

1. A and B can do a piece of work in 72 days. B and C can do it in 120 days. A and C can do it in 90 days. In what time can A alone do it?
  - a) 80 days
  - b) 100 days
  - c) 120 days**
  - d) 150 days
  
2. A train started from a station with a certain number of passengers. At the first halt,  $\frac{1}{4}$  of its passengers got down and 120 passengers got in. At the second halt, half of the passengers got down and 100 persons got in. Then, the train left for its destination with 240 passengers. How many passengers were there in the train when it started?
  - a) 540
  - b) 480
  - c) 360
  - d) 240**
  
3. The sum of the squares of two numbers is 97 and the squares of their difference is 25. The product of the two numbers is
  - a) 45
  - b) 36**
  - c) 54
  - d) 63
  
4. A can do a piece of work in 3 days while B can do the same work in 4 days. If they work together for a total wages of Rs.2800, how much does A get?
  - a) Rs.1200
  - b) Rs.1900
  - c) Rs.1300
  - d) Rs.1600**
  
5. Let E be the set of all integers with 1 at their unit places. The probability that a number chosen from  $\{2,3,4,\dots,50\}$  is an element of E, is
  - a)  $\frac{5}{49}$
  - b)  $\frac{4}{49}$**
  - c)  $\frac{3}{49}$
  - d)  $\frac{2}{49}$

6. A pipe P can fill a tank in 12 min and another pipe R can fill it in 15 min. But, the 3rd pipe M can empty it in 6 min. The 1st two pipes P and R are kept open for double the 2.5 min in the beginning and then the 3rd pipe is also opened. In what time is the tank emptied?
- a) 30 min
  - b) 25 min
  - c) 45 min**
  - d) 35 min
7. Ten different letters of an alphabet are given. Words with 5 letters are formed from these given letter. Then, the number of words which have at least one letter repeated is--
- a) 69760**
  - b) 30240
  - c) 99748
  - d) All of these
8. Out of 11 members of a family 4 are males and rest females. The family hired three taxis on rent to see a museum. The members have to sit in the cars in such a way that not more than 4 members are in any one car and each car has at least one male member. In how many different ways the members can travel?
- a) 658**
  - b) 126
  - c) 140
  - d) 532
9. A, B, and C invest RS. 5,000, RS. 6,000 and RS. 4,000 in a business. A gets 30% of the profit as Manager's salary and the remaining part of the profit is distributed among them in the ratio of their investments. If A gets RS. 200 more than B and C receive together, then total profit is
- a) RS. 3,500
  - b) RS. 3,000**
  - c) RS. 2,000
  - d) None of these
10. The ratio of the prices of two house A and B was 4 : 5 last year. This year, the price of A is increased by 25% and that of B by Rs.50000. If their price are now in the ratio 9 : 10. the price of A last year was
- a) Rs. 360000**
  - b) Rs. 450000
  - c) Rs. 480000
  - d) Rs. 500000

11. In an examination the percentage of students qualified to the number of students appeared from school 'A' is 70%. In school 'B' the number of students appeared is 20% more than the students appeared from school 'A' and the number of students qualified from school 'B' is 50% more than the students qualified from school 'A'. What is the percentage of students qualified to the number of students appeared from school 'B'?
- a) 30 %
  - b) 70%
  - c) **87.5 %**
  - d) 78.5 %
12. A number when divided by a divisor leaves a remainder of 24. When twice the original number is divided by the same divisor, the remainder is 11. What is the value of the divisor?
- a) 13
  - b) 59
  - c) 35
  - d) **37**
13. Three partners A, B and C invest RS. 3,000 RS. 4,000 and RS. 5,000 respectively. A get 15% of the profit as manager's salary and B gets 10% of the profit as Asst. Manager's salary. The remaining part of the profit is distributed among them in the ratio of their investments. If A receives RS. 540, the shares of B and C respectively are
- a) **RS. 560, RS. 500**
  - b) RS.500, RS. 560
  - c) RS. 160, RS. 500
  - d) None of these
14. Four milkmen rented a pasture. A grazed 18 cows for 4 months, B grazed 25 cows for 2 months, C grazed 28 cows for 5 months and D grazed 21 cows for 3 months. If A's share of rent be RS. 360, then total rent of the field is
- a) RS. 1,500
  - b) RS. 1,600
  - c) **RS. 1,625**
  - d) RS. 1,650
15. A goldsmith has two qualities of gold, one of 24 carats and another of 32 carats purity. In what proportion should he mix both to make an ornament of 30 carats purity?
- a) **1 : 3**
  - b) 2 : 3
  - c) 3 : 2

d) 1 : 5

16. The length and breadth of a hall are 60m and 50m respectively. Length of a 2 meter wide carpet to cover the whole floor of the room is

a) 3000 m

**b) 1500 m**

c) 110 m

d) 150 m

17. If on a marked price, the difference of selling prices with a discount of 30% and two successive discounts of 20% and 10% is Rs.72, then the marked price (in Rs.) is

**a) Rs.3600**

b) Rs.3000

c) Rs.2500

d) Rs.2400

18. 18 litres of pure water was added to a vessel containing 80 litres of pure milk. 49 litres of the resultant mixture was then sold and some more quantity of pure milk and pure water was added to the vessel in the respective ratio of 2 : 1. If the resultant respective ratio of milk and water in the vessel was 4:1. what was the quantity of pure milk added in the vessel? (in litres)

**a) 4**

b) 8

c) 10

d) 12

19. SBI lent RS. 1331 lakh to the TATA group at compound interest and got RS. 1728 lakh after 3 yr. What is the rate of interest charged, if compounded annually?

a) 11%

**b) 9.09%**

c) 12%

d) 8.33%

20. A man, a woman and a boy can complete a piece of work in 20 days, 30 days and 60 days respectively. How many boys must assist 2 men and 8 women so as to complete the work in 2 days?

**a) 8**

b) 12

c) 4

d) 6

21. The number 58129745812974 is divisible by
- a) **11**
  - b) 9
  - c) 4
  - d) None of these
22. A boat running upstream takes 528 min to cover a certain distance, while it takes 240 min to cover the same distance running downstream. What is the ratio between the speed of the boat and speed of the water current, respectively?
- a) 2 : 1
  - b) 3 : 2
  - c) **8 : 3**
  - d) Couldn't be determined
23. In a certain year, the average monthly income of a person was Rs. 3,400. For the first eight months of the years, his average monthly income was Rs. 3,160 and for the last five months, it was Rs. 4,120. His income in the eighth month of the year was :
- a) Rs. 3,160
  - b) **Rs. 5,080**
  - c) Rs. 15,520
  - d) Rs. 5,520
24. A boat has to travel upstream 20 km distance from point X of a river to point Y, The total time taken by boat in travelling from point X to Y and Y to X is 41 min 40 s. What is the speed of the boat?
- a) 66 km/h
  - b) 72 km/h
  - c) 48 km/h
  - d) **Cannot be determined**
25. The mean of 12,22,32,42,52,62.....502 is
- a) 850.5
  - b) **858.5**
  - c) 854.5
  - d) 852.5
26. In a certain code language, how is 'increase' can be written?

