1. According to the passage, "Climate change may adversely impact the Himalayan ecosystem..." and "The threats include possible loss of genetic resources and species, habitats and concomitantly a decrease in ecosystem services.". While this supports the claim made in statement 1 about the permanent disappearance of some of the flora and fauna from a given ecosystem, it cannot substantiate the claim about the permanent disappearance of an ecosystem altogether. This eliminates options (b), (c) and (d).
   Hence, the correct answer is **option a.**

2. According to the passage, "The concept advocates a shift from the species-habitat focus to an inclusive focus on expanding the biogeographic range...can proceed without being restrictive.". This vindicates option (d) as the correct answer.
   Options (a), (b) and (c) only highlight part of the picture and are not as holistic in their approach as option (d).
   Hence, the correct answer is **option d.**

3. According to the passage, "The concept advocates a shift from the species-habitat focus to an inclusive focus on expanding the biogeographic range...can proceed without being restrictive.". This vindicates option (b) as the correct answer.
   Though true about the Himalayan region, options (a) and (d) do not highlight the most important message conveyed through the passage.
   The passage discusses the potential impact of climate change on the Himalayan ecosystem, whereas option (c) incorrectly implies that it has already adversely impacted the Himalayan ecosystem.
   Hence, the correct answer is **option b.**

4. The passage states that, "The Himalayan ecosystem is highly vulnerable to damage, both due to geological reasons...exploitation of natural resources and other related challenges.". This substantiates statement 2 as a valid assumption. Eliminate option (d).
   The passage does not have any data that can support statements 1 and 3. The passage only discusses adverse impacts on natural ecosystems, not their extinction. Similarly, complete exploitation of natural resources has not been discussed. Eliminate options (a) and (c).
   Hence, the correct answer is **option b.**

5. According to the passage, "But the basic philosophy...and view that government interventions as processes that create distortions and bring in inefficiency.". This validates option (a) as the correct answer.
   Options (b), (c) and (d) contradict the passage.
   Hence, the correct answer is **option a.**

6. According to the passage, "But the basic philosophy underlying globalization emphasizes absolute freedom to markets to determine prices and production and distribution patterns..." and further elaborates on the aspect of employment through "Any restrictions on the adjustments in workforce by way of retrenchment of workers should also be removed and exit should be made easier...Employment and wages should be governed by free play of market forces...". This points towards option (c) as being the correct answer.
   Option (a) misses out on the aspect of employment, while option (b) only focuses on distribution patterns.
   The processes of import and export have not been discussed in the passage. Eliminate option (d).
   Hence, the correct answer is **option c.**

7. Under the realm of globalization, the passage suggests that, "Thus, public enterprises have to be privatized...activities hitherto reserved for the public sector have to be opened to the private sector. This logic extends to social services like education and health" and "Employment and wages should be governed by free play of market forces...". Thus, statements 1, 3 and 4 present aspects that are necessary for ensuring globalization. Eliminate options (a), (b) and (d).
   The expansionary policy of public expenditure as suggested by statement 2 finds no support in the passage. Thus, statement 2 does not hold.
   Hence, the correct answer is **option c.**

8. The passage states that, "Above all, in line with the overall philosophy of reduction in the role of the State...". This vindicates option b as the correct answer.
   Options (a) and (c) are not in consonance with the passage.
   Hence, the correct answer is **option b.**

9. The average profit of both A and B is directly given in the graph. The average profit of A and B is the same (Rs. 4,000) in 1996.

