Q.1)

Ans) a

Exp) Option a is correct.

Statement 1 is correct: The following line highlights that rapid developments do not give enough time for the public debate around its potential impact. "Progress in this field has been so rapid that the dialogue around potential societal and safety issues are scrambling to catch up. Aside from the safety risks, human genome editing poses some hefty ethical questions."

Statement 2 is incorrect: Nowhere in the passage it has been mentioned that such technologies are out reach for poor people. However, it has been implied that while utility of such technological advancements can be used for public good, there is a prospect that it could lead to artificial improvements and enhancements by people who could afford it.

Q.2)

Ans) d

Exp) Option d is correct.

The passage highlights the fact that how societal subversion of democratic elections by criminal violence is largely ignored. There are studies and academic focus on vertical threats have been there but horizontal threats such as impact of violence have not been enough attention.

Q.3)

Ans) c

Exp) Option c is correct.

Statement 1 is incorrect: In the above passage, it has not been mentioned that the private investment has not been high, in fact the passage mentions that the private investment stands depressed.

Statement 2 is correct: The following line highlights this statement, "However, the present slowing of growth, points to the recent slowdown in demand. The growth slowdown has taken place when the supply side, governed by policy, has not seen any great worsening for firms in the non-agricultural sector."

Statement 3 is incorrect: The causes of the slowdown has been discussed in the passage, highlighted by the following line, "the present slowing of growth, points to the recent slowdown in demand." Thus, it cannot be said that the causes of slowdown are unknown.

Q.4)

Ans) c

Exp) Option c is correct.

The following line highlights how closely now tea is associated with personal manners as well as social gatherings, "The custom of drinking tea widened its scope of influence at high speed and penetrated into nooks of people's daily life. And now, tea is prevalent in across several cultures in the world and remain a focal point for social gatherings."

Q.5)

Ans) b

Exp) Option b is correct.

The passage has conveyed that several North American and European intellectuals try to justify the aggressive foreign policy of the US. This is highlighted in the beginning how real world affects theories. And even in the last line that knowledge and power are correlated in international relations.

Q.6)

Ans) c

Exp) Option c is correct.

The following lines highlight the logical message of the passage, "We need to move away from the standard church-state models of secularism and begin to focus instead on secularism as a response to deep religious diversity. A secular state should show critical respect to all religious and philosophical world views, possible only when it adopts a policy of principled distance towards all of them."

Q.7)
Ans) d
Exp) Option d is the correct answer.
Statement 1 is incorrect: It is mentioned in the passage that India offers useful lessons from its experience to deal with shocks like the global food price shock of 2007-2011 and more recent shock of COVID -19. But we cannot assume that a food crisis was due to low production as the country has successfully solved the issue of low food production.
Statement 2 is incorrect: The passage does not mention about climate change and its impact on food production. So, it is an incorrect assumption.
Statement 3 is correct: The passage mentions that the country now has contemplated to move from a single goal to multiple goals like sustainability; efficiency; equity; affordable, healthy and safe food; farmer's income and competitiveness in food value chain. This is done as India's efforts to increase output growth to raise food production were successful.
Statement 4 is correct: The passage mentions that the country has contemplated to move from a single goal to multiple goals like sustainability; efficiency; equity; affordable, healthy and safe food; farmer's income and competitiveness in food value chain. Thus, multiple goals have been set for agriculture.

Q.8)
Ans) c
Exp) Option c is the correct answer.
Option a is incorrect: The passage does not mention that government intervention in agricultural marketing is creating the problem. Though one can argue that the passage mention that the enlarged set of goals cannot be accomplished through Business as Usual approach but it will be beyond the scope of the passage to assume that government intervention in agricultural marketing is creating problem.
Option b is incorrect: The passage mentions that COVID-19 has created food issues but whether it led to increase in malnutrition among children cannot be inferred.
Option c is correct: The passage mentions that the enlarged set of goals cannot be accomplished through Business as Usual approach and many areas of concern cannot be left to market and they require strong pro-active initiative from government, public institutions, private sector and civil society. So, this statement is the most rational and logical inference.
Option d is incorrect: The passage does not mention about the Green Revolution. So, this statement is beyond the scope of the passage.

