

# VISION IAS

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## TEST BOOKLET

C

CSAT APTITUDE TEST– (4283) – 2024

Time Allowed: Two Hours

Maximum Marks: 200

## INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. ENCODE CLEARLY THE TEST BOOKLET SERIES **A, B, C** OR **D** AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write *anything else* on the Test Booklet.
4. This Test Booklet contains **80** items (Questions). Each item is printed in **English**. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider most appropriate. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See direction in the answers sheet.
6. All items carry equal marks. Attempt all items. Your total marks will depend only on the number of **correct responses** marked by you in the answer sheet. For **every incorrect** response **one-third** of the allotted **Marks** will be deducted.
7. Before you proceed to mark in the Answer sheet the response to various items in the Test booklet, you have to fill in some particulars in the answer sheets as per the instruction sent to you with your Admission Certificate.
8. After you have completed filling in all responses on the answer sheet and the examination has concluded, you should hand over to Invigilator only the answer sheet. You are permitted to take away with you the Test Booklet.
9. Sheets for rough work are appended in the Test Booklet at the end.

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO**

**Directions for the following 3 (three) items:**

Read the following **two** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

**Passage – 1**

Tigers live in some of the most important but also most highly threatened habitats on the planet, where many of Asia's most exceptional species thrive. In Sumatra, dense tropical forests form the only habitat in the world where tigers are found to live alongside orangutans, rhinos and elephants. Protecting tiger landscapes not only helps to protect these majestic big cats but also thousands of other species. Left with just 5% of the range where they used to roam, tigers are losing their homes to deforestation, infrastructure, and other human disturbances, forcing them into rapidly diminishing pockets of nature.

1. Which one of the following statements **best reflects the crux** of the passage?
  - (a) Due to deforestation and other human disturbances, the tiger has become the most threatened species on the planet.
  - (b) Being the keystone species, it is critical to preserve tiger habitats.
  - (c) Asia holds the highest population of tigers, and the majority have their habitat in Sumatra.
  - (d) Diminishing habitats of tigers can threaten human life due to frequent human-wildlife encounters.

**Passage – 2**

The purpose of any social security measure is to give individuals and families the confidence that their level of living and quality of life will not erode by social or economic eventuality. A worker works not only for economic motivation but also for the sense of belongingness and security within his workplace. Hence, the employer must ensure as best as he can that his workers have this psychological satisfaction that their as well as their family's lives are socially secure and cared for. Indian legislations have gone a long way in strengthening this cause and because of this and many other factors, today in the world of labour and employment, the employee and employers' interest is at par with each other, and the principal focus is on the combined interest and satisfaction of both. If these conditions are fulfilled with a joint effort and contribution from both the employer and the employee, then the workplace to a great extent will become a home of sorts.

2. Based on the above passage, the following **assumptions** have been made:
  1. Social security measures are the best way to ensure a decent quality of life of an employee and his family.
  2. More than salary, it is the sense of belongingness towards the workplace which motivates the employee to work.Which of the above assumptions is/are valid?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2

3. Which one of the following statements **best reflects the crux** of the passage?

- (a) Both social security and an employee's commitment at work is critical to ensure that work is actually joyful.
- (b) More than the government, the employer is responsible for the happiness of the employees.
- (c) When the workplace becomes a sort of a home, the performance of all the employees and the management improves manifold.
- (d) For India to exploit its demographic dividend to the fullest, social security measures are a must.

4. If  $p\%$  of  $(p/q) + (p/q)\%$  of  $p = r\%$  of  $(p/q)$ , then what is the value of  $r$ ?

- (a)  $2p$
- (b)  $p^2/q$
- (c)  $p/q$
- (d)  $2/q$

5. 15% of the sum of the ages of Raju and Bittu is equal to 25% of the difference of their ages. What percent of the age of Bittu is equal to the age of Raju? (Assume that the age of Raju is greater than that of Bittu)

- (a) 10%
- (b) 60%
- (c) 200%
- (d) 400%

6. Two statements S1 and S2 are given below followed by a question.

S1:  $x$  is 40% of  $y$ , and  $y$  is 60% of  $z$ .

S2:  $x$  is 25% more than  $y$ , and  $y$  is 20% less than  $z$ .

Question: What is the value of  $x$  in terms of  $z$ ?

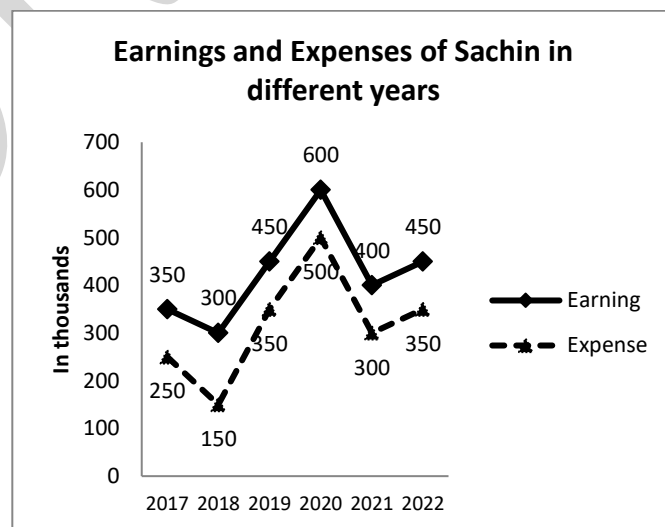
Which one of the following is correct in respect of the above Statements and the Question?

- (a) S1 alone is sufficient to answer the Question
- (b) S2 alone is sufficient to answer the Question
- (c) Either S1 alone or S2 alone is sufficient to answer the Question
- (d) Both S1 and S2 together are sufficient to answer the Question

**Directions for the following 2 (two) items:**

Study the following graph carefully and answer the questions that follow.

