorrect. The first half of the passage discusses what happens when we regard living things as agents performing a computation. In such a scenario, capacities and considerations of living things such as replication, adaptation, agency, purpose and meaning can be understood as inevitable corollaries of physical laws.

It cannot be understood from an evolutionary perspective, as the author has discussed, "capacities and considerations such as replication, adaptation, agency, purpose and meaning can be understood as arising not from evolutionary improvisation, but as inevitable corollaries of physical laws." Thus, option (a) is not correct according to the passage.

Option (b) is incorrect. The author talks about meaning and intention, which are thought to be the defining characteristics of living

systems. However, it has been mentioned only as a passing reference about living systems.

The central theme of the passage is, understanding living systems through physical laws as seen in the lines, "Meaning and intention—thought to be the defining characteristics of living systems—may then emerge naturally through the laws of thermodynamics and statistical mechanics." Thus, option (b) does not perfectly capture the crux of the passage and is incorrect.

Option (c) is incorrect. The author believes that living systems can be understood as powerful enough for collecting and storing information about an unpredictable environment, as mentioned in the passage, "Once we regard living things as agents performing a computation collecting and storing information about an unpredictable environment— capacities and considerations such as replication, adaptation, agency, purpose and meaning can be understood as arising not from evolutionary improvisation, but as inevitable corollaries of physical laws.".

Thus, nothing in the passage suggests that living things have any difficulty in collecting and storing information. Option (d) is correct. Throughout the passage, the author has focused on the importance of physics and physical laws in understanding of the working of living systems. At the start of the passage, the author discussed, "From capacities and considerations such as replication, adaptation, agency, purpose and meaning can be understood as arising not from evolutionary improvisation, but as inevitable corollaries of physical laws."

Further, the author has discussed the same theme even in the concluding paragraph as seen in the following lines, "Meaning and intention—thought to be the defining characteristics of living systems—may then

emerge naturally through the laws of thermodynamics and statistical mechanics."

20. Ans. (d)

Explanation :

Option (a) is incorrect. The passage mentions the case of oncology drugs that have undergone a price cut due to compulsory license order by Indian patent office. Thus, market competition is not the only way leading to sharp price drop in drugs.

Option (b) is not correct. The passage clearly suggests that the prices of cancer medicines have dropped DRAMATICALLY after compulsory licensing order. From this it would be incorrect to deduce that prices of cancer drugs were NOT very high earlier. Moreover, had the prices been affordable for ALL patients, the very need to grant compulsory license might not arise.

Option (c) is not correct. The passage only talks about prices of drugs falling dramatically. It would be too far-fetched to say that patent-holding firm would go bankrupt after the grant of compulsory license. Nexavar is one of the drugs manufactured by this firm, there might be many more drugs that are not affected by compulsory license.

Option (d) is correct. According to the passage, prices of cancer drugs are dropping dramatically after India ordered a domestic company to sell a drug that is patented by a German company. This action may seem to contradict the ideal notions of free market economy in which there is no government interference. However, certain domestic situation like public health concerns may call for government interference even in a free economy. Hence, this is a valid inference.

21. Ans. (c)

Explanation :

Option (a) is incorrect. The initial lines of the passage mention the inequality-multiplier effect of climate change on the inequalities already existing between different income-groups and countries. Lower income countries and groups are least responsible for climate change as they account for very low emissions. Thus, the author does not consider that lower income countries and groups ignore required efforts for mitigation. However, they are affected more by climate change because of low adaptive capacity.

Option (b) is incorrect. The Statement in option (b) stands in direct contrast with what is mentioned in the passage. The author does not blame lower income countries and groups for higher emissions. Instead, the author blames the richer groups for higher emissions, as explained in the passage, "The top 10% of global income holders are responsible for almost half the annual global emissions, while the bottom 50% account only for 12% of emissions."

Option (c) is correct. The author describes the problems faced by the lower income groups and countries because of lower income. They have fewer resources available to adapt to the ravages of climate change, despite being disproportionately affected by the same. This is clear from the following lines, "While lower income groups or countries face greater exposure to temperature fluctuations resulting from emission- induced warming, and might be comparatively less equipped to adapt". Thus, the disproportionate effects of climate change are borne by lower income people because of lesser adaptation power.

Option (d) is incorrect. In the concluding lines of the passage, the author mentions the belief among the resource rich and higher income groups. They believe they can shield themselves from the effects of climate change, by virtue of their resources. Thus, this belief is

not among the lower income but among the higher income groups, as mentioned in the concluding lines of the passage, "...those responsible for planetary pressures are not equally affected by them and believe they have the resources to shield themselves from the adverse effects".

