1. c

Statement 2 is correct as the average speed of Arun is continuously increasing with time initially. It may only happen when Arun's instantaneous speed is continuously increasing with time. Thus, statement 1
is incorrect. Thus, statement 2 is incorrect.
It may also be noted that his average speed is approaching a constant value after some time. This shows that instantaneous speed is not increasing after some time. Thus, statement 3 is correct too. Thus, option (c) is the right answer.

2. a

Let the number of apples and mangoes with the vendor be 2x and 3x respectively.
So, Total number of fruits i.e. apples and mangoes = 2x + 3x = 5x
It is known that he sold all the fruits at Rs. 24 per piece.
Thus, the selling price = Rs. (24 × 5x) = Rs. 120x ………….(i)
Let the cost price of each mango = Rs. y
Cost price of 3x mangoes = Rs. (3x × y)
Cost price of each apple = Rs. 20
Cost price of 2x apples = Rs. (20 × 2x) = Rs. 40x
Thus, the cost price of all fruits = Rs. (40x + 3xy)
It is given that he sold all the fruits at profit of 20%.
Selling price =[(100+Gain%)/100] x Cost price
Or Selling price =(120/100) x (40x + 3xy) ……………(ii)
Equating (i) and (ii) we get,
120x =(120/100) x (40x + 3xy)
or 120x = 48x +(18/5)xy
or 72x =(18/5)xy
or y = Rs. 20
Thus, the cost price of each mango is Rs. 20.
Hence, option (a) is the correct answer.

3. c

Minimum possible number of students = LCM of 3, 7 and 9 = 7 × 9 = 63
Any multiple of 63 can also be a possible number of students. Thus, 2 × 63 = 126 and 3 × 63 = 189 are also possible. At the same time, anything less than 63 is not possible. So, the total number of students cannot be 21 in any case.
Hence, option (c) is the correct answer

4. a

5. c

Monica, Jasmine and Lesilie take fixed times of 42 seconds, 56 seconds and 63 seconds respectively to complete one revolution. They will be at starting point at multiples of these times. And all three will be together at time which is common multiple of these times.
TThus, they will meet at a time that is equal to the LCM of 42, 56 and 63.
LCM (42, 56, 63) = 504
Hence, option (c) is the correct answer

6. d

Let the average weight of the three persons = z kg.
Total weight of three persons = 3z kg.
After one person is replaced:
New average weight = (z + 5) kg.
Total weight of three persons = 3(z + 5) = (3z + 15) kg.
The total weight has increased by 15 kg. So, the new person must weight 15 kg more than the person who has been replaced.
Weight of new person = Weight of person replaced + 15 kg = 75kg + 15 kg = 90 kg.
Hence, option (d) is the correct answer

7. a

Let the marked price be Rs. a.
When discount of 10% is given, the price becomes 0.9 times the original and when discount of 5% is given, the price becomes 0.95 times. thus, after two successive discounts of 10% and 5%, the new price = a × 0.9 × 0.95 = Rs. 427.5

Thus, a = Rs. 500

Hence, option (a) is the correct answer

8. a

Since 4 men can complete the work in 6 days, one man can complete the same work in 24 days.

Then, the amount of work done by 1 man in 1 day = [1/ (6X4)]= (1/24)units

Similarly, 4 women can complete the same work in 12 days. So, one woman can complete the same work in 48 days.

The amount of work done 1 woman in 1 day = [1/(4X12)]= (1/48)units

Therefore, the amount of work done by 1 man and 1 woman together in 1 day =(1/24)+ (1/48) =(1/16) units

Hence, 1 man and 1 woman together can complete the work in 16 days.

Hence, option (a) is the correct answer

9. c

Let sum be Rs. P

Now, Simple interest = PRT/100

Or 4800 = (P × 12 × 4)/100

Or P = 10,000.

Hence, option (c) is the correct answer

10. b

Option (a) is incorrect. The passage doesn't say that terrorism is same as revolution. So terrorists can't be equated to revolutionary. The passage doesn't talk about different perspectives.

Option (b) is correct. Revolution is not complete without terrorism. So, every revolution must have an element of terrorism in it.