Statement I: 'turning point in life' is written as 'su pi ka de'. 'point of connection' is written as 'du pha de'. 'increase in population' is written as 'sikasha'.

Statement II: 'connection between poles' is written as 'tupha di'. 'population of town' is written as 'la du si'.

- a) If the data in statement I alone is sufficient to answer the question.
- b) If the data in statement II alone is sufficient to answer the question.
- c) If the data either in statement I alone or statement II alone are sufficient to answer the question
- d) If the data in both the statements I and II together are necessary to answer the question.**

27. What is the distance between points A and B?

Statement I: A person starts from point A in east direction. He walks for 6 m and takes a right turn. Next he walks for 4 m and takes a left turn. Next he walks 2 m and takes a right turn. Now he walks 4 m and stops at point B.

Statement II: Point A is 5 m to the west of point C. Point H is 2 m to the west of point G. Point E is 3 m to the north of point G which is 4 m to the west of point F. Point C is 4 m to the north of point H. A person starts from point F and after walking for 5 m he takes a right turn and reaches point B which is south of point A.

- a) If the data in statement I alone is sufficient to answer the question.
- b) If the data in statement II alone is sufficient to answer the question.
- c) If the data either in statement I alone or statement II alone are sufficient to answer the question**
- d) If the data given in both I and II together are not sufficient to answer the question.

28. How many people are between Priya and Mita?

Statement I: Mita is sitting at 2nd position from the left end of row. Tiya is sitting at 5th position from the right end of row. Priya is sitting 3rd to left of Tiya. If Mita and Tiya interchange their positions, Mita will be at 9th position from the left end of row.

Statement II: Mita has got 4th rank in the class. Kiya is 6th from the bottom. Priya is 3 positions above Kiya.

- a) If the data in statement I alone is sufficient to answer the question.**
- b) If the data in statement II alone is sufficient to answer the question.
- c) If the data either in statement I alone or statement II alone are sufficient to answer the question
- d) If the data given in both I and II together are not sufficient to answer the question.

29. Who is sitting second to the right of Prerna in a row of 9 people facing North?

Statement I: Vani is sitting 4th to the left of Prerna. Tina is sitting third to the right of Medhavi. There are 3 people between Medhavi and Garima. Tina is sitting 4th to the left of Sakshi.

Statement II: Kavya is sitting 2nd to the right of Tina. Medhavi is somewhere to the left of Prerna. There are 2 people between Anika and Kavya.

- a) If the data in statement I alone is sufficient to answer the question.

- b) If the data in statement II alone is sufficient to answer the question.
- c) If the data either in statement I alone or statement II alone are sufficient to answer the question
- d) If the data in both the statements I and II together are necessary to answer the question.**

30. How is H related to D?

Statement I: C is the brother of A. G is the daughter of A. I is the son of H. B is the mother of F, who is sister of G. D is grandfather of F and I. E who is married to D has only 2 children.

Statement II: E is sister of H. F is sister of G who is son of D. C is grandson of B. F is daughter of E. C is son of H.

- a) If the data in statement I alone is sufficient to answer the question**
- b) If the data in statement II alone is sufficient to answer the question.
- c) If the data either in statement I alone or statement II alone are sufficient to answer the question
- d) If the data given in both I and II together are not sufficient to answer the question.

31. In which direction is point G with respect to point H?

Statement I: Point B is 3 m to the east of point A. Point E is 6 m to the east of point D. Point B is 4 m to the north of point C. Point F is 5 m to the west of point G. Point E is 5 m to the north of point F. Point H is 11 m to the east of point C. Point B is 3 m to the south of point D.

Statement II: A person starts from point G in east direction. He walks 4 m and takes a right turn and walks 7 m. Now he takes a left turn and walks 3 m before turning to his right. Next he walks 6 m and takes a right turn. Next he walks for 7 m and stops at point H.

- a) If the data in statement I alone is sufficient to answer the question.
- b) If the data in statement II alone is sufficient to answer the question.
- c) If the data either in statement I alone or statement II alone are sufficient to answer the question.**
- d) If the data given in both I and II together are not sufficient to answer the question.

32. Directions : Answer the questions on the basis of the information given below.

A family has five married couples and each one of them have one child. Ages of children are 2, 5, 7, 4 and 8 years whose names are A, B, C, D, and E but not necessarily in the same order

Male members are Gaurav, Ajay, Mukul, Sahil and Deepak and female members are Sheena, Radhika, Naina, Tiya and Priya but not necessarily in the same order.

- (i) Name of Gaurav's child is not C or E and he is not eldest or youngest.
- (ii) Naina's child is 7 years old and her husband is one among Ajay, Mukul and Deepak.
- (iii) D is 2 years old but she is not a child of Mukul.
- (iv) A's age is not a multiple of 2 and is not a child of Gaurav or Sheena.
- (v) Radhika's husband is either Mukul or Deepak.
- (vi) Priya's child is 5 years old but the name of the child is not B or E.
- (vii) Mukul's wife name is Sheena

What are the names of Deepak's wife and his child?

- a) Naina and A
- b) Radhika and D**
- c) Tiya and D
- d) Priya and A

33. Directions : Answer the question on the basis of the information given below.

A family has five married couples and each one of them have one child. Ages of children are 2, 5, 7, 4 and 8 years whose names are A, B, C, D, and E but not necessarily in the same order

Male members are Gaurav, Ajay, Mukul, Sahil and Deepak and female members are Sheena, Radhika, Naina, Tiya and Priya but not necessarily in the same order.

- (i) Name of Gaurav's child is not C or E and he is not eldest or youngest.
- (ii) Naina's child is 7 years old and her husband is one among Ajay, Mukul and Deepak.
- (iii) D is 2 years old but she is not a child of Mukul.
- (iv) A's age is not a multiple of 2 and is not a child of Gaurav or Sheena.
- (v) Radhika's husband is either Mukul or Deepak.
- (vi) Priya's child is 5 years old but the name of the child is not B or E.
- (vii) Mukul's wife name is Sheena

What is the name and the age of Sahil's child?

- a) B and 7
- b) E and 8
- c) C and 4
- d) C and 5**

34. Directions : Answer the question on the basis of the information given below.

A family has five married couples and each one of them have one child. Ages of children are 2, 5, 7, 4 and 8 years whose names are A, B, C, D, and E but not necessarily in the same order

Male members are Gaurav, Ajay, Mukul, Sahil and Deepak and female members are Sheena, Radhika, Naina, Tiya and Priya but not necessarily in the same order.

