ANSWERS & EXPLANATIONS
GENERAL STUDIES (P) TEST – 4289 (2024)

1 (b)

Option (a) is not correct: The passage mentions 'agriculture' only at one place - *"Agriculture, health and development are suffering. So, bringing the health discussion onto the agenda of the climate change platform is essential for Africa."* Hence, it can be inferred that 'agriculture' is not one of the subjects that has been 'mostly' emphasised by the author. **Hence, option (a) is not correct.**

Option (b) is correct: The first line of the passage itself mentions 'health' as an important subject of discussion - "*Health practitioners and experts attending the inaugural Africa Climate Summit in Nairobi, Kenya, have expressed **displeasure with the exclusion of health on the main agenda despite its inextricable link with climate change**".* This implies that during the ongoing summit the exclusion of health from the main agenda is a disappointment for experts. Further, it is mentioned in the passage that **"bringing the health discussion onto the agenda of the climate change platform is essential for Africa".** It can be further inferred that health-related issues are important for Africa and need to be incorporated into the ongoing climate summit in Africa. **Hence, option (b) is correct.**

Option (c) is not correct: The summit mentioned Africa Climate Summit, which is related with climate. However, health practitioners and experts are disappointed with the non-exclusion of Health in the agenda. The subject of 'environment' is mentioned at one place in the passage - "*We must highlight the relationship between **climate change, environment and health**".* It can be understood that the subject of environment, though important, is not the one that is mostly emphasized upon. **Hence, option (c) is not correct.**

Option (d) is not correct: The concept of "green growth" finds mention only in the following line of the passage – *The theme of the summit is "Driving **green growth** and climate finance solutions for Africa and the World*". The phrase is not mentioned anywhere else in the passage. **Hence, option (d) is not correct.**

2 (b)

Statement 1 is correct: The passage says that "Hyderabad-based Altmin, a **Hyderabad-based battery material production and cell engineering company,** collaborated with the International Advanced Research Centre for Powder Metallurgy and New Materials, **an institution under the Union Ministry of Science and Technology".** It implies that it is a collaboration between Private and Government sector entities. **Hence, statement 1 is correct.**

Statement 2 is correct: The passage says, "Vikram Sarabhai Space Centre, International Advanced Research Centre for Powder Metallurgy and New Materials and Nonferrous Materials Technology Development Centre **have their own battery know-how and capabilities". Hence, statement 2 is correct.**

Statement 3 is not correct: There is no mention of international collaboration for EV, though the passage mentions the collaboration of the private sector with the government. **Hence, statement 5 is not correct.**

3 (b)

Option (a) is not correct: The passage indeed mentions the significant strides made by India in the EV battery sector. However, the passage does not specifically mention Indian startups. It only mentions that a Hyderabad-based company is collaborating with a Government-supported institution in the manufacturing of EV batteries. With this limited information, we cannot assume that Indian startups in general are doing great in the EV sector. **Hence, option (a) is not correct.**

Option (b) is correct: With all the technical know-how and technical expertise, the EV sector needs to have government backing. Though various government agencies are involved in this sector, and schemes

like PLI which encourage the manufacturing of ACC batteries have been launched, there is still a lot of scope for technology upgradation in this sector. The passage says, "**EV battery research is lacking in government sponsorship**. Even though the Indian government, through its Advanced Chemistry Cell (ACC) Production-Linked Incentive (PLI) scheme, has laid out Rs 18,100 crore for manufacturing of ACC, **it doesn't have a national programme to fund research and development into latest technologies like SIB and SSB".** This implies direct support in the form of a national research program is required for a technological transformation of this sector in India. **Hence, option (b) is correct.**

Option (c) is not correct: There is no mention of the EV batteries with respect to space missions. The passage only mentions Vikram Sarabhai Space Centre having its own battery know-how and capabilities. No mention of the use of EV batteries for space missions is found in the passage. **Hence, option (c) is not correct.**

Option (d) is not correct: The passage says that "Even though the Indian government, through its Advanced Chemistry Cell (ACC) Production-Linked Incentive (PLI) scheme, has laid out Rs 18,100 crore for manufacturing of ACC, **it doesn't have a national programme to fund research and development into latest technologies like SIB and SSB".** It implies that the PLI scheme is for Advanced Chemistry Cell (ACC). For latest technologies like SIB and SSB there is no government scheme in place yet. **Hence, option (d) is not correct.**

Explanation for Questions 4-6:

C sits at an extreme end of the row. Two persons sit between C and F. Two cases are possible.

Case 1:

C	-	-	F	-	-	-	-	-

Case 2:

-	-	-	-	-	F	-	-	C

More than two persons sit between F and J. J does not sit at an extreme end of the row.

Case 1:

C	-	-	F	-	-	-	J	-

Case 2:

-	J	-	-	-	F	-	-	C

Three persons sit between B and D. G sits third to the left of B. B does not sit at extreme ends of the row.

Case 1a:

C	D	G	F	-	B	-	J	-

Case 1b:

C	G	-	F	B	-	-	J	D

Case 2a:

G	J	-	B	-	F	-	D	C

Case 2b:

-	J	D	G	-	F	B	-	C

Case 2c:

-	J	-	D	G	F	-	B	C

E sits to the immediate right of H. This is possible only in Case 1b.

C	G	-	F	B	H	E	J	D

So, the final arrangement:

C	G	A	F	B	H	E	J	D

4 (d)

Two persons sit between A and H.

5 (c)

6 (c)

After rearranging all the persons according to alphabetical order, we get:

A	B	C	D	E	F	G	H	J

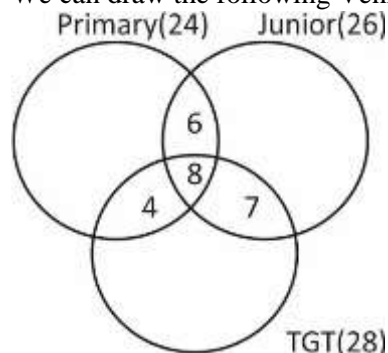D sits 3rd to the left of G.

Hence, option (c) is the correct answer.

7 (b)

Number of teachers that applied for only primary and junior level = 14 – 8 = 6
Number of teachers that applied for only primary and TGT = 12 – 8 = 4
Number of teachers that applied for only junior and TGT = 15 – 8 = 7
We can draw the following Venn diagram:

Number of teachers that applied for only primary = 24 – (8 + 6 + 4) = 6
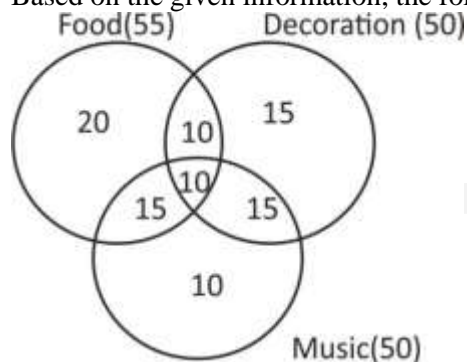Number of teachers that applied for only junior = 26 – (8 + 6 + 7) = 5
Number of teachers that applied for only TGT = 28 – (8 + 4 + 7) = 9
Hence, total number of teachers that applied for the examination = 6 + 5 + 9 + 6 + 8 + 4 + 7 = 45
Hence, option (b) is the correct answer.

8 (c)

Based on the given information, the following Venn diagram can be drawn:

From the above figure it is clear that the percentage of guests who like both decoration and music but not food is 15%.
Hence, option (c) is the right answer.

9 (a)

Let x% are selected in all the three.
Then, 53 + 61 + 60 – 24 – 35 – 27 + x = 95
Or x = 7
The Venn diagram would be:
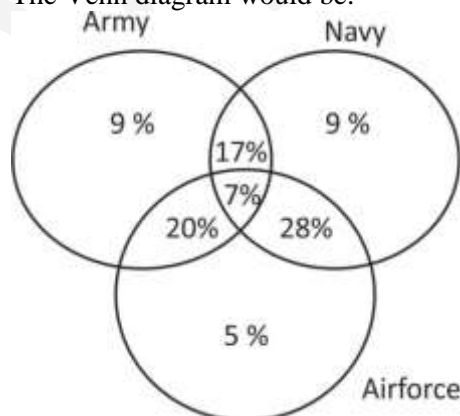
Percentage of candidates selected in only one = (9 + 9 + 5)% = 23%
23% of 300 = 69 (more than 50)
Hence, option (a) is the right answer.

