Section II. Logical Reasoning

Question 1

Argument Construction:
Though automation is essential for cost management, it should not be adopted in the healthcare industry as it will take away the human touch which, as per several studies, is strongly desired by many patients.

   A. The author makes no statement about the surety of automation being adopted in healthcare. He/she merely highlights the disadvantages of such action.
   B. Though this is an inference that can be drawn from the passage, it is not the central idea being discussed.
   C. This statement goes beyond the scope of the passage.
   D. This is a judgmental and moralistic statement.
   E. Correct. The author, while accepting the benefits of automation, is essentially highlighting the negative outcomes of automation in the health care industry in order to reinforce its undesirability.

The correct answer is E.

Question 2

Conclusion I: The statement says that the government has spoiled many top ranking financial institutions by appointing bureaucrats as directors of these institutions. However, we can draw no conclusions about the reasons why these bureaucrats have had this negative impact. It is possible that bureaucrats also have the required expertise in finance but are indulging in nepotism or corruption and it is this conduct that has spoiled these institutions. Thus, conclusion I cannot be drawn.

Conclusion II: This is a vague conclusion that has no direct bearing on the argument. The scope of 'financial work' of an institution is not defined and might include normal financial dealings of any institution. Such interactions don't require any financial expertise on part of the directors.

The correct answer is D.

Question 3
Common solution for questions 1 to 4:
Time duration for tasks A, B, C, D and E are given below:
Task A: 9:00 am – 11:00 am
Task B: 11:00 am – 12:00 pm
Task C: 12:00 pm – 1:00 pm
Task D: 11:00 am – 2:00 pm
Task E: 2:00 pm – 3:00 pm

1.
The earliest time at which Ajay could complete task C is 1:00 pm.
The correct answer is C.

2.

If Ajay takes 2 hours for task B, then the time duration for tasks A, B, C, D and E are given below:

Task A: 9:00 am – 11:00 am

Task B: 11:00 am – 1:00 pm

Task C: 1:00 pm – 2:00 pm

Task D: 11:00 am – 2:00 pm

Task E: 2:00 pm – 3:00 pm

So, Ajay can start task E at 2:00 pm.

The correct answer is C.

3.

The earliest time at which Ajay could complete all tasks is 3:00 pm.

The correct answer is D.

4.

If Ajay were to start task D after the completion of task C, and take a break for an hour, then the new time duration for tasks A, B, C, D and E are given below:

Task A: 9:00 am – 11:00 am

Task B: 11:00 am – 12:00 pm

Task C: 12:00 pm – 1:00 pm

Task D: 1:00 pm – 4:00 pm

Rest time: 4:00 pm – 5:00 pm

Task E: 5:00 pm – 6:00 pm

Therefore, Ajay completes all tasks at 6:00 pm.

The correct answer is D.

Question 4

The pattern followed is as below:

$8 \times 7 - 4 \times 3 = 56 - 12 = 44$
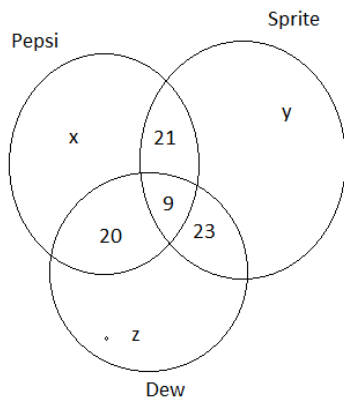
$7 \times 9 - 8 \times 4 = 63 - 32 = 31$

Similarly, $5 \times 10 - 6 \times 2 = 50 - 12 = 38$

The correct answer is B.

Question 5

Common solution for questions 1 to 2:

From the information given in the question, we can draw the following Venn diagram:

Total number of guests = 278

So, x + y + z + 21 + 20 + 9 + 23 = 278
Or, x + y + z = 205 --- (1)
As, there were equal numbers of bottles of each of the three kinds (Pepsi, Dew and Sprite), we have:
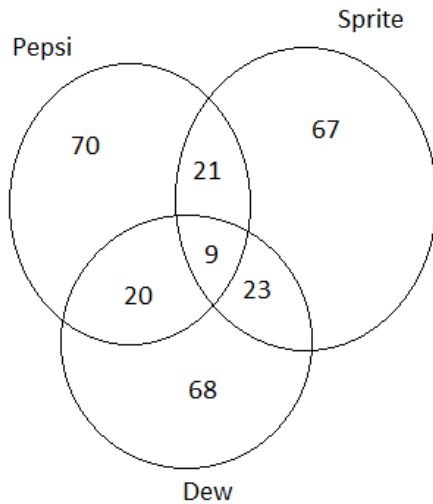x + 21 + 9 + 20 = y + 21 + 9 + 23 = z + 20 + 23 + 9
Or, x + 50 = y + 53 = z + 52--- (2)
On solving Eq. (1) and (2), we get:
x = 70, y = 67 and z = 68
So, final Venn diagram is as below:

1.
Number of guests who enjoyed Dew or Sprite but not Pepsi = 68 + 23 + 67 = 158
The correct answer is E.

2.
Number of guests who enjoyed Pepsi and Dew but not Sprite = 70 + 20 + 68 = 158
The correct answer is E.

Question 6

Argument Construction:

The supply of illegal, adulterated and local alcohol has become a major concern for both citizens and local administration. A meeting of all the stakeholders has been organized that includes members of the local community as well. The response has to be delivered from the perspective of the district administration.