Q.9)
Ans) a
Exp) $G = E$, $D < K$, $E < S$, $K \leq G$
S @ D implies $S > D$, from above D is smaller than K, which is either smaller or equal to G. G is equal to E, which is less than S. So, S greater than D follows
D # E implies $D < E$ follows, from above D is smaller than K, which is either smaller or equal to G. G is equal to E. So, D less than E follows.
K + E implies $K \geq E$, from above K is less than or equal to G, which equals E. So, K + E does not follows

Q.10)
Ans) d
Exp) $T = G$, $K > P$, $M < T$, $P \geq M$

K > P ≥ M < T. So, there is no direct relation between K and T. So, K > T doesn't follows.
G = T > M ≤ P <K. So, there is no direct relation between G and p. So, G = P doesn't follows.
G = T > M ≤ P < K. So, there is no direct relation between G and p. So, T > P doesn't follows.

Q.11)

Ans) a

Exp) Total work = 25 × 30 = 750 units.
According to condition we will form equation = 25 × x + 15(40 − x) = 750
On solving the above equation, we get, x = 15

Q.12)

Ans) a

Exp) Let seven consecutive number is = X, X + 1, X + 2, X + 3, X + 4, X + 5, X + 6
So according to the question, X + X + 1 + X + 2 + X + 3 + X + 4 + X + 5 + X + 6 = 34 * 7 =238
=> 7X = 238 − 21 = 217
=> X = 217/7 = 31
So, largest number is = 31 + 6 = 37

Q.13)

Ans) b

Exp) From Statement I we cannot say about A is even or not because we do not know B is even or not.
But Statement II we can say A is even because 6B is always even and 3A have to be even.

Q.14)

Ans) b

Exp) Market price per kg:
Rice = Rs. 3x
Wheat = Rs. 2x
Monthly expenses:
Rice = Rs. 5y
Wheat = Rs. 6y
Amount of rice = $\frac{5y}{3x} kg$
Amount of wheat = $\frac{6y}{2x} kg$
New price:
Rice = Rs. 4z/kg
Wheat = Rs. 3z/kg
Therefore, required ratio = $\frac{5y}{3x} \times 4z : \frac{6y}{2x} \times 3z = \frac{20}{3} : \frac{18}{2}$ ==> 20: 27

Q.15)

Ans) d

Exp) Net amount of water filled in the tank in 1 hour when all three taps are opened simultaneously, = 42 + 56 − 48 litres = 50 litres
The tank gets completely filled in 16 hours.
Therefore, capacity of the tank = 16 × 50 = 800 litres

Q.16)

Ans) d

Exp) According to question, discount on articles = $\frac{1}{16} \times 100 = 6.25\%$
Overall discount = $-4 - 6.25 + \frac{4 \times 6.25}{100} \approx 10\%$

Forum Learning Centre: Delhi - 2nd Floor, IAPL House, 19 Pusa Road, Karol Bagh, New Delhi - 110005 | Patna - 2nd floor, AG Palace, E Boring Canal Road, Patna, Bihar 800001 | Hyderabad - 1st & 2nd Floor, SM Plaza, RTC X Rd, Indira Park Road, Jawahar Nagar, Hyderabad, Telangana 500020
9821711605 | https://academy.forumias.com | admissions@forumias.academy | helpdesk@forumias.academy

Let cost price = 100, then

selling price = 135

So, 90% of marked price = 135

Marked price = $\frac{135 \times 100}{90} = 150$

Marked price is increased by = $\frac{150-100}{100} \times 100 = 50\%$

Q.17)

Ans) c

Exp) Adam is farther away than Frank, who is five miles away, and closer than Sanjana, who is seven miles away.

Q.18)

Ans) B

Exp) In the given code, A = (27 -1), B = 2, C = 3, D = 4, E = (5 -1), F = 6, G = 7, H = 8, I = (9 − 1) ...., Z = 26

So, F = 6, O = (15 -1), R = 18, U = (21 -1) and M = 13

Similarly, I = (9 -1), A = (27 -1), S = 19.

Q.19)

Ans) c

Exp) C @ B → C is the sister of B

B % F → B is the son of F

Hence, → C is the daughter of F

F % E → F is the son of E

Hence, → C is the granddaughter of E.

Q.20)

Ans) d

Exp) Q @ P implies Q is sister of P and P % S implies that P is son of S this implies that S can be either father or mother of Q and P. So, option (b) is incorrect. Thus, option d is correct.

Q.21)

Ans) a

Exp) Option a is correct.

The entire passage is about "Value Capture Financing". The passage aims to convey that the government should be able to efficiently capture and use the value they create. It is highlighted in these lines, "Ideally, the government will capture a share of that increased value as well. It can then use that value to fund that or other public infrastructure. Government should try to capture a portion of this value to help fund and finance the specific project or future expenditures."

Q.22)

Ans) b

Exp) Option b is correct.

The passage clearly highlights the several macro factors, micro factors and other kinds of factors that motivate an individual to make the choice of migration. Sometimes it may be forced displacement as well. While socio-economic factors remain important driver of migration, there are a host of other factors that lead to an individual's migration.