10 (c)

The persons who have voted must definitely be enrolled in the voter list. A person below the age of 18 years can neither vote, nor his name can be in the voter list.

Hence, option (c) is the right answer.

11 (c)

Using option (a), we get L > M < N ≤ O > P ≤ Q. Here L > M is not definitely false.

Using option (b), we get N > M < O ≤ Q > P ≤ L. There is no definite relation between L and M, so L > M is not definitely false.

Using option (c), we get M > L < N ≤ Q > O ≤ P. Here M > L, so L > M is definitely false.

Using option (d), we get N > P < Q ≤ M > O ≤ L. There is no definite relation between L and M, so L > M is not definitely false.

Hence, option (c) is the correct answer.

12 (d)

Option (a): Tea and Coffee both are subset of beverages. Picture does not represent it.

Option (b): Authors and Teachers may be men or women. So, both will have a common part with men. The picture given does not represent it.

Option (c): Boys, students and athletes will have boys as common. The picture given does not represent it.

Option (d): Sparrows are a subset of birds and mice have nothing in common with birds. The picture represents the same.

Hence, option (d) is the correct answer.

13 (c)

Option (a) is not correct: Refer to the lines of the passage, "In recent times, **people seem to think urban foxes are becoming bolder and more cunning**, "wreaking havoc in central London" by scavenging in bins for food scraps. But our recent study suggests that this popular portrayal may only be partially true for the species". These lines imply that urban foxes have adapted to the local culture. However, from this information it cannot be generalised that bolder animals easily adapt to urban culture, as the passage itself says that it may not be completely true. Moreover, it cannot be the most logical message conveyed by the author. **Hence, option (a) is not correct.**

Option (b) is not correct: The passage does not mention that there is a decrease in animal spaces because of expanding urban areas. Further, the rational message of the passage pertains to the adoption of local culture by foxes, rather than the change in size of animal habitat. **Hence, option (b) is not correct.**

Option (c) is correct: The passage compares the behaviour of red foxes staying in urban areas and those which are found in the countryside. The passage says, "We found urban foxes were more likely to interact with the puzzles than rural ones, suggesting they were bolder. However, **when it came to their willingness to solve the puzzles, there was no difference between the two populations".** From these lines, it can be inferred that to some extent, the social environment indeed has a bearing on behavioural patterns of foxes, but not beyond a point. **Hence, option (c) is correct.**

Option (d) is not correct: The passage mentions the word "colonisation", but it is in the context of the colonisation of cities by animals and not in the context of British colonialism. **Hence, option (d) is not correct.**

14 (d)

Statement 1 is not correct: According to the passage "**The dangerous rise of AMR could lead to up to 10 million deaths annually by 2050,** a United Nations Environment Programme report released February 2023 found. **This would be on par with the 2020 rate of global deaths from cancer".** This implies that AMR-related mortality in 2050 may be equal to cancer-related deaths in 2020, and even that is not certain. **Hence, statement 1 is not correct.**

Statement 2 is not correct: Refer to the lines, "The numbers (cases of AMR) were this high even though many countries could not report data for 2020 due to the novel coronavirus COVID-19 pandemic. The global health body had called for more research to discover **why AMR had increased and the extent to which infections are related to hospitalisations and antibiotic treatments during the COVID-19 pandemic**." This means that there is a possibility that the rise in number of hospitalisations and treatment during the COVID-19 pandemic had contributed to the increased AMR, but it's a matter of further

research. Moreover, we cannot say that the pandemic resulted in the spread of AMR "globally". **Thus statement 2 is not correct.**

15 (b)

Inference 1 is not correct: The passage does not mention that 11 countries cannot reduce their greenhouse gas emissions by 100%. Instead, it says that **"It could take 11 high-income countries over 200 years to reduce their 2022 greenhouse gas emissions by 95 per cent, according to a new analysis."** However, it does not mean that the countries will never be able to reduce emissions by 100%. This statement is illogical because it makes an extreme claim. **Hence, inference 1 is not correct.**

Inference 2 is correct: The passage says that "Our findings suggest that the **continued pursuit of economic growth in high-income countries is at odds with the climate and equity commitments of the Paris Agreement,".** It suggests that "green growth is, therefore, not occurring and appears out of reach for high-income countries". Further, the passage says that "**Scientists have warned that green growth can only occur if decoupling is fast enough to reduce emissions consistent with the Paris Agreement".** This implies that green growth can occur only with emission reductions, which is in turn consistent with the Paris Agreement. **Hence, inference 2 is correct.**

16 (d)

The diagram representing the statements given in the problem is shown below:
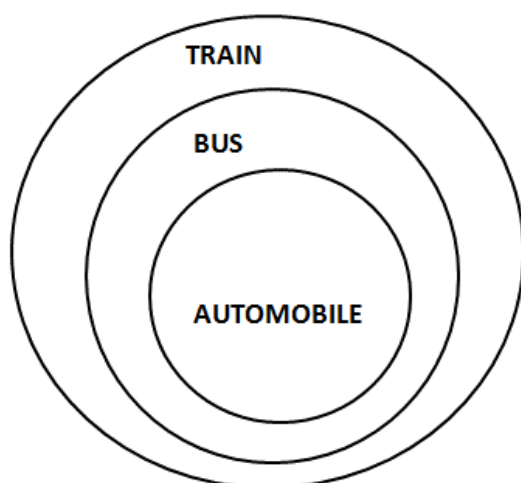
From this diagram, it is evident that:
1. All automobiles are trains.
2. Some buses are automobiles.
3. Some trains are buses.
4. Some trains are automobiles.
Hence, option (d) is the right answer.

Explanation for Questions 17-19:

Either L or M were sitting at one of the extreme ends. L was sitting 2nd to the right of M. Two kids were sitting between M and O. N was sitting 2nd to the left of O. So, there are 2 possible cases:
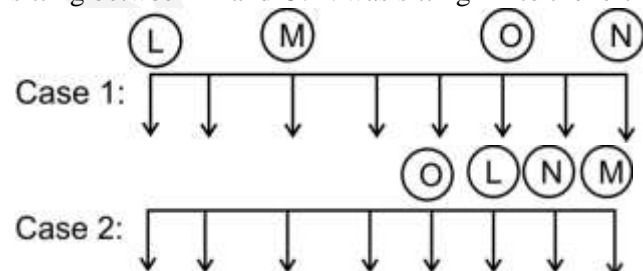
Two of them were sitting between K and J. J was neither an immediate neighbor of O, nor an immediate neighbor L.

Two kids were sitting between P and R. P was not an immediate neighbor of J. P and R cannot be placed in such a way in case2. So, case2 can be eliminated.

Hence, the final arrangement will be:

Case 1:
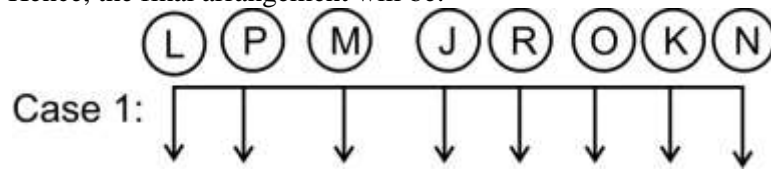
17 (b)

J was sitting third to the left of L.

18 (d)

4 kids were sitting between P and K.