The given line graph shows the earnings and expenses of Sachin (in thousands) in different years from 2017 to 2022.



7. In which of the following years was the percentage increase or decrease in earnings the maximum as compared to the previous year?

- (a) 2022
- (b) 2020
- (c) 2021
- (d) 2019

8. What is the ratio of increase in earnings and expenses in the year 2020 as compared to the previous year?
- (a) 6 : 5  
(b) 9 : 7  
(c) 1 : 2  
(d) None of these
9. A sum of money becomes 16 times in 6 years and 81 times in 10 years. What is the rate of compound interest?
- (a) 30%  
(b) 40%  
(c) 60%  
(d) None of these
10. Sanjay invests a certain amount at simple interest, on which he gets ₹ 2870 as interest in 7 years. Consider the following Statements.
1. If rate of interest is increased by 2%, he will get ₹ 3280 as interest in 7 years.
  2. If rate of interest is decreased by 3%, he will get ₹ 2430 as interest in 7 years.
- Which of the above statements is/are correct?
- (a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

**Directions for the following 5 (five) items:**

Read the following **four** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

**Passage – 1**

Traditional food security programs tend to adopt a production-focused approach, which seeks to directly influence food security by increasing the supply of food. The focus on food production leads to the neglect of other areas in which the root causes of the food system's underperformance, as well as the leverage points to bring about the biggest impacts, can often be found. Furthermore, the interwoven interactions and feedbacks in the food system mean that direct interventions in one area create risks or exacerbate problems in another.

11. Which one of the following statements **best reflects the crux** of the passage?
- (a) India's food security programs do not address the new challenges related to hunger.
- (b) Other ways to deal with food security include cash transfers and more focus on nutritional security.
- (c) For dealing with the new challenges in food security, the structure of food systems related to interactions and feedback needs to change.
- (d) Ensuring food security by merely increasing food production is not a sustainable solution.

### Passage – 2

A new World Bank study finds that the impact of unsafe food costs low and middle-income economies about US\$ 110 billion in lost productivity and medical expenses each year. Yet a large proportion of these costs could be avoided by adopting preventative measures that improve how food is handled from farm to fork. Better managing the safety of food would also significantly contribute to achieving multiple Sustainable Development Goals, especially those relating to poverty, hunger, and well-being. Foodborne diseases caused an estimated 600 million illnesses and 420,000 premature deaths in 2010 according to World Health Organization. This global burden of foodborne disease is unequally distributed. Relative to their population, low- and middle-income countries in South Asia, Southeast Asia, and sub-Saharan Africa bear a proportionately high burden. They account for 41 per cent of the global population yet 53 per cent of all foodborne illnesses and 75 per cent of related deaths. Unsafe food threatens young children the most: although children under 5 make up only 9 per cent of the world's population, they account for almost 40 per cent of foodborne diseases and 30 per cent of related deaths.

12. Based on the above passage, the following *assumptions* have been made:

1. This global burden of foodborne disease is unequally distributed across countries, but evenly distributed across age groups.
2. Agencies working on foodborne illnesses should primarily focus on young children from low and middle-income countries.

Which of the above assumptions is/are valid?

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

13. Which one of the following statements *best reflects the crux* of the passage?

- (a) Increasing global burden of foodborne disease calls for a proactive role of the World Health Organization.
- (b) Low and middle-income countries should adopt the best food safety practices of the developed countries.
- (c) Due to increased food-borne illnesses, there is a dire need for increased investment in health infrastructure, especially in low and middle-income countries.
- (d) Focus on food safety is important not only for the health and economy of the nation, but also to meet international benchmarks.

### Passage – 3

The environment plays a crucial role in people's physical, mental, and social well-being. Despite significant improvements, major differences in environmental quality and human health remain between and within European countries. The complex relationships between environmental factors and human health, considering multiple pathways and interactions, should be seen in a broader spatial, socio-economic, and cultural context. Much progress has been achieved through dedicated approaches to improving the quality of the environment and reducing burdens on human health — but many threats remain. Meanwhile, new challenges are emerging with a wide range of potential, highly uncertain, ecological, and human health implications. In this context, technological advancements may provide new benefits — however, history also offers many examples of adverse health impacts from new technologies.

14. Which one of the following statements *best reflects the crux* of the passage?

- (a) Resorting to technology for addressing rising challenges in ecological and human health might not give the desired results.
- (b) The fluctuations in environmental quality and human health are limited to European region only.
- (c) Without addressing environmental health, challenges to human health are impossible to address.
- (d) Before the adoption of any technology for resolving any ecological or human health challenge, it is important to evaluate its adverse health impacts via some government recognized lab.

**Passage – 4**

In the health sector, India has made enormous strides over the past decades. The life expectancy has crossed 67 years, and infant and under-five mortality rates are declining as is the rate of disease incidence. Many diseases, such as polio, guinea worm disease, yaws, and tetanus, have been eradicated.

Despite this progress, communicable diseases are expected to continue to remain a major public health problem in the coming decades posing a threat to both national and international health security. Besides endemic diseases such as human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS), tuberculosis (TB), malaria, and neglected tropical diseases, communicable disease outbreaks will continue to challenge public health, requiring a high level of readiness in terms of early detection and rapid response.