Option (c) is incorrect. Revolution has an element of terrorism. Its converse is not true. Option (d) is also incorrect. They don't complement each other. Revolution is bigger set and terrorism is its subset.

11. b

Option (a) is incorrect. The relationship between greenhouse gas emissions and GM crops are not given. Though it can be inferred that they might contribute to climate change mitigation, yet they can still emit greenhouse gases.

Option (b) is correct. The author has used the word "irony" to describe how the un-acceptance of safety of GM crops by some is deviant of scientific standards. Author has further argued for GM crop`s case. Option (c) is incorrect. There is no such information about agriculture and greenhouse gas emissions given. Option (d) is also incorrect as the author is asking India to take the lead. It does not mean that India is leader.

12. c

Option (a) is incorrect. The author has not mentioned effect of the CO2 as greenhouse gas. The passage is only talking about its impact on ocean (ocean acidification). Option (b) is incorrect. The author has noticed increased rate of ocean acidification after industrial revolution. It does not mean it is a recent phenomenon witnessed only after industrial revolution.

Option (c) is correct. The author has linked the impact of human activities on ocean biodiversity via CO2 leading to ocean acidification.

Option (d) is incorrect. The passage has not mentioned any such information about resilience of food chain.

13. b

The passage talks of Bhagat Singh's emphasis on organising a mass movement and it is in this context the word army has been used. The passage does not talk of a revolutionary army to fight British. Hence, option (a) is incorrect. The passage mentions that Bhagat Singh was a revolutionary. However, he was not a terrorist and he said that nothing could be gained from terrorist methods. So, option (b) is correct. Bhagat Singh says that he is not a terrorist in the passage. His views on terrorism are not mentioned in the passage.

Hence, option(c) is incorrect. In the passage Bhagat Singh says "And I am convinced that we cannot gain anything through those methods". So, he is not supporting terrorist activities but his belief in satyagraha is not mentioned in the passage. Thus, option (d) is also incorrect

14. c

The passage explains the qualities of Mahatma Gandhi which made him close to the people of India. So, the option which best sums up the message is option (c) which is the correct answer.

Option (a) is incorrect as the passage mentions that Gandhi's lifestyle may not have worked in Russia, Germany and Italy but not India's differences with these countries. Option (b) is incorrect. The aspects of daily way of life of Mahatma

Gandhi are discussed in the passage but this is just to explain how he connected with the masses. Option (d) is incorrect as the passage does not discuss or mention anything about Mahatma Gandhi's religious or spiritual life.

15. c

Option (a) is incorrect. Given statement represents the central theme of the passage. But the questions ask for the least essential statement. This statement is very essential to the argument in the passage.

Option (b) is also incorrect. The passage says that without fraternity, liberty would produce oligarchy. It is clear from the tone of the passage that oligarchy is not desirable. So, oligarchy being antithetical to democracy is strengthening the argument in the passage. So, it can't be least essential.

Option (c) is correct. The passage says that all three- liberty, equality and fraternity are important to coexist. But the given statement says that our constitution has given importance to only two of them.

So, this statement is least essential as part of the argument in the passage. Option (d) is incorrect. The statement supports the central theme of the passage that liberty, equality and fraternity are important to coexist

16. a

Cost price of the first article = Rs. 2,500.

As we know that he sold the first article at a gain of 20%.

Selling price = [(100+Gain %)/100] x Cost price

So, S.P. of the first article = 2500(120/100) 2500 = Rs. 3,000

Total C.P. of both the articles = (Rs. 2500 + Rs. 2000) = Rs. 4,500

Total gain on the whole transaction = 16%

Total S.P. = (116/100) 4500 = Rs. 5,220

Selling price of second article = Total Selling price – Selling price of first article = Rs. 5220 – Rs. 3000 = Rs. 2,220

Thus, he should sell the second article at Rs. 2,220.

Hence, option (a) is the correct answer.

17. d

Speed of first train = 80 Km/h.

Speed of second train = 120 Km/h

As both trains travel in the same direction, their relative speed equals to the difference of two speeds.

Relative speed = (120 - 80) = 40 Km/h

As first train leaveshalf hour before the second, hence in half an hour, it will cover 40 km as it moves 80 km in 1 hour.