19 (b)
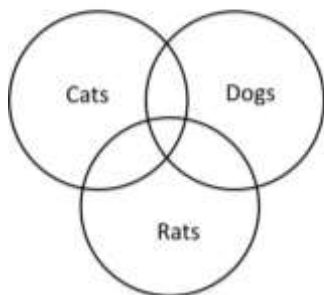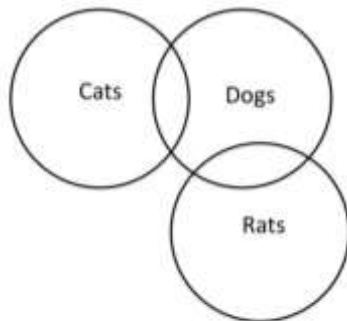
L and N were sitting at the extreme ends of the line.
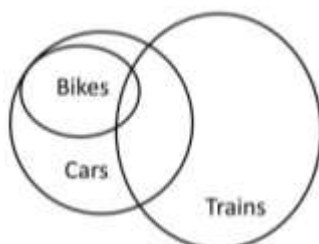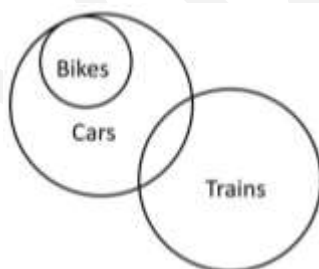
20 (b)

Let's draw Venn diagrams in each case.
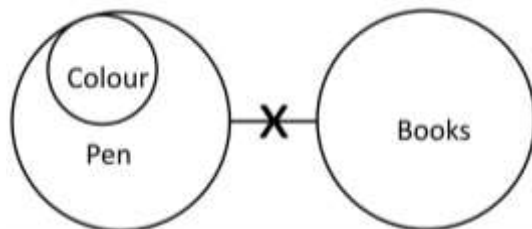**I.** Some cats are dogs. Some dogs are rats. Some cats are rats.

"Some cats are rats" is not definitely true.

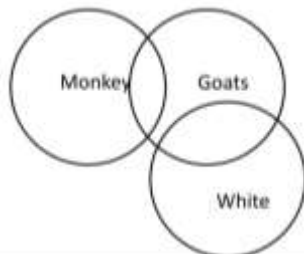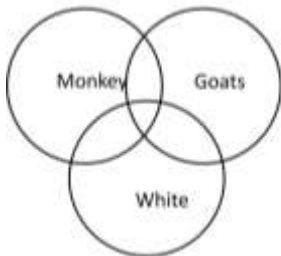**II**. All bikes are cars. Some cars are trains. Some bikes are trains.

"Some bikes are trains" is not definitely true.

III. No book is pen. Only pens have colours . No book has colours.
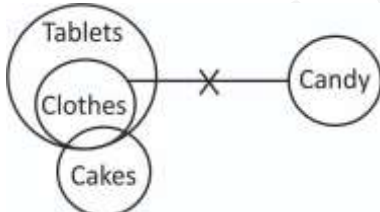

"No book has colours" is definitely true.

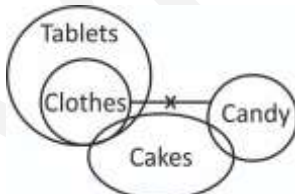**IV.** Some monkeys are goats. Some goats are white. Some monkey are white.

"Some monkeys are white" is not definitely true.
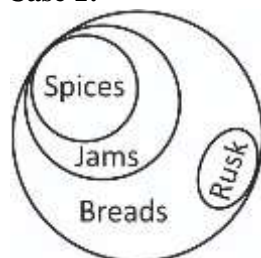Hence, option (b) is the right answer.

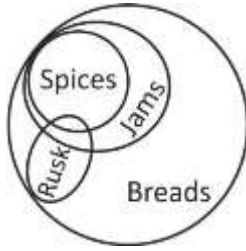**21 (b)**

Case 1:

Case 2:

Observing these two cases, we can say that only conclusions l and II are definitely true.
Hence, option (b) is the correct answer.

22 (c)

Case 1:

Case 2:

Observing these two cases, we can say that only conclusion lll is definitely true.

Hence, option (c) is the correct answer.

23 (c)

On combining the given inequalities, we get:

$O < P > M = C \leq B < Y$

Therefore, we can conclude that $M < Y$.

Hence, option (c) is correct.

Explanation for Questions 24-26:

In this arrangement all persons are sitting facing the south direction.

M sits fourth to the right of O. S sits fourth to the left of O. Only two persons sit between M and Q. R sits second to the right of Q. So, there are 2 possibilities.

| **Case 1:** | M | | R | - | Q | O | - | - | - | S |
| **Case 2:** | R | - | Q | - | - | M | - | - - | O | - | - | - | S |

Only three persons sit to the right of R. Also P sits to the immediate right of S.

Case 1:   -   -   M   R   -   Q   O   -   -   P   S

Case 2:

-     -   -   R   -   Q   -   -   M   -   -   -   O   -   -   P   S

Now, since not more than five persons sit between P and Q, so case2 can be eliminated. The final arrangement will be:

-     -   M   R   -   Q   O   -   -   P   S

24 (b)

25 (c)

26 (a)

27 (d)

Given that, 3<x<6…………………………. I

and 8<y<12………………………. II

So, on adding I and II, we get,

11<x+y<18

Now there may be two cases possible.

Case 1: When x and y both are integers, then the largest integer value of x+y is 5+11 = 16 (when x=5 and y=11).

Case 2: When x and y need not necessarily be integers (i.e. x and y individually may or may not be integers).

Let if x = 5.9 and y = 11.1 OR if x = 5.8 and y = 11.2 etc.

In this case the largest integer value of x + y is 17.

Individual value of x or y need not be given for the calculation of the largest integer value of x + y. However, we must know their nature (integer/non-integer).

Hence, option (d) is correct.

28 (d)

Assumption 1 is incorrect: The given assumption is not correct because the passage does not compare the role of local and national governments in the process of climate adaptation. It only mentions that local governments need to play a pioneering role in adapting to climate change as per the lines "Local governments are therefore at the frontline of adaptation."

Assumption 2 is incorrect: Refer to the lines, "throughout history, people and societies have adjusted to and coped with changes in climate and extremes with varying degrees of success.". Here, it talks about how people and societies have adjusted and coped with changes in climate. There is however, no mention of their role in accelerating climate change. Hence, this assumption is not correct.

29 (a)

Option (a) is correct: The given option is based on the following lines "**Our modern life is tailored to that stable climate**, not the much warmer climate of the next thousand years. **As our climate changes, we will need to adapt**" and "Climate change (drought in particular) has been at least partly responsible for the **rise and fall of civilizations**". These lines show that climate change causes devastation, but if we need to live our modern lives then we need to adapt to the changing climate. Further the lines, "**Local governments are therefore at the frontline of adaptation**. Cities and local communities around the world have been focusing on solving their climate problems." emphasise the role of local-level adaptation measures.

Option (b) is incorrect: The given option is not correct because it mentions 'reversal' of climate change with intervention at local levels. However, the passage focuses on adaptation to and not reversal of climate change at the local level as is clear from the lines, "**Local governments are therefore at the frontline of adaptation.** Cities and local communities around the world have been focusing on solving their climate problems." Hence, as per the passage, this is not the best crux of the passage.

Option (c) is incorrect: The option adds a new context of 'climate change mitigation', which is not a part of the passage. The passage only focuses on the adaptation to climate change as per the lines "Local governments are therefore at the **frontline of adaptation**. Cities and local communities around the world have been focusing on solving their climate problems." So, this option does not reflect the crux of the passage.

Option (d) is incorrect: The given option establishes a necessary relationship between adaptation measures at the local level to solving climate change at the global level. This statement is logically correct; however, such a relationship is not reflected in the passage. The passage states that since climate change is felt on a local level, local governments are at the forefront of adaptation as per the line "The faster the climate changes, the more difficult it will be. While **climate change is a global issue, it is felt on a local scale**. Local governments are therefore at the frontline of adaptation." However, to state that unless changes are done at the local level, climate change cannot be addressed at the global level would not be correct.

30 (b)

Option (a) is incorrect: There is no mention of the likely relative dependence of developed and developing countries on renewable energy in future. Hence, this option is not the crux of the passage.

