

GS Paper II

Solution Key

Q.	Ans.
1	4
2	2
3	4
4	3
5	4
6	1
7	3
8	4
9	2
10	1
11	1
12	3
13	1
14	4
15	3
16	4
17	4
18	3
19	3
20	4

Q.	Ans.
21	3
22	1
23	3
24	3
25	3
26	4
27	2
28	4
29	2
30	2
31	1
32	3
33	1
34	2
35	3
36	1
37	2
38	3
39	1
40	2

Q.	Ans.
41	4
42	1
43	2
44	2
45	2
46	3
47	4
48	4
49	1
50	2
51	4
52	4
53	3
54	3
55	1
56	2
57	4
58	2
59	2
60	2

Q.	Ans.
61	3
62	3
63	3
64	2
65	1
66	1
67	1
68	2
69	3
70	4
71	2
72	4
73	1
74	2
75	3
76	1
77	2
78	3
79	2
80	1

MY SCORE CARD

Total no. of Questions	80
Correct	
Incorrect	
Unattempted	
Total Marks	

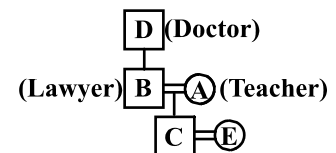
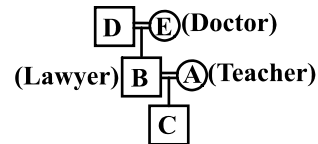
Detailed Solutions:

- A is incorrect as it is not that the adult society does not act on behalf of children if they are denied any education. It is merely that since a child cannot demand the rights or his/her own, therefore adult society "must" act on behalf of the child.
B is incorrect as the passage does not indicate that the right cannot be enforced in the country but rather mentions the shortfalls and difficulties which may occur in the act of enforcing the law.
Hence, the correct answer is **option 4**.
- A is not in the passage at all.
B, C and D are mentioned as traditional obstacles to the education of girls, this can be seen by the statements "This may be painfully..... if at all.", "Tenacious prejudice against the intellectual potential of girls runs across.....has not been able to address it."
Hence, the correct answer is **option 2**.
- A is incorrect as in the passage it is mentioned that "One hardly needs a reminder.....enshrined in the Constitution.", which indicates that it is a constitutional right.
B is incorrect as it is not indicated in the passage that adoption of a new system of education similar to that of developed countries will lead to the realization of the goal of universal education.
Hence, the correct answer is **option 4**.
- 1 is incorrect since there is no mention of any declaration making education compulsory.
2 is incorrect as the passage mentions that adults should act on behalf of children in implementing the act but there is no mention of the adults not being keen in implementing the Right to Education.
4 is incorrect as this is not the key message in the passage and it cannot be implied or inferred from the passage.
3 is correct as it conveys the key message of the passage as it mentions the various obstacles a girl child has to face in her education and mentions the importance of safeguarding the right.
Hence, the correct answer is **option 3**.
- 1 is mentioned in the passage and hence is not an inference.
3 has the word 'prohibitive' which cannot be inferred from the passage.

4 is supported by "If a legal battle.....if at all" which points out the opportunity cost of a missed childhood, particularly for girls.

Hence, the correct answer is **option 4**.

- If there are two fathers and two sons among three males, we can conclude that the family has three generations.
We can have two possible arrangements as shown below:



From the first arrangement, D is E's husband.
Hence, **option 1**.

- E and A are the females in the group.
Hence, **option 3**.
- B's wife A, is the teacher .
Hence, **option 4**.
- Total number of participants = 2878
Total number of male participants = 1652
∴ Total number of female participants = 2878 - 1652
= 1226
1226 voted against and 1425 persons voted for the proposal.
Hence, 2878 - 1226 - 1425 = 227 persons were undecided.
Now, there were 196 undecided females.
Hence, there were 227 - 196 = 31 undecided males.
As, 796 males voted against, hence, 1226 - 796 = 430 females voted against the proposal.
Now, number of males who voted for the proposal is 1652 - 796 - 31 = 825
Hence, 1425 - 825 = 600 females voted for the proposal.
Hence, we get the following table.