Time taken by the second train to gain 40 Km = 40/40 = 1 hour

Actual distance covered by 2nd train in 1 h = 1 x 120 = 120 Km

Thus, they will meet each other at the distance of 120 Km from Delhi.

Hence, option (d) is the correct answer.

18. d

Total number of ways of filling the 6 bottles numbered as (1, 2, 3, 4, 5 and 6) with either water or milk = 26 = 64 ways.

Two adjacent bottles with milk can be obtained in 5 ways, i.e. (1, 2), (2, 3), (3, 4), (4, 5) and (5, 6).

Three adjacent bottles with milk can be obtained in 4 ways, i.e. (1, 2, 3), (2, 3, 4), (3, 4, 5) and (4, 5, 6).

Four adjacent bottles with milk can be obtained in 3 ways, i.e. (1, 2, 3, 4), (2, 3, 4, 5) and (3, 4, 5, 6).

Five adjacent bottles with milk can be obtained in 2 ways, i.e. (1, 2, 3, 4, 5) and (2, 3, 4, 5, 6).

Six adjacent bottles with milk can be got in only 1 way (1, 2, 3, 4, 5, 6).

So, the total number of ways of filing the bottles such that adjacent bottles have milk = (5 + 4 + 3 + 2 + 1) = 15.

Hence, the number of ways of filling up the bottles such that no two adjacent bottles have milk = 64 – 15 = 49.

Hence, option (d) is the correct answer.

19. c

20. c

The students came to the institute to attend a lecture at 12:15 pm

As the students came 25 minutes before the teacher, the teacher must have arrived at 12:40 pm.

Now, the teacher was late to the class by 30 minutes.

Correct class timing = 12:40 – 30 = 12:10 pm.

Hence, option (c) is the correct answer

21. c

22. b

23. b

Option (a) is incorrect. The passage doesn't talk in this context of saving either one of two. Since this is not the context, this message can't be derived.

Option (b) is correct. The passage talks about no room for temptation. It means there needs to be selfcontroll. 'No space for doubt' means being above suspicion. Transparency connotes to truthfulness.

Option (c) is incorrect. This is an idiom. It means that the associates of public figures must not even be suspected of wrongdoing. But the passage doesn't talk about associates rather the public figure itself.

Option (d) is also incorrect. The passage only derides financial temptations in public life and not all kinds of temptations

24. b

Option (a) is incorrect. The dilemma that has been shown in the passage is not within Moses rather between two sections of people. One criticises Moses, another believes that he can get rich.

Option (b) is correct. From the conversation of people, it is implied that Moses is accused of corruption. Also the accusation is because he has become rich. It means he is being accused of disproportionate assets. This Moses also replies to this allegation in the last sentence. Thus, it is the central theme.

Option (c) is incorrect. The passage doesn't make any such definite statement about corruption in the work of Sanctuary.

Option (d) is also incorrect. The passage is not about public officials in general rather Moses in particular.

25. b

Option (a) is incorrect. The passage is all about memristors and its impact on computers. So, central idea has to be related to that. Thus, central idea is not about size of computers.

Option (b) is correct. This adequately represents the central idea. The passage talks about how it will change flash memory, RAM and computer all together. In last line author says that memristorsmay lead to affordable, solid-state computers that fit in your pocket and run many times faster than today's PCs.

Option (c) is incorrect. This doesn't represent the central idea as adequately as option (b) does. The passage is not only limited to effect of memristors on RAM and flash memories but the whole world of computers.

Option (d) is incorrect. The passage tells the qualities of memristors in way that displays how it will affect the worlds of computer. So, merely explaining the qualities is not the central idea.

26. c

The passage reads "on catalysing all sectors-public, private, and voluntary-into action to solve their community problem" hence option (c) is correct.

Option(a) is incorrect as being driven goals does not mean "no" value of rules. Option (b) is also incorrect as reliance on market mechanism does not mean all public services are privatised. Option (d) is irrelevant to the passage as no details of START-UP India have been given in the passage.

27. c

Option (c) is correct as the passage reads "Glacier changes, as important and pronounced parts of climate-induced changes in mountain landscapes….. fundamental basis of ecosystem stability and economic development" Option (a) is incorrect as the first line does not imply absence of any effect on less populous area. "...region or in the South American Andes.." hence option (b) is wrong. In passage no such quantification of risk (i.e. being at equal risk) is given and so option (d) is also incorrect.