22. Ans. (b)

Explanation :

Statement 1 is incorrect. The author agrees that it is futile to fight with the past, as is conveyed by the introductory lines of the passage, "It is never a good idea to fight with the past, no matter how old it is." Thus, the first part of the statement 1 is correct. However, the author does not emphasise removing the relics left behind by the past. Instead, the author asks us to study history and its relics with an inquisitive mind without a biased attitude, through the following lines - "To study it with curiosity is a preferable option to quarrelling with it or harming the few tangible relics it has left behind." So, the second part of the statement 1 is not correct. Hence, statement 1 as a whole is incorrect.

Statement 2 is correct. The author has discussed several issues faced by colonised societies, such as drainage of wealth and the emergence of a state apparatus that the common people found difficult to identify with. Furthermore, the author also assumes that there used to be a sense of fear and distrust between the state and the citizens, as is visible in the concluding line of the passage, "Their fear of the state and the state's distrust of the citizen ought to be the prime agenda for anyone pursuing de-colonisation." Thus, statement 2 is in sync with the author's ideas in the passage, and thus is correct.

23. Ans. (b)

24. Ans. (a)

Explanation :

From the images 1 and 3, the number that is opposite to 2 must be 6.

25. Ans. (c)

Explanation :

The use of word 'only' weakens Statement (d). Option (a) and (b) cannot be sustantiated from the passage.

26. Ans. (a)

Explanation :

Statement 1 can be inferred from the passage.

27. Ans. (d)

Explanation :

Statements 1 and 2 cannot be implied by the passage.

28. Ans. (c)

Explanation :

Only Statements 1 and 2 are the assumptions of the passage.

Explanation for Questions 29 to 32:

In such questions, first we will look out for and fill the directly given information in a table and from thereon we will start drawing further inferences.

From statement (3), Avnish likes Movies and he does not teach in Ranchi or Allahabad and he does not teach Polity.

From statement (4), English is taught by Rahul and he does not teach in Delhi or Ranchi.

From statement (6), Neither Aditya nor Satyam teach Geography, and they do not like Cartoons and News.

From statement (7), Mukesh teaches in Pune and he likes neither Daily soaps nor Songs.

Person name	Favourite program	Subject	City
Avnish	Movies	~~Polity~~	~~Ranchi~~ ~~Allahabad~~
Rahul		English	~~Delhi~~ ~~Ranchi~~
Mukesh	~~Daily soaps~~ ~~Songs~~		Pune
Aditya	~~Cartoons~~ ~~News~~	~~Geography~~	
Prakash			
Satyam	~~Cartoons~~ ~~News~~	~~Geography~~	

From statement (2), the person whose favourite kind of program on television is News, teaches Geography in Jaipur. He must be Prakash.

Now, as per statement (5) the person who likes Reality shows teaches Polity in Patna and is not Aditya. So, he must be Satyam.

Statement (8) clearly states that the person who likes to watch Daily soaps, teaches Economics but not in Patna. This person can only be Aditya. Hence, we get:

Person name	Favourite program	Subject	City
Avnish	Movies	Polity	Ranchi Allahabad
Rahul		English	Delhi Ranchi
Mukesh	Daily soaps Songs		
Aditya	Daily soaps	Economics	Patna
Prakash	News	Geography	Jaipur
Satyam	Reality shows	Polity	Patna

From statement (1), the person who teaches History does not watch Movies. This person must be Mukesh.

Hence, we get:

Person name	Favourite program	Subject	City
Avnish	Movies	Sociology	Ranchi Allahabad
Rahul	Songs	English	Delhi Ranchi
Mukesh	Cartoons	History	Pune
Aditya	Daily soaps	Economics	Patna
Prakash	News	Geography	Jaipur
Satyam	Reality shows	Polity	Patna

Now, three cities are left – Ranchi, Allahabad and Delhi. From the table above we can deduce that Avnish must be from Delhi and Rahul from Allahabad. So, Aditya must be from Ranchi.

Hence, the final arrangement will be as follows:

Person name	Favourite program	Subject	City
Avnish	Movies	Sociology	Delhi
Rahul	Songs	English	Allahabad
Mukesh	Cartoons	History	Pune
Aditya	Daily soaps	Economics	Ranchi
Prakash	News	Geography	Jaipur
Satyam	Reality shows	Polity	Patna

29. Ans. (d)

   Explanation :

   The person who likes Songs visits Allahabad to teach.