15. Which one of the following statements *best reflects the crux* of the passage?

- (a) It is not possible to eradicate communicable diseases in the coming future.
- (b) High life expectancy and declining mortality rates in children will boost human capital, and eventually economic growth.
- (c) Development of natural immunity should be the focus area in dealing with communicable diseases like TB and malaria.
- (d) Both (a) and (b)

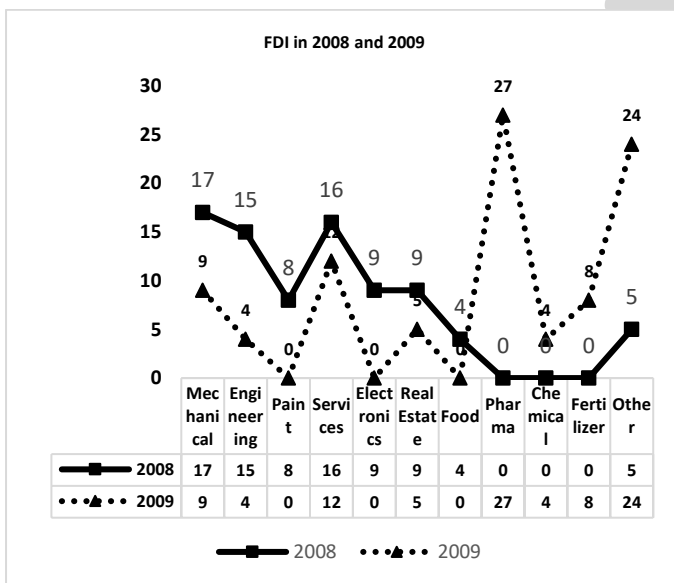
16. A shopkeeper sells an item at a certain price. If he sells that item at 33.33% of the original selling price, then he suffers a loss of 33.33 %. Find the profit percent, if he sells that item at 60% of the original selling price?

- (a) 35%
- (b) 20%
- (c) 25%
- (d) 37.5%

17. Meenakshi invested ₹ 8000 in a bond where interest rate doubles every year. At the time of investment, the rate of interest was 4% per annum. What amount of money will she receive at the end of the 3<sup>rd</sup> year?

- (a) ₹ 10800  
(b) Less than ₹ 10000  
(c) More than ₹ 11000  
(d) None of these

18. Study the graph given below carefully and answer the question that follows:

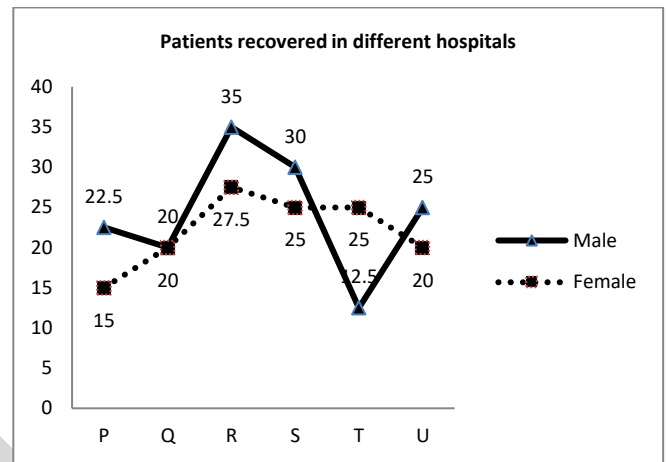


For how many sectors was there an increase in FDI in 2009 as compared to 2008?

- (a) 2  
(b) 4  
(c) 1  
(d) 5

19. Study the graph given below carefully and answer the question that follows.

The given line graph shows the number of male and female patients that recovered in different hospitals P, Q, R, S, T and U.



Male patients that recovered in hospital R are approximately what percent of the total male patients that recovered in all the hospitals?

- (a) 20%  
(b) 34%  
(c) 24%  
(d) 29%

20. Raman bought a bicycle costing ₹ 8000 at two successive discounts of 10% and 15% respectively. He spent some money on repairing it and then sold it for ₹ 8000. Which of the following statements is correct?

- (a) If he earns a profit, then the sum of repairing cost and profit is ₹ 1880.  
(b) If repairing cost is 30% of the cost price of the bicycle, then he will make a loss.  
(c) Repairing cost is more than 30% of the cost price.  
(d) None of these

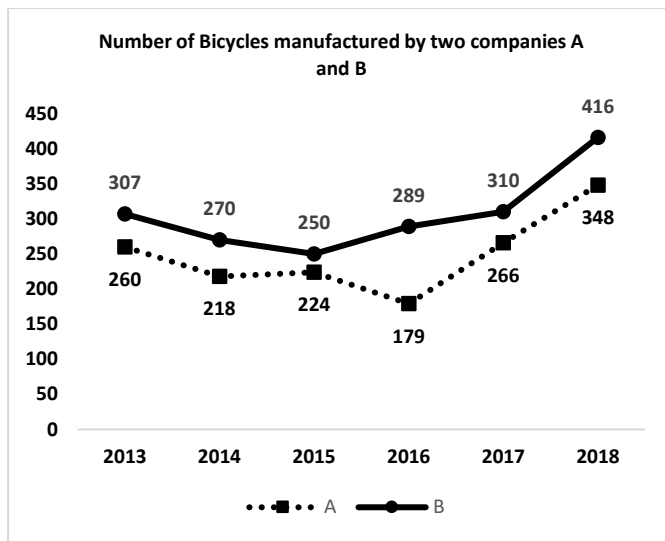


21. A shopkeeper sells a book marked ₹ 40 at a discount of 15%, and along with it gives a pen of ₹ 2 free with it. If he earns a profit of 60%, the cost price of the book must be
- (a) ₹ 22
  - (b) Approximately 166% of the profit
  - (c) 30% of the marked price
  - (d) Data not sufficient
22. In a party, 72% of the people ate roti (chapati) and 44% ate rice. If each person ate either roti or rice and 80 people ate both, then how many people were there in the party?
- (a) 315
  - (b) 500
  - (c) 574
  - (d) Can't be determined
23. Sanjay's expenditure is 40% of Dinesh's expenditure, which is 25% of Shikha's expenditure. Sanjay's expenditure must be
- (a) 85% more than Dinesh's expenditure
  - (b) 10% more than Shikha's expenditure
  - (c) 90% less than Shikha's expenditure
  - (d) None of these