Hence, **option b.**

10. Average profit of B in 1998 = Rs. 4,000
Average profit of A in 1998 ≈ Rs. 3,400
∴ Difference between average profit = 4000 – 3400
= Rs. 600
Hence, **option c.**

11. Average profit of A in 2000 = Rs. 6,000
Average profit of A in 1999 = Rs. 4,000
∴ Difference between average profit = 6000 – 4000
= Rs. 2,000
Hence, **option d.**

12. The average profit of B is constant from 1997 to 1998 and consistently increases from 2008 to 2010 i.e. it never decreases.
Thus, it shows a non-decreasing trend.
Hence, **option b.**

13. The mean aggregate percentage marks can be calculated as:
Mean aggregate percentage marks

$$= \frac{\text{aggregate percentage marks}}{4}$$

Total aggregate percentage marks of A

$$= \frac{60 + 70 + 50 + 30}{100 + 100 + 100 + 50} \times 100 = \frac{210}{350} \times 100 = 60\%$$

Total aggregate percentage marks of B

$$= \frac{80 + 70 + 60 + 15}{150 + 100 + 100 + 25} \times 100 = \frac{225}{375} \times 100 = 60\%$$

Since the total aggregate percentage marks are the same for both students, their mean aggregate marks are also the same.
∴ Difference in mean aggregate marks = 0
Hence, **option d.**

14. Observe that only the figure in option (c) has the given figure embedded in it.
Hence, **option c.**

15. Observe that there are three columns in the figures, and each cell of each column has 2 elements.
From column 1 to column 2, the first element (i.e. the one on the left) remains as it is, while the second element (i.e. the one on the right) rotates by 180°.
From column 1 to column 3, the second element remains as it is, while the first element rotates by 180°.
Hence, applying this pattern to the first cell of the last row, both arrows should point upwards.
Hence, **option b.**

16. Calculate the % increase in population, % increase in income and per capita income as shown below.

Year	Population (lakhs)	Income (Rs. crores)	Per capita income	Population growth (in %)	Income growth (in %)
1992	20	1010	5050	-	-
1993	21	1111	≈5290	5%	10%
1994	22	1225	≈5568	4.76%	10.26%
1995	23	1345	≈5847	4.54%	9.79%

Thus, only the statement in option (b) is correct.
Hence, **option c.**

17. Consider the sum of numbers in each row.
Row 1: 29 + 13 + 18 = 60
Row 3: 30 + 27 + 3 = 60
Thus, the sum of numbers in each row is 60.
Applying the same logic to the second row, 33 + x + 19 = 60
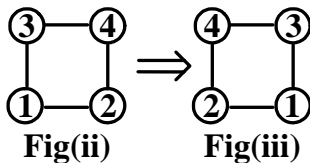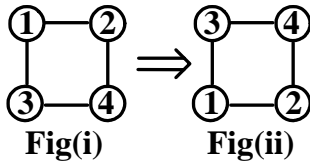∴ $x = 8$
Hence, **option d**.

18. In each row, the number of triangles increases by 1 from left to right and the number of circles decreases by 1 from left to right.
So, the blank cell should have 0 circles and 2 triangles.
Hence, **option a.**

19. Total number of routes from S to T without retracing from U and/or V

= Total routes from S to U × Total routes from U to V × Total routes from V to T

= 3 × 2 × 3 = 18

Hence, **option d.**

20. The pattern from figure (i) to (ii) and from (ii) to (iii) is as shown below:

Fig(i)   **Fig(ii)**

Fig(ii)   **Fig(iii)**

When this pattern is applied to figure (iv), the following figure is obtained.

Hence, **option b.**

21. The three bells will ring simultaneously at the LCM of the individual intervals at which each bell rings i.e. at the LCM of 18, 24 and 32.

$18 = 2 \times 3^2$

$24 = 2^3 \times 3$

$32 = 2^5$

LCM of 18, 24 and 32 = $2^5 \times 3^2 = 32 \times 9 = 288$

288 minutes corresponds to 4 hours and 48 minutes

Since the bells first rang together at 8:00 a.m., they will now ring together at 12:48 p.m.

Hence, **option b.**

22. The passage tells us that one day if the prices of everything were to double, the value of everything except one thing would not. This implies that money will not have the same value anymore. For example if one could rent a house for INR 15,000 per month, once prices were doubled, this amount of money would have half of its original value as presented in option (d).

Option (a) contradicts the passage, which implies that the value of one thing i.e. money would lessen.

While the values of things bought and sold may change, on the basis of the information given in the passage, we cannot infer whether it will be doubled or halved. Eliminate options (b) and (c).

