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UPSC CSE PRELIMS 2026

OPEN TEST-01

GENERAL STUDIES PAPER – II(CSAT)

Key & Explanation

Q1. Answer: C

Assumption 1 is correct: The passage presents a description of Saturn's core, layers, and overall composition. It does not explicitly state how scientists know this information, but we can reasonably assume that it is not based on direct sampling. Given the extreme conditions described in the passage, we can infer that the information about Saturn's interior is derived from a combination of indirect observations and modelling. Hence, assumption 1 is correct.

Assumption 2 is correct: The passage states that a spacecraft wouldn't be able to fly through Saturn unscathed and that the extreme pressures and temperatures would melt and vaporize it. This directly implies that existing spacecrafts are not designed to survive such harsh environments. The passage assumes the limitations of current technology as a given. Hence, assumption 2 is correct.

Q2. Answer: B

Option (a) is not correct: The passage says that, *"Throughout history, philosophers have held different views as to whether revolution is a natural occurrence in a changing society or whether it indicates social decay."* So, nothing has been proved as of yet. Hence, option (a) is not correct.

Option (b) is correct: The passage says, *"Revolutions are born when the social climate in a country changes and the political system does not react in kind."* This establishes the core idea of a mismatch between societal shifts and political responsiveness as the primary catalyst for revolution. It highlights the importance of political systems adapting to social change. It further says, *"Plato linked revolution to social decay...system of values and a code of ethics that prevent upheaval."* This reinforces the idea of institutional failure as a contributing factor. It shows how the breakdown of established systems of values and ethics can create an environment ripe for revolution. It connects the social climate with the role of institutions in maintaining stability. Hence, option (b) is correct.

Option (c) is not correct: The author focuses not only on the Church's actions in one era, but also on the general dynamics that lead to revolutions, including the interplay between social change, political systems, and the role of institutions in shaping values and ethics. The medieval example is a supporting detail, demonstrating how institutions can strive to maintain order, but the passage's core message is a more comprehensive analysis of the causes and nature of revolutions across different contexts. Hence, option (c) is not correct.

Option (d) is not correct: The philosophical debate is introduced to illustrate different perspectives on revolution, but the core message focuses on the dynamics that lead to revolutionary upheaval. The fact that philosophers have discussed revolution for centuries is background information, not the central theme of the passage. Hence, option (d) is not correct.

Q3. Answer : A

Assumption 1 is correct: The passage explicitly connects 20th-century mathematical developments (like those in algebra) with major technological inventions (computers, the internet, cellphones). It highlights the impact of mathematics on society by showcasing these inventions. Therefore, it is rational to assume that the passage is based on the understanding that mathematical progress plays a crucial role in enabling technological advancements. Hence, assumption 1 is correct.

Assumption 2 is not correct: This answer option is incorrect because the passage, while mentioning abstract algebra and calculus, does not claim that these were the primary areas of mathematical research. It simply highlights them as important fields of study. Even in the passage we see a mention of the study of probability, risk analysis, etc. Hence, assumption 2 is not correct.

Q4. Answer : D

Option (a) is incorrect: While the passage mentions the Tuskegee Syphilis Study, which directly impacted human health, it does not limit the scope of ethics to only such research. The passage states that ethics in research *"ensures knowledge pursuit doesn't harm society or individuals, fostering responsible inquiry."* This is a broad statement that encompasses more than just health-related research. The mention of *"rapid technological advancements in fields like biotechnology and AI, raising ethical dilemmas regarding privacy, consent, and longterm societal impacts"* also extends the scope beyond immediate health impacts. Therefore, the passage implies a wider application of ethics. Hence, option (a) is incorrect.

Option (b) is incorrect: The passage emphasizes the importance of ethics in the context of *"rapid technological advancements... raising ethical dilemmas regarding privacy, consent, and long-term societal impacts."* This suggests that ethical considerations are important precisely because of the potential impact, even if that impact is not immediately apparent or easily quantifiable. Furthermore, the passage states that ethics in research *"... fostering responsible inquiry."* This holds across all fields of scientific research. It is also important to note that even theoretical physics can have significant societal impacts in the long run. Moreover, even if we consider this statement to be true, it cannot be the best inference that we can draw from the passage. Hence, option (b) is incorrect.

Option (c) is incorrect: The passage directly contradicts this statement. It states that ethics in research *"ensures knowledge pursuit doesn't harm society or individuals."* This prioritizes the prevention of harm over the unfettered pursuit of knowledge. The entire discussion of the Tuskegee Study serves as an example of the severe consequences that can arise when ethical considerations are neglected in the name of scientific progress. Therefore, the passage implies that ethical considerations are crucial and are not secondary. Hence, option (c) is incorrect.

Option (d) is correct: The passage states that the importance of ethics *"is heightened by rapid technological advancements in fields like biotechnology and AI, raising ethical dilemmas regarding privacy, consent, and longterm societal impacts."* This directly implies that as technology and science advance, new ethical challenges arise, requiring the adaptation and evolution of ethical principles to ensure that research remains responsible. The passage also mentions *"Increased public scrutiny also demands greater transparency and accountability."* This reinforces the idea that ethical practices must evolve with societal expectations and technological progress. Therefore, this option best reflects what is implied by the passage. Hence, option (d) is correct.

Q5. Answer : C

$P = a + b + c$ (where a, b and c are distinct prime numbers between 10 and 20.)

Prime number between 10 and 20 are 11, 13, 17 and 19

So, Possible values of "P" can be

1. $P = 11 + 13 + 17 = 41$ (where Unit digit = 1)

2. $P = 11 + 13 + 19 = 43$ (where Unit digit = 3)

3. $P = 13 + 17 + 19 = 49$ (where Unit digit = 9)

4. $P = 17 + 19 + 11 = 47$ (where Unit digit = 7)

Now, check the statements and find the similar digits.

1 and 3 can be the unit digit but 5 is not the possible value.

So, 5 cannot be the unit digit given in option (c).

Hence, option (c) is the correct answer.

Q6. Answer : A

In order to get a zero in the product there must be a pair of 2 and 5.

Since, all the numbers are odd (i.e., no '2') in the given equation, there will not be a zero Hence, option (a) is correct.

Q7. Answer : C

Let the fixed fees of the Gym be ₹ x and the variable fees (which is dependent on the member) is ₹ y, then

$$x + 10y = 600 \quad \dots(i)$$

$$x + 20y = 800 \quad \dots(ii)$$

Solving equations (i) and (ii),

we get; $\Rightarrow 10y = 200$

$$\Rightarrow y = 20$$

$$\Rightarrow x = 400$$

So, the total expense when there are 50 members = $x + 50y$

$$= 400 + 50 \times 20 = 400 + 1000 = \text{Rs } 1,400$$

Therefore average expense will be = $1400/50 = \text{Rs } 28$

Hence, option (c) is correct.