30. Ans. (b)

   Explanation :

   Satyam teaches Polity.

31. Ans. (b)

   Explanation :

Avnish teaches Sociology in Delhi.

32. Ans. (d)

Explanation :

The person who teaches in Pune likes Cartoons.

33. Ans. (c)

Explanation :

The advertisement wants girls "able to speak fluently in English" then advertisement must have assumed that fluency in English is a requirement for a good model but it's not necessarily correct in general. So, assumption 1 is not implicit. And height as a criterion is not described in the statement so, neither assumption 1 nor 2 is implicit.

34. Ans. (a)

Explanation :

Suppose A gets x amount then B gets = x + 1, D gets = x + 1, E gets = x + 4

and C gets = x + 6

Hence, A gets the smallest amount.

35. Ans. (c)
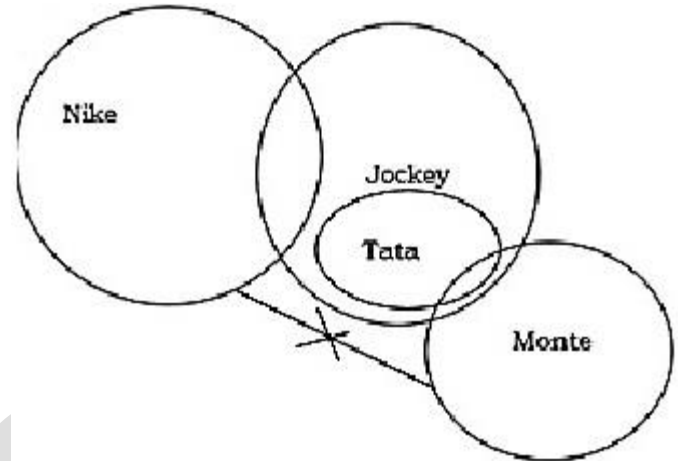
Explanation :

1 * 2 + 2 * 2 = 6

6 * 4 + 4 * 3 = 36

36 * 6 + 6 * 4 = 240

240 * 8 + 8 * 5 = 1960.

1960 * 10 + 10 * 6 = 19660

36. Ans. (d)

Explanation :

37. Ans. (b)

Explanation :

At Start: x gold coins; 4x non-gold coins

Add 5: x+ 5 gold; 4x non-gold

Then, according to the given ratio

3 × number of gold coins = number of non-gold coins

3(x+5) = 4x

3x + 15 = 4x

x = 15

Total number of gold is x + 5 = 15 + 5 = 20

Total number of non-gold is 4x = 60

Total number of coins is 80

38. Ans. (c)

Explanation :

Let A be the set of people who speak English.

B be the set of people who speak French.

A - B be the set of people who speak English and not French.

B - A be the set of people who speak French and not English.

A ∩ B be the set of people who speak both French and English.

Given, n(A) = 132 n(B) = 61 n (A ∪ B) = 150

Now, n (A ∩ B) = n(A) + n(B) - n (A ∪ B)

= 132 + 61 – 150

= 193 – 150

= 43

Therefore, Number of persons who speak both French and English = 43

39. Ans. (a)

Explanation :

Statements 1 and 3 are correct. The lines "Drought will make water more expensive, which will likely affect the cost of raw materials and production. Climate volatility may force companies to deal with uncertainty in the price of resources for production, energy transport and insurance. And some products could become obsolete or lose their markets, such as equipment related to coal mining or skiing in an area that no longer has snow" reflect that options 1 and 3 are disadvantages of climate change.

Statements 2 and 4 are incorrect. The lines "Whether in the U.S. or abroad, new regulations such as carbon pricing and subsidies that favour a competitor may affect a business's bottom line. A company's reputation could also suffer if it's seen as doing something that hurts the environment", this shows that carbon pricing is important for dealing with issues of climate change and also,

if the companies are forced to think about the environment, then also, it is good for dealing with climate change. So, these are not disadvantages but benefits.

40. Ans. (a)

Explanation :

Option (a) is correct. The lines "Drought will make water more expensive, which will likely affect the cost of raw materials and production. Climate volatility may force companies to deal with uncertainty in the price of resources for production, energy transport and insurance. And some products could become obsolete or lose their markets, such as equipment related to coal mining or skiing in an area that no longer has snow. Whether in the U.S. or abroad, new regulations such as carbon pricing and subsidies that favour a competitor may affect a business's bottom line.", illustrate the changes or impact of climate change on companies and the production of goods. Therefore, this option is the best crux of the passage.