	Males	Females
Voted for	825	600
Voted against	796	430
Undecided	31	196

From the above table, 600 females voted for the proposal.

Hence, **option 2**.

10. From the table in the answer to the first question of this set, 31 males were undecided.

Hence, **option 1**.

11. From the table in the answer to the first question of this set, 430 females were not in a favour of the proposal.

Hence, **option 1**.

12. Number of people between X and Y = $48 - 14 - 17 = 17$
Now, Z is exactly between X and Y.

Hence, number of people between X and Z = $(17 - 1)/2 = 8$

Hence, **option 3**.

13. A and B are stated in paras 2 and 3 respectively. C contradicts the passage which says "remains on the sidelines with minimal interference".

The sentence "The early debatecan be misleading" shows that size is not something that the author wishes to focus on. Hence, D is not correct.

Hence, the correct answer is **option 1**.

14. 1, 2 and 3 are an increase in government interference which is contradictory to the basic idea of the passage, 4 is in line with the passage - "steps... who needs support and help".

Hence, the correct answer is **option 4**.

15. The passage calls a large bureaucracy 'cumbersome' and is not in favour of it, making A is incorrect. B has no support in the passage - rather the passage is against government interference.

C, D and E are mentioned in the third paragraph.

Hence, the correct answer is **option 3**.

16. The passage states that the state is unable to deliver all that is needed as India is too large and complex a nation for the state to do so, which means that the structure of the nation is responsible, not the state. A and B both place the blame on the state.

Hence, the correct answer is **option 4**.

17. 1 and 2 convey only part of the message of the passage.

3 contradicts the passage - talking about more rather than less interference.

4 is the best option since it best captures the passages's focus on inclusive growth.

Hence, the correct answer is **option 4**.

18. A takes a literal meaning of "creative society", which is inappropriate in the context.

B contradicts the passage.

C is mentioned in the first sentence where potential contradictions become "articulate".

D is mentioned in "This is evident....creative society in temporary times".

Hence, the correct answer is **option 3**.

19. Social movements do not need to be aggressive. Hence A is incorrect.

B contradicts the passage since social groups get politically mobilised and demand their rights (internally) and not externally.

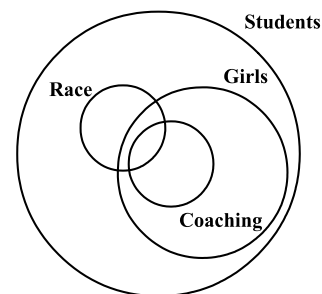
The entire passage supports C and D.

Hence, the correct answer is **option 3**.

20. A and B invert the argument in the passage, and are incorrect.

Hence, the correct answer is **option 4**.

21. The given three statements can be represented in the diagram below.

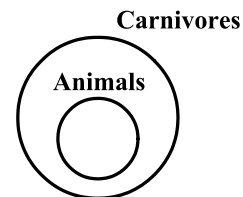


Clearly, only option(c) is correct.

Hence, **option 3**.

22. We will try to understand each of the given statements
A. All animals are carnivorous.

This can be represented using a venn diagram as:

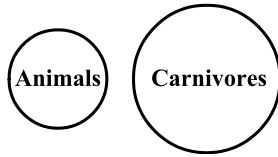


- B. Some animals are not carnivorous.

This means that there is at least one animal, which is not carnivorous.

- C. Animals are not carnivorous.

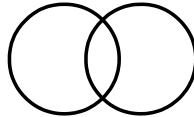
The venn diagram for this statement is:



D. Some animals are carnivorous.
This means that at least one animal is carnivorous.

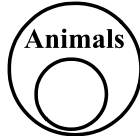
The venn diagram for this statement is:

Animals Carnivores



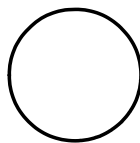
Or

Carnivores



Or

Animals = Carnivores



Let us now consider the options.