24. Two statements S1 and S2 are given below followed by a question.  
S1: Number B is 30% less than number C.  
S2: Number A is 37% less than number C.  
Question: Number A is what percent less than number B?
- Which one of the following is correct in respect of the above Statements and the Question?
- (a) S1 alone is sufficient to answer the Question
  - (b) S2 alone is sufficient to answer the Question
  - (c) Either S1 alone or S2 alone is sufficient to answer the Question
  - (d) Both S1 and S2 together are sufficient to answer the Question
25. Two statements are given below followed by a question.  
S1: Sales increased by 20% from Year 1 to Year 2.  
S2: Sales increased by 15% from Year 2 to Year 3.  
Question: Is the increase in sales (in absolute terms) from Year 1 to Year 2 greater than the increase in sales from Year 2 to Year 3?
- Which one of the following is correct in respect of the above Statements and the Question?
- (a) Both S1 and S2 together are sufficient to answer the question, but neither S1 alone nor S2 alone is sufficient to answer the Question.
  - (b) S1 alone is sufficient to answer the Question, but S2 alone is not sufficient to answer the Question.
  - (c) S1 alone or S2 alone is sufficient to answer the Question.
  - (d) Both S2 and S1 together are not sufficient to answer the Question



26. Study the graph given below carefully and answer the question that follows.



The average number of bicycles manufactured by company A is approximately what percent of the average number of the bicycles manufactured by company B during 2013 to 2018?

- (a) 67%
- (b) 78%
- (c) 83%
- (d) 81%

27. Puja and Archana both invested a certain amount separately. Puja got ₹ 820 at simple interest at the rate of 5% per annum in 2 years, while Archana got the same interest compounded annually in the same time and at the same rate of interest.

Consider the following statements:

1. Sum of the principals they invested is ₹ 8200.
2. Archana invested ₹ 200 more than Puja.

Which of the above statements is/are correct?

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

28. There are three contestants Rohan, Mohan and Sohan in an election. Rohan secured 30% of the total votes, Mohan secured 60% of the remaining votes and Sohan secured 84000 votes. What was the winning margin (i.e. difference between the winner and runner-up) in number of votes?

- (a) 46000
- (b) 26000
- (c) 40000
- (d) 36000

29. Ravi invests ₹ 4000 in a scheme which will amount to ₹ 7840 in some years at compound interest.

Consider the following statements.

1. In half of that time ₹ 4000 will amount to ₹ 5600.
2. The rate of interest is 12%.

Which of the above statements is/are correct?

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

**Directions for the following 2 (two) items:**

Read the following **two** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

### Passage – 1

The traditional justification for keeping interstate rivers under the Centre's purview is that since these rivers are not confined by any boundaries (political or administrative), no state can claim an exclusive right to utilise their waters by depriving another state located downstream. Interestingly, however, while the Union List mentions "interstate water," the State List simply uses the term "water" to signify what is essential "surface water" confined within the boundaries of the state. This has allowed states to legislate on the entire extent of surface water available within its borders, regardless of whether the source of the river or its tributary is located outside its boundary or the river is draining into another state. In this regard, a state only exercises its right to *use* water for various purposes as long as the Union government deems fit. In the event of indiscriminate use of interstate waters by a state, the Centre can enact a law to prohibit the state in the larger public interest.

30. Which one of the following statements ***best reflects what is implied*** by the passage?
- (a) All states having interstate rivers are at a disadvantage as those rivers are under the Centre's purview.
  - (b) The conflict between "interstate water" in Union List and "water" in the state list should end with an amendment.
  - (c) Complex nature of interstate river water distribution requires the adoption of the 'right of use' by states and oversight by the Centre.
  - (d) No state should have any kind of power concerning interstate river water utilization.

### Passage – 2

The United Nations (UN) World Water Development Report (WWDR) has provided an update on the present trends of clean water availability and future expectations. Water security, the capacity of a population to safeguard sustainable access to adequate quantities of water of acceptable quality, is already at risk for many, and the situation will become worse in the next few decades. Clean water scarcity is a major issue in today's world of 7.7 billion people. The strain on the water system will grow by 2050 when the world population will reach between 9.4 and 10.2 billion, a 22 to 34% increase. The strain will be aggravated by unequal population growth in different areas unrelated to local resources. Most of this population growth is expected in developing countries, first in Africa, and then in Asia, where scarcity of clean water is already a major issue.

31. Which one of the following statements ***best reflects what is implied*** by the passage?
- (a) UN WWDR should primarily focus on Africa and Asia for ensuring access to clean water.
  - (b) In addition to the existing causes for water scarcity in Africa and Asia, population growth will be a major contributor to it.
  - (c) Not only developing countries, but also developed countries face scarcity of clean water.
  - (d) The best mechanism to ensure sustainable access to clean water is to control population growth.

32. To pass an examination it is necessary to obtain 43% marks. Anshuman secured 86 marks, but failed by 86 marks.

Which of the following statements is/are right?

- (i) Total marks are a factor of 7.
- (ii) Passing marks are 238 marks less than the total marks.
- (iii) His marks are 52% less than the passing marks.
- (iv) On adding 200 more marks, his score becomes 66.27% more than the passing marks.

Select the correct answer using the codes given below.

- (a) Only (i)
- (b) Only (ii) and (iii)
- (c) Only (iv)
- (d) All of the above

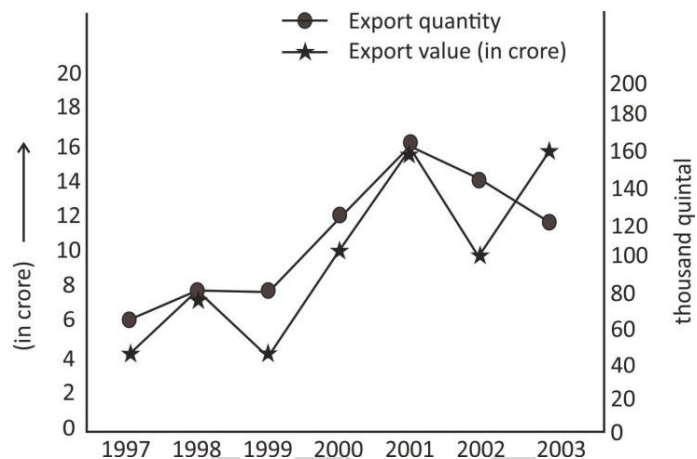
33. Sachita invested a certain amount of money on compound interest, which became 69% more in two years. What must be the rate of interest?