Option (b) is incorrect. The passage discusses the companies but to say that companies which do not follow climate governance will face a boycott of their products will not be correct. So, this option is beyond the scope of the passage.

Option (c) is incorrect. This option in general seems to be correct but it is not based on the information given in the passage. The passage mainly focuses on the challenges of climate change from the perspective of companies (not nations) and what impact will it have on their production methods. So, this is also not correct.

Option (d) is incorrect. There is no discussion about the significance of sustainable development in coping with climate change.

So, this option is beyond the scope of the passage.

41. Ans. (d)

Explanation :

Option (a) is incorrect. The author is not pessimistic about sufferings in this world. Towards the conclusion, the author says people can be liberated from sufferings when they understand the impermanent nature of all their feelings, and stop craving for them. Thus, despite feelings being never- ending and ephemeral, sufferings can end.

Option (b) is incorrect. In the very beginning the author says, the root of suffering is neither the feeling of pain nor of sadness nor even of meaninglessness. It is nowhere said that these feelings ONLY in combinations of two or three lead to sufferings. Rather, according to the author, real root of suffering is never-ending and pointless pursuit of ephemeral (short lived) feelings.

Option (c) is also incorrect. This statement on its own might be true. However, it cannot be inferred from this passage, as the author does not make any reference to Buddha.

42. Ans. (c)

Explanation :

The average number of basic calculators in store B, C and D together

= > (3000 + 1500 + 3000)/3

= > 7500/3 = 2500

43. Ans. (d)

Explanation :

The (Basic + Scientific) calculators sold by store A

= > 3500*(20/100) = 700

The (Basic + Scientific) calculators sold by store C

= > 5000*(30/100) = 1500

Required difference = 1500 − 700 = 800

44. Ans. (b)

Explanation :

The number of (Basic + Scientific) calculators sold by store B = > 5000*(40/100) = 2000

The number of (Basic + Scientific) calculators sold by store D = > 4000*(40/100) = 1600

Required ratio = 2000: 1600 = 5: 4

45. Ans. (c)

Explanation :

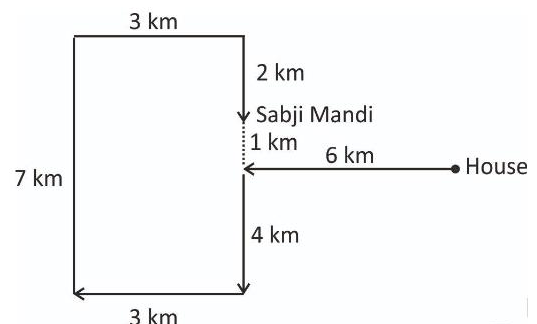The total number of Scientific calculators in store B = 2000

The total number of Basic calculators in store E = 2500

Required % = (2000/2500)*100 = 80 %.

46. Ans. (b)

Explanation :

The path taken by the Saroj has been depicted below:
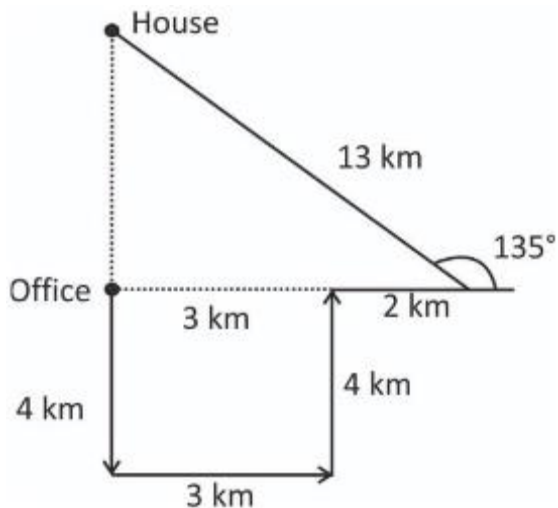

Shortest distance between Saroj's house and

Sabji Mandi = (12 + 62)1/2 = √37 km

Hence, option (b) is correct.

47. Ans. (a)

Explanation :

The path taken by the man has been depicted below:

Shortest distance between his office and his house = [132 – (3 + 2)2]1/2

= (169 – 25)1/2

= √144

= 12 km

Thus, the shortest distance between his house and his office is 12 km.

Hence, option (a) is correct.

48. Ans. (b)

Explanation :

Box W is placed between box V and box T. Hence, option (b) is correct.