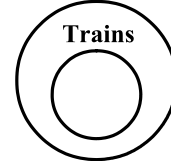
- (1) A and C: From the explanation above, it can be easily seen that both these cannot be true at the same time. However both can be false if only some animals are carnivorous. Hence, option 1 is correct.
- (2) A and B: We can see that these two statements contradict each other and hence cannot both be true. However, both can be false, if statement 2 implies statement 3. Hence, option 2 is also correct.
- (3) B and C: Statement (2) can also mean that all animals are not carnivorous, in which case it will be equivalent to statement 3. So these statements can both be true. Hence, option 3 is not correct.
- (4) C and D: These statements contradict each other and hence cannot both be true. However, they cannot both be false either. Hence, option 4 is not correct.

Multiple answers are correct. We however mark option 1 as the answer as only one answer can be correct. Hence, **option 1**.

23. The statements can be understood as follows:

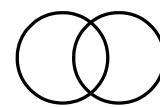
- A. All trains are run by diesel engine.
This statement can be represented using a venn diagram as:

Diesel Engines



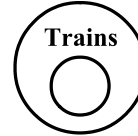
- B. Some trains are run by diesel engine.
The venn diagram for this is:

Trains Diesel Engines



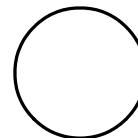
Or

Diesel Engines



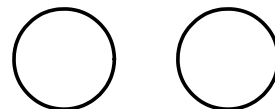
Or

Train = Diesel Engines



- C. No train is run by diesel engine.
This is represented as:

Trains Diesel Engines



- D. Some trains are not run by diesel engine.
This means that there is at least one train, which is not run by a diesel engine.

Now consider options:

(1) A and B: From the explanation above, both these statements can be true at the same time.

Hence, option 1 is not correct.

(2) B and C: These statements are contradictory and hence cannot both be true. However, one of these has to be true and hence they both cannot be false at the same time.

Hence, option 2 is not correct.

(3) A and C: These statements are contradictory and hence cannot both be true. However, if statement 2 is true, they can both be false.

Hence, option 3 is correct.

(4) A and D: These statements contradict each other and hence cannot both be true. However, both can be false if statement 4 implies statement 3.

Hence, option 4 is also correct.

Multiple answers are correct. We, however, mark option 3 as the answer as only one answer can be correct.

Hence, **option 3**.

24. Population of country will be declining if the percentage of youngsters is less than the percentage of old people.

Only pyramid C depicts this.

Hence, **option 3**.

25. Only graph C represents exponential growth.

Hence, **option 3**.

26. The given pie charts give disease categories as percentage of total number of patients. We do not know the total number of patients in the two towns. So it is not possible to find the number of diabetes patients in towns A and B.

Hence, **option 4**.

27. Since, the numbers in town B add up to more than 100%, we can conclude that Town B definitely has patients with more than one disease.

In town A, the numbers add up to exactly 100%.

Hence, no one in town A has more than one disease.

Hence, **option 2**.

28. Velocity = $\frac{\text{Distance travelled}}{\text{time taken}}$

As the velocity of train B is higher than train A, we can say that both the trains do not travel the same distance in the same time.

Hence, **option 4**.

29. The pronoun "them" refers to the poor and unfortunate in every country and only B is consistent with this. Hence, the correct answer is **option 2**.

30. A is contradictory to the passage.

B is an assumption implied from "Spiritual or any other starvation and misery".

C is a conclusion in the passage and is not an assumption.

Hence, the correct answer is **option 2**.

31. 2, 3 and 4 are just references in the passage.

Hence, the correct answer is **option 1**.

32. 3 is correct from "every civilization and every people.....that torture the mind and spirit".

Hence, the correct answer is **option 3**.

33. The person started recovering soon after he started treatment. This means that after starting treatment, the number of bacteria decreased. This must be region E.

The time when he suffered is thus from B to D, where the bacteria and hence the symptoms increased.

A must be the period immediately after being exposed to contaminated water, or the incubation period of the infection, when he did not show any symptoms.

Hence, **option 1**.

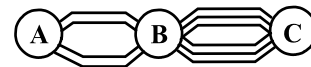
34. Part B of the curve indicates that the person began showing symptoms of infection.

Hence, **option 2**.

35. Region E indicated that the treatment yielded effective relief.

Hence, **option 3**.