- (a) 25%
- (b) 30%
- (c) 16%
- (d) None of these

34. Mihir invested some money at 6% per annum, which amounted to ₹1430 in 5 years on simple interest. If the rate of interest is increased to 10% per annum now, then what will be the amount that he will get in two and a half years?

- (a) ₹ 1480
- (b) ₹ 1100
- (c) ₹ 1375
- (d) None of these

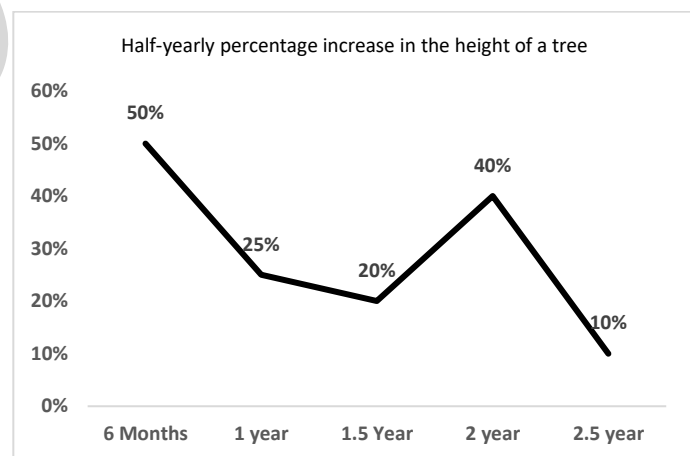
35. Study the graph given below carefully and answer the question that follows.



In which of the given years was the export price per quintal the maximum?

- (a) 2002
- (b) 2003
- (c) 1999
- (d) 1997

36. Study the graph given below carefully and answer the question that follows.



If initial height of the tree was 2 feet, then what will be its height by the end of 1.5 years?

- (a) 2.5 feet
- (b) 3 feet
- (c) 4 feet
- (d) None of these

37. The value of a machine is depreciating by 16% every year. If in 2022 its value was ₹ 37,044, then what would have been its value 3 years ago?
- (a) ₹ 61500  
(b) ₹ 62500  
(c) ₹ 63500  
(d) Can't be determined
38. Ramesh and Suresh invested a sum total of ₹ 2100. Ramesh invested at 4.5% simple interest for 3.5 years, while Suresh invested at 5.25% simple interest for 4 years. Both earned equal interest. How much money did Suresh invest?
- (a) ₹ 800  
(b) ₹ 1200  
(c) ₹ 1500  
(d) ₹ 900
39. 6% of the marks obtained by Ram in Maths is equal to 18% of the marks obtained by Raju in Science. 10% of the marks obtained by Raju in Science is equal to 30% of the marks obtained by Mohan in English. What is the number of marks scored by Raju in Maths?
- (a) 200  
(b) 400  
(c) 600  
(d) Can't be determined

40. Shyamlal lends ₹3750 at 12% compound interest per annum for 2 years. How much extra money will he get as interest at the end of that time period?
- (a) ₹ 904  
(b) ₹ 872  
(c) ₹ 954  
(d) ₹ 1008

**Directions for the following 4 (four) items:**

Read the following **three** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

**Passage – 1**

Unemployment can have a devastating impact both on a household and the general economy. The loss of income has an immediate effect on the reduction of consumer spending. However, the increase in uncertainty for the household can have a multiplier effect on the reduction of consumer spending. A household that endures unemployment is likely to significantly cut spending, often more than the loss of income due to uncertainty, and the resumption of spending can lag after the return of income. The psychological impact of unemployment on a household can have a significant impact on the broader economy. For this reason, economists have long sought better information on the dynamic influences of the re-employment market. It is in society's best interest for the newly unemployed to quickly navigate the re-employment market and re-emerge with the best wage outcome possible.

41. Based on the above passage, the following *assumptions* have been made:

1. Economists are best placed to single-handedly assess the overall impact of unemployment.
2. Governments should ensure quick engagement of the newly unemployed people in the market.

Which of the above assumptions is/are valid?

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

42. Which of the following is/are *the most rational and logical inference/inferences* that can be made from the passage?

- (a) Economists have duly studied all dimensions of the impact of unemployment on households.
- (b) Unemployment is the biggest challenge for the growth of any economy.
- (c) The uncertainty related to unemployment is no less serious a concern than unemployment itself.
- (d) Macro level data-based policy decision is sufficient to address the issue of unemployment.

## Passage – 2

The relationship between science and philosophy is an intricate and somewhat problematic subject. On the one hand, some great scientists have been great philosophers—not necessarily in the professional sense, but in the sense of deep thinking: science and philosophy often went together in the work of great figures such as Newton and Leibniz, so that it is sometimes hard—and perhaps unnecessary, and certainly anachronistic—to say where science ends and where philosophy begins. But on the other hand, philosophy is often regarded as useless, so that a philosophical outlook is irrelevant for science at best, and harmful at worst—as evinced by long pages of armchair philosophy that is blissfully uninformed by science.

43. Which one of the following statements *best reflects the crux* of the passage?

1. Conciliation between science and philosophy is not possible because of their contradictory nature.
2. Newton and Leibniz were the greatest philosophers cum scientists.

Select the correct answer using the code given below.