Option (b) is correct: The lines, "This trend is anticipated to grow. A prediction of future power consumption is essential for the investigation of adequate environmental and economic policies. Likewise, an **outlook on future power consumption helps to determine future investments in renewable energy**" show that estimation of future energy demands will help allocate proper resources and ensure a smooth transition towards renewable energy. Therefore, this option is the best crux of the passage.

Option (c) is incorrect: The given option is not the best crux because it states that fossils are a thing of the past and renewables like solar energy are the future, which is an extreme-sounding and unrealistic judgement. Though the passage mentions increasing investments in renewable energy in future, it does not talk about giving up on fossil fuel-based energy. Moreover, the passage does not mention anything

regarding the use of fossil fuel, nor does it talk about solar energy per se. Hence, this option is beyond the scope of the passage.

Option (d) is incorrect: The given option seems to be based on the following lines "Hence, international comparisons are helpful to identify past, present, and future power consumption." But these lines do not talk about the history of renewable energy but rather a general understanding of the trend of energy consumption over the years. Therefore, the given option is not the best crux of the passage.
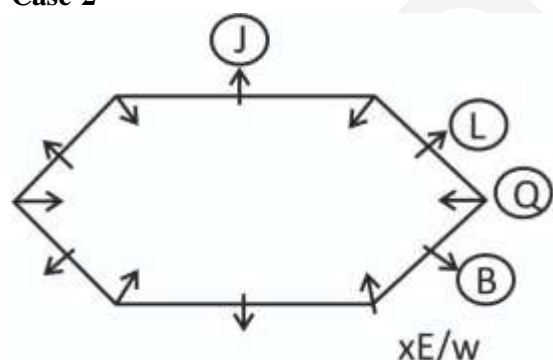
Explanation for Questions 31 – 34:

B sits fourth to the right of J, who faces away from the center. Also, only one person sits between B and L. L sits to the immediate right of Q. Neither E nor W sits adjacent to B. Two cases are possible:
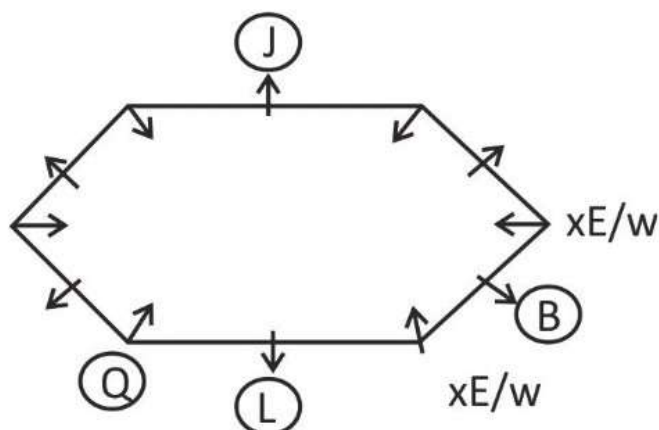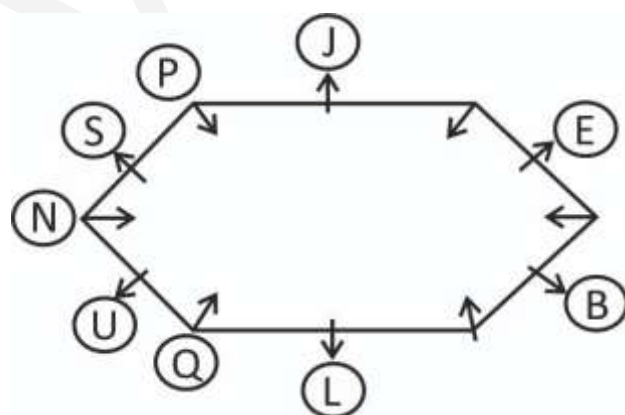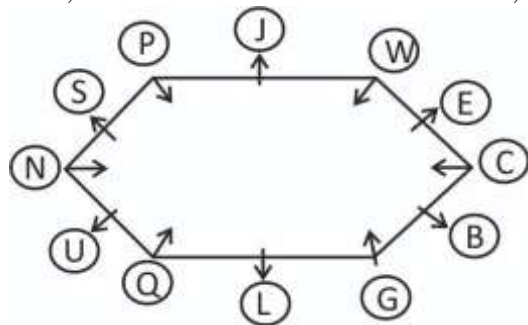
Case-1

Case-2

Now, P sits third to the right of U and is adjacent to S and J. N sits to the immediate left of S. Four persons sit between E and N. So, we can eliminate Case 2. Now, we get:

Case-1

Now, C sits second to the left of W. Hence, the final arrangement will be:

31 (b)

32 (c)

33 (a)

J is sitting seventh to the left of G.

34 (d)

Except G, L and C, all others are adjacent to each other.

35 (c)

From statement-1:
$A/E > B > — > —$
From statement-2:
$E > A > C$
From statement -1 and 2 together, we get:
$E > A > B > C/D$
Therefore, we can conclude that all are shorter than E.
Hence, option (c) is the correct answer.

36 (c)

Let a = number of patients having allergy from only one of the things, b = number of patients having allergy from exactly two of the things and c = number of patients having allergy from all three of the things.
Then, $a + b + c = 500$ (since each of the 500 patients had allergy from at least one of the things).
Given that $b = 20\%$ of $500 = 100$,
So, $a + 100 + c = 500$
or, $a + c = 400$……………… I
Also, if the number of patients who have allergy from pollen (40% of 500, i.e. 200) is added to the number of patients who have allergy from fur (50% of 500, i.e. 250), and this sum is added to the number of patients who have allergy from dust (60% of 500, i.e. 300), then each patient who has allergy from only one of the given things is counted exactly once, each patient who has allergy from exactly two of the given things is counted exactly twice and each patient who has allergy from all of the three given things is counted exactly 3 times.
Therefore, $a + 2b + 3c = 200 + 250 + 300 = 750$.
Using $b = 100$, we get:
$a + 2(100) + 3c = 750$
or, $a + 3c = 550$…………………. II
Solving equations I and II, we get,
$a = 325$.
Hence, option (c) is the correct answer.

37 (b)

The problem classified the job applicants into two categories:
Whether they had more or less than 2 years of experience, and whether they had an MBA degree.
The given information can be summarised in the following table:

	At least 2 years of experience	Less than 2 years of experience	Total
MBA degree			30
No MBA degree		5	
Total	24		50

Thus, according to the given information, 50 – 24 = 26 applicants had less than 2 years of experience. Then of those applicants with less than 2 years of experience, it is given that 5 applicants did not have an MBA degree, so 26 – 5 = 21 applicants had less than 2 years of experience and had an MBA degree. Therefore, out of the given 30 applicants that had MBA degrees, 21 applicants had less than 2 years of experience, so 30 – 21 = 9 applicants had at least 2 years of experience with an MBA degree.

These results are shown in the following table:

	At least 2 years of experience	Less than 2 years of experience	Total
MBA degree	9	21	30
No MBA degree		5	
Total	24	26	50

Hence the required ratio = 21/9 = 7/3 = 7:3.

Hence, option (b) is the correct answer.

38 (c)

Option (a) is incorrect: The given option seems to be based on the following lines "Many who struggle to secure the financial resources they require often, find themselves unduly swayed by the perspectives of others. They allow newspapers and gossipy neighbours to mould their beliefs and guide their thinking." However, to state that for achieving success one should desist from reading newspapers and listening to any person is not correct. The author of the passage tries to say that one should not blindly rely on word of mouth or newspaper reports for financial decision-making but also apply his/her reason.

Option (b) is incorrect: The given option is not correct as the passage does not specifically mention that decisions on financial matters are ones the most influenced by popular opinion, there could be other matters as well. The impact of others' opinions on other domains are not discussed in the passage and so a comparison cannot be made. The passage only implies that securing financial resources solely based on others' perspectives is not recommended. Refer to the line "Many who struggle to secure the financial resources they require often, find themselves unduly swayed by the perspectives of others.