Hence, the correct answer is **option d.**

23. Let the total fare for two people be Rs. x.

∴ $10 = 0.8 \times x$

∴ $x = 12.5$

When B hands over Rs.3 to A, A has 10 + 3 = Rs. 13 with him.

So, A can buy the two bus tickets and still be left with 50 paise.

Hence, **option c.**

24. The loan is being paid without interest. So, all the installments go towards the principal payment.

18 installments correspond to 60% of the loan amount.

So, if x installments correspond to the entire loan amount,

$x = 18 \times \dfrac{100}{60} = 30$

Thus, there are 30 installments in all.

Hence, **option c.**

25. Let the distance of the factory from the worker's house be d kms, and let the work normally take h hours to reach the factory.

∴ $\dfrac{d}{5} = h + \dfrac{3}{60}$ ... (i)

and $\dfrac{d}{6} = h - \dfrac{7}{60}$ ... (ii)

Equation (i) – (ii) gives,

$\dfrac{d}{5} - \dfrac{d}{6} = \dfrac{10}{60}$

∴ $\dfrac{d}{30} = \dfrac{1}{6} \rightarrow d = 5$ kms

Hence, **option c.**

26. Only option (a) calls the accountability of the government into question as is suggested in the extract given.

Options (b) and (c) only focus on the aspects of individuals and ignore the Government,

The part about restraint as suggested in option (d) cannot be considered as the extract does not have sufficient information to substantiate it.

Hence, the correct answer is **option a.**

27. According to the passage, "A nation interested in inclusive growth views the same growth differently depending on whether the gains of growth are heaped primarily on a small segment or shared widely by the population.". This emphasizes the author's central focus.

Option (a) goes beyond the scope of the passage.

Option (b) only focuses on economic growth as being the sole determinant of a country's prosperity, which is untrue as per the passage.

Option (d) is vague with the usage of "high growth".

Hence, the correct answer is **option c.**

28. According to the author, "In other words, policies for promoting growth need to be...who are unable to partake in the market processes and, hence, get left behind.". Thus, he/she would support the recommendation made in option (c).

Option (a) is vague with the usage of "develop economic growth" and misses out on crucial aspects that are mentioned in the passage.

The passage does not recommend redistributing incomes as much as it recommends ameliorating the situation of those left behind in reaping the gains of growth. Eliminate option (b).

Option (d) refers to the long-term consequence of policies supporting economic growth and does not put forth as accurately as option (c) how policies can help the immediate situation.

Hence, the correct answer is **option c.**

29. The passage discusses the potential of growth and not what growth has already done for India. The author does not make any claims about growth eradicating poverty altogether. In fact the author states that, "...growth is necessary for eradicating poverty but it is not a sufficient condition.". Thus, statement 1 does not hold. Eliminate options (a) and (c).

The author does not enter the discussion of prosperity for all as suggested in statement 2. Thus, it does not hold. Eliminate option (b).

Hence, the correct answer is **option d.**

30. According to the passage, "The rule has to be worked out...cover their costs. This will mean that if one company can innovate and cut costs, it will make greater profits.". This supports statements 2 and 3. Eliminate options (a), (c) and (d).

There is no data in the passage that can support statements 1 and 4.

Hence, the correct answer is **option b.**

31. According to the passage, firms will be prone towards innovation and efficiency in a transparent rule-based petrol pricing system. Thus, statement 1 holds. Eliminate options (b), (c) and (d).

The passage also states that, "Once the rule is announced, there should be no interference by the government...". Thus, statement 2 also holds.

The passage does not mention government subsidies and it supports anti-trust regulations. Thus, statements 3 and 4 do not hold.

Hence, the correct answer is **option a.**

32. 1 hour = 60 × 60 = 3600 seconds.

The people fire the bullets together at the LCM of 6, 7, 8, 9 and 12 seconds.

LCM (6, 7, 8, 9, 12) = $2^3 × 3^2 × 7$ = 504 seconds

∴ Number of times they fire the bullets together $= \dfrac{3600}{504}$

= 7.14

Since the number of times has to be an integer, they firs together 7 times.