Q8. Answer : C

Let the total number of candidates who appeared for the examination be "x".

According to question, $70x - 30 \times (90 - 50) = 65x$

$$70x - 1200 = 65x$$

$$5x = 1200$$

$$x = 1200 \div 5 = 240$$

Hence, option (c) is correct

Q9. Answer : A

Let price of 1 cm cloth = ₹ 1

Price of 100 cm cloth = ₹ 100

Actual length bought with ₹ 100 = 120 cm

Actual length sold for ₹100 = 80 cm

Cloth saved = $120 - 80 = 40$ cm

Selling Price (SP) of 80 cm cloth = ₹ 100

SP of 40 cm cloth = $100/80 \times 40 = ₹ 50$

Profit = ₹50

Profit% = $\text{profit} / \text{CostPrice} \times 100$

Profit% = $50 / 100 \times 100 = 50\%$

Hence, option (a) is correct.

Q10. Answer : A

Given, speed of 'A' = 2 rounds per hour

Speed of 'B' = 3 rounds per hour

Since, 'A' and 'B' are moving in opposite directions

Relative speed of 'A' w.r.t. 'B' = $2 + 3 = 5$ rounds/hour

Hence, they will cross each other 5 times in an hour

From 8 a.m. to 9:30 a.m. (i.e., 1.5 hrs duration), they will cross = $5 \times 1.5 = 7.5$ times

Thus, they will cross each other 7 times in the given duration.

Hence, option (a) is correct.

Q11. Answer : C

Ratio of time = $6k : 5k = 6 : 5$

Ratio of efficiency = $5 : 6 = \text{Number of men needed earlier:}$

Number of men needed actually

Required percentage = $(6-5)/5 \times 100 = 20\%$

Hence, option (c) is correct.

Q12. Answer : A

Let 'n' be the number of teams.

$$nC_2 = 36$$

$$n(n-1)/2 = 36$$

$$\Rightarrow n(n-1) = 72$$

$$n^2 - n - 72 = 0$$

$$n^2 - 9n + 8n - 72 = 0$$

$$n(n-9) + 8(n-9) = 0$$

$$(n-9)(n+8) = 0$$

$$\Rightarrow n = 9 \text{ [Since, } n \neq -8]$$

Hence, option (a) is correct.

Q13. Answer : C

Option (a) is not correct: While the difficulty in distinguishing between teasing and bullying is an important point, the passage primarily focuses on the importance of recognizing and addressing harmful behavior, especially in the context of online interactions. Hence, option (a) is not correct.

Option (b) is not correct: The escalation of teasing to bullying is an important point in the context of the passage. However, it cannot be considered the main idea of the passage. The passage provides a broader perspective on bullying, emphasizing its recognition, prevention and the importance of seeking help. Hence, option (b) is not correct.

Option (c) is correct: The passage says, "Sometimes they'll laugh it off with a 'just kidding,'... laughing at you instead of with you, then the joke has gone too far." This emphasizes that even if the intent seems harmless, the impact on the recipient matters. If someone feels hurt or targeted, the behavior, even if unintentional, can be considered bullying. The passage further adds – "Call it what you will – if you feel bad and it does not stop, then it's worth getting help." Hence, option (c) is correct.

Option (d) is not correct: This statement is incorrect because it makes a comparison between different forms of bullying which is not explicitly or implicitly stated or supported by the passage. The passage focuses on the negative impact of bullying in general, without making a direct comparison between online and offline forms. Though the passage says that "When the bullying takes place online, it can result in unwanted attention from a wide range of people, including strangers.", we cannot infer from it that online bullying is more sinister. Moreover, such a comparison cannot be the main idea that the author wants to convey anyways. Hence, option (d) is not correct.

Q14. Answer : C

Assumption 1 is valid. The passage critiques standardized syllabi and rigid pedagogies for fostering intellectual conformity and diminishing originality.

Assumption 2 is valid. The passage explicitly acknowledges that mass education, while flawed, contributes to empowerment and upward mobility for many.

Q15. Answer : D

Option a is incorrect: This reflects the very technocratic mindset that the passage critiques—it valorizes interventionist logic over philosophical/ethical grounding.

Option b is incorrect: The passage does not dismiss modern science but critiques the emphasis on visibility without deeper commitment; it acknowledges traditional methods without suggesting exclusivity.

Option c is incorrect: . Misleading. The passage does reference spiritual elements but does not argue that ethical environmentalism is solely about symbolism over outcomes.

Option d is correct: This option reflects the core tension of the passage—the contrast between superficial beautification and deeper ethical/environmental responsibility.

Q16. Answer : C

Option a is incorrect: The passage explicitly condemns the industry's ethical and environmental costs, stating they create "moral conflicts." It does not justify these costs but questions them.

Option b is incorrect: While sustainability efforts are mentioned, the passage notes they "struggle against systemic exploitation," indicating they are insufficient.

Option c is correct: The passage repeatedly contrasts economic benefits with harm to workers, animals, and the environment, directly linking ethical issues to profit-driven priorities.

Option d is incorrect: Cultural relevance of leather is acknowledged, but the passage emphasizes the urgency of addressing ethical concerns, not dismissing them.

Q17. Answer : C

In order to keep the average weight of the 30 children as high as possible, we need to keep the average weight of the 15 children above 8 kg as low as possible.

Since the weights of all children are in integral kilograms, the least value that the 15 children above 8 kg can take is 9 kg.

So, the sum of the weights of 15 children = $15 \times 9 = 135$ kg

So the sum of the weights of the remaining 30 children = $8 \times 45 - 135 = 225$ kg

Hence, the average weight of the remaining 30 children is $225/30 = 7.5$ kg.

Hence, option (c) is correct.

Q18. Answer : B

$$5 \times 1 + 3 = 8$$

$$8 \times 3 - 5 = 19$$

$$19 \times 5 + 7 = 102$$

$$102 \times 7 - 9 = 705$$

$$705 \times 9 + 11 = 6356$$

$$6356 \times 11 - 13 = 69903$$

Hence, option (b) is correct.

Q19. Answer : D

Let the number of coins be x,y,z.

$$x + y + z = 150 \quad \dots\dots\dots(1)$$

$$5x + 10y + 20z = 2100 \quad \dots\dots\dots(2)$$

Multiply equation (1) by 5 and get, $5x + 5y + 5z = 750$

(2) - (1) and get

$$5y + 15z = 1350$$

$$\Rightarrow y + 3z = 270$$

We need to maximise the value of 'z', so we need to minimise 'y'.