36.



As there are 4 routes from A to B and 6 from B to C, there are $4 \times 6 = 24$ routes from A to C.

Hence, **option 1**.

37. The penalty pattern is an AP.

First term $a = \text{Rs.}200$

Common difference $d = \text{Rs.}50$

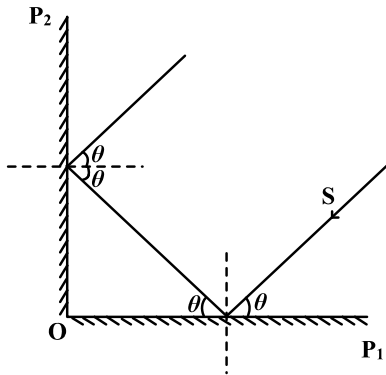
$n = 10$

$$S_n = \frac{n}{2}[2a + (n - 1)d]$$

$$\therefore S_{10} = \frac{10}{2}[2 \times 200 + (10 - 1) \times 50] = \text{Rs.} 4250$$

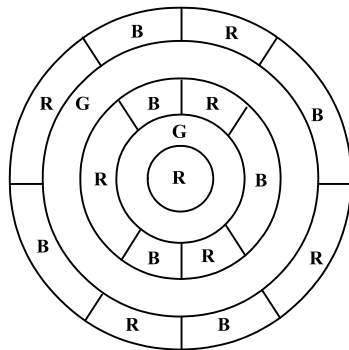
Hence, **option 2**.

38.



The fundamental law of reflection states that the angle of incidence is equal to the angle of reflection. Using this principle, we plot the path of the ray. We observe that both the incident and reflected rays make equal angles with the line OP_1 and make the same angle with the normal to the line OP_2 . Thus, they are parallel and oppositely directed. Hence, **option 3**.

39.



As shown in the figure, we can achieve the required using 3 colours, R, G and B. Hence, **option 1**.

40. The sides of the rectangle with area 15 can be (1, 15) or (3, 5). The sides of the rectangle with area 48 can be (48, 1); (16, 3); (8, 6); (4, 12) or (2, 24)

Consider option 1:

The side of rectangle with area 15 can be 3 and 5. Hence, the corresponding sides of rectangle with area 48 have to be 7 and 5, which is not possible. Hence, option 1 can be eliminated.

Consider option 2:

The sides of the rectangle with area 15 can be 3 and 5. Then, the side of rectangle with area 48 is 8 and 6.

This is possible. Hence, **option 2**.

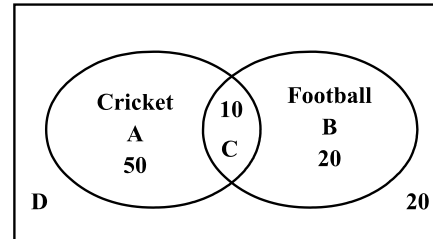
41. Let x be the number of Rs.1 coins and y be the number of Rs.2 coins.
Total number of coins = $x + y = 50$... (i)
Total amount of money = $x + 2y = 75$... (ii)
From (i) and (ii),
 $y = 25$
 $\therefore x = 25$
Hence, **option 4**.

42. Let the maximum distance be d cm.
Hence, d is the minimum number such that it is an integral multiple of 40, 42 and 45.
 $\therefore d = \text{LCM}(40, 42, 45) = 2520$
 $\therefore d = 2520 \text{ cm} = 25 \text{ m } 20 \text{ cm}$
Hence, **option 1**.

43. Velocity of the first bus $v_1 = 40 \text{ km/hr}$
Velocity of second bus $v_2 = 320/5 \text{ km/hr} = 64 \text{ km/hr}$
 $\therefore \frac{d_1}{d_2} = \frac{v_1 t}{v_2 t} = \frac{v_1}{v_2} = \frac{40}{64} = \frac{5}{8}$

Hence, **option 2**.

44. Consider the venn diagram below



Number of students who play both the games = 10
Number of students who play only cricket = $60 - 10 = 50$
Number of students who play only football = $30 - 20 = 10$
 \therefore Number of students who play neither of the games = $100 - (50 + 20 + 10) = 20$
Hence, **option 2**.