Hence, **option b.**

33. There are 630 children in all and each row has three less children than the row in front of it.

Let the first row contain X children and the number of rows be N.

Since the values of N are given to be very small (3 to 6), consider each option instead of arriving at a general expression.

The first 6 rows will have X, $(X – 3)$, $(X – 6)$, $(X – 9)$, $(X – 12)$ and $(X – 15)$ children respectively.

Consider each value of N and take 3, 4, 5 or 6 rows accordingly. The option that does not give an integral value of X corresponds to invalid number of rows.

For N = 3: $X + (X – 3) + (X – 6)$ = 630 → $3X – 9$ = 630 i.e. X = 213 (i.e. a valid value)

Similarly, for N = 4: $4X – 18$ = 630 i.e. X = 162 (i.e. a valid value)

For N = 5: $5X – 30$ = 630 i.e. X = 162 (i.e. a valid value)

For N = 6: $6X – 45$ = 630 i.e. X = 112.5 (i.e. an invalid value)

So, the number of rows cannot be 6.

Hence, **option d.**

34. There are seven persons A, B, C, D, E, F and G up on a ladder.

B is exactly in the middle.

Since G is between A and B while E is between F and B, their relative position (from top to bottom) is: AGBEF or FEBGA

However, A has to be above E.

So, the correct order is AGBEF.

Since A is lower than C, and F is between E and D, the correct order from top to bottom is:

C
A
G
B
E
F
D

Thus, the person on the bottom step of the ladder is D.

Hence, **option c.**

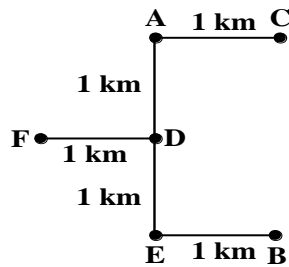**35.** The people are to be arranged in ascending order of heights.

Hence, B < A, A < C, C < D and E is the tallest.

Thus, the correct order of heights is: B < A < C < D < E (from shortest to tallest).

Thus, C will occupy the middle position.

Hence, **option c.**

36. Based on the given information, the position of the six villages is as shown below:

Thus, villages A, D and E are in a line.

Hence, **option b.**

37. A, B, C and D are sitting in a row, such that A and B are together.

Now, if A or B are at any of the ends, C and D have to be together.

e.g. ABCD or ABDC or CDAB or CDBA etc.

However, in all these arrangements, C and D are together (which violates the given condition).

Hence, A and B are in the middle while C and D are at the ends.

Since A is not next to C, A has to be next to D. i.e. DABC or CBAD.

In either case, A occupies the seat next to D.

Hence, **option b.**

38. The angle between two hands of the clock is:

$$\theta = 6\left[5h - \frac{11}{12}m\right]$$

Hence, when the angle is 0° between 8 o'clock and 9 o'clock

$$0 = 6\left[5(8) - \frac{11}{12}m\right]$$

$$\therefore \frac{11}{12}m = 40$$

$$\therefore m = \frac{40 \times 12}{11} = 43.63 \approx 44 \text{ minutes}$$

Hence, between 8 o'clock and 9 o'clock, the hands will be one above the other at approximately 8:44 p.m.

The next time they will be together is between 9 o'clock and 10 o'clock.

$$\therefore h = 9 \text{ and } \theta = 0$$

$$\therefore 0 = 6\left[5(9) - \frac{11}{12}m\right]$$

$$\therefore \frac{11}{12}m = 45$$

$$\therefore m = \frac{45 \times 12}{11} = 49.09 \approx 49 \text{ minutes}$$

Hence, between 9 o'clock and 10 o'clock, the hands will be one above the other at approximately 9:49 p.m.

Interval between these two instances = 65 minutes

Hence, **option c.**

45. The fifth day from the 21st of the month implies the 26th day of the month.

Since the 3rd day is a Monday, the 10th, 17th and 24th day are also Mondays.

Hence, the 26th day is a Wednesday.

Hence, **option c.**

46. 210 tickets were sold at Rs. 5 each, 140 tickets were sold at Rs. 3 each and the remaining 70 tickets were sold at Rs. 2 each.