If y = 0, then z = 90.

Highest possible value of Rs. 20 coins can be 90.

Hence option (d) is the correct answer.

Q20. Answer : D

As X and Y are not defined set of numbers, the value of V cannot be determined. So the answer must be none of these.

Q21. Answer : C

Only two people are shorter than T. The number of people shorter than T is equal to the number of people taller than Q.

$$_ > _ > Q > T > _ > _$$

S is taller than only U.

$Q > P > T > S > U$

Q is taller than S but shorter than P. P is not the tallest.

$R > P > Q > T > S > U$

The shortest person has a height of 148 cm.

So, we get: $R > P > Q > T > S > U$ (148 cm)

Now, the average height of U and T is 151 cm, i.e. $U + T = 151 \times 2 = 302$ cm

or $T = 302 - U = 302 - 148 = 154$ cm

So, $154 \text{ cm} > S > 148 \text{ cm}$

On scanning the given options, we can see that the possible height of S is 152 cm.

Hence, option (c) is correct.

Q22. Answer : C

$n = 4p$

Since p is a prime number greater than 2, p must be odd.

Also, since p is a prime number, the only factors of p are p and 1.

So, factors of $4p$ would be: 1, 2, 4, p, $2p$, $4p$

The fact that p is not 1 or 2, means that $2p$ cannot be 1, 2 or 4. Similarly, $4p$ cannot be 1, 2 or 4. So they are all distinct factors.

2, 4, $2p$, and $4p$ are even factors.

Therefore, the number of even divisors of n is 4. So, statement I is correct.

1 and p are odd factors. Therefore, the number of odd divisors of n is 2. So, statement II is incorrect.

So, option (c) is the correct answer.

Q23. Answer : A

Given that sum of marks of 6 students = $72 \times 6 = 432$

$80 + (\text{marks of remaining 5}) = 432$

$\Rightarrow$ Marks of remaining 5 = 352

80 is not the lowest as $5 \times 80 > 352$

80 is not the 2nd lowest as $80 \times 4 + 50 > 352$

Let the lowest 3 marks be 50, 51, and 52.

Let the highest 2 marks be x and $x + k$

Then, $2x + k + 153 = 352$

$\Rightarrow 2x + k = 199$

Putting $k = 1$, we get $x = 99$

Hence, required maximum difference = $99 - 51 = 48$.

Hence, option (a) is correct.

Q24. Answer : A

Given statements are:

1. All numbers are divisible by 2

2. All numbers are divisible by 3

Conclusion-I is true, because all numbers which are divisible by 2 and 3 must also be divisible by 6.

Conclusion-II is false, because all numbers which are divisible by 2 and 3 need not be divisible by 4.

Hence, only conclusion I logically follows.

Hence, Option (a) is the correct answer.

Q25. Answer : D

Option (a) is incorrect: There is no "confusion" regarding the methodology or classification- the author does not mention anything as a confusion. (S)he only states that the current methods of estimating poverty are

narrow, i.e. inadequate. (S)he tries to convey that poverty goes beyond income and purchasing power- it is about restricted choices and lack of real opportunity.

Option (b) is incorrect: The assertion made in this option goes beyond the scope of the passage. In fact, there is no talk of the rural or urban poor in the passage.

Option (c) is incorrect: This option also goes beyond the scope of the passage. No line in the passage leads to the assumption that "There is no uniform global standard for measuring income poverty."

Option (d) is correct: This is the main message being stressed by the author, who explains through the various lines of the passage that measuring poverty through the lens of income or purchasing power (buying capacity) is only a narrow way of looking at poverty. We must look at other factors that restrict choices and opportunities for individuals, income being just one part of it. Various lines in the passage indicate the same- For example, "extremely narrow definition of 'who is poor' and the debatable methodology used to count the poor, but also because of a more fundamental assumption underlying it. It exclusively relies on the notion of poverty as insufficient income or insufficient purchasing power."

Q26. Answer : A

Option (a) is correct: This option follows from the lines, "income poverty. If poverty is ultimately about deprivations affecting human well-being, then income poverty is only one aspect of it." The author, in the passage, later goes on to describe poverty, in the true sense, stems from a "lack of real opportunity given by social constraints as well as personal circumstances—to choose other types of living."

Option (b) is incorrect: This option is rather extreme and goes beyond the scope of the passage. Nothing in the passage talks about the factors affecting the purchasing power of a person.

Option (c) is incorrect: This option is beyond the scope of the passage. There is no mention in the passage of income being a temporary or permanent condition.

Option (d) is incorrect as the passage does not lay out a time consideration (i.e. when does income poverty affect human choices by restricting them- whether only at a point of time or always, till such poverty exists) anywhere while suggesting how income poverty affects or restricts human choices.

Q27. Answer : C

Option (a) is incorrect as the passage is referring to those people who are not able to accumulate sufficient money to meet their needs. It does not say what proportion of people are able to or fail to accumulate money. Thus, statement 1 that most people do not accumulate money to meet their needs is not implied by the passage.

Option (b) is incorrect Similarly, the implication given in statement 2 that most people do not fail to accumulate money is also incorrect.

Option (c) is correct as the passage talks about the majority of those people who are not able to accumulate sufficient money to meet their needs. This would imply that there are groups of people who are not able to accumulate money to meet their needs.

Option (d) is incorrect: The passage does refer to the necessity for accumulating money to meet one's needs. And if one does not, then (s)he will be misled by a plethora of (incorrect) opinions and would ultimately never succeed in life. This is reflected in the lines "The majority of people who fail to accumulate money sufficient for their needs, are generally, easily influenced by the opinions of others." and "If you are influenced by opinions when you reach decisions, you will not succeed in any undertaking."

Q28. Answer : A

Option (a) is correct as the passage concludes by saying that to succeed in any undertaking, people should not be influenced by the opinion of others when they make decisions.

Option (b) is incorrect as the author is not suggesting a need to “accumulate” money as such, beyond one’s needs. It only talks about “money sufficient for their needs” and not as much money as possible.

Option (c) is incorrect as although the passage states that opinions are the cheapest commodity, it does not suggest that people should stop giving or accepting advice altogether. There may be genuine and important advice, which might be important and vital. Understanding the entire tone of the passage, the author seems to only make a case against the unwarranted advice, which would harm rather than benefit people. So, it prescribes that people should not be influenced by others’ opinions easily while reaching decisions.