- (i) Name of Gaurav's child is not C or E and he is not eldest or youngest.
- (ii) Naina's child is 7 years old and her husband is one among Ajay, Mukul and Deepak.
- (iii) D is 2 years old but she is not a child of Mukul.
- (iv) A's age is not a multiple of 2 and is not a child of Gaurav or Sheena.
- (v) Radhika's husband is either Mukul or Deepak.
- (vi) Priya's child is 5 years old but the name of the child is not B or E.
- (vii) Mukul's wife name is Sheena

Name of father, mother and age of E?

- a) Deepak, Tiya and 7



- b) Gaurav, Naina and 8
- c) Mukul, Sheena and 8**
- d) Sahil, Radhika and 7

35. Statement: Prices of oil and gas are likely to rise in India owing to the rising tension in the Gulf region due to the fear of US attack on Iraq, a major source of oil.

Courses of Action:

I. India should tap new oil sources to avoid the fallout of an attack on Iraq.

II. At least a month's stock of oil and its products should be stored.

- a) if only I follows
- b) if only II follows**
- c) if either I or II follows
- d) if neither I nor II follows

36. Statement: Many school children died in few accidents caused due to poor maintenance of school buses during the last few months.

Courses of action:

I. The government should set up an expert group to inspect the condition of school buses to avoid such accidents.

II. The government should suspend the license of school buses

- a) If only I follows**
- b) If only II follows
- c) If either I or II follows
- d) If neither I nor II follows

37. Statement: Many customers complained to the manager of the local branch of the bank against the highhandedness of the bank employees while dealing with the customers.

Courses of action:

I. The bank management should immediately suspend all the employees of the branch and deploy a different set of employees.

II. The bank management should ask for a report from the manager of the branch for taking necessary tips

- a) If only I follows
- b) If only II follows**
- c) If either I or II follows
- d) If neither I nor II follows

38. Statement: Some students of the local college were caught travelling in the train without purchasing valid tickets.

Courses of Action:

- I. The parents of these students should be informed about the incident and requested to counsel their wards.
- II. These students should be put behind bars for travelling without bonafide credentials.

- a) **If only I follows**
- b) If only II follows
- c) If either I or II follows
- d) If neither I nor II follows

39. Statement: A large number of invitees who attended the marriage function fell ill due to food poisoning and were rushed to various hospitals located in the area.

Courses of action:

- I. The govt. should ban such marriage function till further notice.
- II. The local hospital should be advised by the govt to provide best services to the affected people.

- a) if only I follows
- b) **if only II follows**
- c) if either I or II follows
- d) if neither I nor II follows

40. Statement: A huge tidal wave swept away many fishing boats and hutments of the fishermen living along the coastline.

Courses of Action

- I. The fisherman should henceforth be restrained from constructing their huts along the coast line.
- II. The local administration should send a team of officials to assess the extent of damage and suggest remedial measures.

- a) If only I follows
- b) If only II follows
- c) **If both I and II follows**
- d) If neither I nor II follows

41. Statement: Some workers of the company making diamond jewellery were caught while there were leaving the premises as they were trying to smuggle small pieces of diamonds hidden in their purses.

Courses of Action:

- I. The management of the company should immediately put on hold all activities in the premises till a full proof security system is in place.
- II. The belongings of all the workers should thoroughly be searched before they leave the premises of the company.

- a) If only I follows
- b) **If only II follows**

- c) If either I or II follows
- d) If neither I nor II follows

42. Statement: A huge truck overturned on middle of the main road and blocked most part of the road, causing a huge traffic jam.

Courses of action:

I. The traffic department should immediately deploy its personnel to divert traffic through other roads.

II. The traffic department should immediately send men and equipment to move the truck and clear the road.

- a) If only I follows
- b) If only II follows
- c) If either I or II follows
- d) If both I and II follows**

43. Statement: There have been sporadic cases of stone throwing and damaging vehicles in the locality during the day following altercation between two local youth clubs last night.

Courses of action:

I. The local police administration should arrest all those who are caught committing these acts.

II. The local police administration should call a meeting of office bearers of both the clubs of the locality to bring the situation under control.

- a) If only I follows
- b) If only II follows
- c) If either I or II follows
- d) If both I and II follows**

44. Statement: The police reported that two armed terrorists had entered the city a couple of days ago.

Courses of Action:

I. Police should immediately circulate the photographs of the terrorists using electronic and print media in order to take public's help in nabbing them.

II. Public should be informed to stay indoors until the terrorists are arrested.

- a) If only I follows**
- b) If only II follows
- c) If either I or II follows
- d) If neither I nor II follows

45. Directions: In the question below, statements are given followed by two conclusions numbered I and II. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

Statements: No rat is dog. All dogs are tiger. No tiger is cat.

Conclusions:

I. No cat is dog

II. All rats being tiger is a possibility.

a) Only I follows

b) Only II follows

c) Either I or II follows

**d) Both I and II follow**

46. Directions: In the question below, statements are given followed by two conclusions numbered I and II. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

Statements: All lions are frogs. No lion is dog. All rats are dogs

Conclusions:

I. No frog is dog.

II. All rats are frogs is a possibility.

a) Only I follows

**b) Only II follows**

c) Either I or II follows

d) Neither I nor II follow

47. Directions: In the question below, statements are given followed by two conclusions numbered I and II. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

Statements: Some dogs are bats. No bat is rabbit. All frogs are rabbits. Some dogs are lions.

Conclusions:

I. Some dogs are frogs

ii. No dog is frog

a) Only i follows

b) Only ii follows

**c) Either i or ii follows**

d) Neither i nor ii follow

48. Directions: In the question below, statements are given followed by two conclusions numbered I and II. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

Statements: All goats are tigers. Some tigers are lions. No lion is dog. Some dogs are bears.

Conclusions:

I. All lions are goats is a possibility.

II. All lions are bears is a possibility.

- a) Only I follows
- b) Only II follows
- c) Either I or II follows
- d) Both I and II follow**

49. Directions: In the question below, statements are given followed by two conclusions numbered I and II. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

Statements: Some tigers are dogs. All dogs are rats. Some rats are foxes. All foxes are bears.

Conclusions:

- I. Some foxes are not tigers
  - II. All foxes being dogs is a possibility.
- a) Only I follows
  - b) Only II follows**
  - c) Either I or II follows
  - d) Neither I nor II follow

50. Directions: In the question below, statements are given followed by two conclusions numbered I and II. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

Statements: Some dogs are cats. All cats are horses. Some horses are cows. No lion is cat.