$\therefore$ Total revenue = (210 × 5) + (140 × 3) + (70 × 2) = Rs.1,610

Hence, **option c.**

47. First map each person to occupation. This will reduce your later work substantially.

A = engineer, F = draughtsman, C = lawyer, E = doctor (unmarried).

Hence, B and D are the lady stenographer and judge (in no specific order).

Now, the judge has to be a male (as the judge is married to the lawyer and the lawyer is a daughter-in-law of someone).
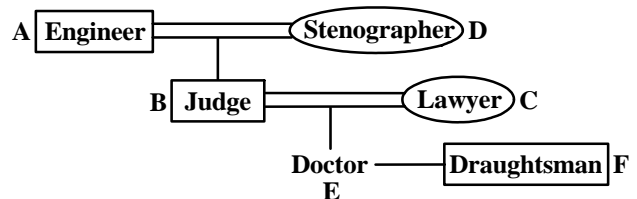
Since D is a grandmother, D is the stenographer and B is the judge.

So, A (engineer) – D (stenographer) forms one couple and so does B (judge) – C (lawyer).

Since C is the daughter-in-law of D, B is the son of A and D.

F, the draughtsman, and E, the doctor, are the children of B and C. However, the gender of E cannot be determined.

Thus, the entire family tree is as shown below:

Thus, B is a judge.

Hence, **option a.**

48. Consider the family tree obtained in the solution to the first question.

AD and BC are the couples.

Hence, **option c.**

49. Consider the family tree obtained in the solution to the first question.

D is the stenographer.

Hence, **option b.**

50. According to the apologists, free markets are fair, competent, efficient and also able to self-correct themselves. Thus, they are likely to be believe in a market that is not controlled by government authorities as suggested in option (a). According to the apologists, capitalism is a successful system.

The protection of the market by the government has not been discussed in the passage. Eliminate option (b).

The ability of the market to self correct only highlights a part of the belief of the apologists. They believe in something much bigger than option (c) alone.

Option (d) has not been discussed in the passage.

Hence, the correct answer is **option a.**

51. While presenting the success of capitalism, the passage also highlights its drawbacks by providing the example of the global banking crisis and stating that "...a more honest conceptualization of the conflicts of interest among the rich and powerful players who have benefited from the system...focus on the wealth creation should also highlight the resultant gross inequity.". This vindicates the stance made in option (b).

Options (a), (c) and (d) contradict the information given in the passage.

Hence, the correct answer is **option b.**

52. If, as per the last few lines of the passage, wealth creation results in gross inequity, then the ideology of the apologists that private greed is in the larger interest of the public can be proved false. Thus, statements 1 and 4 hold as far as private greed is concerned. Eliminate options (a), (b) and (d).

This refutes the righteous claims of the free market and dismisses capitalism as being benevolent. Thus, statements 2 and 3 do not hold.

Hence, the correct answer is **option c.**

53. Though the passage suggests reevaluating the role of the public sector it does not suggest that it has lost its relevance in the industrialization process. In fact it suggests that it should act as the umpire and the private

sector should be the players. Thus, statement 1 does not hold. Eliminate options (a) and (d).

Statements 2, 3 and 4 are vindicated by "...comparatively less-than-satisfactory performance of the public sector enterprises...a much larger social base for expanding entrepreneurship and the growing institutional capabilities to enforce competition policies...". Eliminate option (b).

Hence, the correct answer is **option c.**

54. According to the passage, "At the opposite end, rural roads, whose sparse traffic makes tolling unviable, have to be on the balance-sheet of the state.". The lack of viability of tolling means that there will be no monetary gains. This vindicates option (b).

Option (a) merely repeats the question asked in the form of a statement.

There is no data in the passage that can validate options (c) and (d).

Hence, the correct answer is **option b.**

55. According to the passage, the portfolio composition of the government should not remain static and it should invest in rural roads, public health and preservation and improvement of forest cover. This refers to a mixture of industries that the government must invest in as indicated by option (c).