Option (d) is incorrect as the passage says that people will not succeed if they accept others’ opinions when reaching a decision. However, we cannot infer that if one does not accept such opinions, the person would succeed in their enterprise, as this might be dependent on many other factors as well.

Q29. Answer : B

Downstream speed = $24 + 8 = 32$ km/hr

Upstream speed = $24 - 8 = 16$ km/hr

Therefore, the required percentage = $32/16 \times 100 = 200\%$

Hence, option (b) is correct.

Q30. Answer : C

Let the quantities of alcohol be $2k$ for alcohol A, $3k$ for alcohol B, Xk for alcohol C.

The concentrations of alcohols A, B, and C are 10%, 20%, and 30%, respectively.

This means that the amounts of pure alcohol in each component are:

From A: $0.10 \times 2k = 0.2k$,

From B: $0.20 \times 3k = 0.6k$,

From C: $0.30 \times Xk = 0.3Xk$

The total amount of pure alcohol in the mixture is: $0.2k + 0.6k + 0.3Xk = (0.8 + 0.3X)k$

The total volume of the mixture is: $2k + 3k + Xk = (5 + X)k$

The concentration of alcohol in the mixture is given as 23%.

This means the amount of pure alcohol divided by the total volume should be 23%.

Thus, we set up the equation: $(0.8 + 0.3X)k / (5 + X)k = 0.23$ $X = 5$.

Hence, option (c) is correct.

Q31. Answer : B

We are arranging 8 digits in total, where we have 2 occurrences of 4, 3 occurrences of 5, and 3 occurrences of 6.

The number of distinct arrangements is given by the formula for the multinomial coefficient: Number of ways = $8! / (2! \times 3! \times 3!)$ Where:

$8!$ is the total number of ways to arrange 8 digits without any restrictions,

$2!$, $3!$, and $3!$ account for the repeated digits (the two 4's, three 5's, and three 6's).

Number of ways = 560

Hence, option (b) is correct.

Q32. Answer : A

New salary = $17000 (100\% + 5\%) = 17850$

Deduction amount of transport allowance = 850

Net salary = $17850 - 850 = 17000$

Hence option (a) is the correct answer.

Q33. Answer : C

$112 \Rightarrow (1+1+2 = 4) \Rightarrow 112+4 = 116$

$116 \Rightarrow (1+1+6 = 8) \Rightarrow 116+8 = 124$

$124 \Rightarrow (1+2+4 = 7) \Rightarrow 124+7 = 131$

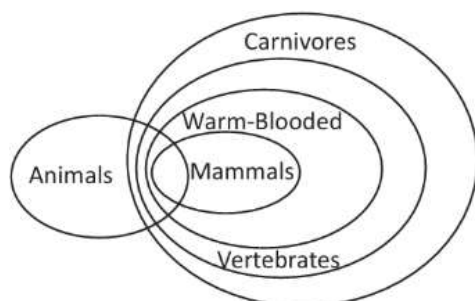
$131 \Rightarrow (1+3+1 = 5) \Rightarrow 131+5 = 136$

$136 \Rightarrow (1+3+6 = 10) \Rightarrow 136+10 = 146$

Hence option (c) is the correct answer.

Q34. Answer : A

As per the given statements the following Venn diagram can be made:



From the above Venn diagram we can say that:

Some mammals are animals: Follow

All warm-blooded creatures are animals: Not Follow

Some animals are warm-blooded: Follow

All animals are vertebrates: Not Follow

Hence, option (a) is the correct answer.

Q35. Answer : B

Total expenditure = Fuel consumption per month × Petrol price

= (Distance covered per month / Mileage) × Petrol price

Before price hike, total expenditure = $(2200/16) \times 90$ (i)

Let the distance covered per month after price hike be d km.

Petrol price after price hike = $90 + 10\% \text{ of } 90 = 90 + 9 = \text{Rs. } 99$

And, after price hike, total expenditure = $(d/16) \times 99$ (ii)

As the expenditure remains the same in both cases, we get:

$(d/16) \times 99 = (2200/16) \times 90$

Or $99d = 2200 \times 90$

Or $d = 2000 \text{ km}$

Reduction required = $2200 - 2000 = 200 \text{ km}$

Hence, option (b) is correct.

Q36. Answer : C

If the numbers are 1 and 11, there are two numbers between them that are divisible by 5 (i.e. 5 and 10).

However, if we consider the numbers 5 and 15, there is only one number between them that is divisible by 5 (i.e. 10).

Hence, there can be one or two such numbers in the given range, depending on the range we choose.

Hence, option (c) is correct.

Q37. Answer : B

Statement 1 is not a valid assumption. It is nowhere indicated in the passage that small and marginal farm size is a hurdle in structural and rural transformation. Passage only mentions that 85 per cent of Indian farms are small and marginal. Statement 2 is a valid assumption. "Research reveals that the relative price scenario changed significantly (by more than 50%) in favour of agriculture in the wake of rising global prices. This boosted private investments in agriculture by more than 50%."

Statement 2 can clearly be stated from the above mentioned sentence.

Statement 3 is not a valid assumption. The passage nowhere clearly talks about the need to build value chains for high-value agri-products like livestock and horticulture in India. It only makes mention of structural and rural transformation alongwith boost in private investment.

Statement 4 is a valid assumption. Assumption can directly be derived from the sentences in the passage. "India's poverty reduction was slow during 1988-2005, but during 2005-2012, it accelerated dramatically—almost three times faster than during the earlier period. What did India do during this period? Research reveals that the relative price scenario changed significantly (by more than 50%) in favour of agriculture in the wake of rising global prices. This boosted private investments in agriculture by more than 50%."

Q38. Answer : D

The main theme of passage is poverty reduction in India and it highlights two reasons for poverty reduction in countries like China, Vietnam and India. Firstly, by structural and rural transformation (in China & Vietnam) and secondly, by relative change in price scenario in wake of rising global prices which in turn boosted private investment in agriculture (in India).

So, option (c) seems right answer but option (d) carries broader ambit. "Inclusive agriculture growth" can be interpreted as agriculture with structural changes where there is scope for building value chain for high value agri-products, transformation of villages, along with investment from both private and public entities.

Q39. Answer : C

Statement a is incorrect. Though the passage states "The development of agriculture, after green revolution, has slowed down due to structural and technological stagnation", the statement does not best reflect the most logical and rational inference that can be made from the passage as it does not talk about middle class in India.

Statement b is incorrect. While the passage states "the rural middle classes harbour a deep-seated antagonism and conflict with urban middle classes, entrepreneurs, and professional groups", the statement does not best reflect the most logical and rational inference that can be made from the passage as it does not talk about the similarities between rural and urban middle class in India.