Conclusions:

- I. No lions is horses
  - II. Some cows are dogs
- a) Only I follows
  - b) Only II follows
  - c) Either I or II follows
  - d) Neither I nor II follow**

51. When I was a school teacher, my attention was drawn to the student in my class of thirty who scored lowest on the end of year exams. I could see that he was depressed as a result of his performance, so I took him aside. I said to him: "Someone has to come thirtieth in a class of thirty. This year, it happens to be you who have made the heroic sacrifice, so that none of your friends have to suffer the ignominy of being last in the class. You are so kind for doing this, so compassionate. You deserve a medal." Unpleasant things, like coming last in our class, happen in life. They happen to everyone. The only difference between a happy person and one who gets depressed is how they respond to disasters.

This is a sensitive issue-based story which tries to sensitise the readers about:

- a) The importance of teaching for children.
- b) Making sacrifices for the good of community.**
- c) Being positive even in negative circumstances.**
- d) Compassionate behaviour should be cultivated since childhood.

52. Laughter is especially useful when we feel sick, fed up, or downright depressed. Laughter has been proven to release endorphins into our bloodstream, which strengthens our immune system and make us feel happy. And laughter makes us look beautiful.

Which among the following is the most logical and rational inference that can be made from the above passage?

- a) Laughter is the best medicine even for terminal diseases.
- b) Laughter is beneficial Physiological and aesthetic point of view.**
- c) Unwarranted laughter may damage social relationships.
- d) If you can laugh, you will not need any make-ups.

53. We all like to hear ourselves praised but unfortunately most of the time we only hear about our faults. That's fair, I suppose, because most of the time we only speak about the faults of others. We hardly ever speak praise. Try listening to yourself speaking. Without praise the good qualities wither and die. But a little bit of praise is a grandstand of encouragement. We all want to hear ourselves praised; we just want to be sure about what we have to do to hear it.

Which one of the following is in the central theme of the above passage?

- a) Flattery is useful despite it is made to look otherwise
- b) One should follow cautious approach towards flattery.
- c) The value of criticism for growth of an individual.
- d) The significance of positive reinforcement of good qualities**

54. The fear of lowland species moving to higher elevations has long been predicted as an effect of climate change. We are actually seeing lowland species moving upward in elevation, slowly driving upland species extinct, and if the upland species can't evolve fast enough then they're going to continue to go extinct.

Which among the following is the most logical corollary to the above passage?

- a) Climate change can alter the biodiversity of different regions**
- b) Hilly regions are more vulnerable to climate change than plains.
- c) Climate change can lead to mass extinctions on earth.
- d) The effects of climate change can't be ascertained correctly.

55. In the Western philosophy, there are three eminent schools of ethics. The first, inspired by Aristotle, holds that virtues (such as justice, charity and generosity) are dispositions to act in ways that benefit the possessor of these virtues and the society of which he is a part. The second, subscribed to mainly by Immanuel Kant,

makes the concept of duty central to morality: human beings are bound, from knowledge of their duty as rational beings, to obey the categorical imperative to respect other rational beings with whom they interact. The third is the utilitarian viewpoint that asserts that the guiding principle of conduct should be the greatest happiness (or benefit) of the greatest number.

Which among the following is the most rational and logical inference that can be made from the above passage?

- a) The Western thought is full of ethical guidelines to rulers, whether in a monarch or a democracy.
- b) Utilitarian principle may not safeguard rights of the minorities.**
- c) Kant's ethics doesn't consider the consequence of an act for its ethical validity.
- d) Aristotle's principles are not applicable on those people who don't possess any virtue.

56. Trust is the essence of public life. A nation that suspects its leaders of corruption cannot function effectively as a free, just and open society. It is the mark of a good society that public leadership is seen as a form of service rather than a means to power, which is all too easily abused.

Which of the following expresses the view implied in the above passage?

- a) Citizens of a country should not suspect its leaders of wrongdoings
- b) Leaders should not be bestowed with a lot of power.
- c) Trustworthiness is the most important quality required in public figures.**
- d) In a democracy, public leadership should be service oriented.

57. President Boris Yeltsin was informed that a nuclear missile was speeding towards the heart of Russia. Russian nuclear forces, already on a hair-trigger alert, were put on even higher alert, ready to launch at his command. The fate of the planet hung in the balance as hundreds of millions of people were going about their daily lives. Russian policy called for a "launch on warning." "Use them or lose them." Yeltsin wisely waited. And within those fateful moments, the Russians were able to declare a false alarm. An unimaginable nuclear disaster had barely been avoided.

1. Which is the critical inference that can be made from the above passage?

- a) The world has got divided into nuclear haves and nuclear have-nots.
- b) The principles of non-violence are necessary in conflict ridden world.
- c) A possible nuclear disaster was avoided due to Yeltsin's patience.**
- d) It is very important to have patience after a nuclear attack

58. Gandhi knew that the earth has enough to satisfy everybody's need but not anybody's greed. He had called for the replacement of greed with love. Gandhi is, therefore, now a source of inspiration and a reference book for all those fighting against racial discrimination, oppression, domination, wars, nuclear energy, environmental degradation, lack of freedom and human rights- for all those who are fighting for a better world, a better quality of life. Gandhi is, therefore, no longer an individual. He is a symbol of all that is the best and the most enduring in the human tradition. And he is also a symbol of the alternative in all areas of

life agriculture, industry, technology, education, health, economy, political organizations, etc. He is a man of the future - a future that has to be shaped if the human race has to survive and progress on the path of evolution.

With reference to the above passage, consider the following statements

1. Gandhi would have solved most of the problems of modern era.
2. Gandhi's philosophy can help in creating a better world in future.
3. Gandhi's philosophy does not support individualism.

Which of the above statements can be inferred from the given passage?

- a) 1 only
- b) 2 and 3 only
- c) 2 only**
- d) 1, 2 and 3

59. Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed. The world in arms is not spending money alone. It is spending the sweat of its labourers, the genius of its scientists, and the hopes of its children. This is not a way of life at all, in any true sense. Under the cloud of threatening war, it is humanity hanging from a cross of iron.

Which one of the following is essentially discussed in the passage?

- a) The human costs incurred in the act of war.**
- b) The perpetual threat of nuclear war.
- c) The impediments towards disarmament
- d) The human psychological tendency towards violence.

60. My view of relationships and marriage is this: when the couple are going out, they are merely involved; when they become engaged, they are still only involved, maybe more deeply; when they publicly exchange marriage vows, that is commitment. The meaning of the marriage ceremony is the commitment. I explain that the difference between involvement and commitment is the same as the difference between bacon and eggs. "With bacon and eggs, the chicken is only involved, but the pig is committed. Let this be a pig marriage."

With reference to the above passage, consider the following statements:

1. The author believes that most relationships are fraud.
2. The author finds merits of relationships in human life.
3. The author is comparing relationships with marriage.

Which of the above statements is/are correct ?