The quality of public sector assets, investment in liquid assets and buying return on investment yielding capital assets have not been discussed in the passage. Eliminate options (a), (b) and (d).

Hence, the correct answer is **option c.**

56. The author states that, "There is also the conflict of interest between the government as an owner and as the regulator. The formulation and implementation of competition policy will be more vigorous and fair if government companies are out of action.". Options (a) and (b) contradict this.

The question can be negated if the government has no control over the private sector. Option (c) is not in concurrence with its logic.

Hence, the correct answer is **option d.**

57. Since modern poets figure in the question paper in alternate years, medieval poets also figure in alternate years.

Last year's paper had a question on A (i.e. a medieval poet). So, this year's paper should have a question on a modern poet (i.e. one of E, F, G or H).

F cannot be present as the paper setter does not like to ask about F.

If the paper has a question on H, it has to have a question on G as well. However, the paper can have a question on

only poet in a year. So, both H and G cannot be present. Hence, the paper is most likely to have a question on E.
Hence, **option b.**

58. Show each woman along with each skill in a table, as given below.

	Dancer	Vocal Musician	Actress	Violinist
Girija				Yes
Vanaja		Yes		Yes
Jalaja		Yes		No
Shailaja	Yes	Yes		No
Tanuja	Yes	Yes		Yes
Pooja			Yes	

From the table, Tanuja is definitely a dancer and a violinist.

Jalaja and Shailaja are not violinists. Tanuja also cannot be a violinist as all three violinists have been identified.
Hence, **option d.**

59. $P = 4$
$P \sim T = 5$
Since each letter is substituted by an integer from 1-9, $T > P$
$\therefore T = P + 5 = 4 + 5 = 9$
$N \sim T = 3$
Since $T = 9, N < T$
$\therefore N = T - 3 = 9 - 3 = 6$
Hence, **option d.**

60. The two groups of army personnel and civilians respectively, are completely unrelated. Both groups are subject to different probable causes of death. For example, army personnel are subjected to the risk of death while fighting in a war, while this is something that a civilian may not necessarily be exposed to. Similarly, a civilian may die of starvation due to poverty; this is something that may not happen in the army. Therefore, the two groups are heterogeneous and cannot be compared. Option (d) is correct.
Option (a) is incorrect, because joining the army does not preclude death.
Option (b) is incorrect, because it is unclear which relationship is being referred to as fortuitous here- the relationship between the two groups or the relationship between death and each group respectively.
Option (c) is incorrect, because we have no data regarding the quality of life within the armed forces.
Hence, the correct answer is **option d.**

61. The statement talks about the number of accidents caused by buses, trucks and cars as relative to each other.

Option (a) cannot be concluded. Just because the statement mentions that buses cause more accidents than trucks, we cannot infer anything about the number of these vehicles on the road. The frequency of accidents need not be proportional to the number of vehicles.
Option (b) cannot be concluded. The statement merely mentions that cars cause less accidents than buses; we cannot infer anything about the caution exercised by the drivers. The frequency of accidents need not have relation to the drivers' caution.
Option (c) cannot be concluded. There could be other causes of accidents that go beyond the skills of truck, bus and car drivers.
Hence, the correct answer is **option d.**

62. The passage talks about how military intervention can prove effective in cases where political leadership fails, and its withdrawal when political development is in place. Therefore, it is assumed that the military fills a political vacuum. Option (b) is correct.
Option (a) is incorrect, because the passage does not focus solely on how military power can help when political leadership is ineffective; it also mentions military withdrawal in cases where political development has taken place.
Option (c) is incorrect, because the passage only says that the military can be helpful when politics fails. It does not say that military intervention is unavoidable or inevitable for development.
Option (d) is thus, incorrect.
Hence, the correct answer is **option b.**

63. Let Alok, Bhupesh, Chander and Dinesh have Rs. A, B, C and D respectively.
Since the person with the maximum amount has to be identified, it is not necessary to calculate the amount with each person.
$A > B$
Also, $A = D + 5 \rightarrow A > D$
Since $C = D/2, D > C$
Thus, $A > D > C$ and $A > B$.
Hence, Alok has the maximum amount of money.
Hence, **option a.**

64. List George's schedule for each day.
Monday = Music
Tuesday = Sports
Wednesday = Mathematics
Since he attends History on the day following his Mathematics class,
Thursday = History
George has no lecture on Sunday. Since George does not have Literature classes on Friday,

Saturday = Literature.