Statement c is correct. The statement best reflects the most logical and rational inference that can be made from the passage as it highlights both the similarities and conflicts between the rural and urban middle class in India. It is mentioned in the passage as "The rural middle class in India shares an ideological affinity with their urban counterparts." "on another level, the rural middle classes harbour a deep-seated antagonism and conflict with urban middle classes." "Stagnation (in agriculture) has resulted in downward mobility in social and economic status for the rural middle classes."

Statement d is incorrect. The passage highlights that urban counterpart of rural middle class continued to flourish due to absence of stagnation in the economy. However, the statement does not best reflect the most logical and rational inference that can be made from the passage as it does not talk about the rural middle class in India.

Q40. Answer : B

Statement 1 is incorrect: This statement is incorrect because of the use of the word "inherently". The passage states that "The reality is that because the organic farming industry is still young and not well-regulated in India, farmers and consumers, alike...in ways that could harm them as well." Therefore, we must infer that organic farming is not inherently unsafe for both farmers and consumers, but might be unsafe due to factors such as lack of regulation, "organic fertilizers are difficult to obtain on a large scale", "If, not applied in the right dose" etc.

Statement 2 is correct: This assumption closely aligns with the content of the passage. The passage discusses the confusion among farmers and consumers due to the lack of regulation and research in the organic farming industry. This implies that there is a need for more education about what constitutes eco-friendly food and how it should be produced and consumed safely.

Q41. Answer : C

Option (a) is incorrect: It is a little extreme in drawing an inference that In India, organic farming should not be promoted as a substitute for conventional farming. The passage is using a cautionary, rather than an

exaggerated, tone regarding organic farming. Further, the author is nowhere found comparing or even promoting conventional farming at the cost of organic farming in the passage.

Option (b) is incorrect: This option is extreme. Nowhere has the author indicated that there are no safe organic alternatives to chemical fertilizers. In fact the author of the passage states the contrary that “since organic fertilizers are difficult to obtain on a large scale in India” implying that safe (can assume safe) organic alternatives to chemical fertilizers are present, but not accessible or readily available.

Option (c) is correct: The passage mentions, “The reality is that because the organic farming industry is still young and not well-regulated in India, farmers and consumers, alike, are not only confused about what products are best for them, but sometimes use products in ways that could harm them as well.” The passage in the further lines goes on to explain the same. Therefore, we can correctly infer that In India, farmers need to be guided and helped to make their organic farming sustainable.

Option (d) is incorrect: This option is extreme. The passage does not discuss the profit or market aspect of organic farming at all.

Q42. Answer : D

Let C.P. = Rs. 100

So, M.P. = $1.25 \times 100 = \text{Rs. } 125$

Now, the shopkeeper offers two successive discounts of 20% and 15% on the marked price.

So, S.P. = $125 \times 0.80 \times 0.85 = \text{Rs. } 85$

So, Loss = CP – SP = $100 - 85 = \text{Rs. } 15$

And, Loss% = $(15/100) \times 100 = 15\%$

Hence, option (d) is correct.

Q43. Answer : C

S1 : R is greater than P as we as Q, i.e. $R > P/Q$

S2 : S is not the largest number.

Either of the two statements alone is not sufficient to answer the question.

Reading both statements together, we can conclude that:

$R > P/Q/S$

Hence, we can say that S1 and S2 together are sufficient to answer the question.

Hence, option (c) is the answer.

Q44. Answer : C

Let the correct attempted questions are ‘x’.

Let the incorrect attempted questions are ‘y’.

According to the question,

$x+y+12 = 100$

So, $x+y = 88$ (1)

Marks obtained = 68.

Equation becomes $2*x - y - 12/2 = 68$

So, $2*x - y = 74$ (2)

From eq 1 and 2, We get

$x = 54$.

Hence, option (c) is the answer.

Q45. Answer : C

The given sequence: a_b e _c b_d a c_e d

There are a total 15 letters in the sequence.

Let's break this sequence into three sets of 5 alphabets each.

(i) a_b e _

(ii) _c b_d

(iii) a c_e d

By 2nd and 3rd we can observe that the sequence is a repetition of acbed.
Hence the complete sequence is acbed/acbed/acbed
Hence, option (c) is correct.

Q46. Answer : B

The interval of leaving two metro = 30 minutes

The time for the next metro = 15 minutes

Time passed = 30 – 15 = 15 minutes

The required time for the information given by the station master = 9:10 + 0:15 = 9:25 Hence, option (b) is correct.

Q47. Answer : D

$XYZXYZ = XYZ000 + XYZ = XYZ(1000 + 1) = XYZ \times 1001$

Now, $1001 = 7 \times 11 \times 13$

So, any number of the form $XYZXYZ$ must be divisible by 7, 11 and 13.

Hence, option (d) is correct.

Q48. Answer : B

Given sequence: 5 1 4 7 3 9 8 5 7 2 6 3 1 5 8 6 3 8 5 2 2 4 3 4 9 6

The odd numbers followed by another odd number are: 5, 7, 3, 5, 3, and 1.

So, required number of odd numbers = 6

Hence, Option (b) is the correct answer.

Q49. Answer : B

Option (a) is incorrect: The passage does not discuss what qualifies for the home range of the elephants. It rather discusses the importance and benefits of elephants for the forest ecosystem.

Option (b) is correct: The passage discusses this aspect in the entire and each line of the passage.

Option (c) is incorrect: While this option might seem true, as the passage does discuss the importance of elephants to a point where their presence might seem critical in the forest ecosystem, the passage does not go to the extent of stating that the rich biodiversity in the forests cannot be maintained without the presence of elephants. For example, there might be another species/ multitude of species that could maintain the rich biodiversity of forests even in the absence of elephants. Hence, it would be extreme and incorrect to infer that the rich biodiversity of the forests cannot be maintained in the forests without the presence of elephants.

Option (d) is incorrect: This option is incorrect because it mentions “as per their requirement”. The passage shows that elephants regenerate forests in an involuntary manner (not as per their consciousness or own requirements per se), for example, they “propagate(ing) the seeds when they defecate...Elephant dung acts as a breeding ground for insects.” Further, one might argue that the passage mentions “In times of drought, they access the water by digging holes which benefits other wildlife” which they do “for their requirement”. However, how such access to water benefits other wildlife is not consciously controlled by them, i.e. they are only accessing water here for their own requirement, and not facilitating regeneration in the forest for their own requirement!