- a) 1 and 2 only
- b) 3 only**
- c) 2 and 3 only



d) 1, 2 and 3

61. My view of relationships and marriage is this: when the couple are going out, they are merely involved; when they become engaged, they are still only involved, maybe more deeply; when they publicly exchange marriage vows, that is commitment. The meaning of the marriage ceremony is the commitment. I explain that the difference between involvement and commitment is the same as the difference between bacon and eggs. “With bacon and eggs, the chicken is only involved, but the pig is committed. Let this be a pig marriage.”

Which among the following is the most logical and rational assumption that can be made from the above passage?

a) Pigs show higher level of commitment and fidelity towards their partner than humans.

**b) The level of commitment in marriage is much more than that in other relationships.**

c) Relationships before marriage is a virtual erosion of culture and traditions

d) Marriage has become meaningless in the light of increasing live-in relationships.

62. Why is it that having spent many happy years with a companion, when they make one mistake that hurts us badly, we get so angry that we end the relationship forever? All the wonderful moments we have shared together count as nothing. We only see that one dreadful mistake and destroy the whole thing. It doesn't seem fair. If you want to be lonely, then cultivate anger.

Which of the following statements best sums up the above passage?

**a) Anger can destroy our relationships and separate us from our friends.**

b) Anger can deteriorate our health and shorten our longevity.

c) Anger is the perfect solution of dreadful mistakes in a relationship.

d) One should not prefer irrationality and emotion over wisdom.

63. Global warming means the rise in the mean global temperature to a level which affects the life-forms on the earth surface. Warming of the globe due to natural factors is not an unusual phenomenon. The earth's climate is variable. For example, about 18,000 years ago, the earth was about 5°C cooler than it is today. That was the last glacial period on the earth. Thereafter, the global temperature began to rise. The earth kept on warming due to what is known as the greenhouse effect. These gases are known as greenhouse gases. Water vapours, carbon dioxide, methane, ozone, nitrous oxide, CFCs and halogens are prominent examples. To maintain the global energy balances, both the atmosphere and the surface will warm until the outgoing energy equals the incoming energy. The increase in the quantity of the greenhouse gases in the atmosphere can reinforce the greenhouse effect (increase in temperature of the earth) and lead to global warming. Global warming will increase the temperature of the earth which leads to the melting of ice and this increases the sea level. Carbon dioxide is the largest contributor to global warming as it holds the largest share among the greenhouse gases in the atmosphere

Which of the following phenomena are related to global warming?

1. Greenhouse effect
2. Melting of ice and increase in the sea level
3. Mismatch in incoming energy and outgoing energy

a) **1 and 2 only**

b) 2 and 3 only

c) 1, 2 and 3 only

d) None of the above

64. Global warming means the rise in the mean global temperature to a level which affects the life-forms on the earth surface. Warming of the globe due to natural factors is not an unusual phenomenon. The earth's climate is variable. For example, about 18,000 years ago, the earth was about 5°C cooler than it is today. That was the last glacial period on the earth. Thereafter, the global temperature began to rise. The earth kept on warming due to what is known as the greenhouse effect. These gases are known as greenhouse gases. Water vapours, carbon dioxide, methane, ozone, nitrous oxide, CFCS and halogens are prominent examples. To maintain the global energy balances, both the atmosphere and the surface will warm until the outgoing energy equals the incoming energy. The increase in the quantity of the greenhouse gases in the atmosphere can reinforce the greenhouse effect (increase in temperature of the earth) and lead to global warming. Global warming will increase the temperature of the earth which leads to the melting of ice and this increases the sea level. Carbon dioxide is the largest contributor to global warming as it holds the largest share among the greenhouse gases in the atmosphere.

Which of the following sentences is true according to the passage in the context of global warming?

a) Global warming will lead to disastrous consequences such as floods, droughts, storms

**b) Global warming will increase the temperature of the planet by 5°C**

c) It is caused due to the increase in the concentration of greenhouse gases in the atmosphere.

d) Urgent methods should be taken to save the mankind

65. Steve Jobs, the American businessman and technology visionary who is best known as the co-founder, chairman, and chief executive officer of Apple Inc., was born on February 24, 1955. His parents were University of Wisconsin graduate students, Joanne Carole Schieble and Syrian-born AbdulfattahJandali. Jandali had no choice but to put the baby up for adoption because his girlfriend's family objected to their relationship. The baby was adopted at birth by Paul Jobs and Clara Jobs. The parents later adopted a daughter, Patti. Paul was a machinist for a company that made lasers, and taught his son rudimentary electronics and how to work with his hands.

Of the following, who is the sibling of Steve Jobs.

a) Abdul Fattah Jandali

b) Clara Jobs

c) **Patti**

d) Steve Wozniak

66. The yoga system is divided into two principal parts- Hatha and Raja yoga. Hatha yoga deals principally with the physiological part of the man with a view to establish his health and train his will. The processes prescribed to arrive at this end are so difficult that only a few resolute souls go through all the stages denounced by all the philosophers. The most illustrious Shankaracharya has remarked in his treatise called Aparokshanubhuti that “the system of Hatha yoga was intended for those whose worldly desires are not pacified or uprooted.”

Hatha yoga is that approach which has been centered around the awakening of kundalini at the base of the spine and raising it to the top part of the brain between the brain hemispheres as a way to enter into nirvikalpasamadhi. In the stage of Nirvikalpa Samadhi one feels so nearer to God, the creator. So rather than dealing with the mind, the approach of the hatha yogis is largely to use the body as an instrument to bring about inner transformation.

Raja Yoga deals directly with the mind itself through meditation. That approach of using the techniques of Hatha yoga as preparation for Raja Yoga was a much later invention. Because if you try to sit for meditation immediately - one will find that unless one continues with one-pointedness in the practice, it will be almost impossible to enter into meditation, the mind is scattered in a million different directions. That is why, it may be tremendously helpful to first settle some groundwork and prepare the mind and body for meditation. But these were all later innovations. As far as the origins of “asana” is concerned, it was originally just referring to the seat in which the yogi would sit for meditation.

Why the technique of Hatha yoga as preparation for Raja Yoga was invented?

a) As Hatha yoga trains one's will to practice Raja yoga.

b) As Hatha yoga is easier to practice than Raja yoga

c) As Hatha yoga results in improvement of physical health which is essential to practice Raja yoga.

**d) As Hatha yoga prepares the mind and body for meditation**

67. The yoga system is divided into two principal parts- Hatha and Raja yoga. Hatha yoga deals principally with the physiological part of the man with a view to establish his health and train his will. The processes prescribed to arrive at this end are so difficult that only a few resolute souls go through all the stages denounced by all the philosophers. The most illustrious Shankaracharya has remarked in his treatise called Aparokshanubhuti that “the system of Hatha yoga was intended for those whose worldly desires are not pacified or uprooted.”

Hatha yoga is that approach which has been centered around the awakening of kundalini at the base of the spine and raising it to the top part of the brain between the brain hemispheres as a way to enter into nirvikalpasamadhi. In the stage of Nirvikalpa Samadhi one feels so nearer to God, the creator. So rather than dealing with the mind, the approach of the hatha yogis is largely to use the body as an instrument to bring about inner transformation.