Thus, George is also free on Friday.

Hence, **option d.**

65. B is original 10th from right.

When A comes at that position, A is 18th from left.

Thus, the 18th position from left is the same as the 10th position from right.

∴ Number of people in the row = 18 + 10 − 1 = 27

Excluding A and B, the number of people is 27 − 2 = 25

Hence, **option c.**

66. Based on the conditions, ABC forms a right triangle with AB as the height (5 km), AC as the base (12 km) and BC as the hypotenuse.

Since, (5, 12, 13) is a Pythagorean triplet, the shortest distance between B and C = 13 km.

Hence, **option b.**

67. Since the cars start at the same time and move towards each other (i.e. in opposite directions), their relative speed is the sum of their individual speeds.

$$\therefore \text{ Time taken to meet} = \frac{\text{Distance}}{\text{Relative speed}} = \frac{160}{50 + 30}$$

= 2 hours

Since they start at 08:10 a.m., they meet again at 10:10 a.m.

Hence, **option a.**

68. The passage mentions statement 1, the melting of glaciers, as one of the examples of how water availability will be a key factor in making investment decisions regarding the shifting of crop locations. Eliminate option (b).

The second paragraph of the passage mentions the role of temperature suitability and water availability in the shifting of crops to other locations. Therefore, statement 2 is correct. Eliminate option (c).

The second paragraph of the passage states the necessity of shifting crops "To ensure continued yields...". This validates statement 3.

The wider adaptability of crop plants cannot possibly require the shifting of their locations. Statement 4 is incorrect. Eliminate option (d).

Hence, the correct answer is **option a.**

69. The passage mentions in the first paragraph, that "...need to promote agricultural research and create maximum flexibility in the system to permit adaptations.". This validates option (c) as correct.

Options (a), (b) and (d) have not been mentioned in relation to agricultural research in the passage.

Hence, the correct answer is **option c.**

70. The passage mentions consumption of much lower quantities of animal protein as necessary for mitigation of greenhouse gas emissions. Thus, statement 1 holds. Eliminate options (b) and (d).

Rapid economic liberalization has not been mentioned as one of the requirements for mitigation of greenhouse gases. Thus, statement 2 does not hold. Eliminate option (a).

Statement 3 is validated by "Mitigation...requires changes in lifestyles and transformation of a country's economic structure...who have never questioned the impacts that their dietary habits of consuming more and more animal protein are bringing about.".

Statement 4 is incorrect, as the passage does not touch upon the management practices of livestock.

Hence, the correct answer is **option c.**

71. The passage validates statement 1, in the following lines in paragraph one - "A shift away from fossil fuels is now long overdue, but unfortunately, technological development has been slow and inadequate...". Eliminate option (b).

Statement 2 is incorrect, because the passage says that "...government policies have not promoted investments in research and development...". This indicates that funds are available, however, they have not been invested in research. Eliminate option (d).

Statement 3 is incorrect, because the passage states that "This country is extremely well endowed with solar, wind and biomass sources of energy.". Eliminate option (c).

Hence, the correct answer is **option a.**

72. Statement 1 is supported by the passage. The last lines of the passage state that "Mitigation overall has huge co-benefits, such as...health benefits...". If the health of the public is benefited by mitigation of greenhouse has emissions, it follows that there will be a reduction in expenditure on it. Eliminate option (c).

Statement 2 is incorrect, because reduction of dependence on livestock and animal protein has been mentioned as a requirement for the mitigation of greenhouse gases. The mitigation itself will not lead to less dependence on livestock. Eliminate option (a).

Statement 3 is incorrect, because reduction of energy requirements is something that will help in mitigation of greenhouse gases and not the other way around. Eliminate option (b).