28. b

The passage explains modernity. According to it science takes precedence over those of the emotions, the sacred, and the non-rational, thus it means embracing rationalism. Also, it mentions the individual rather than the group be the primary unit of society and politics. So, it means embracing humanism.

Thus, statement 1 is correct. The passage mentions "give way to universal commitments and cosmopolitan attitudes" which means emphasising that all human beings belong to same community. So, statement 2 is also correct.

According to the passage "associationsin which men live and work be based on choice not birth". Thus, it does not support identities based on birth. Thus, statement 3 is incorrect. Therefore, option (b) is correct answer.

29. b

The theme of passage is how UAE diversified its economy (develop other sectors) and hence was able to reduce its dependence on oil.Thus Option (b) is the correct answer.

Option (a) is incorrect. It can't be said whether most of the oil rich countries developed their infrastructure with revenue generated from oil or not. Option (c) and Option (d) are incorrect. Nothing is mentioned in the passage about poverty alleviation or Islamic states.

30. b

31. d
Let Amit, Mukund and Dhayani can type x, y and z pages respectively in one hour. Therefore they together can type 4(x + y + z) pages in four hours.
It is given that together they can type 192 pages in four hours.
According to the question we get,
4 (x + y + z) = 192
Or x + y + z = 48 …………… (i)
Also it is known that Dhayani can type as many pages more than Mukund as Mukund can type more than Amit.
So, z – y = y – x
Or 2y = x + z ………………….. (ii)
From equation (i) and (ii), we get
3y = 48
Or y = 16
From equation (ii),
x + z = 32 ………………….. (iii)
Further, it is given that during a period of three hours, Dhayani can type as many pages as Amit can type in five hours.
So, 5x = 3z ……………… (iv)
From equation (iii) and (iv), we get:
Or z = 20
Putting the value of y and z in equation (i), we get x = 12.
x = 12, y = 16, z = 20
Hence, Amit ,Mukund and Dhayani type 12, 16 and 20 pages, respectively in per hour.
32. c
Let us assume that the rear wheels of the wagon have made x revolutions.
Then, front wheels of the wagon have made (20 + x) revolutions.
Circumference of the front wheel of the wagon = $2\pi$ ft.
Distance travelled by the front wheel in (20 + x) revolutions = $2\pi$ (20 + x) feet …………..(i)
Circumference of the rear wheel of the wagon = $3\pi$ ft.
Distance travelled by the rear wheel in x revolutions = $3\pi x$ …………………..(ii)
As the distance travelled by the front and the rear wheels of the wagon is equal, thus by equating (i) and (ii) we get,
$3\pi x = 2\pi$ (20 + x)
Or $3\pi x = 40\pi + 2\pi x$
Or $\pi x = 40\pi$
Or x = 40
The distance travelled by the wagon = $3\pi x = 3 \pi 40 = 120\pi$ feet.
Hence, option (c) is the correct answer.
33. b
The interest paid by the company grew at the same pace for the year 2002.
The interest is increasing by Rs. 2 lakhs every year.
So, the interest paid by the company in 2002 = 29 + 2 = Rs. 31 lakhs.
Total interest paid for the period 1998 - 2002 = 23 + 25 + 27 + 29 + 31 = Rs 135 lakhs.
Average = 135/5 = Rs. 27 lakhs.
Alternatively, the interest paid per year forms an AP (23, 25, 27, 29, 31), with a common difference of 2.
The average of the AP will be equal to its middle term = Rs. 27 lakhs.
Rs. 27 lakh interest is paid in the year 2000.
Hence, option (b) is the correct answer
34. a
Total expenses in the year 1999 = 347 + 120 + 25 + 108 = Rs. 600 lakh.
Expense in fuel = Rs. 120 lakh.
Expense in fuel as a percentage of the total expenses = (Expenses in fuel/total expenses)× 100 = 20%
Hence, option (a) is the correct answer.
35. d

The passage discusses how FDR remained calm and composed even during his assassination attempt. In the last line it is mentioned that if he could remain calm during a personal trauma, he can also remain calm and solve national crisis such as Great Depression. This is the most important message of the passage. Thus, Option (d) is correct.