Option (c) is correct: The given option best reflects what the passage implies. The lines "They can be readily imparted to **anyone willing to accept them**. **Relying on the judgments of others** to make decisions can undermine one's success in any pursuit. True success arises from the **ability to sift through external influence, cultivating independent, informed decisions** based on a clear understanding of one's goals", show that it is very important to make informed decisions that are based on a clear understanding of one's goals and by an objective and cautious consideration of external influence. Also, those decisions that are taken solely on the basis of gossip and opinions may fail. Therefore, it is important to listen to others' opinions and gather information about the matter but the ultimate decision should emerge from one's own subjective analysis and reasoning.

Option (d) is incorrect: The given option is not correct as the passage does not say that people's opinion compromises one's independent ability to reason and make informed decisions. The lines "They can be readily imparted **to anyone willing to accept them**. **Relying on the judgments of others** to make decisions can undermine one's success in any pursuit", mean that one should not blindly trust others' judgement and opinions on any issue. It does not mean that opinions compromise the ability to think. It only means that others' opinions have the power to influence one's attitude towards various matters if one

lets themselves be influenced. One has the autonomy to filter external influence and take independent decisions.

39 (d)

Option (a) is incorrect: The given option is not correct because it does not reflect the essence of the passage. This option focuses on people being the centre of any business, but the crux of the passage is the importance of good corporate governance as seen in lines "Effective governance ensures that companies maintain rigorous standards in areas like risk management, compliance with regulations, and responsible environmental and social practices." Hence, this option is not the best crux of the passage.

Option (b) is incorrect: The given option is very limited in context as it covers only one of the aspects of effective governance i.e., environmental and social practices. It is based on the lines "Effective governance ensures that companies maintain rigorous standards in areas like risk management, compliance with regulations, and **responsible environmental and social practices**." However, the passage is about the importance of good corporate governance which includes an efficient supply chain as well. Hence, this option is not better as compared to option (d).

Option (c) is incorrect: The given features in the option are not the foundational concepts of good corporate governance, but reflect its outcome, as per the lines "Furthermore, good governance practices **foster innovation and adaptability**, enabling businesses to respond swiftly to changing market conditions and emerging challenges." Hence, this option is not the best crux of the passage.

Option (d) is correct: The given option best captures the essence of the passage. The lines "This trust forms the basis for strong, **mutually beneficial relationships along the supply chain** …. These factors are vital for supply chain stability, as they reduce the likelihood of disruptions and costly setbacks. Furthermore, good governance practices foster innovation and adaptability, enabling businesses to **respond swiftly to changing market conditions and emerging challenges**", show that good governance is much more than a set of principles. Hence, this option is the best crux of the passage.

40 (d)

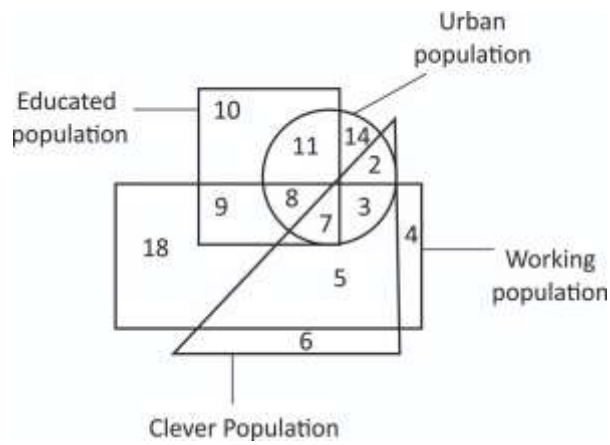The following Venn diagrams may represent the statements given in the question:
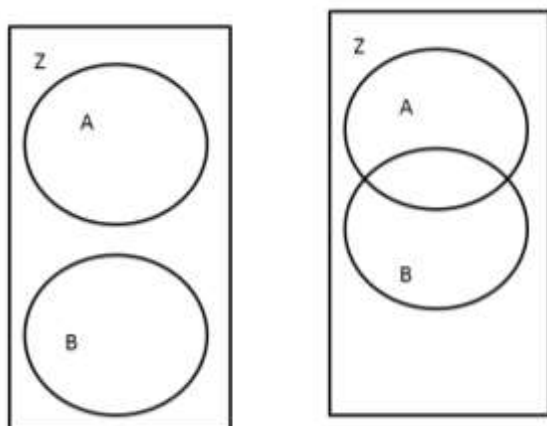
Clearly, none of the Conclusions can be true for sure.
Hence, option (d) is the correct answer.

41 (b)

2 is both even as well as prime. Both Prime numbers and Even numbers are subsets of Natural numbers. Hence, option (b) is the correct answer.

42 (c)

Given Venn Diagram:

Clever Population

On observing above Venn diagram, it is clear that:
Number of urban educated people who are clever = 7
Hence, option (c) is the right answer.

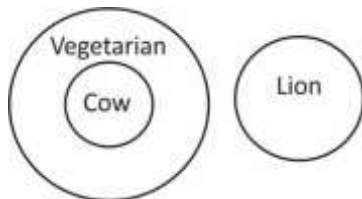**43 (d)**

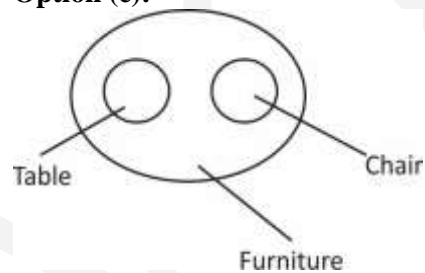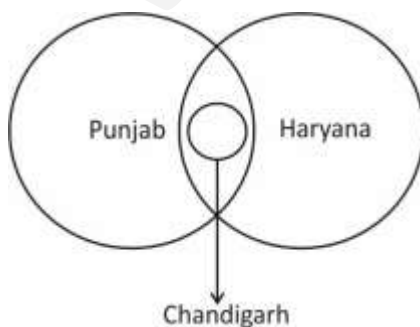Venn diagram of all options are as follows;
Option (a):
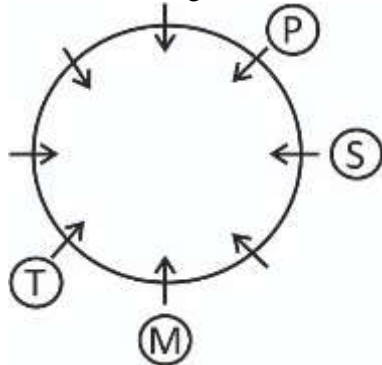

Option (b):

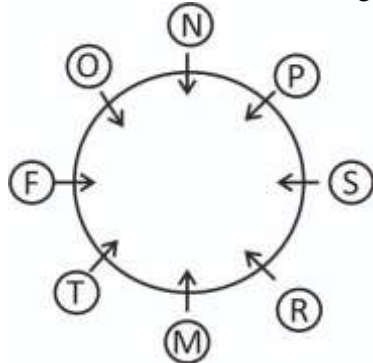**Option (c):**

Option (d):

Hence, option (d) is the correct answer.

Explanation for Questions 44-46:

P is 3rd to the right of M and to the immediate right of S. T is 3rd to the left of S.

Now, O is to the immediate right of N and to the immediate left of F.

44 (c)

45 (c)

4 persons are sitting between M and O when counting from the right side of the M.

46 (b)

Except P and F, all others are sitting adjacent to each other.

Explanation for Questions 47 and 48:

C was sitting 3rd to the left of D and both of them were facing the center. E was neither sitting adjacent to C nor sitting adjacent to D. The only person sitting between D and F was not facing the center.
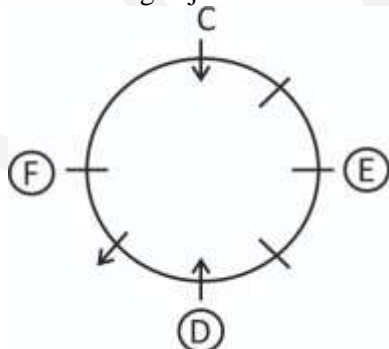
E and F were sitting across the table facing away from each other. G was sitting 3rd to the right of A and was facing the center. Hence the final arrangement will be:
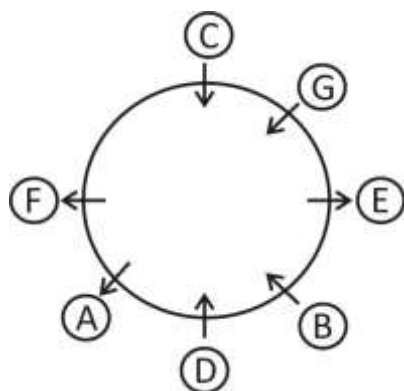
47 (d)

F was facing away from the center.