Statement 4 is supported by the passage, because the first paragraph states that "...we mitigate the emissions of greenhouse gases and thus avoid some of the worst impacts of climate change that would take place in coming years and decades.".

Hence, the correct answer is **option d.**

73. The entire passage describes the need for the immediate mitigation of greenhouse gases and the benefits of this. This is best reflected in option (b).

Option (a) is incorrect, because our heavy dependence on fossil fuels has only been mentioned in order to highlight the need for mitigation of greenhouse gases.

Option (c) is incorrect, because our lack of investment in research and development has been mentioned only to bring out the reason behind our slow technological development. It cannot be considered as the essential message of this passage.

Option (d) is incorrect, because lifestyle change is just one of the requirements for mitigation of greenhouse gases.

Hence, the correct answer is **option b.**

74. 10 students speak both English and Hindi while 21 students speak English.

∴ Number of students who speak only English = 21 – 10 = 11

This value is given only in option d.

Hence, **option d.**

75. Let the original length and breadth by *l* and *b* respectively.

∴ Area = *lb*

Since the length increases by 40%, new length = 1.4*l*

Since the breadth decreases by 20%, new breadth = 0.8*b*

∴ New Area = 1.4*l* × 0.8*b* = 1.12*lb*

∴ % increase in area = $\frac{1.12lb - lb}{lb} \times 100 = 12\%$

Hence, **option b.**

76. Instead of finding the colour, age and type of each book, consider each category in the question (i.e. old, medical and green cover) and see which books fall in that category.

C, E and F are old books.

Hence, option (a) can be eliminated.

D, E and F are medical books.

Hence, options (c) and (d) can also be eliminated.

Hence, **option b.**

Note: It can be verified E and F have green covers.

77. Let the point at the extreme left be marked as 0 and the point at the extreme right be marked as 36. Now, start marking points from left to right.

The first mark is made at 0 + 1 = 1 cm, the next is made at 1 + 2 = 3 cm, the next at 3 + 3 = 6 cm, and so on.

So, the points from left to right (excluding 0 and 36) are 1, 3, 6 10, 15, 21 and 28 i.e. 7 points.

Since the next point is at 36 cm (i.e. the end), it is ignored.

Now, start marking from right to left.

The first mark is made at 36 – 1 = 35 cm, the next is made at 35 – 2 = 33 cm, the next at 33 – 3 = 30 cm, and so on.

So, the points from right to left (excluding 0 and 36) are 35, 33, 30, 26, 21, 15 and 8 i.e. 7 points.

Since the next point is at 0 cm (i.e. the end), it is ignored.

Here, the points at 15 cam and 21 cm are common to both groups.

∴ Total number of points = 5 + 2 + 5 = 12 (as the common points are counted only once).

Hence, **option b.**

78. When two items have the same S.P. such that a profit of a% is made on one and a loss of a% is made on the other, the transaction always results in a loss.

Also, loss % = $\frac{a^2}{100}$

Here, *a* = 10

∴ loss % = $\frac{10^2}{100} = 1\%$

Hence, **option c.**

79. Total number of people = 120

Number of people who play all three instruments = 5% of 120 = 6

People who play any two and only two instruments implies the people who play exactly two instruments.

∴ Number of people who play exactly two instruments = 30

People who play exactly 1 instrument + People who play exactly 2 instruments + People who play all 3 instruments = 120

∴ People who play only guitar + (people who play only violin + people who play only flute) + 30 + 6 = 120

∴ People who play only violin or play only flute = 120 – 36 – 40 = 44

Hence, **option b.**

80. Initially, the cards are placed as shown below,

1 1 1 1 1 1

After turning four cards, the new sequence may appear as follows,

2 2 2 2 1 1

In each try, four cards must be turned. In the next try, the new sequence may appear as follows,

2 2 1 1 2 2

It can be seen that two cards were changed to 2, and two other cards were changed back to 1.

Hence, the resulting sequence will consist of either four 1s or two 1s.

Hence, it will be never be possible to obtain all six cards with "2" on the upper side.

Hence, **option d.**