Option (a) is incorrect. FDRcared for his friend. However, the significance of friendship is not discussed in the passage. Thus, it is not the most important message discussed in the passage. Option (b) is incorrect.

This is because god is not mentioned in the passage. Option (c) is also incorrect. Virtues are not compared in the passage. Thus, whether fearlessness is most important virtue or second most important virtue can't be concluded from the passage.

36. c

Passage mentions Gandhiji's views about demerits of mendicancy which is supported here by giving free meal. Thus, we can infer that Gandhiji is against the practice of providing aid to the undeserving.

Therefore, Option (c) is correct.

He is not against charity. He is against mendicancy, i.e., giving charity to the undeserving. Thus, Option (a) is incorrect. Option (b) is also incorrect. Economic degradation of the country is not discussed in the passage. Option (d) is also incorrect. The author is not concerned about the cleanliness of the environment. He is just suggesting that meals should be given for work in clean environment

37. d

The passage discusses that even in ancient times republican governments existed in ancient India. Also popular assembly was a well-established institution; hence, democracy also existed at that time. This is given in option (d) which is the correct answer.

Option (a) is wrong as Chandragupta Maurya founded his empire is mentioned in the passage but he started republics is not mentioned. Nothing is mentioned about common people likeness of republics.

Hence, option (b) is also incorrect. The passage mentions "when India was unified politically under one emperor" meaning India was unified politically. Nothing is told about difficulty in unifying India politically. So, option (c) is also incorrect.

38. d

The passage emphasises how various aspects of society and culture still have British imprints. Thus, option (d) is the correct answer. Nowhere, it's mentioned or can be inferred that Indians choose to use British way of life rather than developing their own. So, option (a) is incorrect. Also, India's admiration for British as a cause for such imprints is not given in the passage. Thus, option (b) is incorrect. Similarly, India's dependence cannot be ascertained from the passage. So, option (c) is also incorrect. So, the most valid inference is option (d).

39. c

Option (a) is incorrect. The author is not proposing tit-for-tat approach, rather rejecting it as untenable, outrageous and unreasonable.Option (b) is incorrect. The Author does elaborate on the ways India can enlarge norms for carbon. But in the following sentences author criticises such an approach as untenable, outrageous and unreasonable. Option (d) is incorrect. The Author doesn't comment on the economic growth of India in 20th century. But just talks in term of polluting opportunity.

Option (c) is correct. Author suggests something to do in an exaggerated way and also declare it unreasonable. It depicts that the tone of the author is sarcastic

40. d

Option (a) is incorrect. Rubber stamp ministry means that ministry gives automatic approval without giving proper consideration. Option (b) is incorrect as MOEF is wrongly seen by industry and a section of the media. This doesn't mean that both industry and that section of media are in collusion. Option (c) is also incorrect. The Supreme Court has directed the centre to constitute the national environmental regulator. It doesn't itselfwant to set up the regulator.

Option (d) is correct. The first sentence says that the decision of Supreme Court to constitute national regulator is a step in the right direction to ensure effective implementation of environmental laws.

41. d

The statement " In Libya 2011, council authorisation was forthcoming in..." indicates that UN did not approve of using military force in Libya. Therefore, statement 1 is incorrect. The passage does not state if there was an intervention in Syria. It only mentions a civil war going on in Syria. Therefore, statement 2 is also incorrect.

42. c

Line 1 of the passage does not make it clear as to what will constitute a diplomatic success. So, options (a) and (d) are incorrect. Option (b) is also incorrect as the passage does not mention the act of using military force without UN authorisation as illegal.

Lines 2 and 3 of the given passage, read together, indicate that Chapter VI of UN Charter talks about conciliation. Option (c) can thus be inferred from this.

43. a

Neither of the balls will be white if the two balls drawn are either black or red.

Number of red and black balls in the bag = 7 + 9 = 16

Total balls in the bag = 7 + 9 + 4 = 20.

At first pick any of the 16 balls out of 20 can come. And in 2nd pick any of the 15 balls out of 19 can come.