Q.23)

Ans) a

Forum Learning Centre: Delhi - 2nd Floor, IAPL House, 19 Pusa Road, Karol Bagh, New Delhi - 110005 | Patna - 2nd floor, AG Palace, E Boring Canal Road, Patna, Bihar 800001 | Hyderabad - 1st & 2nd Floor, SM Plaza, RTC X Rd, Indira Park Road, Jawahar Nagar, Hyderabad, Telangana 500020
9821711605 | https://academy.forumias.com | admissions@forumias.academy | helpdesk@forumias.academy

Exp) Option a is correct.

Statement 1 is correct: The following line highlights that sometimes personal data can be useful for larger public, "There is individually tangible and easily comprehensible added value of personal data processing... benefits made possible by the donation of sensitive personal data, e.g. in order to advance research and public health surveillance"

Statement 2 is correct: The passage essentially deals with the issue of handling of the data. And the idea of data sovereignty has been introduced along with. The idea of data sovereignty is that "individuals, specific groups, or communities should retain control over the handling of their data"

Statement 3 is incorrect: There are no imperatives made in the above passage that we should do away with our personal data in order to reap benefits. It just highlights that there are dual way of handling data i.e. by public-private institutions and by the users whose data is in question.

Q.24)
Ans) d
Exp) Option d is correct.
The passage has highlighted that wetlands are especially celebrated among the conservationists as they provide an opportunity of not only restoring to an original natural state but fresh and new wetlands can be created as well. The last lines of the passage also highlight the difference between creation and restoration of wetlands.

Q.25)
Ans) a
Exp) Option a is correct.
The crux of the above passage is that now long-term investors who were hitherto passive are adopting new methods and venturing beyond what they used to invest in. They are turning into active investors who are involved in the process of investing as well as do not just want to invest in traditional asset class. They are also using outside asset managers, larger teams and adopting new methods to invest.

Q.26)
Ans) c
Exp) Option c is correct.
The following lines highlight the crucial message given in the above passage, "No one can take that fine balance between doing good and doing business for granted. Ultimately, the rural agenda has to been driven both by purpose and performance."

Q.27)
Ans) d
Exp) Option d is the correct answer.
Option a is incorrect: The passage is centered on the low growth in agricultural sector and reasons for this. The income distribution is beyond the scope of the passage.
Option b is incorrect: We cannot infer from the passage that the economic reforms in 1991 did not have any provision for improving agricultural market.
Option c is incorrect: The passage mention that the average annual growth rate for five years in agriculture hovered around a long-term growth trend of 3%. So, there is not much growth in this sector. Further, the passage is talking about low growth in agricultural sector as compared to non-agricultural sector and reasons for this.
Option d is correct: The passage mentions the reasons for low growth in agricultural sector. It mention that an important reason for this is that the price incentive offered by the agricultural market in the country did not improve, as these markets remained fragmented, inefficient and dominated by low scale and multiple middlemen.

Q.28)
Ans) a
Exp) Option a is the correct answer.
Statement 1 is correct: This statement be inferred from the passage when it mention that an important reason for this is that the price incentive offered by the agricultural market in the country did not improve, as these markets remained fragmented, inefficient and dominated by low scale and multiple middlemen. Thus, we can assume that no reform in the agricultural market has been successfully implemented.
Statement 2 is incorrect: This assumption is cannot be made based on the passage the passage does not delve into the solution of the agricultural marketing problem.