Q50. Answer : D

Assumption 1 is invalid: The passage mentions, “Application of technology...Americas”. This does not mean that technological development in agriculture is confined to the West. Focus on the use of the word “much” here. From this, we can infer that the West holds a major share of technological development in agriculture, but it does not imply “no technological development (of agriculture) in the developed countries”. (Here, we can assume the West/ Americas synonymous with the developed world, as the author makes a contrast with developing countries in later lines- “In the developing world, that applies as much to existing farming techniques as it does to the latest advances in genetic modification, extending to the smallholders and subsistence farmers of Africa and Asia the best of today’s agricultural practices, in such simple matters

as how much fertilizers to apply and when, would lead to a greatly increased availability of food for humanity.”)

Assumption 2 is invalid: The author only makes a caution about blindly copying and deploying the technologies of the West with respect to their suitability in different climatic regions of the Tropics. He makes a case, instead, for investing in more achievable things such as optimal fertilizer application and better infrastructure. However, this does not imply that agricultural technology is not adapted in developing countries at all. Also, this assumption does not state agricultural technology developed in the western world- It refers to agricultural technology in general.

Q51. Answer : A

Assumption 1 is correct: As per the passage, “Technology is of little use if it is not adapted. In the developing world, that applies as much to existing farming techniques as it does to the latest advances in genetic modification.”. The passage clearly recommends the need to extend latest agricultural practices in simple matters like the timing and amount of fertilizer usage. This highlights the need to change agricultural practices. Therefore, this assumption is valid. (Though the author has nowhere mentioned poor countries, but only developed and developing countries. This makes this option partially incorrect too – the typical RC grey area.)

Assumption 2 is incorrect: This assumption goes beyond the information provided in the passage. There is no mention of the infrastructure status of the developed countries or the food wastage there. Though the last lines of the passage do suggest that better roads and storage facilities will reduce wastage, but it has been stated in a very general way (with no comparison between developed countries and developing countries whatsoever). The only comparison being made in the passage between developed and developing countries is regarding agricultural technology.

Q52. Answer : D

Assumption 1 is incorrect: these lines- “in such simple matters as how much fertilizers to apply and when, would lead to a greatly increased availability of food for humanity”. The author gives the problem at the start of the passage but also gives the solution by referring to food for humanity. Therefore, we cannot predict for sure if and whether growing enough food for future generation would be a challenge. Also, the passage makes no reference to future generations.

Assumption 2 is incorrect: This assumption goes beyond the information provided in the passage. There is no mention or indication of corporate farming in the passage.

Q53. Answer : B

Statement 1 is incorrect. Though the passage highlights the benefits of incorporating SWMs as “The Smart Waste Management System (SWM), powered by the Internet of Things (IoT), is transforming waste processing by enhancing efficiency and promoting sustainability”, it is silent on its adoption at the national level.

Statement 2 is correct. The passage states “This seamless integration (of IOT in waste management) offers localities greener, cleaner, smarter, and more sustainable waste management solutions.” From here we can assume that the assumption is correct.

Q54. Answer : D

Statement a is incorrect. Though the passage states “The government must notify rules under the new Labour Codes at the earliest and eliminate avenues for rent-seeking”, the statement does not best reflect the most logical and rational inference that can be made from the passage as it focuses only one aspect of the problem.

Statement b is incorrect. The passage mentions “Regulatory overreach must also be tackled, modernizing regulators to act as facilitators of growth and innovation instead of relying on outdated control mechanisms.”

However, the statement does not best reflect the most logical and rational inference that can be made from the passage as it only talks about regulatory measures.

Statement c is incorrect. The passage mentions that India must focus on “attracting manufacturing and investments”. However, the statement does not best reflect the most logical and rational inference that can be made from the passage as it gives a more comprehensive view that includes ease of doing business, reforms, labour codes, and regulatory modernization.

Statement d is correct. The statement best reflects the most logical and rational inference that can be made from the passage as it highlights the main argument of the passage most comprehensively. It is mentioned in the passage as “India must renew its focus on improving ease of doing business to attract manufacturing and investments. These measures will drive economic growth, job creation, and innovation.”

Q55. Answer : A

Let Daniel's present age be “D” years and Leo's present age be “L” years

Daniel is twice as old as Leo was 5 years ago

So, $D = 2(L - 5)$ (i)

In 3 years, Daniel will be $(D + 3)$ years old.

7 years ago, Leo was $(L - 7)$ years old.

According to question;

$D + 3 = 3(L - 7)$

$D = 2L - 10$ [From equation (i)]

So, $(2L - 10) + 3 = 3(L - 7)$

Or, $2L - 7 = 3L - 21$

Or, $L = 14$

So, $D = 2(14) - 10 = 18$

Required difference = $D - L = 18 - 14 = 4$ years.

Hence, option (a) is the correct answer.

Q56. Answer : C

‘Y’ is blocked for storms.

For floods ‘X’, 1 and 2 are blocked and ‘Z’ is blocked, whenever 1 is blocked.

So, for floods and storms, only unblocked road left is 3.

Hence, option (c) is correct.

Q57. Answer : D

$P@Q$ means P is not greater than Q i.e. $P \leq Q$

$Q\#R$ means Q is greater than R i.e. $Q > R$

$R\$S$ means R is equal to S i.e. $R = S$

Combining these: $P \leq Q > R = S$

If $P = 2$, $Q = 3$, $R = S = 1$, then $2 < 3 > 1 = 1$

Therefore, P can be greater than S.

If $P = 2.5$, $Q = 3$, $R = S = 2.9$, then $2.5 < 3 > 2.9 = 2.9$

So, P can be less than S

Hence, option (d) is correct

Q58. Answer : D

10 years ago, the age of the mother was three times the age of her son. Say, the age of son was x and the mother's age was 3x.

At present: Mother's age is $(3x + 10)$ and son's age is $(x + 10)$

After ten years: Mother's age will be $(3x + 10) + 10$ and son's age will be $(x + 10) + 10$. Given that, the mother's age is twice that of son after ten years.

$(3x + 10) + 10 = 2[(x + 10) + 10]$

$(3x + 20) = 2[x + 20]$

Solving the equation, we get $x = 20$
 $(3x + 10) : (x + 10) = 70 : 30 = 7 : 3$.
Hence, option (d) is correct.

Q59. Answer : D

Let the cost price is Rs 100.
Marked price = $130/100 \times 100 = \text{Rs } 130$.
Final price after 20% discount = $80/100 \times 130 = \text{Rs } 104$.
So, Gain = Final price - Cost price
Gain = $104 - 100 = \text{Rs } 4$.
Percentage gain = $4/100 \times 100 = 4\%$.
Hence, option (d) is correct.

Q60. Answer : B

We need to consider all three digit and all 4-digit numbers.