49. Ans. (c)

Explanation :

Let two numbers be 19x and 19y respectively, as 19 is the HCF of these numbers.

Now, LCM of 19x and 19y is 19xy and, according to the question LCM of these two numbers,

=3553

⇒19xy =3553

⇒xy = 3553 / 19

⇒ xy =187

=17×11

Now we have two possible scenarios,

Either, x=17 and y=11 ---- (1)

Or, x=11 and y=17 ---- (2)

In the first scenario, where x=17 and y=11, numbers will be,

19x=19 × 17=323

19y=19 × 11=209.

Or, in the second case where x=11 and y=17,

numbers will be 209 and 323.

Required sum would be =209+323 =532.

50. Ans. (c)

Explanation :

Let the speed of the cycle be x km/h.

Speed of man = 6 km/h

Relative speed = (x - 6) km/h

Therefore, (x - 6) × 12/60= 2.4

x – 6 = 12

x = 18 km/h

51. Ans. (c)

Explanation :

Person	Dance	Cricket	Singing	Swimming	Cooking
Mohit	✓	✓	✓	✗	✗
Sourabh	✓	✓	✗	✓	✗
Aman	✗	✓	✓	✓	✓
Pawan	✓	✗	✓	✓	✗
Nitesh	✗	✗	✓	✓	✓

52. Ans. (c)

Explanation :

Person	Dance	Cricket	Singing	Swimming	Cooking
Mohit	✓	✓	✓	✗	✗
Sourabh	✓	✓	✗	✓	✗
Aman	✗	✓	✓	✓	✓
Pawan	✓	✗	✓	✓	✗
Nitesh	✗	✗	✓	✓	✓

53. Ans. (a)

Explanation :

Person	Dance	Cricket	Singing	Swimming	Cooking
Mohit	✓	✓	✓	✗	✗
Sourabh	✓	✓	✗	✓	✗
Aman	✗	✓	✓	✓	✓
Pawan	✓	✗	✓	✓	✗
Nitesh	✗	✗	✓	✓	✓

54. Ans. (c)

Explanation

Person	Dance	Cricket	Singing	Swimming	Cooking
Mohit	✔	✔	✔	✗	✗
Sourabh	✔	✔	✗	✔	✗
Aman	✗	✔	✔	✔	✔
Pawan	✔	✗	✔	✔	✗
Nitesh	✗	✗	✔	✔	✔

55. Ans. (a)

56. Ans. (a)

Explanation

Comparing relation in each of the statement, we get Asha is coded as 'ja'.

57. Ans. (d)

Explanation :

Let the ten and unit digit be x and 21 x respectively.

Then, (10x + 21 x) + 36 = 10 × 21 x + x

=> 9x2 + 36x – 189 = 0

=> 9x2 – 27x + 63x – 189 = 0

=> (x – 3) (9x – 63)

So, x is either 3 or -7 and it is given that the product of numbers is 21. So, number is either 37 or -73.

When we add 36 to these number then we get 73 and – 37 respectively.

In option 37 is present. So, that will be our answer.

58. Ans. (a)

Explanation :

Average temperature for Wednesday, Thursday, and Friday = 16°C

Total temperature = 3 * 16 = 48°C

Average temperature for Thursday, Friday, and Saturday = 20°C

Total temperature = 20 * 3 = 60°C

The temperature on Saturday = 24°C

Now, (Thursday + Friday + Saturday) (Wednesday + Thursday + Friday) = 60 – 48

Saturday – Wednesday = 12 Wednesday

= 24 - 12

= 12°C.

59. Ans. (d)

Explanation :

Let number of notes of each denomination be x.

Then 10x + 20x + 50x = 2400

80x = 2400

x = 30.

Hence, total number of notes = 3x = 90.

60. Ans. (b)

Explanation :

Statement 1 is incorrect: Computers are non-living because even though they can cognize, they do not develop biologically grow. Reproduction and metabolism are features of life.

Statement 2 is correct: Life is determined by the proliferation and maturation towards a state of death.

Death can occur only to livings as life is anything that grows and eventually dies,

i.e., ceases to proliferate and be cognizant.

61. Ans. (d)

Explanation :

Option a is incorrect: The passage mentions that both formal and informal education settings offer different strengths and value to a career path.

Option b is incorrect: This statement is out of the scope of the passage as there is no mention of India and demographic dividend.

Option c is incorrect: The passage mentions that a balance of the two forms of education can help students develop skills such as common sense, problem solving, empathy, etc.