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

### Passage – 3

Politically sensitive social sector programmes are fluid and unstandardized. There is a multiplicity of schemes undergoing constant repackaging as governments try to appeal to voters. There is also a good deal of confusion about how social expenditures are accounted for. Moreover, since federal programmes are often implemented by the states, funds are transferred to the states and reallocated to different sub-sectors. Thus, transparency of the flow of funds to the poor is impaired. Another chronic feature is that actual payments lag allocations. Emergency funds for other purposes tend to be supplied from the social sector budget.

44. Based on the above passage, the following *assumptions* have been made:

1. The effectiveness of the programme gets compromised without timely payments.
2. For the welfare of the poor, the social sector schemes should be rationalized and depoliticized.

Which of the above assumptions is/are valid?

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

45.  $A = (45\% \text{ of } P) - (15\% \text{ of } Q)$  and  $B = (25\% \text{ of } P) + (20\% \text{ of } Q)$ . In which of the following cases is  $A - B$  positive?

- (a)  $P = 700$  and  $Q = 400$
- (b)  $P = 700$  and  $Q = 300$
- (c)  $P = 700$  and  $Q = 500$
- (d) None of the above

46. A sold a machine after giving a 30% discount. B sold the same machine after giving three successive discounts of 10% each. C sold the same machine after giving successive discounts of 15%, 10% and 5%. If marked price of all three merchants - A, B, and C were the same, find the descending order of their selling prices.

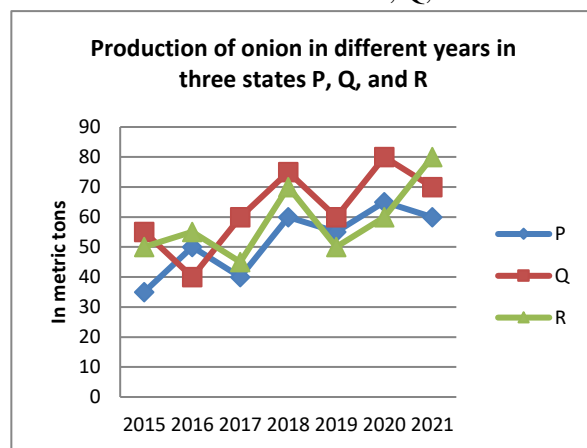
- (a) BAC
- (b) ABC
- (c) ACB
- (d) BCA

47. Ananya sold some toys at a profit of 10%. Thereafter, she sold another similar batch of toys at a loss of 10%. What is her overall profit or loss percent?

- (a) Loss of 1%
- (b) Profit of 1%
- (c) No profit, no loss
- (d) None of these

48. Study the graph given below carefully and answer the question that follows.

The given line graph shows the production of onion (in metric tons) in different years from 2015 to 2021 in three states P, Q, and R.

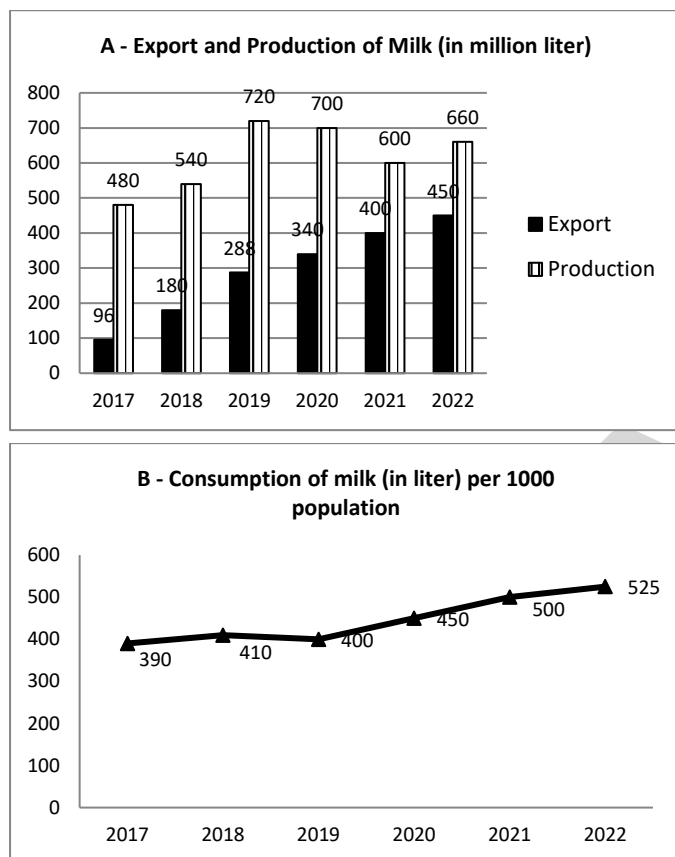


The average production of onion in state P is approximately what percent of the average production of onion in state R?

- (a) 89%
- (b) 82%
- (c) 95%
- (d) 77%



49. Study the two graphs A and B given below carefully and answer the question that follows. The given bar graph shows the Export and Production of Milk (in million liter) in different years from 2017 to 2022, and the line graph shows Consumption of milk (in liter) per 1000 population in different years from 2017 to 2022.



Based on the above graphs, consider the following statements.

Statement – 1: We can find out the average quantity of milk consumed during the given period.

Statement – 2: Year 2022 has the maximum percentage of exports with respect to production.

Which of the above statements is/are correct?

- (a) Only 1 follows
- (b) Only 2 follows
- (c) Both 1 and 2 follow
- (d) Neither 1 nor 2 follows

50. Satya buys a pair of slippers for ₹500 and sells them to Sachin at a profit of 20%. Thereafter, Sachin sells those slippers to Nitin at a profit of 10%.

Consider the following statements.

- (i) Sachin paid ₹100 more than Satya.
- (ii) Nitin gave ₹660 to Satya.
- (iii) Sachin gave ₹600 to Satya.