Thus, probability that neither of the balls drawn are white = (16/20)X(15/19)

Hence, option (a) is correct answer

44. a

Let the ages of Amar and Norman be 4x years and 3x years respectively.

Amar's age after 6 years = 4x + 6 = 26 years  or x = 5 years

Norman's present age = 3x = 3 X 5 = 15 years

Hence, option (a) is the correct answer.

45. a

Let us analyze the given statements one by one.

In terms of scores, we have : V > P, P > Q i.e. V > P > Q.

If R scores the highest, we have R > ...... > T,

If S scores the highest, we have S > ...... > Q or S > ...... > U.

If V ranks fifth, P and Q coming after it will occupy sixth and seventh places respectively i.e. Q ranks least. So, S will score the highest.

46. b

47. d

Let number of notes of each denomination be x.

Then, x + 5x + 10x = 480

16x = 480

x = 30

Hence, total number of notes, 3x = 3 x 30 = 90

Hence, option (d) is the correct answer.

48. b

The passage makes a case for a clean environment, where healthy and productive citizens ply. Therefore, option (a) that says demographic dividend will be boosted by healthy environment strengthens the message of the passage (See last line of the passage- "... people healthy and productive"). The passage does not appreciate American style of growth and development. So, option (c) too favours the passage. The passage also talks of a sense of civil duty as important for clean environment. Since an educated population will help doing that, option (d) also supports the passage.

Option (b), on the other hand, talks about environmental protection triumphing over economic development, which is something not mentioned or suggested in the passage. So, option (b) is the least essential argument for the given passage.

49. d

The passage mentions that a popular government without popular information is a prologue to a farce or a tragedy. This is because with popular information, people may not take a correct decision and they may choose a wrong candidate. This will make democracy meaningless. Thus, Option (d) is the correct justification.

Option (a) is incorrect because comparison between freedom of speech and human rights is not done in the passage.

Option (b) is incorrect because the passage is not criticizing reasonable restriction.

Reasonable restriction is in fact important in a democracy. Option (c) is also incorrect because it can't be concluded from the passage whether right to information is granted to the citizens in most developed nations or not.

50.c

Statement 1 is incorrect as such an inference cannot be made from the given passage.

Statement 2 is also incorrect as it is beyond the scope of the passage.

Statements 3 and 4 are correct as seen from the 2nd sentence of the 1st paragraph. To quote the passage,

"If we are to contain massive migration from the rural areas to the urban; if we are to protect and improve the quality of life in villages, then we have to apply the Gandhian model to solar electrification of villages"

51. d

Statement 1 is incorrect as the direct effect of Gandhian Model on rural-urban linkage is nowhere discussed in the passage.

Statement 2 is also incorrect because Gandhian Model is antithetical to top-down projects where locals have a control over technology as seen in the 2nd paragraph – "What Bharat.....people themselves".

Statement 3 is also incorrect because it is not an effect, rather an argument used by the author to support his stand for Gandhian Model.

Statement 4 is correct as seen from the 2nd paragraph – "What Bharat....rural problem". Thus, author suggests indigenous Gandhian solution.

52. a

Statement a) is correct as it flows throughout the passage and serves as its central message.

Statement b) is incorrect as the passage does not cover a discussion on theory of justice per se. Passage mostly deals with just institutions. Thus, just institutions may be a part of Theory of Justice.

Statement c) is incorrect because its ambit is broader than what the passage covers. Natural duties is a broader term.

Statement d) is also incorrect as it partially addresses the message of the passage.

53. d

Statement 1 is incorrect as the passage talks about our role in terms of complying with and supporting just institutions but doesn't talk about becoming a part of them (which may be specialised role left to the judiciary) as seen from the first two sentences of the passage.

Statement 2 is also incorrect as such a conclusion cannot be made from the 2nd sentence of the passage. Author only says, we should assist in the establishment of just arrangements when they do not exist, at least when there is little cost to ourselves. This does not mean little cost is involved in the establishment of just arrangements.