48 (b)

A was sitting 4ᵗʰ to the left of G.

49 (c)

Three magazines have been discontinued. None of the discontinued magazines are from Company A. So, the options- (a), (b) and (d) may or may not be true. Option (c) is certainly true.

50 (b)

Assumption 1 is correct: The given assumption is based on the line "Additionally, education can help bridge the urban-rural divide by **enabling rural youth to actively participate in emerging sectors, including technology and entrepreneurship**." This implies that lack of education is a reason for rural youth not participating in emerging sectors. Hence, this assumption is correct.
Assumption 2 is incorrect: The given assumption is not correct because the passage mentions that rural education will reduce immigration in already overcrowded cities as seen in the line "This can lead to more balanced regional development and **reduce migration pressures** on already overcrowded cities." This does not necessarily mean that rural education will make people leave or emigrate from those cities. Hence, this assumption is not correct.

51 (d)

Option (a) is incorrect: The given option is not correct as it does not capture the central theme of the passage. The option focuses on the intention of capitalists. However, the central theme of the passage is the relevance of hard work and making informed and intelligent life choices in achieving success as seen in the lines "Hard work has helped them get there, but only because they've chosen to focus on tasks, projects, and roles that align with their long-term growth goals." So, this option is not the best crux of the passage.
Option (b) is incorrect: The given option suggests prioritizing intelligent life choices over hard work, which is contradictory to the information given in the passage. The passage mentions the importance of both hard work and quality life choices in achieving success. This is reflected in the following line, "**Hard work has helped them get there,** but only because they've chosen to focus on tasks, projects, and roles that align with their long-term growth goals." So, this option is not the best crux of the passage.
Option (c) is incorrect: The passage does emphasize the importance of informed and intelligent choices. It says, "**Most people fail not because of a lack of effort but because their effort was misdirected or misaligned with their interests**" and "**People who make informed and intelligent choices about the work they choose to focus on have been quicker to reach success.**" However, the passage does not entirely negate the value of hard work. It adds, **Hard work has helped them get there, but only because they've chosen to focus on tasks, projects, and roles that align with their long-term growth goals**. "While option (c) is not entirely incorrect, it omits the continued importance of hard work when it is directed correctly.
Option (d) is correct: The given option is correct because it gives equal importance to informed and intelligent life choices and hard work on the road to success. Though hard work is an important contributing factor of success, the passage equally emphasises the role of taking informed and intelligent choices. It is reflected in the following lines, "Hard work has helped them get there, **but only because**

they've chosen to focus on tasks, projects, and roles that align with their long-term growth goals." Hence, this is the best crux of the passage.

52 (b)

Option (a) is incorrect: The given option is based on the following lines "While proponents argue that GM crops can enhance yields … potential allergenicity, and the **monopolistic control of seed markets by a few biotechnology companies**." These lines highlight the issues with monopoly, but this option does not reflect the central theme of the passage which is the importance of the precautionary principle in developing GM crops. Hence, this is not the best crux of the passage.

Option (b) is correct: The given option is the best crux and is reflected in the following lines "Policymakers, scientists, and stakeholders must prioritize comprehensive, independent research and transparent risk assessments to ensure the responsible development and deployment of GM crops, **considering the precautionary principle** to safeguard both our ecosystems and human health. **Ignoring this principle could have irreversible consequences for our environment and future generations**." Hence, we can conclude that precautionary principle may counter the concerns related to development of the GM crops.

Option (c) is incorrect: The option uses the phrase, "despite the precautionary principle". This means that even after adopting this principle, GM crops will be a double-edged sword. Now, this is an assumption which is not reflected in any line of the passage. The main theme of the passage is the need for the application of precautionary principles in GM crops as seen in the line "The **lack of emphasis on the precautionary principle in GM crop** discussions can result in hasty approvals and inadequate safety assessments." Hence, this option is not the best crux of the passage.

Option (d) is incorrect: The main theme of the passage is the need for the application of precautionary principles in GM crops which is not reflected in the option. The option mentions that things other than this principle are required to address the concerns associated with GM crops, which may be correct in general but not as per the passage. The passage focuses on the lack of emphasis on this principle as seen in the line "The **lack of emphasis on the precautionary principle in GM crop discussions** can result in hasty approvals and inadequate safety assessments." Moreover, "Grassroot participation of farmers" has not been discussed in the passage. Hence, this option is not the best crux of the passage.

53 (b)

The two of the possible cases are:
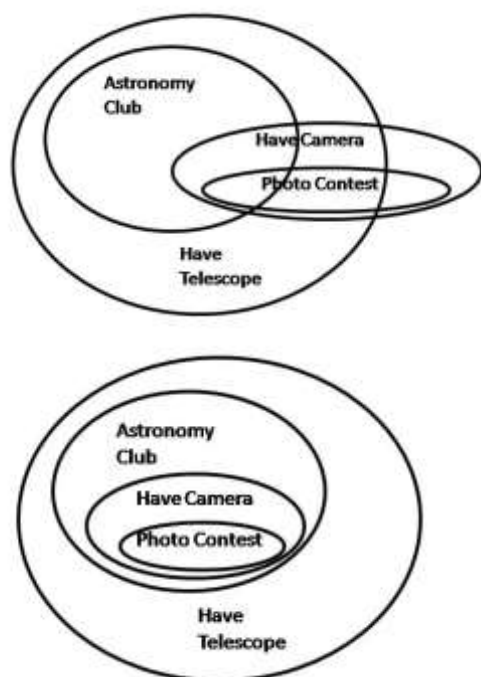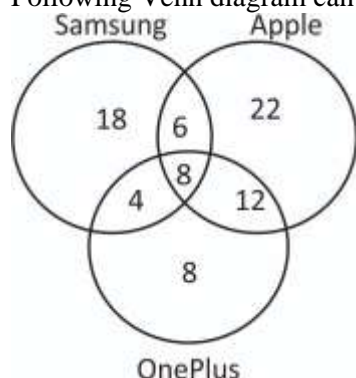

Clearly, option (b) is correct in both the cases.

54 (d)

$n(A \cup B \cup C) = n(A) + n(B) + n(C) - n(A \cap B) - n(B \cap C) - n(A \cap C) + n(A \cap B \cap C)$

$\Rightarrow 78 = 36 + 48 + 32 - 14 - 20 - 12 + n(A \cap B \cap C)$

$\Rightarrow n(A \cap B \cap C) = 8$

Following Venn diagram can be drawn based on this data:

Required ratio = 18 : 8 = 9 : 4

Hence, option (d) is the right answer.

55 (b)

From Statement 5:

	Coat	Tie
Accounts Teacher		
Business Studies Teacher		Orange
Commerce Teacher		

From Statement 2, Business Studies teacher's coat is not blue. So, it is must be black.

	Coat	Tie
Accounts Teacher		
Business Studies Teacher	Black	Orange
Commerce Teacher		

From statement 3, Commerce teacher's coat is not orange. So it must be blue. And from statement 4, green tie belongs to Commerce teacher. The final table is depicted below:

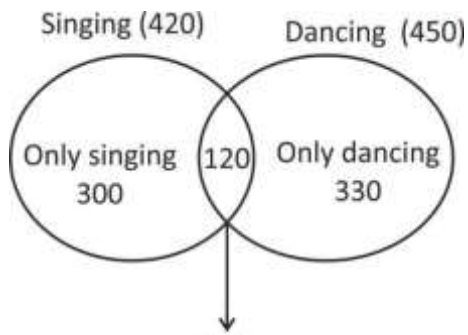|	Coat	Tie
Accounts Teacher	Orange	Yellow
Business Studies Teacher	Black	Orange
Commerce Teacher	Blue	Green

Hence, option (b) is the right answer.