Which of the statements given above is/are right?

- (a) Only (i)
- (b) Only (i) and (iii)
- (c) Only (ii) and (iii)
- (d) None of the above

**Directions for the following 3 (three) items:**

Read the following **two** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

### Passage – 1

Governments must exploit the enormous opportunities in wastewater. Safely managed wastewater is an affordable and sustainable source of water, energy, nutrients and other recoverable materials. Wastewater can help meet growing demand. There are many treatment processes and operational systems that use wastewater in municipal activities, sustainable agriculture, energy production and industrial development. The benefits far outweigh the costs of better wastewater management. The positive impacts on water quality and supply by increasing wastewater recycling and safe reuse will drive progress in public health, environmental sustainability and economic development by providing new business opportunities and creating more 'green' jobs.



51. Based on the above passage, the following *assumptions* have been made:

1. Wastewater recycling is a highly expensive process compared to its safe discharge.
2. Wastewater management is becoming an ever-challenging issue in the field of environmental sustainability.

Which of the above assumptions is/are valid?

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

52. Which one of the following statements *best reflects the crux* of the passage?

- (a) Wastewater being a finite resource, needs adequate attention for its recycling.
- (b) Use of wastewater should be a focus area for the private sector.
- (c) There is a need for an effective policy by the government to leverage wastewater resource in PPP mode.
- (d) Investment in wastewater recycling infrastructure can be regained through development in public health, economic and environmental sectors.

## Passage – 2

The nature of conflict and violence has transformed substantially since the UN was founded 75 years ago. Conflicts now tend to be less deadly and are often waged between domestic groups rather than states. Homicides are becoming more frequent in some parts of the world, while gender-based attacks are increasing globally. The long-term impact on the development of interpersonal violence, including violence against children, is also more widely recognized. Separately, technological advances have raised concerns about lethal autonomous weapons and cyberattacks, the weaponization of bots and drones, and the live streaming of extremist attacks. There has also been a rise in criminal activity involving data hacks and ransomware, for example. Meanwhile, international cooperation is under strain, diminishing global potential for the prevention and resolution of conflict and violence in all forms.

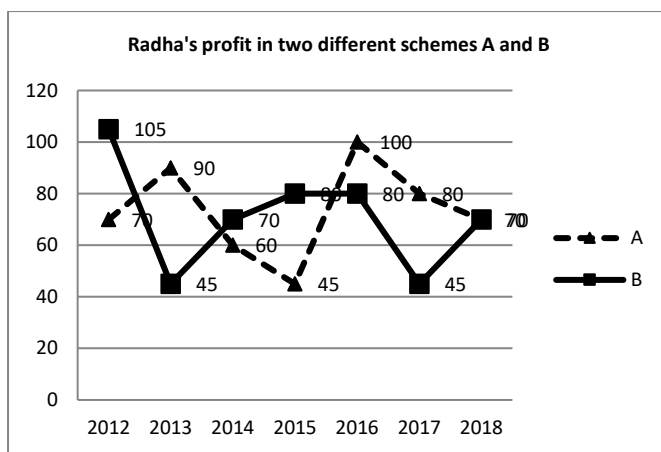
53. Which one of the following statements *best reflects the crux* of the passage?

- (a) Technology, being borderless, is the most lethal weapon for attacks, and is beyond the control, even through international cooperation.
- (b) Women and children are the worst sufferers of conflicts and violence through cyberattacks in the world.
- (c) Without international cooperation, dealing with the prevention and resolution of conflicts and violence would be arduous.
- (d) UN has not been successful in controlling conflicts and violence across the globe.

54. By selling 16 articles, a seller loses the selling price of 4 articles. Find his loss percent.

(a) 25%  
(b) 75%  
(c) 20%  
(d) None of these

55. Study the graph given below carefully and answer the question that follows.



Increase in profit in scheme A in year 2016 with respect to the previous year was what percent of the increase in profit in scheme B in 2018 with respect to the previous year?

(a) 310%  
(b) 220%  
(c) 170%  
(d) None of above

56. Subhash earns a profit of 20% by selling a bed sheet for ₹ 840, and makes a loss of 4% by selling a second bed sheet for ₹ 1248. Calculate his overall profit or loss percent.

(a) Loss of 8.8%  
(b) Profit of 4.4%  
(c) Loss of 2.8%  
(d) Profit of 2.4%

57. In a money winning contest, Monu got 40% of the maximum prize money and Golu got 50% of the maximum prize money.

Consider the following statements.

Statement – 1: Golu got 25% more money than the money that Monu won.

Statement – 2: Monu got 20% less money than the money that Golu won.

Which of the statements given above is/are right?

(a) Only 1 follows  
(b) Only 2 follows  
(c) Both 1 and 2 follow  
(d) Neither 1 nor 2 follows

58. Animesh purchased a certain number of lemons. He sold one-third of the lemons at a profit of 20%.

Consider the following statements.

- To gain an overall profit of 25%, he needs to make a profit of 27.5% on the remaining lemons.
- To gain an overall profit of 25%, he needs to sell the remaining two-third lemons at double the selling price of the one-third lemons he sold earlier.

Which of the statements given above is/are right?