So, we cannot infer that informal education is more important than formal education in developing Emotional Intelligence.

Option d is correct: The passage mentions that both formal and informal education settings offer different strengths that add value to the career path. Thus, success in career would require learning from both types of education.

62. Ans. (c)

Explanation :

Option a is incorrect: The passage only mentions that the checks and balances can be ensured by increasing the citizenry's role in Government through additional political participation. But how to ensure this additional political participation is beyond the scope of the passage.

Option b is incorrect: The passage only argues that more equality would increase the power of Government and reduce political freedoms. This needs to be checked by increasing the citizenry's role in Government through additional political participation. What will happen if there is too much citizen participation in Government cannot be inferred from the passage.

Option c is correct: The passage mentions that the conservatives argue that more equality would increase the power of Government and reduce political freedoms.

Option d is incorrect: The passage did not mention the reason for people not voting regularly. So, this statement is out of the scope of the passage.

63. Ans. (b)

Explanation :

Marks scored by G in Hindi = 55 i.e. $\frac{55}{80} \times 100$ = 68.75%

Marks scored by D in Chem = 25 i.e. $\frac{25}{40} \times 100$ = 62.5%

Percentage difference is (68.75 − 62.5 = 6.25%)

64. Ans. (a)

Explanation :

Percentage in Hindi = $\frac{51}{80} \times 100$ = 63.75%

Percentage in Eng = $\frac{48}{80} \times 100$ = 60%

Percentage in Maths = $\frac{93}{100} \times 100$ = 93%

Percentage in Phy = $\frac{28}{40} \times 100$ = 70%

Percentage in Chem = $\frac{27}{40} \times 100$ = 67.5%

Percentage in Bio = $\frac{31}{40} \times 100$ = 77.5%

So, B got more than 65% in four subjects.

65. Ans. (b)

Explanation :

% Marks of C = $\frac{62+32}{80+40} \times 100$ = 78.33%

% Marks of B = $\frac{48+27}{80+40} \times 100$ = 62.5%

Difference = (78.33 − 62.5) % = 15.8%

66. Ans. (d)

Explanation :

$Total\ G$ = 55 + 70 + 81 + 30 + 28 + 33 = 297

Maximum marks = 80 + 80 + 100 + 40 + 40 + 40 = 380

Reqd% = $\frac{297}{380} \times 100 \approx 78\%$

67. Ans. (b)

Explanation :

Statement 1 is correct. The passage mentions, "With his unbounded greed, man has caused irreversible damage to the environment. Today, climate change is a global phenomenon." Here the author highlights the issue of pollution which is damaging the environment and the reason behind climate change.

Statement 2 is correct. The passage mentions, "Promotion of the mother tongue will revolutionize the educational landscape by making it more inclusive and equitable." Here equitable education implies non-discriminatory education.

Statement 3 is incorrect. The passage mentions, "Rural India cannot be left behind in this mission. Improving rural infrastructure across the country must be fast-tracked and integrated into the larger development narrative." It highlights the issue of rural infrastructure, however, it does not explicitly highlight the need for irrigation.

Statement 4 is correct. The passage mentions, "Universal and affordable access to quality education and healthcare must be the focus of our attention." It implies universal and affordable access to healthcare.

Statement 5 is correct. The passage mentions, "Today, climate change is a global phenomenon. Conservation is our only hope for the survival of the planet." It highlights the issue of the survival of the planet. If the survival of the planet is in danger, then it is an obvious threat to the survival of human beings.

Statement 6 is correct. The passage mentions, "With his unbounded greed, man has caused

irreversible damage to the environment." It highlights the issue of human greed which shows his avariciousness nature.

68. Ans. (b)

Explanation :

Option (a) is incorrect. The passage highlights the issue of loneliness in the cities, but it nowhere prohibits living in cities.

Option (b) is correct. The passage lists out issues of loneliness like people rarely talking to their neighbours; children do not play cricket; friends may not play together; and friends or relatives are not generally welcomed. We spend time on online studies or social media. Here, the author criticizes this life of cities and wants to convey the message of becoming a more socialized person. So, this option best reflects the suggestion conveyed by the passage.

Option (c) is incorrect. The passage mentions, "...even if, paradoxically, the surfeit of lonely pursuits has reduced the quality of solitude." Based on the passage, we cannot say that people are "Searching for loneliness" – it may be imposed based on the urban cultural setting. Also, this statement can be an inference but not a suggestion.