Three-digit numbers: A B C. 3 can be printed in the 100's place or 10's place or units place.
=> 100's place: 3 B C. B can take values 0 to 9, C can take values 0 to 9. So, 3 gets printed in the 100's place 100 times
=> 10's place: A 3 C. A can take values 1 to 9, C can take values 0 to 9. So, 3 gets printed in the 10's place 90 times
=> Unit's place: A B 3. A can take values 1 to 9, B can take values 0 to 9. So, 3 gets printed in the unit's place 90 times
So, 3 gets printed 280 times in 3-digit numbers

Four-digit numbers: A B C D. 3 can be printed in the 1000's place, 100's place or 10's place or units place.
=> 1000's place: 3 B C D. B can take values 0 to 9, C can take values 0 to 9, D can take values 0 to 9. So, 3 gets printed in the 1000's place 1000 times.
=> 100's place: A 3 C D. A can take values 1 to 9, C & D can take values 0 to 9. So, 3 gets printed in the 100's place 900 times.
=> 10's place: A B 3 D. A can take values 1 to 9, B & D can take values 0 to 9. So, 3 gets printed in the 10's place 900 times.
=> Unit's place: A B C 3. A can take values 1 to 9, B & C can take values 0 to 9. So, 3 gets printed in the unit's place 900 times.
3 gets printed 3700 times in 4-digit numbers.

So, there are total $3700 + 280 = 3980$ numbers.
Hence, Option (b) is the correct answer.

Q61. Answer : C

Statement 1 is correct. The passage states that the original ethical intent of the Outer Space Treaty has been eroded, as modern space activities often lack international coordination and are driven by "competitive leverage." This shows that collective stewardship is being replaced by profit and power motives. The phrase "spirit of that accord seems to drift in the vacuum of expediency" metaphorically supports this implication.

Statement 2 is correct. The passage explicitly draws a parallel between moral failings on Earth and behavior in space: "our behavior in space reflects - and magnifies - our Earthbound moral fractures." The author suggests that inequality and exploitation in space are a continuation of terrestrial ethical dilemmas, aligning with "ethical cosmopolitanism."

Q62. Answer : D

Statement 1 is incorrect: The passage nowhere makes any assertion indicating that collection, processing and segregation of municipal waste should be with government agencies. In fact, the passage suggests that "More than three-fourths of the municipal budget goes into collection and transportation, which leaves

very little for processing/resource recovery and disposal”, indicating how the municipal system (under the government) is already stressed.

Statement 2 is incorrect: The passage nowhere makes any assertion indicating that resource recovery and recycling require technological inputs that can be best handled by private sector enterprises. The passage only limits itself to saying that “which technology is most appropriate in converting waste to energy depends on what is in the waste (that is biodegradable versus non-biodegradable component) and its calorific value.” and further that “The biodegradable component of India's municipal solid waste is a little over 50 per cent, and biomethanation offers a major solution for processing this.” So, the passage makes a case for the mode of resource recovery and recycling, i.e., bio methanation, rather than which sector should perform it.

Q63. Answer : C

Option (a) is incorrect: The passage nowhere specifies or even dwells upon the cost of generation of energy from municipal solid waste.

Option (b) is incorrect: The passage does outrightly state that “The biodegradable component of India's municipal solid waste is a little over 50 per cent, and biomethanation offers a major solution for processing this.” However, ‘major solution’ cannot be equated with ‘most ideal way’ in the strict sense. Further, the question is asking us to suggest the crux of the passage. The fact about bio methanation offering a major solution is a solution to the crux of the passage, which is about the issue of the rarity of segregation of municipal waste at source and achieving waste-to-energy amidst such a challenging scenario.

Option (c) is correct: The passage begins with laying the central theme that “In India, the segregation of municipal waste at source is rare.” Further, it goes on to say, “Where does waste-to-energy fit into all this ? Ideally, it fits in the chain after segregation (between wet waste and rest), collection, recycling, and before getting to the landfill.” This line lays the sequential chain of waste processing, which can further be re-aligned to generate energy. Hence from these lines, it is clear that the segregation of municipal solid waste is the first step in ensuring the success of waste-to-energy plants.

Option (d) is incorrect: The passage clearly refutes this by mentioning that “The biodegradable component of India's municipal solid waste is a little over 50 per cent, and biomethanation offers a major solution for processing this.”

Q64. Answer : B

Statement I: Given ‘B’ is a multiple of 4, but nothing is known about ‘A’.

Hence, we cannot conclude about the unit digit of A^B with the help of statement I alone.

Statement II : Given ‘A’ is an odd multiple of 5, i.e. ‘A’ = {5, 15, 25, 35,.....}

It is evident that the unit digit of ‘A’ is always 5.

Therefore, the unit digit of A^B would also be 5 (‘B’ is a positive integer).

Also, we can observe:

$$5^1 = 5$$

$$5^2 = 25$$

$$5^3 = 125$$

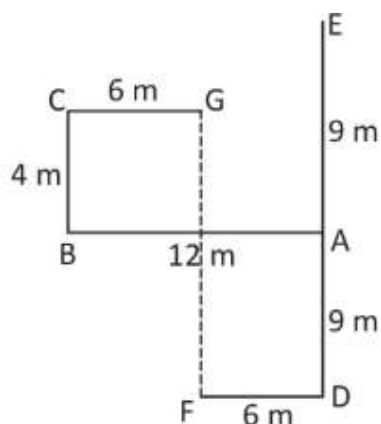
$$5^4 = 625.....$$

So, statement II alone is sufficient to answer the question.

Hence, option (b) is correct.

Q65. Answer : C

Using the given information, we can make the following diagram.



The distance between point F and G = $BC + AD = 4 + 9 = 13$ m
Hence, option (c) is correct.

Q66. Answer : C

$P = QQQ = Q \times 111 = Q \times 3 \times 37$ (Q can be 1, 2, 3,, 9)

And, $481 = 13 \times 37$

So, HCF of P & 481 = 37 (as Q cannot be 13)

Hence, option (c) is correct.

Q67. Answer : D

20 X pipes can fill 70% of the tank in 14 minutes.

So, 20 X pipes can fill 100% tank in $(14/70) \times 100 = 20$ minutes

10 Y pipes can fill $3/8$ th of the tank in 6 minutes.

So, 10 Y pipes can fill 100% tank in $[6/(3/8)] \times 100 = 16$ minutes

16 Z pipes can empty 50% of the tank in 20 minutes.

So, 16 Z pipes can empty 100% of the tank in 40 minutes.

As per the question, X and Y work at half their capacity, while Z work at full capacity.

So, Set X pipes can fill the tank in 40 minutes.

Set Y pipes can fill the tank in 32 minutes.