Q.29)
Ans) d
Exp) Part 5 of the figure represent all three requirements by the hospital.
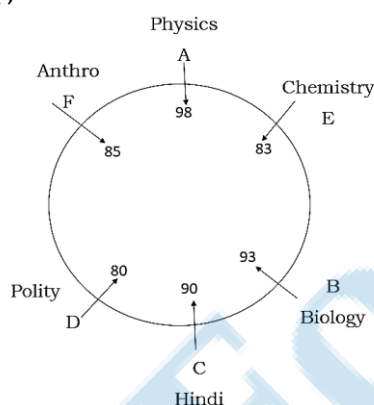
Q.30)
Ans) d
Exp) Each letter in the word is moved two steps backward to obtain the corresponding letter of the code.
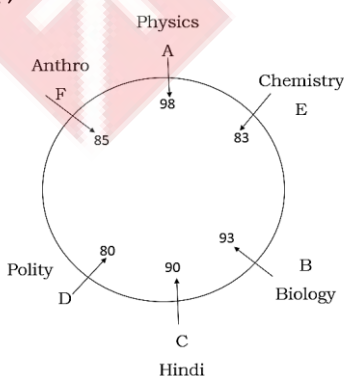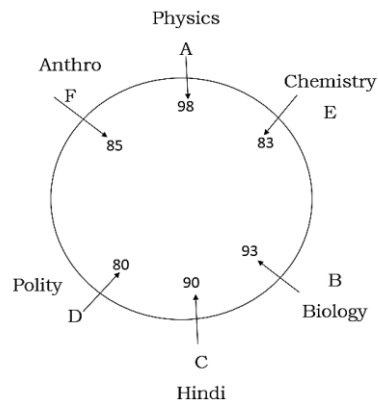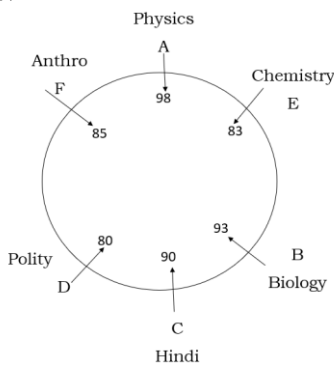
Q.31)
Ans) b
Exp)

Q.32)
Ans) c
Exp)

Q.33)
Ans) d
Exp)
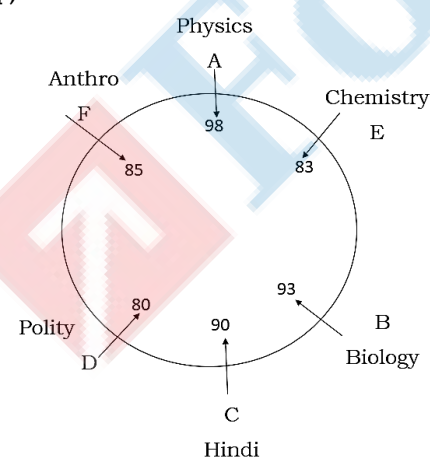

Q.34)
Ans) b
Exp)

Q.35)
Ans) d
Exp)

Q.36)
Ans) a
Exp) Let the total work (LCM of 10 and 15) be 30 units Efficiency of A = 30/10 = 3 units
Efficiency of B = 30/15 = 2 units.

As said in question that A joins B after 5 days that means B was working for the first 5 days from starting alone.

Hence, Work done by B in 5 days = 2 × 5 = 10 units

Now remaining Work = Total Work - Work done by B alone, So the left work = 30 - 10 = 20 units.

Remaining work is done by both A and B together, therefore time taken by (A+B) = 20/5 = 4 days.

And Total Time taken to complete the whole work = 5 + 4 = 9 days

Q.37)

Ans) b

Exp) Let total amount = x,

According to the question,

As we know that sum of A.P n terms = n/2(a (first term) + l (last term))

So, 1 + 2 + 3 + 4 ………. + 20 = (20/2) × 21 = 210

(Sum of A.P of 20 terms where a = 1 and l = 20)

As per question,

x = 3x/4 + 210 + 190

Or, x/4 = 400

So, x = 1600.

Hence the correct option is B.

Q.38)

Ans) c

Exp) Part of the tank filled in 1 minute when all the three pipes are opened simultaneously

$= \frac{1}{10} + \frac{1}{30} - \frac{1}{20} = \frac{6+2-3}{60} = \frac{5}{60} = \frac{1}{12}$

Hence, the tank will be filled in 12 minutes.

Q.39)

Ans) d

Exp) Let the remainder in each case be x.

Then, (11284 − x) and (7655 − x) are exactly divisible by that three-digit number.

Hence, their difference is [(11284 − x) − (7655 − x) = 3629 will also be exactly divisible by that three-digit number.

In other words that divisor will be a factor of 3629.

Now, 3629 = 19 × 191

Since both 19 and 191 are prime numbers, the three-digit number is 191.

Hence, the required number = 191

Q.40)

Ans)

Exp) For the least number of tiles, each tile must be of maximum area.

Side of the largest tile = HCF of 26m and 10m

= HCF of 2 × 13m and 2 × 5 m = 2 metres

So, area of a tile = 2 × 2 = 4 sq. metres

So, the least number of tiles = $\frac{Area\ of\ floor}{Area\ of\ tile} = \frac{26×10}{2×2} = 65$

Q.41)

Ans) a

Exp) Option a is correct.