Raja Yoga deals directly with the mind itself through meditation. That approach of using the techniques of Hatha yoga as preparation for Raja Yoga was a much later invention. Because if you try to sit for meditation immediately - one will find that unless one continues with one-pointedness in the practice, it will be almost impossible to enter into meditation, the mind is scattered in a million different directions. That is why, it may be tremendously helpful to first settle some groundwork and prepare the mind and body for meditation. But these were all later innovations. As far as the origins of "asana" is concerned, it was originally just referring to the seat in which the yogi would sit for meditation.

Which of the following is NOT related to Hatha yoga?

- a) Awakening of kundalini
  - b) Using the body as an instrument to bring about inner transformation
  - c) **Doing meditation**
  - d) A technique to prepare for Raja yoga
68. Malaria is a disease that develops when a mosquito infected with a Plasmodium parasite bites a person. Once it gets into the bloodstream, the parasite invades and lives in a new host's red blood cells (RBC). According to World Health Organization (WHO), malaria killed an estimated 6,27,000 people in 2012, majority of them sub-Saharan African children under the age of 5. India has 12.8 crores suspected malaria cases. Till now the only way to protect against malaria has been preventive – control of the mosquito breeding and protection against mosquito bite using mosquito net and mosquito-repellents. Once infected, the only treatments available are antimalarials such as chloroquine, quinidine, mefloquine, primaquine, etc., but malarial parasites have developed resistances against many of these drugs, making them ineffective. Recently, an international team led by researchers at St. Jude Children's Research Hospital, Memphis, USA has developed a new compound that can remove the malarial parasite from blood very fast and thus may slow down the development of resistance to antimalarial drugs. According to the researcher, the new compound tricks the host immune system into destroying only infected RBC while leaving healthy ones alone
- What does the passage talk about the sub-Saharan Africans?
- a) **Majority of the children under the age of five who died due to malaria belong to this region**
  - b) It is one of the poorest areas of the world.
  - c) WHO has been very effective in controlling malaria in this region.
  - d) All of the above.
69. Malaria is a disease that develops when a mosquito infected with a Plasmodium parasite bites a person. Once it gets into the bloodstream, the parasite invades and lives in a new host's red blood cells (RBC). According to World Health Organization (WHO), malaria killed an estimated 6,27,000 people in 2012, majority of them sub-Saharan African children under the age of 5. India has 12.8 crores suspected malaria cases. Till now the only way to protect against malaria has been preventive – control of the mosquito breeding and protection against mosquito bite using mosquito net and mosquito-repellents. Once infected, the only treatments available are anti-malarials such as chloroquine, quinidine, mefloquine, primaquine, etc., but malarial

parasites have developed resistances against many of these drugs, making them ineffective. Recently, an international team led by researchers at St. Jude Children's Research Hospital, Memphis, USA has developed a new compound that can remove the malarial parasite from blood very fast and thus may slow down the development of resistance to antimalarial drugs. According to the researcher, the new compound tricks the host immune system into destroying only infected RBC while leaving healthy ones alone.

1. According to the passage, what are the ways to protect against malaria?

1. Use of mosquito repellent
2. Use of mosquito net
3. Control of mosquito breeding

Select the correct answer using the codes given below:

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) 1, 2 and 3**

70. Malaria is a disease that develops when a mosquito infected with a Plasmodium parasite bites a person. Once it gets into the bloodstream, the parasite invades and lives in a new host's red blood cells (RBC). According to World Health Organization (WHO), malaria killed an estimated 6,27,000 people in 2012, majority of them sub-Saharan African children under the age of 5. India has 12.8 crores suspected malaria cases. Till now the only way to protect against malaria has been preventive – control of the mosquito breeding and protection against mosquito bite using mosquito net and mosquito-repellents. Once infected, the only treatments available are antimalarials such as chloroquine, quinidine, mefloquine, primaquine, etc., but malarial parasites have developed resistances against many of these drugs, making them ineffective. Recently, an international team led by researchers at St. Jude Children's Research Hospital, Memphis, USA has developed a new compound that can remove the malarial parasite from blood very fast and thus may slow down the development of resistance to antimalarial drugs. According to the researcher, the new compound tricks the host immune system into destroying only infected RBC while leaving healthy ones alone.

Which of the following statement is correct with regard to the passage?

- a) Malaria is a bacterial disease.
- b) Malaria cannot be cured.
- c) Antimalarials are totally ineffective.
- d) New antimalarial drug is effective in removing malarial parasite from the blood**

71. There are some topics that create a buzz in the country from time to time and heat up the atmosphere, putting global warming to shame. Did the ancient Indians know quantum mechanics? Did they come up with calculus? Some topics are outright nonsense, but there are some that merit a debate. However, most of us are not historians, and such discussions become pointless after a while. One has come across the names Aryabhata or Varahamihirain school textbooks, but one would be hard pressed to name any specific

achievement of these ancient Indian scientists. School students are taught about the discovery of the zero but they never learn what it means to have “discovered” it. How does one suddenly invoke a number and bring it down to the realm of reality? We teach our children that our ancestors must have had a remarkable knowledge of metallurgy and give the example of the iron pillar in Delhi, but we never spell out what exactly they knew. This superficiality in our collective knowledge often leads to meaningless, rhetorical debates on the achievements of ancient Indian scientists. Some people believe that the Vedas contained everything worth knowing. And there are others who contend that Indians were a barbaric lot before the Europeans arrived. Often, these debates take on a political flavour. By saying something in favour of ancient Indian scientists, one runs the risk of being called jingoistic, while one might be called unpatriotic or irreverent of one’s heritage if one chooses to criticise such a position. Recently, there were claims in the media that the important mathematical tool calculus, instrumental in the advancement of modern science, originated in India much before Isaac Newton or Gottfried Wilhelm von Leibniz, who are usually credited with its development. If the claim turns out to be true, then much of what is known about the history of Indian science will have to be revised. But there has hardly been any discussion in the popular media outlining the details of the arguments for or against the proposition. The apprehension that one would be pigeonholed into either the jingoist camp or called unpatriotic stalks much of these discussions. Another reason for skirting the details is that there are as yet no black-and-white answers to this question. The best answer probably lies between a complete yes or no. One might think that this is a diplomatic answer, but the Real story behind the claim of calculus having originated in India is as complicated as it is fascinating

Why does the author say "...and such discussions become pointless after a while."

- a) Most of these topics are baseless.
- b) After sometime, the discussion gets politicized.
- c) **Most of us do not have sufficient knowledge of the history.**
- d) These discussions cannot alter the history of Indian science.