54. c

It is mentioned that "With a dearth of educational facilities provided by the Indian diplomatic mission, the problem of this gharwapsi is more pronounced in the youth. Case in point: The young non-resident Indians (NRIs) of Saudi Arabia." There is no mention of it being prevalent only in Indian youth. Thus, option (a) is incorrect. Gharwapsi is coming back to India. Not the other way around that is going back to Saudi Arabia after completion of education. Thus, option (b) is also incorrect.

It is stated that "Interviews with several present and former NRIs, who have lived in the Kingdom for extended periods of time, revealed that while the Indian diplomatic mission runs the CBSE-affiliated International Indian School chain in various cities, it has no undergraduate or graduate colleges." So option (c) is correct.

There is no mention of how to stop 'gharwapsi'. So statement (d) can't be inferred.

55. b

In the fifth paragraph of the passage the reasons are mentioned as "Those who have spent many years, at the peak of their productive age, know well that unlike in the USA and European nations, the chances of naturalisation in GCC countries are slimmer than slim" and "Stuck in a "no man's land", these Saudi residents find themselves in a peculiar position as they identify themselves as culturally Saudi, but are Indian passport holders."

So option (b) is the right answer.

Statements 1 and 3 are outside the scope of the passage. Statement 1 says that Indian children are are sent to India because they can't find a job in Saudi. This is factually incorrect as the passage says that that Indian children are are sent to India to pursue their education. Statement 3 is completely out of context.

56. b

In one hour the hour hand will rotate 1 unit (say 10 to 11)

That means rotation of 360/12 = 30 degrees in one hour.

Therefore, degrees by which it will rotate in 5 hours (i.e. from 10 AM to 3 PM) = 30 x 5 = 150 degrees.

57. d

58. b

59. d

Let Rose, Lily, Tulip, Lotus and Marigold be represented by R, L, T, Lo and M.

As per the 1st statement: L -R

Now, as per the 2nd statement, Tulip is to the left of Lotus and on the right of Rose. Thus, both Tulip and Lotus are to the right of Rose: L - R - T - Lo

As Lily is to the right of Marigold, the final picture that emerges may be represented as follows:

M - L - R - T - Lo

It's evident in the above figure that Rose is in the middle of the row.

Hence, option (d) is the correct answer

60. a

Let the amount of work done by a man and a woman be M and W units/day.

Now, the man days will remain constant, i.e. Man-days1 = Man-days2

Therefore, (5M+15W) × 10= (15M + 5W) × 15

Or10M +30W= 45M + 15W

Or35M= 15W --------------- (i)

Hence, 5M+15W= 5M + 35M= 40M (Using i)

So, it can be said that 40 men will take 10 days to finish the work.

Let us assume that 4 men worked for x days to finish the task

Again, man-days1 = man-days2

40 × 10= 4 × x

or x = 400/4=100 days

61. b

Let us assume that Satya takes x minutes to walk between two points.

Then Satish will takes (x+30) minutes to walk the same distance.

Ratio of speed of Satish and Satya= 5:7

Hence, the ratio of time taken by Satish and Satya= 7:5

Therefore, (x+30)/x=7/5 or 5x+ 150=7x or 2x=150

or x = 75 minutes

So, original time taken by Satish= 75+30= 105 minutes.

Now, if Satish doubles his speed, he will take half of the initial time, i.e. 105/2=52.5 minutes.

62. c

Every hour car A will cover 70 km and car B will cover 40 km. Thus, effective distance between will reduce by 30 km per hour. Here 30kmph is the relative speed of cars.

Thus, the time taken for Car A to catch up with Car B = Distance between the cars/ Relative speed of the cars

= 90 / (70- 40)

= 90/30

= 3 hours

Hence, option (c) is the correct answer.

63. a

Let the cost price and selling price of the mangoes be represented by CP and SP.

CP of 8 mangoes = Rs. 12

Therefore, CP of 1 mango = 12/8 = Rs. 3/2.

Also, SP of 12 mangoes = Rs. 8

Therefore, SP of 1 mango = 8/12 = Rs. 2/3.