The following lines clearly highlight the message that the above passage wishes to convey, "The present organizational overload in the international global system needs to be pruned so as to enable

Forum Learning Centre: Delhi - 2nd Floor, IAPL House, 19 Pusa Road, Karol Bagh, New Delhi - 110005 | Patna - 2nd floor, AG Palace, E Boring Canal Road, Patna, Bihar 800001 | Hyderabad - 1st & 2nd Floor, SM Plaza, RTC X Rd, Indira Park Road, Jawahar Nagar, Hyderabad, Telangana 500020
9821711605 | https://academy.forumias.com | admissions@forumias.academy | helpdesk@forumias.academy

leaders committed to global cooperation to focus on the truly important issues... Under no circumstances should new organisations be created henceforth without abolishing existing ones"

Q.42)

Ans) b

Exp) Option b is correct.

The following lines in the passage highlight how space technology has wide application beyond space exploration, "The commercial sector has already adopted inventions that were funded or designed by space agencies. These include several ecology-based projects like one that uses LED light color that triggers growth for indoor agriculture or satellites used to predict the weather and document climate change".

Q.43)

Ans) c

Exp) Option c is correct.

The following lines clearly highlight the impact of classifying groundwater by its usage, "Classifying groundwater use could be the most impactful action. Such a classification can reduce the demand substantially, while improving efficiency."

Q.44)

Ans) a

Exp) The entire passage has focus on how public healthcare is cost-effective as well as significantly rewarding. It mentions that public healthcare investments "give returns on investment in both the short and longer terms." Furthermore, "Investing in cost-effective interventions to reduce costs to the health sector and other sectors can help create sustainable health systems and economies for the future."

Q.45)

Ans) a

Exp) Statement 1 is correct: The passage mentions that norm of use of nitrogen (N), phosphorous (P) and potassium (K) in the ratio of 4:2:1 was a product of 1950s experiments that has led to wrong policies on fertilizers. This has led to inadequate or over application of fertilizers. So, the policy on fertilizer use should not be based on an outdated norm.

Statement 2 is incorrect: The passage mentions that contrary to the notion that there is excess use of nitrogen in India, 12 major states were found using less than the required level. So, it is a common notion in India that farmers apply excess nitrogen but in reality we have to raise the use of nitrogen in the two-thirds of the states.

Q.46)

Ans) a

Exp) Option a is correct: The passage mentions that norm of use of nitrogen (N), phosphorous (P) and potassium (K) in the ratio of 4:2:1 was a product of 1950s experiments that led to wrong policies on fertilizers. This has led to inadequate or over application of fertilizers and has become irrelevant to the present agricultural situation.

Option b is incorrect: Though this statement is true but it does not reflect the critical message of the passage which is centered on correcting the 4:2:1 norm of fertilizer use.

Option c is incorrect: The passage mention that India faces large deficits in use of P and K. So we must increase their application. But we have to raise the N in the two-thirds of the states also as 12 major states were found using less than the required level of nitrogen.

Option d is incorrect: The passage mentions that that there are three major plant nutrients, namely, nitrogen (N), phosphorous (P) and potassium (K). This means that there are other nutrient too that will be required for plant growth.

Q.47)

Ans) c

Exp) Option c is the correct answer.

Option a is incorrect: The passage does not mention about the blending of fuels and their impact on carbon emission. So, this cannot be implied.

Option b is incorrect: The passage does not mention about the fuel efficiency of vehicles vis-à-vis different fuels. So, this cannot be implied.

Option c is correct: The passage compares the cost of cost of gasoline with the cost of ethanol and methanol. This implies that if gasoline cost is high then the production of alternate fuels such as methanol and ethanol will get boost.

Option d is incorrect: The passage mentions that unlike ethanol, methanol will not ignite a food versus fuel security debate. This implies that ethanol can endanger the food security but methanol won't.

Q.48)

Ans) b

Exp) Option a is incorrect: We can infer from the passage that current prices of gasoline are high but there is no mention of the reason for this. So, this cannot be inferred.

Option b is correct: The passage mentions that even if the government levies a high tax on methanol, its price will be very much in the range of current gasoline prices prevailing in India. Unlike ethanol, methanol will not ignite a food versus fuel security debate. Using coal to produce methanol will help India monetize its domestic resources to reduce crude oil imports. Thus, the passage mentions the multiple benefits of transiting towards methanol.
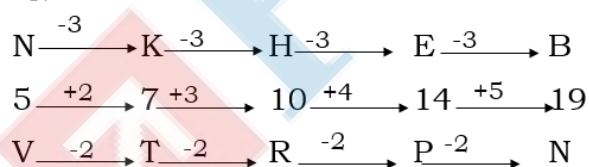
Option c is incorrect: The passage mentions that India is dependent on oil imports but it does not mention about current account deficit. So, this is an incorrect inference.