Option (d) is incorrect. The passage mentions the problem of loneliness in the cities, so this statement is correct as the cities have become a ground for loneliness. But this is the problem cited by the author. While the demand of the question is the suggestion that author wants to convey.

69. Ans. (c)

Explanation :

Option (a) is incorrect. The passage talks about "rural" being always present in Hindi films, in the past. It nowhere says that now rural characters are not shown at all.

Option (b) is incorrect. It is true that films affect society and vice versa. But, the existence of a split between rural and urban being a result of Hindi films ALONE is not conclusively proven in this passage.

Option (c) is correct as the passage does talk about portrayal of "the rural" in Hindi films as good, and the "urban" as something evil. This is clear from the 3rd sentence of the passage.

Option (d) is incorrect due to option (b) being incorrect.

70. Ans. (c)

Explanation :

Let $a = 10m + n$

So, $b = 10n + m$

It is given that, $a^2 - b^2 = k^2$

So, we have, $(10m + n)^2 - (10n + m)^2 = k^2$

or

$100m^2 + n^2 + 20mn - (100n^2 + m^2 + 20mn) = k^2$

or $99m^2 - 99n^2 = k^2$

or $99(m + n)(m - n) = k^2$

or $11 \times 9 \times (m + n)(m - n) = k^2$

9 is already a perfect square, so k^2 can be of the form 99×11.

So, $k = 33$ and $(m + n)(m - n) = 11$

So, $m = 6$ and $n = 5$

$a = 10m + n = 10 \times 6 + 5 = 65$

So, required numbers are 65 and 56.

Hence, $a + b + k = 65 + 56 + 33 = 154$

Hence, option (c) is correct.

71. Ans. (a)

Explanation :

Here, when the ball is dropped, it bounces back to 3/4 of the height it was dropped from, and then falls again. So, in other words it covers 3/4 of its original drop height 2 times - going up and then down.

The same will happen every time. Initial height is 30 m and in each bounce, it rebounds to 3/4th of the distance it fell.

After the first bounce, the height reached is (3/4)×(30).

After the second bounce, the height reached = (3/4)×[(3/4)×(30)] = 30×(3/4)2

After the third bounce, the height reached = (3/4)×[(3/4)×(3/4)×(30)] = 30×(3/4)3

So, Total distance travelled = 30 + 2×(30)×(3/4) + 2×30×(3/4)2 + 2×30×(3/4)3 + ... = 30 + 2 × [(30)×(3/4) +(30)× (3/4)2 + (30)×(3/4)3 + ...]

The given series is in the form of a geometric progression.

$$S_\infty = \sum_{n=1}^{\infty} ar^{n-1} = \frac{a_1}{1-r}, -1 < r < 1$$

So, total distance covered = Distance travelled first time + 2 × {a ÷ (1 - r)}

Here a = 30×(3/4), common ratio (r) = ¾

So, total distance covered = 30 + 2 ×

[30×(3/4)/[(1 – 3/4)] =

30 + 2 × [30×(3/4)×4] =

30 + 180 = 210 m

72. Ans. (d)

Explanation :

Option (a) is incorrect. The passage nowhere mentions that wild food is cooked in forest areas. It is cooked by people who are celebrating any festival and as a part of any ritualistic meal. So this option is incorrect.

Option (b) is incorrect. The passage nowhere mentions that wild food is supposed to be eaten by wild people. It is cooked and eaten by people who are celebrating any festival and as a part of any ritualistic meal. So this option is incorrect.

Option (c) is incorrect. The passage mentions, "Some wild foods are brought to the plate only once a year." It implies wild food is cooked only once a year. While the option mentions 'never'. So this option is incorrect.

Option (d) is correct. The passage mentions, "Some wild foods are brought to the plate only once a year as part of a ritualistic meal." It implies wild food is the one which is part of a ritualistic meal. So this option is correct.

73. Ans. (b)

Explanation :

Statement 1 is incorrect. The passage is about NASA and its space missions. In the first line of the passage, it is mentioned that only 30% of the engineers in space exploration are women. From this, we cannot generalise that the proportion of women involved in space exploration is abysmally low. We do not know the gender composition of other space organisations. Even in context of the mission being talked about in the passage, 30% cannot be said to be abysmally low. Therefore, this answer option is incorrect.

Statement 2 is correct. It is explicitly mentioned in the passage that because their bodies tend to reach NASA's maximum Permissible threshold of radiation earlier than

men's, female astronauts are currently less likely to be chosen for missions than male astronauts.