72. There are some topics that create a buzz in the country from time to time and heat up the atmosphere, putting global warming to shame. Did the ancient Indians know quantum mechanics? Did they come up with calculus? Some topics are outright nonsense, but there are some that merit a debate. However, most of us are not historians, and such discussions become pointless after a while. One has come across the names Aryabhata or Varahamihirain school textbooks, but one would be hard pressed to name any specific achievement of these ancient Indian scientists. School students are taught about the discovery of the zero but they never learn what it means to have “discovered” it. How does one suddenly invoke a number and bring it down to the realm of reality? We teach our children that our ancestors must have had a remarkable knowledge of metallurgy and give the example of the iron pillar in Delhi, but we never spell out what exactly they knew. This superficiality in our collective knowledge often leads to meaningless, rhetorical debates on the achievements of ancient Indian scientists. Some people believe that the Vedas contained everything worth knowing. And there are others who contend that Indians were a barbaric lot before the Europeans arrived. Often, these debates take on a political flavour. By saying something in favour of ancient Indian

scientists, one runs the risk of being called jingoistic, while one might be called unpatriotic or irreverent of one's heritage if one chooses to criticise such a position. Recently, there were claims in the media that the important mathematical tool calculus, instrumental in the advancement of modern science, originated in India much before Isaac Newton or Gottfried Wilhelm von Leibniz, who are usually credited with its development. If the claim turns out to be true, then much of what is known about the history of Indian science will have to be revised. But there has hardly been any discussion in the popular media outlining the details of the arguments for or against the proposition. The apprehension that one would be pigeonholed into either the jingoist camp or called unpatriotic stalks much of these discussions. Another reason for skirting the details is that there are as yet no black-and-white answers to this question. The best answer probably lies between a complete yes or no. One might think that this is a diplomatic answer, but the Realstory behind the claim of calculus having originated in India is as complicated as it is fascinating.

Consider the following statements:

1. One of the reasons why media has avoided discussing achievements of ancient Indian scientists is that it might acquire a political dimension.
2. It was either Isaac Newton or Gottfried Wilhelm von Leibniz who developed the Calculus.

Which of the statements given above is/are correct?

- a) 1 only
  - b) 2 only
  - c) Both 1 and 2
  - d) Neither 1 nor 2
73. There are some topics that create a buzz in the country from time to time and heat up the atmosphere, putting global warming to shame. Did the ancient Indians know quantum mechanics? Did they come up with calculus? Some topics are outright nonsense, but there are some that merit a debate. However, most of us are not historians, and such discussions become pointless after a while. One has come across the names Aryabhata or Varahamihirain school textbooks, but one would be hard pressed to name any specific achievement of these ancient Indian scientists. School students are taught about the discovery of the zero but they never learn what it means to have "discovered" it. How does one suddenly invoke a number and bring it down to the realm of reality? We teach our children that our ancestors must have had a remarkable knowledge of metallurgy and give the example of the iron pillar in Delhi, but we never spell out what exactly they knew. This superficiality in our collective knowledge often leads to meaningless, rhetorical debates on the achievements of ancient Indian scientists. Some people believe that the Vedas contained everything worth knowing. And there are others who contend that Indians were a barbaric lot before the Europeans arrived. Often, these debates take on a political flavour. By saying something in favour of ancient Indian scientists, one runs the risk of being called jingoistic, while one might be called unpatriotic or irreverent of one's heritage if one chooses to criticise such a position. Recently, there were claims in the media that the important mathematical tool calculus, instrumental in the advancement of modern science, originated in India much before Isaac Newton or Gottfried Wilhelm von Leibniz, who are usually credited with its

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What is the tone of the passage?

- a) Argumentative
- b) Informative
- c) **Analytical**
- d) Judgmental

74. There are some topics that create a buzz in the country from time to time and heat up the atmosphere, putting global warming to shame. Did the ancient Indians know quantum mechanics? Did they come up with calculus? Some topics are outright nonsense, but there are some that merit a debate. However, most of us are not historians, and such discussions become pointless after a while. One has come across the names Aryabhata or Varahamihirain school textbooks, but one would be hard pressed to name any specific achievement of these ancient Indian scientists. School students are taught about the discovery of the zero but they never learn what it means to have “discovered” it. How does one suddenly invoke a number and bring it down to the realm of reality? We teach our children that our ancestors must have had a remarkable knowledge of metallurgy and give the example of the iron pillar in Delhi, but we never spell out what exactly they knew. This superficiality in our collective knowledge often leads to meaningless, rhetorical debates on the achievements of ancient Indian scientists. Some people believe that the Vedas contained everything worth knowing. And there are others who contend that Indians were a barbaric lot before the Europeans arrived. Often, these debates take on a political flavour. By saying something in favour of ancient Indian scientists, one runs the risk of being called jingoistic, while one might be called unpatriotic or irreverent of one’s heritage if one chooses to criticise such a position. Recently, there were claims in the media that the important mathematical tool calculus, instrumental in the advancement of modern science, originated in India much before Isaac Newton or Gottfried Wilhem von Leibniz, who are usually credited with its development. If the claim turns out to be true, then much of what is known about the history of Indian science will have to be revised. But there has hardly been any discussion in the popular media outlining the details of the arguments for or against the proposition. The apprehension that one would be pigeonholed into either the jingoist camp or called unpatriotic stalks much of these discussions. Another reason for skirting the details is that there are as yet no black-and-white answers to this question. The best answer probably lies between a complete yes or no. One might think that this is a diplomatic answer, but the Realstory behind the claim of calculus having originated in India is as complicated as it is fascinating.



Which of the following can be inferred from the passage?

- a) Aryabhata and Varahmihira were ancient Indian mathematicians
- b) Complicated things cannot be fascinating.
- c) The learning provided to our children does not have the requisite depth of knowledge.**
- d) Vedas are ancient Indian scriptures.

75. Global Warming is the increase of Earth's average surface temperature due to effect of greenhouse gases, such as carbon dioxide emissions from burning fossil fuels or from deforestation, which trap heat that would otherwise escape from Earth. This is a type of greenhouse effect. The most significant greenhouse gas is actually water vapor, not something produced directly by humankind in significant amounts. However, even slight increases in atmospheric levels of carbon dioxide (CO<sub>2</sub>) can cause a substantial increase in temperature. Why is this? There are two reasons: First, although the concentrations of these gases are not nearly as large as that of oxygen and nitrogen (the main constituents of the atmosphere), neither oxygen or nitrogen are greenhouse gases. This is because neither has more than two atoms per molecule (i.e. their molecular forms are O<sub>2</sub> and N<sub>2</sub>, respectively), and so they lack the internal vibrational modes that molecules with more than two atoms have. Both water and CO<sub>2</sub>, for example, have these "internal vibrational modes", and these vibrational modes can absorb and reradiate infrared radiation, which causes the greenhouse effect. Secondly, CO<sub>2</sub> tends to remain in the atmosphere for a very long time (time scales in the hundreds of years). Water vapor, on the other hand, can easily condense or evaporate, depending on local conditions. Water vapor levels therefore tend to adjust quickly to the prevailing conditions, such that the energy flows from the Sun and re-radiation from the Earth achieve a balance. CO<sub>2</sub> tends to remain fairly constant and therefore behave as a controlling factor, rather than a reacting factor. More CO<sub>2</sub> means that the balance occurs at higher temperatures and water vapor levels. Combustion of Fossil Fuels, for electricity generation, transportation, and heating, and also the manufacture of cement, all result in the total worldwide emission of about 22 billion tons of carbon dioxide to the atmosphere each year. About a third of this comes from electricity generation, and another third from transportation, and a third from all other sources