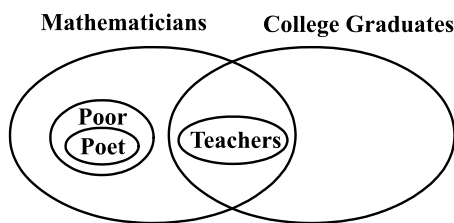
45. Note that 1000 litres = $1(\text{metre})^3$

$$\begin{aligned} \text{Thus, daily need of water} &= \frac{4000 \times 150}{1000} \text{ m}^3 \\ &= 600 \text{ m}^3 \end{aligned}$$

Total water in the tank = $(20 \times 15 \times 6) \text{ m}^3 = 1800 \text{ m}^3$
Number of days water can last = $1800/600 = 3$
Hence, **option 2**.

46. 1 and 4 represent an example of the theme. 3 is correct since the passage focuses on the role of key stone species.
Hence, the correct answer is **option 3**.
47. A is incorrect since mussels are the dominant species only in the absence of Sea stars.
B has no support in the passage.
Hence, the correct answer is **option 4**.
48. A is incorrect since mussels are prey – rather than competitors for sea stars. B has no support in the passage. C is mentioned in the first few lines of the passage.
Hence, the correct answer is **option 4**.
49. A is correct since the removal of a key stone species threatens the survival of other species in the eco system.
B has no support in the passage – it merely takes the example of an aquatic ecosystem to explain keystone species.
C is too strong. While a few species will be wiped out if the key stone species are removed, collapse cannot be concluded.
Hence, the correct answer is **option 1**.

50. The given argument can have one representation as follows:



Now, consider options

- Those mathematicians who are poor cannot be teachers. So option 1 is a valid conclusion.
- Teachers are college graduates and college graduates are not poor. So teachers are not poor is valid.
- From the diagram above, option 2 is not a valid argument.
- Poets are poor and no college graduates are poor. So option 4 is valid.

Hence, **option 2**.

51. Average for the first three tests = N
 \therefore The sum of scores in the first three tests = $3N$
 Score in the fourth test = $N + 20$

$$\therefore \text{Final average} = \frac{\text{Sum of scores in four tests}}{4}$$

$$= \frac{3N + N + 20}{4}$$

$$= N + 5$$

Hence, **option 4**.

52. Fraction of males = 70%
 \therefore Fraction of females = 30%
 Fraction of married = 30%
 Fraction of unmarried = 70%

Now, $\frac{5}{7}$ of males are unmarried.

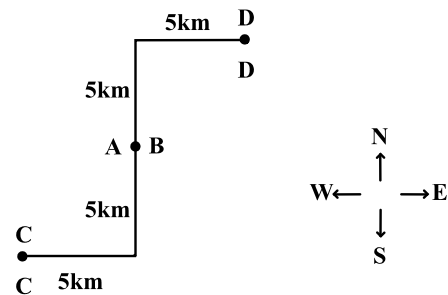
Let the fraction of females who are single be x .

$$\therefore 70 = 70 \times \frac{5}{7} + 30 \times x$$

$$x = \frac{2}{3}$$

Hence, **option 4**.

- 53.



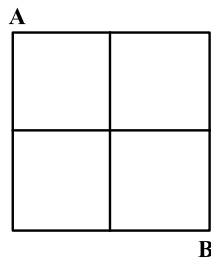
The distance along the path given is 20 km. So the straight line distance between the houses C and D is less than 20 km.

Hence, **option 3**.

54. The last sentence indicates an adverse effect on clean water and on biodiversity.
Hence, the correct answer is **option 3**.
55. Only A is implied. C is irrelevant, and C has no support.
Hence, the correct answer is **option 1**.
56. A is incorrect since the passage points out both the negatives and positives of modifications.
B is mentioned in the passage.
Hence, the correct answer is **option 2**.
57. B and D are irrelevant to the passage.
A is correct since a moral act should spring from our own free will.

C is correct from "But if the messenger...moral one".
Hence, the correct answer is **option 4**.