Option d is incorrect: The passage mentions that there is no commercial coal to methanol plant in India. But there might be other methanol plants. So, this is an incorrect inference.

Q.49)

Ans) c

Exp)

$$N \xrightarrow{-3} K \xrightarrow{-3} H \xrightarrow{-3} E \xrightarrow{-3} B$$
$$5 \xrightarrow{+2} 7 \xrightarrow{+3} 10 \xrightarrow{+4} 14 \xrightarrow{+5} 19$$
$$V \xrightarrow{-2} T \xrightarrow{-2} R \xrightarrow{-2} P \xrightarrow{-2} N$$

Q.50)

Ans) d

Exp) Let the total work (LCM of 12, 15) be 60.

Efficiency of A = 60/12 = 5 units/day

Efficiency of B = 60/15 = 4 units/day

On the first two days, A can do 5 units on the first day and B can do 4 units on the second day. (Because they are working on alternate days)

Total units completed in the 1st day and 2nd day is= 9 units

60% of the work = 60 × 75% = 45

According to 9 units per 2 day, in 10 days 45 units of the work completed.

Q.51)

Ans) b

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

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

Percentage difference is (68.75 – 62.5 = 6.25%)

Q.52)

Ans) a

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

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

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

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

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

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

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

Q.53)

Ans) b

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

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

Difference = (78.33 – 62.5) % = 15.8%

Q.54)

Ans) d

Exp) $Total_G = 55 + 70 + 81 + 30 + 28 + 33 = 297$

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

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

Q.55)

Ans) c

Exp) Statement I we cannot calculate the first number but from Statement II we can calculate the first number from the relation between first and second number.

Q.56)

Ans) c

Exp) 20 years ago, Sita's age = x years

Meena's age = 4x years

$\frac{x + 20}{4x + 20} = \frac{1}{2}$

=> 2x + 40 = 4x + 20

=> 2x = 20 => x = 10

Sita's present age = 30 years.

Q.57)

Ans) c

Exp) The cost price of television = Rs. 25,000

Profit% of Dimpi = 20%

Rambha spent on repairing = Rs. 5000

Loss% of Rambha = 25%

The selling price of Dimpi = C.P × (100 + P%)/100

⇒ 25,000 × (100 + 20)/100

⇒ Rs. 30,000

The cost price of Rambha = Selling price of Dimpi

The cost price of Rambha = 30,000

Rambha spent on repairing = Rs. 5000

So, Total cost price of Rambha = 30,000 + 5,000

⇒ Rs. 35,000

The selling price of Rambha = C.P × (100 – L%)/100

⇒ 35,000 × (100 – 25%)/100

⇒ Rs. 26,250

The cost price of Rakhi = Selling price of Rambha

The cost price of Rakhi = 26,250

The cost price of Rakhi more to the cost price of Dimpi = 26,250 – 25,000
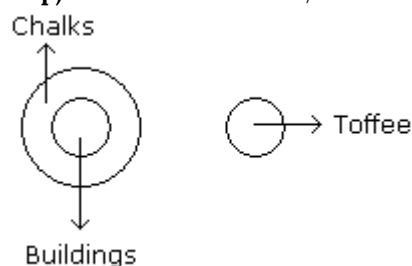
⇒ 1,250

More % = (1,250/25,000) × 100

⇒ 5%

Therefore, the cost price of Rakhi is 5% more than the cost price of Dimpi.

Q.58)

Ans) a

Exp) From the statement, we can draw the graph:

So, from graph we conclude that no building is toffee and all buildings are chalks. So, only conclusion (I) follows.

Q.59)

Ans) c

Exp) The fig. (X) is similar to the Form I. So, when the sheet in fig. (X) is folded to form a cube, then the completely shaded face lies opposite to the half-shaded face. Therefore, the cubes shown in figures (1) and (3) which have the completely shaded face adjacent to the half-shaded face cannot be formed. Since Fig 4 doesn't have at-least one shaded face, it cannot be formed. Hence, only the cubes in figure (2) can be formed.

Q.60)

Ans) b

Exp) Because the first two statements are true, Emily is the youngest of the three, so the third statement must be false.

Q.61)

Ans) b

Exp) Option a is incorrect: The passage mentions that the diffusion of technology in many fields of daily life can become a fundamental support to improve traditional reading comprehension skills like inference generation.