74. Ans. (a)

Explanation :

Statement 1 is correct. According to the author, he is not going to the movies to learn about history, witness the life of a successful real-life person unfold in a cliched plot, watch a hysterical hero destroy the most stale form of the villain, or receive a dose of moral instruction, they have sort of turned into the benchmark at the box office during the past few years. Also, the line: "...But, over the last few years, they have sort of become a norm at the box office" clearly indicates that the genre of movies is getting repetitive. Hence, it is a correct statement.

Statement 2 is correct. The author believes it's the pure excitement of witnessing something more extraordinary than usual and the thrill of taking part in a community celebration rather than pursuing a common goal: let's just enjoy ourselves at the movies. Hence, it is a correct statement.

Statement 3 is incorrect. Refer to the line: "The film also packed a lot of star power, Fahadh Faasil and Vijay Sethupathi..." This is about the particular movie Vikram. It cannot be generalised to all contemporary movies. Hence, it is not a correct statement.

75. Ans. (b)

Explanation :

Statement 1 is incorrect. Refer to the line: "...scientists for the first time calculated minimum ice loss in Greenland, and the corresponding rise in global sea level." According to the passage, for the first time, scientists estimated Greenland's minimum ice loss and the resulting rise in the world's sea level. Hence, it would be incorrect to say that numerous such studies have been conducted.

Statement 2 is correct. As mentioned in the passage, Zombie ice, also known as dead or doomed ice, is the ice that is still a part of the parent ice sheet but is not gaining new snow. Hence, it is a correct statement.

76. Ans. (d)

Explanation :

The number of people who like listening to music, but not eating = 6 + 12 = 18

People who like eating, but not listening to music = 7 + 11 + 2 + 15 = 35

Hence, sum = 18 + 35 = 53

Hence, option (d) is correct.

Explanation for Questions 77 to 79:

As per the given information we have four teams, four couples and 4 different points.

(i) "Sweet Couple" won 2 points.

(ii) Mukesh's team won four more points than Lina's team, but Lina's team didn't score the least number of points. Therefore, only possible option is that Lina has 4 points and Mukesh has 8 points.

It also means that Mukesh (with 8 points) is not with Lina, and both of them do not belong to "Sweet Couple"

Team	Male	Female	Points
Sweet Couple			2
		Lina	4
			6
	Mukesh		8

(iii) "Just Singing" won 6 points. Hence Mukesh and Lina do not belong to "Just Singing"

(iv) Sanjeev's team scored 4 points. While from (ii) we can see that Lina has also 4 points. Hence, Sanjeev and Lina belongs to same team.

Team	Male	Female	Points
Sweet Couple			2
	Sanjeev	Lina	4
Just Singing			6
	Mukesh		8

(v) Tapas and Sania were on the same team, but it wasn't the team "Sweet Couple"

Team	Male	Female	Points
Sweet Couple			2
	Sanjeev	Lina	4
Just Singing	Tapas	Sania	6
	Mukesh		8

(vi) Laxman is the only male remaining, who must be in the team which scored 2 points, i.e. "Sweet Couple".

Team	Male	Female	Points
Sweet Couple	Laxman		2
	Sanjeev	Lina	4
Just Singing	Tapas	Sania	6
	Mukesh		8

(vii) "Bindas Singers" won 2 more points than Laxman's team; hence it has 4 points.

Team	Male	Female	Points
Sweet	Laxman		2

Team	Male	Female	Points
Couple			
Bindas Singers	Sanjeev	Lina	4
Just Singing	Tapas	Sania	6
New Singers	Mukesh		8

(vii) Waheda was not on "New Singers", so she must belong to "Sweet Couple" and Divya must be in the team "New Singers".

Team	Male	Female	Points
Sweet Couple	Laxman	Waheda	2
Bindas Singers	Sanjeev	Lina	4
Just Singing	Tapas	Sania	6
New Singers	Mukesh	Divya	8

77. Ans. (d)

78. Ans. (d)

79. Ans. (d)

80. Ans. (d)

Explanation :

Given statement: Ram > Trisha > Suresh

Rakesh ≥ Sita

Conclusion (I):

Ram > Rakesh → False (As Ram > Trisha < Suresh = Rakesh;

So, no relationship can be established between Ram and Rakesh).

So, conclusion I does not follow.

Conclusion (II):

Suresh > Sita → False (As Suresh = Rakesh ≥ Sita; So, Suresh ≥ Sita.)

Thus, conclusion II does not follow.

Hence, neither I nor II follows.

Hence, option (d) is correct.