Consider the following statements:

1. Deforestation is not as big a contributor to global warming as burning of fossil fuels.
2. It is essential for a gas to have three atoms per molecule in order to act as a greenhouse gas.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2**

76. Global Warming is the increase of Earth's average surface temperature due to effect of greenhouse gases, such as carbon dioxide emissions from burning fossil fuels or from deforestation, which trap heat that would otherwise escape from Earth. This is a type of greenhouse effect. The most significant greenhouse gas is actually water vapor, not something produced directly by humankind in significant amounts. However, even slight increases in atmospheric levels of carbon dioxide (CO<sub>2</sub>) can cause a substantial increase in temperature. Why is this? There are two reasons: First, although the concentrations of these gases are not nearly as large as that of oxygen and nitrogen (the main constituents of the atmosphere), neither oxygen or nitrogen are greenhouse gases. This is because neither has more than two atoms per molecule (i.e. their molecular forms are O<sub>2</sub> and N<sub>2</sub>, respectively), and so they lack the internal vibrational modes that molecules with more than two atoms have. Both water and CO<sub>2</sub>, for example, have these "internal vibrational modes", and these vibrational modes can absorb and reradiate infrared radiation, which causes the greenhouse effect. Secondly, CO<sub>2</sub> tends to remain in the atmosphere for a very long time (time scales in the hundreds of years). Water vapor, on the other hand, can easily condense or evaporate, depending on local conditions. Water vapor levels therefore tend to adjust quickly to the prevailing conditions, such that the energy flows from the Sun and re-radiation from the Earth achieve a balance. CO<sub>2</sub> tends to remain fairly constant and therefore behave as a controlling factor, rather than a reacting factor. More CO<sub>2</sub> means that the balance occurs at higher temperatures and water vapor levels. Combustion of Fossil Fuels, for electricity generation, transportation, and heating, and also the manufacture of cement, all result in the total worldwide emission of about 22 billion tons of carbon dioxide to the atmosphere each year. About a third of this comes from electricity generation, and another third from transportation, and a third from all other sources.

Which of the following can be inferred from the passage?

- a) Global warming and Greenhouse effect are the same
- b) Oxygen and Nitrogen gases contribute slightly to global warming because of their high concentration
- c) Burning fossil fuels for electricity generation is the single biggest contributor to the emission of carbon dioxide
- d) None of the above**

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Consider the following statements:

1. Nitrogen is the largest constituent of the atmosphere.
2. Water Vapor is not produced directly by humankind in significant amounts.
3. The internal vibrational mode is lacking in case of oxygen and nitrogen molecules.

Which of these is/are correct according to the passage?

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only**
- d) 1, 2 and 3

78. One day Ann and Frank went to the lake with Rover. Rover can swim well, so Frank made him go into the water after a stick. "Jump, Rover! Jump in and get the stick," said Frank, and into the water Rover went with a big splash. Pretty soon he came out with the stick in his mouth. Rover did not like the game as much as Frank because the water was a little cold. They had a fine time for a while with Rover, and then set out for home because it was late in the day, and they could not stay long. On the way home, Rover saw a rabbit and away he went after it as fast as he could go. Ann and Frank ran too but could not keep up with Rover and the rabbit. When they got home, Rover was there, and Frank said, "Where is the rabbit, Rover?" Rover gave Frank a funny look and went away. "Oh I know," said Frank. "The rabbit ran so fast you could not catch it."

Which of the following statements is incorrect regarding the passage?

1. Rover can swim well whereas other two Ann and Frank cannot swim.
2. Rover, Ann and Frank ran behind the rabbit, but only Rover could catch the rabbit.
3. Rover did not like the game of Jumping in and getting the stick

Select the correct answer using the codes given below:

- a) 3 only
- b) 1 and 2 only**
- c) 2 and 3 only
- d) 1, 2 and 3

79. The Earth is more than 4½ billion years old. It is very hot. In comparison, you can see that the Sun is very, very hot. The Sun gives us light and heat. It is the centre of our Solar System. The Earth and other planets revolve around the Sun. The Sun also gives out dangerous ultraviolet light which causes sunburn and may cause cancer. You need to be careful of the Sun and wear sunscreen and clothing to protect yourself from its rays. Without the Sun, there would be only darkness and our planet would be very cold and without liquid water. The Sun seems small when you look at it in the sky during the daytime, in the morning when it comes up, and in the evening at sunset. That is because the Sun is so far away. The Sun is made up of gases: 75% hydrogen and 25% helium. Hydrogen is the simplest and lightest of all of the known elements. When you combine hydrogen with oxygen you get water.

1. Which of the following statements is correct with regard to the passage?

1. Without the sun, there would be darkness in our planet
2. The sun looks large in the evening at sunset
3. The sun is the largest star of all
4. The sun is made up of gases

Select the correct answer using the codes given below:

- a) **1 and 4 only**
- b) 1, 2 and 4 only
- c) 1, 3 and 4 only
- d) 2 and 3 only

80. A boy named Hemant was once taking care of some sheep not far from a forest. Nearby was a village, and he was told to call for help if there was any danger. One day, in order to have some fun, he cried out with all his might, "The wolf is coming! The wolf is coming!" The men came running with clubs and axes to save the boy from the wolf. As they saw nothing, they went home again and left Hemant laughing in his sleeve. Because he had had so much fun, Hemant cried out again the next day, "The wolf! The wolf!". The men came again, but not as many as the first time. Again they saw no trace of the wolf, so they shook their heads and went back. On the third day, the wolf came in earnest. Hemant cried in dismay, "Help! Help! The wolf! The wolf!" But not a single man came to help him. The wolf broke into the flock and killed a great many sheep. Among them was a beautiful lamb that belonged to Hemant. Then he felt very sorry that he had deceived his friends and neighbors, and he grieved over the loss of his pet lamb.

What is the most logical, rational and crucial message that is implied in the above passage?

- a) A friend in need is a friend indeed.
- b) There is limited extent to which people can help.
- c) **The truth itself is not believed, from one who often has deceived.**
- d) The best way to protect ourselves is "SELF HELP".