56 (c)
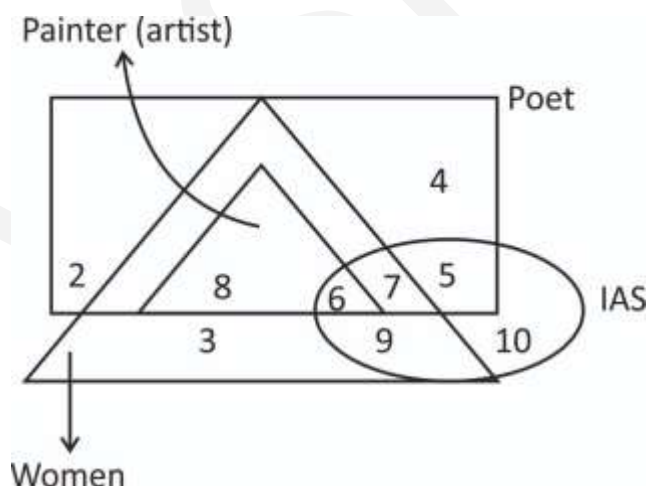
On observing the above Venn diagram, we can see that there are 6 women painters who are IAS.

Hence, option (c) is the right answer.

57 (c)

Based on the given information, following Venn diagram can be drawn:
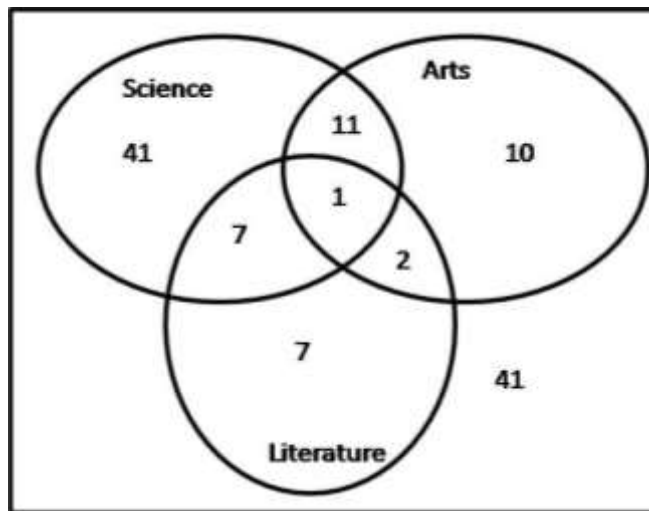
Total number of participants = 300 + 120 + 330 = 750

Hence, option (c) is the right answer.

Explanation for Questions 58 to 60:

We can represent the information in form of a Venn diagram, as shown below:

58 (a)

Students who opt neither for Arts nor for Science = 41 + 7 =48.

59 (a)

Students who do not attend classes for Arts, Science and Literature = 41

60 (d)

Students who study exactly two subjects = 11 + 7 + 2 = 20.

Explanation for Questions 61 to 63:

R sits 3rd from one of the ends, and 2nd to the right of V. V and T are immediate neighbors of each other. Two people sit between P and R. Two cases are possible:

Case 1:

| - | - | P | V | T | R | - | - |

Case 2:

| V | T | R | - | - | P | - | - |

S sits at one of the extreme ends. Two people sit between S and T. So, case2 can be eliminated.

Case 1:

| - | - | P | V | T | R | - | S |

U sits to the left of T, but to the right of Q. W sits to the right of Q. Hence, the final arrangement will be:

| Q | U | P | V | T | R | W | S |

61 (c)

Except T and R, people in all other pairs have one person between them.

62 (d)

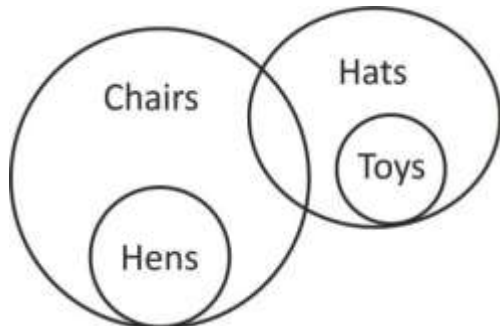S is sitting to the immediate right of W.
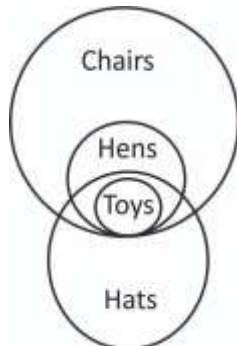
63 (c)

4 persons are sitting between U and W.

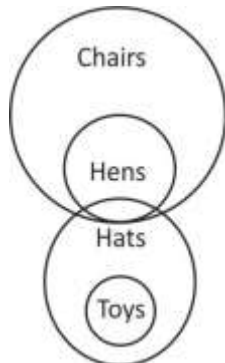**64 (d)**

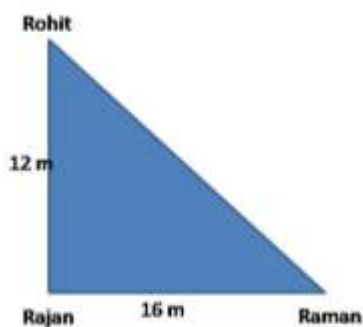Some of the possible cases have been depicted below:

Case 1:

Case 2:

Case 3:

From above, we can conclude that none of the given conclusions is definitely true.
Hence, option (d) is right.

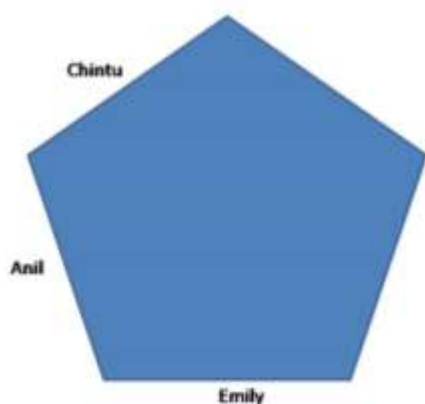**65 (d)**

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Length of hypotenuse in the above triangle, i.e. shortest possible path from Raman to Rohit = $(12^2 + 16^2)^{1/2} = 400^{1/2} = 20$ m

So, Shyam needs to walk at least 20 m. However, deviating from the shortest path, he may walk for more than 20 m too, say 21 m etc.

Hence, option (d) is the correct answer.

66 (c)

Anil and Chintu are next to each other. Neither Deepa nor Binny are next to Anil. So, Emily has to be next to Anil.

Deepa and Emily can be on any of the vacant chairs.

So, both the given statements are correct. Hence, option (c) is the correct answer.

67 (a)

Given Statements:

I. a > b > c = d < e

II. f ≤ g = h < c < i

By combining both the inequalities, we get:

a > b > c = d > h = g ≥ f

Therefore, conclusion I is true but conclusion II is false.

Hence, option (a) is the correct answer.

68 (c)

Value of Rs. 10 coins is twice the value of Rs 5 coins

It means that, Number of Rs 5 coins = Number of Rs 10 coins. = X (Assume)

Number of Rs 2 coins = 2 (Number of Rs 5 coins) = 2 (Number of Rs 10 coins) = 2X

Total number of coins = 2X (Rs 2 coins) + X (Rs 5 coins) + X (Rs 10 coins) = 4X = 4 times the number of Rs 5 coins

Hence, option (c) is the correct answer.

69 (d)

Assumption 1 is incorrect: The given statement is based on the following lines "Fake news presents strong, **often prejudiced opinions**, as fact. It **can also direct these opinions to those most likely to agree to reinforce them.**" However, the issues of India in this regard have not been discussed in the passage. So, it's out of context. Also, this statement is more of an implication than an assumption.