Forum Learning Centre: Delhi - 2nd Floor, IAPL House, 19 Pusa Road, Karol Bagh, New Delhi - 110005 | Patna - 2nd floor, AG Palace, E Boring Canal Road, Patna, Bihar 800001 | Hyderabad - 1st & 2nd Floor, SM Plaza, RTC X Rd, Indira Park Road, Jawahar Nagar, Hyderabad, Telangana 500020
9821711605 | https://academy.forumias.com | admissions@forumias.academy | helpdesk@forumias.academy

Option b is correct: The passage mentions that reading comprehension is a fundamental cognitive ability for children that support school achievement and successively participation in most areas of adult life. It is a complex cognitive ability which involves linguistic, cognitive and metacognitive skills. So, this statement is the best crux of the passage.

Option c is incorrect: The statement can be inferred from the passage but it is not the crux of the passage. The crux should explain about the main idea of the passage.

Option d is incorrect: The passage mentions that reading comprehension is a complex cognitive ability that involves not only linguistic skills like grammatical knowledge but also cognitive and metacognitive skills and higher order comprehension skills such as the generation of inferences. So, this is wrong statement.

Q.62)

Ans) a

Exp) Statement 1 is correct: The passage mentions that reading comprehension is a fundamental cognitive ability for children that support school achievement and successively participation in most areas of adult life. So, it is a correct assumption.

Statement 2 is incorrect: The passage mentions that reading comprehension is a complex cognitive ability that involves not only linguistic skills like grammatical knowledge but also cognitive and metacognitive skills and higher order comprehension skills such as the generation of inferences. So, having more command over component does not ensure better reading comprehension ability as other components have also to be taken into account.

Statement 3 is incorrect: It is mentioned in the passage that technology can become a fundamental support to improve traditional reading comprehension and learning skills. So, Reading comprehension is a cognitive ability so it can be learned.

Q.63)

Ans) c

Exp) Option a is incorrect: The passage mentions that nudges is an intervention, from either private or public institutions, that affects people's behaviour while fully maintaining their freedom of choice. So, it is a wrong inference.

Option b is incorrect: This cannot be inferred from the passage. The massage mentions about organ donation as an example for choice architecture. To infer that India has high rates organ donation is beyond the scope of the passage.

Option c is correct: The passage mentions about the choice architecture which influences judgment and decision-making in a subtle and automatic manner. For example, provision of organ donation as the default option in the driving and motor vehicles form shows a significant increase in organ donation, just as small sized plates in buffets has been found to result in less food wastage. This means that if we carefully restrict the choices then desired results can be achieved.

Option d is incorrect: This statement cannot be inferred as nowhere in the passage it is mentioned that Indian society is irrational as well as that behavioural economic tools are unsuccessful in India.

Q.64)

Ans) c

Exp) Statement 1 is correct: The passage mentions that provision of organ donation as the default option in the driving and motor vehicles form shows a significant increase in organ donation. This means that people have to nudge towards organ donation and are not enthusiastic about it.

Statement 2 is incorrect: The passage does not mention anything about green nudges. So, this assumption is invalid.

Statement 3 is correct: Nudge involves change in the structured environment which influences judgment and decision-making in a subtle and automatic manner and is designed to elicit the desired

behavior. So, it does not incur much cost. Also, the examples of organ donation and buffet clearly demonstrate about its cost-effectiveness.

Q.65)

Ans) d

Exp) Statement 1 is incorrect: The batteries and not the Electric Vehicle need to be replaced after the battery performance falls below 70–80% of the initial nameplate storage capacity.

Statement 2 is incorrect: The passage mentions that while the battery may no longer be able to meet its original performance requirements, the battery still has life remaining and can be repurposed for a second-life application in line with its remaining performance characteristics. So, the repurposed batteries will find application other than EV.

Q.66)

Ans) a

Exp) Option a is correct: We can infer it from the line "typically, this replacement occurs when the battery performance falls below 70–80% of the initial nameplate storage capacity." So, as the EV market grows automatically there will be increase in the rate of battery replacement.

Option b is incorrect: The statement is incorrect as the battery development should increase the time for battery replacement. Moreover, there is no mention about this aspect (research) in the passage.

Option c is incorrect: The passage mentions that at some point in the life of an Electric Vehicle (EV) battery pack, the consumer may choose to replace the battery if its capacity is no longer sufficient to meet the end-use application needs. Typically, this replacement occurs when the battery performance falls below 70–80% of the initial nameplate storage capacity. We cannot infer that the battery needs to be replaced within short span of time.

Option d is incorrect: This statement is beyond the scope of the passage as the passage does not mentions what will be the impact on imported raw material due to second-use applications of batteries.

Q.67)

Ans) c

Exp) Statement 1 is incorrect: The passage mentions that there was a 15% fall in BCG, Pentavalent 1, and at-birth oral polio vaccinations but it was due to movement restriction caused by lockdown and not due to non-availability of vaccine.