58. 1 contradicts the passage. 3 and 4 have not been mentioned.
Option 2 is correct. A moral action should be based on our free will or discretion.
Hence, the correct answer is **option 2**.
59. The statement refers to not having one's own opinion or thought process, following what orders are given without actually understanding them, and also refers to being easily influenced and pressurised. C is not consistent with the above meaning, while D has a literal meaning.
A and B are correct.
Hence, the correct answer is **option 2**.
60. Time require to complete 30 km was lowest for A.
Hence, A won the race.
Hence, statement A is correct.
Till 25 km, B was faster than A. Hence, statement B is also correct.
In the initial part of the race, C covered greater distance than A and B. So C had the highest speed.
Hence, statement C is false.
Hence, **option 2**.
61. Every element of first figure is multiplied by 1.5 to get it's corresponding element in figure 2.
 $2 \times 1.5 = 3$
 $80 \times 1.5 = 120$
 $24 \times 1.5 = 36$
Hence, missing term = $6 \times 1.5 = 9$
Hence, **option 3**.
62. Note from the figure that the person needs to take four steps of which two steps are south and two steps are east.



He can select the two steps that go southward in ${}^4C_2 = 6$ ways.
The choice of eastward steps follows from the choice of southward steps.
Hence there are 6 different paths.

Hence, **option 3**.

63. Let the area of larger triangle be 16.
Hence, number of triangles with area 1 = 12
Number of triangles with area 4 = 7
Number of triangles with area 9 = 3
Number of triangles with area 16 = 1
Hence, total number of triangles = $12 + 7 + 3 + 1 = 23$
Hence, **option 3**.
64. A haystack refers to a pile of hay or dried grass.
Hence, the correct answer is **option 2**.
65. "He fell asleep being much tired with his long walk" hence he was exhausted.
Hence, the correct answer is **option 1**.
66. He slept under a haystack lying in the meadow. A meadow refers to a tract of grass land or a field. Which means that he was walking through the countryside.
Hence A is correct.
B is incorrect since it contradicts the passage - he was 'hungry'.
Hence, the correct answer is **option 1**.
67. Horrible means something very bad or unpleasant,
Hence, the correct answer is **option 1**.
68. "My toothbrush is a thing a misery" indicates the correct answer.
Hence, the correct answer is **option 2**.
69. At the last moment he carries it to the railway station wrapped up in his handkerchief.
Hence, the correct answer is **option 3**.
70. "In spring..... cubs" indicates that they give birth to the cubs three months before spring which indicates the season of "winter".
Hence, the correct answer is **option 4**.
71. "If there are..... expense of others" which means that the mother bear lets her cubs fight for the meal and in a sense makes them fend for themselves without interfering.
Hence, the correct answer is **option 2**.
72. A and B have no support in the passage.
Hence, the correct answer is **option 4**.
73. 1 will aggravate the situation. 3 is unfair to you. 4 is an untrue statement, and hence not appropriate.
1 is most appropriate in the given content, since it preserves your stand for the record.
Hence, the correct answer is **option 1**.

74. 1 and 4 are either bending to an anti-social element or dealing with the same. .
2 is better than 3 since the police is the appropriate authority to deal with such elements.
Hence, the correct answer is **option 2**.
75. It is important to accomplish the task. Hence 3 is better than the others.
Hence, the correct answer is **option 3**.
76. It is important to continue to work while maintaining transparency. 3 lacks transparency. 2 and 4 stop work.
Hence, the correct answer is **option 1**.
77. In a crisis, the priority is the welfare of the people.
Hence, the correct answer is **option 2**.
78. Without being unfair to either, you need to provide them both with the vaccine.
Hence, the correct answer is **option 3**.
79. It is important to continue to work while maintaining transparency. 1 lack transparency. 3 and 4 sidestep the issue.
Hence, the correct answer is **option 2**.
80. Keep the context in mind: social pressure. 2 is clearly inappropriate. 1 will not be useful due to the social pressure. 4 will work only if the daughter-in-law also does not face social pressure – which is unlikely.
Hence, the correct answer is **option 1**.