Assumption 2 is incorrect: The given statement is based on the line "Sometimes this is then reported as fact by real journalists.". This line shows that sometimes even real journalists get misled by fake news and present them as real news. However, this does not mean that those journalists are not trustworthy. It simply means that journalists need to be stringent with the verification of news before reporting.

70 (d)

Option (a) is incorrect: The given statement is not based on the information in the passage. It could be a rational implication as to what should be done to check fake news. However, it is not the crux because the central theme of the passage is how technology enables the faster transmission of fake news.

Option (b) is incorrect: The given statement is based on the lines "**Fake social media posts and accounts help make misinformation viral.**" However, it is not the crux because the central theme of the passage is how technology enables the faster transmission of fake news and social media sites are only a part of it. So, the context covered in this option is narrow as compared to the information given in the passage. Also, the passage is rather descriptive than focussing on providing solutions. Hence, this option is not the best crux of the passage.

Option (c) is incorrect: The given option is not correct because it mentions ethics as the issue. Though this could be a rational inference but not the crux because the central theme of the passage is how technology enables the faster transmission of fake news. The context of ethics is not covered in the passage. Hence, this option is not the best crux of the passage.

Option (d) is correct: The given option best reflects the crux of the passage because it is reflected in the following lines "**Fake news stories use technology and social media to look like proper news sites**" and "**Fake news presents strong, often prejudiced opinions, as fact.** It can also direct these opinions to those most likely to agree to reinforce them." These lines show that it is the technology which makes it easier to transmit fake news and consequently that news impacts the lives of the people negatively. Hence, this is the best crux of the passage.

71 (c)

Case 1:
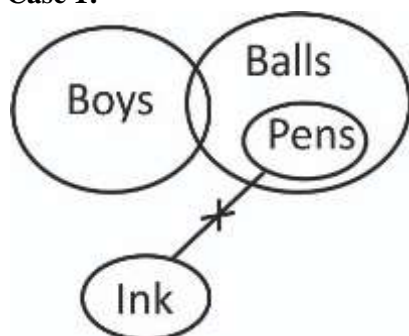
Case 2:
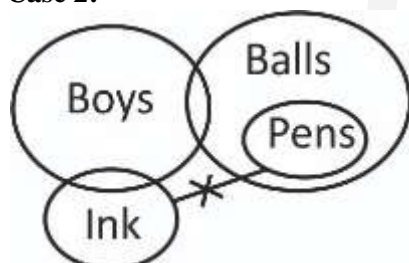
From above cases, we can say that only conclusions l and II follow.
Hence, option (c) is the correct answer.

Explanation for Questions 72 and 73:

Both A and B occupy offices on the left of the corridor as one enters in the direction given in the plan. E occupies office on the right.
Left → A, B,
Right → E
D and E occupy offices on opposite sides of the corridor but their offices do not face each other.
So, D occupies the office on the left
Left → A, B, D
Right → E
The other two – C and F must occupy offices on the right
Left → A, B, D
Right → E, C, F
E occupies a corner office and A does not occupy a corner office.
So, E can occupy any of the corner offices on the right and A has to occupy the middle office on the left.

→	Office 1	Office 2 (A)	Office 3
	Office 4 (E)	Office 5	Office 6

OR

→	Office 1	Office 2 (A)	Office 3
	Office 4	Office 5	Office 6 (E)

Now, offices of D and E do not face each other and offices of A and C face each other.

The arrangement of offices can be as per either of the two cases given below:

→	Office 1 (B)	Office 2 (A)	Office 3 (D)
	Office 4 (E)	Office 5 (C)	Office 6 (F)

OR

→	Office 1 (D)	Office 2 (A)	Office 3 (B)
	Office 4 (F)	Office 5 (C)	Office 6 (E)

72 (c)

As shown in the diagram above, office 6 may belong to either E or F.

73 (d)

Offices of B and F are farthest from each other in both the cases.

74 (d)

Shortest distance from G to A is: G-D-C-A
Distance = 9 + 18 + 5 = 32 km

75 (a)

Different routes from A to G are:
1. A – B – F – G
2. A – E – G
3. A – D – G
4. A – C – D – G

76 (a)

Using all the 3 statements, we get:
$D \leq X < Z = P = K \leq G = Q \leq C$
And, $D \leq X < Z = P = K \leq G = Q > T \geq S > R$
Therefore, we can say that relation between R and X is inconclusive, while $C \geq Z$.
Hence, neither conclusion I nor II follows.
Hence, option (a) is the correct answer.

77 (d)

Option (a):
$M > X > E = S < H \leq K$
'M > S' and ' K > S' are definitely true.
Option (b):
$M \geq X = E > S \leq H < K$
'M > S' and ' K > S' are definitely true.
Option (c):
$M = X > E \geq S < H < K$
'M > S' and ' K > S' are definitely true.
Hence, option (d) is the correct answer.

78 (d)

Inference 1 is incorrect: The given statement is not a rational inference because of the mention of "people's participation". The passage completely focuses on the misgovernance by the urban local bodies as seen in the lines "**Mismanagement, leakages, and inadequate maintenance** further exacerbate the problem. Ageing pipes and inadequate repair and maintenance programs result in significant water losses." All these issues are not people's issues but governance issues. Hence, this option is not correct.

Inference 2 is incorrect: The given option is not correct as supporting evidence cannot be gathered from the information given in the passage. The option states an extreme consequence of continued water shortage resulting from unchecked mis-governance of water-related infrastructure. This has not been discussed in the passage. The passage focuses on the governance issues leading to water shortages in urban areas. Hence, from the information given in the passage, we cannot infer that continued water shortage in urban areas could lead to the de-urbanization of our cities.

79 (a)

Assumption 1 is invalid: The given assumption is not correct because the passage mentions what investments can do in the context of employment in the social sector as seen in lines "Firstly, **investments in healthcare and education create a demand for skilled professionals**, … This not only provides jobs but also enhances the overall quality of human capital." We cannot say that lack of investment is the fundamental reason for poor employment. The reasons for this could be poor skills, etc. So, to assume that lack of investment is the fundamental reason for poor employment is not correct. Moreover, the passage hints towards increased investment in the social sector in the line – "However, **increased social sector expenditure** must be combined with efficient governance …"

Assumption 2 is valid: The given assumption is based on the lines "However, **increased social sector expenditure must be combined** with efficient governance, accountability, and **measures to combat corruption to ensure the funds** are effectively utilised." These lines mean that though social sector investments need to increase, it must be complemented by governance reforms and measures to reduce corruption. If corruption is not controlled, the funds invested will be diverted from their intended use and therefore will not be properly used for growth. Hence, this assumption is correct as per the passage.

80 (d)

Based on the given statement, there may be many possible cases, two of which are shown in the diagram below:
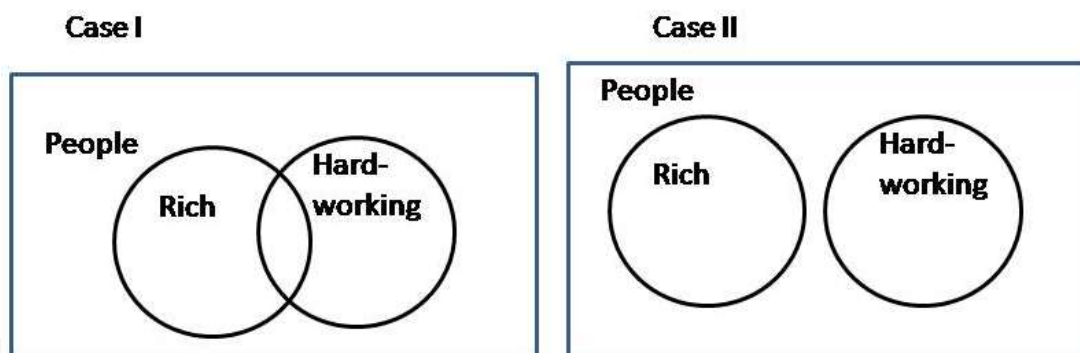
In each of the two cases, there may be or may not be some people outside the sets of Rich and Hard-working. Therefore, none of the conclusions given is definitely true.

Hence, option (d) is the correct answer.