And, Set Z pipes can empty the tank in 40 minutes.

We can see that pipes X and Z will eliminate each other's efforts.

So, Y can fill the entire tank in 32 minutes, it will fill half the tank in 16 minutes.

Hence option (d) is the correct answer.

Q68. Answer : D

A prime number is a natural number greater than 1 that has no positive divisors other than 1 and itself.

The smallest prime number is 2 (which is even), and all other prime numbers are odd.

Here, the prime numbers shall be less than 20,

So, the prime numbers would be- 2, 3, 5, 7, 11, 13, 17, 19

Let a, b and c be the prime numbers, If we take $a=2$ and $b=5$ and $c=3$,

Since the product is $2 \times 5 \times 3 = 30$, we get the unit digit of the product as 0.

Hence, Statement 1 is correct.

Since the product is $2 \times 5 \times 3 = 30$, which is an even number.

Hence, Statement 2 is correct.

If we take a, b and c as 2, 5 and 3, we get, $2 \times 5 \times 3 = 30 = 3 + 0 = 3$

Hence, Statement 3 is also correct

Hence option (d) is the correct answer.

Q69. Answer : A

Statement 1 is correct. The passage states “Prayer and meditation as a part of Spiritual development embody a dialogue between the soul and cosmos. Together, they form a union of expression and receptivity, bridging the human spirit and the infinite consciousness, each enriching the other in their sacred and profound interplay.” From here we can assume that the statement is correct.

Statement 2 is incorrect. While the passage states that prayer and meditation bridge the human spirit and the infinite consciousness, it is silent on the degree of each measure. Therefore, the assumption is incorrect.

Q70. Answer : A

Option (a) is correct since the passage clearly implies that financing mechanisms have to be put in place for ULB's to sustain. Levying user charges can be one such mechanism.

Option (b) is incorrect since the passage only talks about lack of proper financing mechanisms that would fund the infrastructure to ensure water delivery. Inefficiency implies that there are funds but are not utilised well.

Option (c) is incorrect because the first sentence of the passage itself implies that sustainable delivery of water is possible if proper financing mechanisms are in place. Hence, water shortage in our cities is a problem that can be solved.

Option (d) is incorrect since the passage makes no mention of overpopulation as a reason for water shortage.

Q71. Answer : B

Statement 1 is incorrect since the passage talks about having proper financing mechanisms to ensure sustainable delivery of water. About rich cities it only says that they can afford free supply of water which implies that cities that are not rich need to raise finances to ensure the same. It does not hold it impossible for cities that are not rich to ensure sustainable delivery of water.

Statement 2 is correct since sustainable delivery of water not only involves collection, treatment and distribution of water, but also investments in sewerage infrastructure and sewage treatment plants. Hence by elimination, Option (b) is the correct answer.

Q72. Answer : C

In an eight-digit number there are 4 odd and 4 even positions. In the number 11223344, there are 4 odd numbers (1, 1, 3, 3) and 4 even numbers (2, 2, 4, 4).

Now, the number of ways these 4 odd numbers (1, 1, 3, 3) can be arranged in 4 odd positions = $4!/(2 \times 2) = 6$

Similarly, the number of ways these 4 even numbers (2, 2, 4, 4) can be arranged in 4 even positions = $4!/(2 \times 2) = 6$

So, number of such distinct numbers = $6 \times 6 = 36$

Hence, option (c) is correct.

Q73. Answer : B

Let the last two digits be A and B.

A can be any digit between “0 to 9” i.e. 10 possible values.

B is odd, so it can be 1, 3, 5, 7, or 9, i.e. 5 possible values.

So, Total possible ways to enter A and B = $10 \times 5 = 50$

However, there is only one correct way to enter A and B.

So, the required probability = Favourable outcomes / All possible outcomes = $1/50$

Hence, option (b) is correct.

Q74. Answer : A

Condition- 1:

If X is true $\rightarrow$ Y and W are true.

If X is false, we cannot conclude anything about Y and W.

Condition- 2:

If Z and W are true $\rightarrow$ V must be false.

If either Z or W is false, we cannot conclude anything about V.

Analyzing Conclusion-1:

If V is true, then at least one of Z or W must be false.

If W is false, then from condition- 1, X should also be false.

This means that at least one of X or Z must be false.

So, Conclusion-1 is correct.

Analyzing Conclusion-2:

From condition-1, we only know that if X is true, then Y is true too.

However, Y being true does not necessarily mean that X must be true.

There could be other reasons for Y to be true.

So, Conclusion-2 is incorrect.

Hence, option (a) is correct.

Q75. Answer : D

Given: $ab > cd$

Four-digit number formed = abcd

Now, $abcd - ab - cd = 6039$

$1000a + 100b + 10c + d - 10a - b - 10c - d = 6039$

$\Rightarrow 990a + 99b = 6039$

$\Rightarrow 10a + b = 61$.

Hence, option (d) is correct.

Q76. Answer : D

Positions of T and P are fixed.

So, R, U, M can be arranged in $3! = 3 \times 2 \times 1 = 6$ ways.

Hence option (d) is the correct answer.

Q77. Answer : A

NO = $14(\text{place value of N in alphabet series}) \times 15(\text{place value of O in alphabet series}) = 210$

NOT = $14 \times 15 \times 20 = 4200$

NOTE = $14 \times 15 \times 20 \times 5 = 21000$

NOTES = $14 \times 15 \times 20 \times 5 \times 19 = 399000$

Hence option (a) is the correct answer.

Q78. Answer : B

Let the distance between his home and the station be 'd' km.

Time required to reach the station at 5 km / hr = $d/5$ hours

Time required to reach the station at 6 km/hr = $d/6$ hours

Now, the difference between these times is 12 minutes = 0.2 hours. (7 minutes late - 5 minutes early = (7) - (-5) = 12 minutes)

Therefore, $(d/5) - (d/6) = 0.2$

$\Rightarrow d/30 = 0.2$

$\Rightarrow d = 6$

Thus, the distance between his home and the station is 6 km.

Hence option (b) is the correct answer.

Q79. Answer : C

From option (c), $9 > 5 > 4 - 18 + 9 > 16$

By interchanging the signs, $9 + 5 + 4 = 18$ and $1 + 9 + 16 \rightarrow 18 = 18$

Thus, option (c) is correct.

Q80. Answer : B

Let the numbers be A, B and C.

$$A + B + C = 14 \times 3 = 42 \quad \dots (1)$$

$$2(B + C) = 30$$

$$B + C = 15 \quad \dots (2)$$

Using (1) in (2), $A = 27$

Hence option (b) is the correct answer.



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