Therefore, loss percentage = [(CP – SP)/CP] x 100 = [(3/2 – 2/3)/(3/2)] x 100 = (5/9) x 100 = 55.5 %

64. a

Number of routes from A to B = 2

Number of routes from B to C = 1

==> Number of routes from A to C via B = 2 × 1 = 2

Now, Number of routes from A to C = Number of routes from A to C via B + Direct route A to C = 2 + 1 = 3 …….......(i)

Number of routes from C to D = 2

Number of routes from D to F = 2 ==> Number of routes from C to F via D = 2 × 2 = 4 ……....… (ii)

Number of routes from C to F bypassing D = 1

So, Number of routes from C to F = Number of routes from C to F via D + Number of routes from C to F bypassing D = 4 + 1 = 5 ……....… (iii)

Using (i) and (iii), we get

Total number of routes from A to F = Number of routes from A to C × Number of routes from C to F = 3 × 5 = 15

65. c

66. b

67. c

68. b

Ambedkar considered the idea of a village republic as one based on undemocratic values as for him, it was "a den of…narrow mindedness and communalism" Statement 2 is thus correct. Statement 1 is also correct as the passage clearly describes that being landless makes Dalits dependent on landowning castes for survival, thereby making the Dalit assertion for freedom and dignity difficult. Violence against Dalits can be seen as an undemocratic value, therefore statement 4 is also correct.

The passage nowhere suggests that Dalits are ignorant about their freedoms. Therefore, statement 3 is wrong.

69. c

Option (a) is incorrect. Paragraph 2, last line suggest exactly opposite. Besides, in the first paragraph, it directly mentions that Ambedkar's observations are as relevant today as they were in 1940s. Option (b) cannot be derived from the last line of the passage, as it only mentions daughters becoming debt. Option (d) is wrong due to use of the word "essentially".

Option (c) is correct as evident from last para. Author says, land signifies it also has cultural value attached to it.

70. b

Statement 1 is correct as in last para, which says that "land….yields persistent rent", rent signifies returns.

Statement 2 is also correct as directly given in the last para. Similarly, Statement 4 can be directly inferred from the passage.

Statement 3 is not correct in the given context as it is the patrilineal ownership which proves disadvantageous to women. It cannot be said that land itself gives power over women.

71. c

72. c

73. c

Statement 1 is correct as seen from the 4th sentence of the 1st paragraph.

Statement 2 is also correct as seen from the 3rd last sentence of the 2nd paragraph. These are the two inter-connected arguments mentioned in the 2nd sentence of the 1st paragraph

74. a

Statement 1 is correct as seen from the 3rd and 4th sentences of the 1st paragraph. Statement 2 is incorrect because the statement shows similarity between the two, and not a difference as mentioned in the question

75. b

The important part in the question is "implied in the passage" and hence the context is very important. Statements a), c) and d) may not be incorrect per se but they lack a contextual linkage with the given phrase in the way it is used in the 2nd paragraph, and hence cannot be considered correct for this question. Statement c) does justice to the context and hence is correct as seen in the 2nd paragraph – "Of the two.....ethnic lines".

76. c

Statement1 is beyond the scope of this passage and hence is incorrect.

Statement 2 is incorrect because it cannot be generally implied for all politicians as seen from the last three sentences of the 2nd paragraph.

77. a

78. d

79. c

Only Q is sitting between P and T. Therefore, there are two possible arrangements of P, Q and T, i.e. as PQT or TQP. Furthermore, as R is to the left of T and S is to the right of P, the two arrangements possible are RPQTS and RTQPS. Both these arrangements satisfy the conditions given in the question. Thus, S is on the right-most side in both of these arrangements.

Hence, option (c) is the correct answer

80. c

Let's assume the amount of milk and water in the original mixture is 2x and x liter respectively.

Now, 0.9 liter of mixture is taken out.

In the 0.9 liter of the mixture, the amount of milk = (2/3 X 0.9) = 0.6 liter and the amount of water = 0.3 liter.

Thus, milk left in the container = 2x – 0.6

And water left in the container = x – 0.3

Now 0.9 liter water is added.

Hence, amount of water in the new mixture = x – 0.3 + 0.9 = x + 0.6

It's given that milk and water in the new mixture are in the ratio of 3:2.

Hence, (2x – 0.6) / (x + 0.6) = 3/2

or 4x – 1.2 = 3x + 1.8 or x = 3 liter

Now, volume of container = 2x+ x = 3x = 3 X 3 = 9 liter

Hence option (c) is correct.