   A. Telling people that the problem lies solely with them, without taking any responsibility for the issue is only going to make matters worse. The passage states that the local people are already upset with the administration for not doing enough. In this case, placing all the blame on the people will further aggravate them.
   B. This is a vague and insufficient response. Merely asking people to refrain from indulging in this behavior exhibits a passive and desultory approach that does not address the central issue.
   C. Just like option A, this response also absolves the administration of all accountability and will only result in escalation of people's anger.

D. Correct. Such issues require a coordinated and comprehensive approach. While the administration cannot tackle the problem on its own, it also cannot place the entire burden of responsibility on the people. Therefore, acknowledging the importance of local participation and inviting collaboration will pave the way for a concerted effort on the part of the local people. This will also help assuage the feeling of anger amongst the community.

E. This is again a vague and passive approach that can devolve into apathy and unrest amongst the people.

The correct answer is D.

Question 7

This question actually expects the test takers to identify the number of pairs of letters in a word in which the number of letters between the first letter and the second letter of a pair must have the same number of letters as in English alphabet. For example, the positional difference between **E and I** in English alphabet is three (F,G and H are between them); the positional difference between **E and I** in the word CHILDREN is also three (L,D and R are between them). Hence, **(E, I)** is one such pair.

Similarly, in the word 'CHILDREN', the other pairs can be identified as below:

- (H, I): The number of letter between 'H' and 'I' in English alphabet is **zero** as there is no letter between 'H' and 'I'. Similarly in the word 'C**HI**LDREN' the number of letter between 'H' and 'I' is also zero as there is no letter between 'H' and 'I'.
- (H, N): The number of letter between 'H' and 'N' in English alphabet is **five** as there are five letters between 'H' and 'N'. Similarly in the word 'C**H**ILDRE**N**' the number of letter between 'H' and 'N' is also five as there are five letters between 'H' and 'N'.
- (I, N) : The number of letter between 'I' and 'N' in English alphabet is **four** as there are four letters between 'I' and 'N'. Similarly in the word 'CH**I**LDRE**N**' the number of letter between 'I' and 'N' is also **four** as there are four letters between 'I' and 'N'.

Therefore, there are four such pairs – (E, I), (H, I), (H, N) and (I, N).
The correct answer is C.

Question 8

Option A: English speaking bachelors living in Delhi are indicated by region 7. So, this option is true.
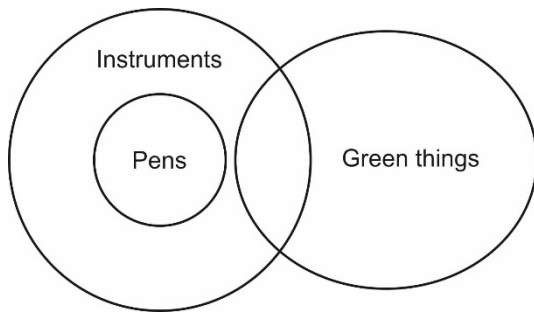
Option B: Region 8 indicates the bachelors who do not know the English language but they are in Delhi. So, this option is true.

Option C: Regions 7 and 9 indicates English speaking persons who are neither tourists nor are they in Delhi. So, this option is true.
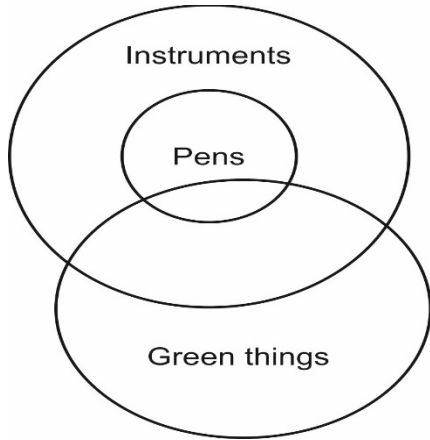
Option D: No region indicates bachelors who is tourists and lives in Delhi. So, this option is **not** true.

The correct answer is D.

Question 9

OR

Option A: We know all pens are instruments. However, this does not mean that all instruments are pens. Thus, option A is not necessarily true.

Option B: Correct. As can be seen from the Venn diagrams, if some green things are instruments then it follows that some instruments are green.

Option C: We only know that some green things are instruments. From this we cannot draw any conclusion regarding the relation between pens and green things.

Option D: As explained above, we cannot establish a conclusive relationship between pens and green things.

Option E: Only statement (3) is correct.

The correct answer is B.