Statement 2 is correct: The passage mentions that the health services were severely curtailed during the months of the strictest lockdown-March-May 2020. Even where services remained open, use of essential services decreased. So, it is a correct inference.

Statement 3 is incorrect: The passage is centered on the lockdown period between March and May 2020 and the condition of health services during this period. We cannot infer what happened in 2021.

Statement 4 is incorrect: The passage does not mention the comparative data regarding institutional deliveries between urban and rural areas. So, this is an incorrect inference.

Q.68)

Ans) d

Exp) Statement 1 is incorrect: The passage mentions that the supply of two crucial raw materials has not been continuous to the steel sector due to various reasons. But whether it led to decline in steel production in India cannot be assumed.

Statement 2 is incorrect: The passage does not mention about the world demand for steel. So, this assumption is invalid.

Statement 3 is incorrect: The passage mentions that there have been various mine closures over the past five years as a result of Shah Commission investigation and Supreme Court announcements. And

bans on iron ore mining in the states like Karnataka & Goa due to illegal mining had been imposed through Supreme Court rulings. So, we cannot assume what was the recommendation of Shah Commission.

Q.69)

Ans) c

Exp) If Sabastian finishes after Dicken, then two runners must finish after Dicken- Sabastian and Morrison. It is possible that White finishes either before or after Dicken. However, four people are required to finish before Dicken- Gilchrist, Churchill, Pattrick, and Amit.

Q.70)

Ans) c

Exp) This constraint would set up a chain that would look like this: Amit < Pattrick < white < Sabastian. Based on this chain, it is clear that Amit must finish before Sabastian.

Q.71)

Ans) d

Exp) The graph shows that the price of M and N type tiles decreases over the period. Now, for O type tiles the percentage increase from 2006 to 2012 is;

$\frac{200-150}{150} \times 100 = \frac{50}{150} \times 100 = 33\frac{1}{3}\%$

For P type tiles the percentage increase from 2006 to 2012 is

$\frac{300-50}{50} \times 100 = \frac{250}{50} \times 100 = 500\%$

Q.72)

Ans) b

Exp) Average price of M during 2006 to 2012 = $\frac{1}{7}(250 + 400 + 50 + 150 + 200 + 50 + 150) = \frac{1250}{7} =$ 178.57

Average price of N during 2006 to 2012 = $\frac{1}{7}(300 + 350 + 250 + 350 + 300 + 350 + 250) = \frac{2150}{7} = 307.14$

Average price of O during 2006 to 2012 = $\frac{1}{7}(150 + 100 + 200 + 300 + 100 + 250 + 200) = \frac{1300}{7} = 185.714$

Average price of P during 2006 to 2012 = $\frac{1}{7}(50 + 200 + 150 + 100 + 250 + 100 + 300) = 164.28$

Thus, N type of tiles' show the maximum average price during 2006 to 2012.

Q.73)

Ans) c

Exp) Total price of all four types of tiles in 2012 is (150 + 200 + 250 + 300) = 900
Total price of all four types of tiles in 2009 is (150 + 200 + 250 + 300) = 900
Both are equal, so the required percentage is 0%.

Q.74)

Ans) a

Exp) Reqd ratio = $\frac{Price\ of\ O\ type\ tiles\ in\ 2008}{Price\ of\ P\ tiles\ in\ 2009} = \frac{200}{250} = \frac{4}{5} = 4:5$

Q.75)

Ans) a

Exp) Let the other discount be x%.

Then, $65 \times \frac{90}{100} \times \frac{100-x}{100} = 56.16$

=> $100 - x = \frac{56.16 \times 100 \times 100}{65 \times 90}$

=> 100 − x = 96

=> x = 4%

Q.76)
Ans) d
Exp) My (Rambo's) father's son will be Rambo himself as he has no brother or sister. Rambo's wife is mother of the person in the portrait. The portrait is thus of Rambo's own son. Hence, answer is (d) His Son.

Q.77)
Ans) c
Exp) 64 and 64 cubes of both types of cubes are such who have at least two coloured faces saffron each.
Therefore, total number of the required cubes is 128.

Q.78)
Ans) b
Exp) No. of saffron faces among first 64 cubes = 128
No. of saffron faces among second 64 cubes = 192
Therefore, total number of saffron faces = 128 + 192 = 320

Q.79)
Ans) a
Exp) Second 64 cubes are such each of whose two faces are blue.

Q.80)
Ans) a
Exp) First 64 cubes are such each of whose two faces are black and second 64 cubes are such each of whose two faces are blue.
Therefore, green and blue colours have the same number of faces.