(a) Only 1 follows  
(b) Only 2 follows  
(c) Both 1 and 2 follow  
(d) Neither 1 nor 2 follows

59. If Sanjeev invests a certain amount of money at simple interest, it will get doubled in 12.5 years. In how much time will this money get tripled?
- (a) In 20 years  
(b) In 25 years  
(c) In 35 years  
(d) In 32.5 years
60. If the price of a commodity is raised by 25%, then by how much percent a house holder should reduce his consumption of the same commodity so that his expenditure does not increase?
- (a) 25%  
(b) 20%  
(c) 33.33%  
(d) None of these
61. Kavita's annual salary is ₹ 80000. If her salary is being cut by 2.5% every year, then how much money will she get after 2.2 years?
- (a) ₹ 75669.75  
(b) ₹ 74750.62  
(c) ₹ 72405.50  
(d) ₹ 76491

**Directions for the following 5 (five) items:**

Read the following **three** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

### Passage – 1

Governments, organisations, and individuals increasingly generate, collect and process personal data. Data protection seeks to balance the benefits and the risks of personal data processing so that individuals have confidence that their data is collected and stored safely and used solely for legitimate purposes. Data protection laws typically require personal data processing to be lawful, limited, transparent, accurate and secure. They often seek to protect individuals' privacy and grant some control over how personal data about them is processed. They also typically establish institutions with powers to conduct investigations and enforce obligations. A strong data protection framework provides certainty which may encourage investment, competition and innovation in the digital economy and uptake of digital government and private sector services.

62. Based on the above passage, the following *assumptions* have been made:

1. India already has in place a robust data protection framework which balances the benefits and the risks of personal data processing.
2. Data protection is important not only for privacy concerns, but also for the economic growth of a country.

Which of the above assumptions is/are valid?

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

63. Which one of the following statements *best reflects the crux* of the passage?
- (a) High incidences of misuse of personal data call for a strong data protection regime.
  - (b) Considering the diversity of stakeholders, the development of a strong data protection regime is a complex process.
  - (c) A strong data protection framework is impossible to achieve.
  - (d) Data protection framework should place the concerns of the individuals above those of governments and private companies.

**Passage – 2**

The global race to fund, develop, and acquire artificial intelligence technologies and start-ups is intensifying, with commercial uses for AI proliferating in emerging economies. AI could increase GDP growth in both advanced countries and emerging markets. In energy, AI can optimize power transmission. In healthcare, diagnosis and drug discovery will benefit enormously from AI. In education, it can improve learning environments and learning outcomes and can better prepare youth for the transition to the workplace. In manufacturing, AI can help design better products in terms of functionality, quality, and cost, and improve predictive maintenance. AI can help extend credit and financial services to those who lack them. The potential impact of AI on transportation and logistics goes far beyond automation and road safety to span the entire logistics chain. Yet with the exceptions of China and India, emerging markets have received only a modest share of global investment in this advanced technology, even though they may benefit more from AI implementation than advanced economies.

64. Which of the following are applications/benefits of AI as *implied* by the passage?

- 1. Performing critical surgeries in healthcare.
- 2. Skilling fresh workforce.
- 3. Boosting economic growth of nations.

Select the correct answer using the code below:

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

65. Which of the following is/are *the most rational and logical inference/inferences* that can be made from the passage?

- 1. Advanced economies have invested more in AI, than emerging markets.
- 2. AI implementation can greatly benefit emerging markets in various sectors.

Select the correct answer from the code given below:

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

### Passage – 3

The evolution of issues such as climate change, technology, and urbanisation raises urgent policy challenges. For example, climate change is exacerbating environmental degradation, increasing the frequency and intensity of extreme weather events, and by no means impacting people uniformly. If climate change continues unaddressed it will increase inequality within countries and may even reverse current progress in reducing inequality between countries. Meanwhile, technology can be a great equaliser – by enhancing connectivity, financial inclusion, access to trade and public services, for instance – but those yet to be connected may experience further marginalisation as a result, especially as progress is slowing, even reversing, among some countries. With a global trend toward urbanisation, cities are becoming a growing site for inequalities. They find high levels of wealth and modern infrastructure coexist with pockets of severe deprivation, often side by side. This makes gaping and increasing levels of inequality even more glaring within cities.

66. Based on the above passage, the following *assumptions* have been made:

1. There has been no progress to reduce inequality among countries of the world.
2. The demand for urbanization will severely impact the rural population by increasing the inequality between rural and urban people.

Which of the above assumptions is/are valid?

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

67. Radha spends 40% of her savings on Char-Dham Yatra, 10% of the remaining on charity and 16.67% of the remaining on food. If in the end she is left with ₹ 22500, then which of the following must be right?
- (a) She spent 8% of her savings on charity.
  - (b) She spent 15% of her savings on charity and food.
  - (c) She spent 66% of her total savings.
  - (d) At the end, she is left with 40% of the initial total savings.
68. Weight of a jar alone is 12.5% of the jar filled with water. When some quantity of water is removed, weight of the jar and the remaining water is 25% of the original total weight. What fractional part of the water has been removed?
- (a)  $\frac{3}{7}$
  - (b)  $\frac{5}{7}$
  - (c)  $\frac{6}{7}$
  - (d) None of these
69. A report consists of 10 sheets each consisting of 50 lines and each such line consists of 60 characters. This report is retyped into sheets each of 30 lines, each having 25 characters. The percentage increase in the number of sheets is?
- (a) 400%
  - (b) 300%
  - (c) 200%
  - (d) None of these
70. Raghu borrowed ₹18000 at 12% simple interest per annum, and some more money at 15% simple interest per annum. If the overall interest paid by him in 2 years is ₹ 9000, then how much money did he borrow?
- (a) ₹ 33800
  - (b) ₹ 32600
  - (c) ₹ 32000
  - (d) None of these

71. Anurag gains a profit of 25% by selling an item at ₹ 3920. What is the profit earned by him?
- (a) ₹ 820  
(b) ₹ 900  
(c) ₹ 784  
(d) None of these
72. Ramesh and Suresh bought mangoes from the market at the same price. Ramesh made a profit of 20% by selling his mangoes. What must be the profit percentage earned by Suresh if he sold his mangoes at double the selling price of Ramesh?
- (a) 40%  
(b) 120%  
(c) 140%  
(d) None of these
73. A person has invested some money in a policy that gives 10% return for the first year and 20% return for the subsequent years. What will be the value of the money for the amount a person invests after a period of six years?
- (a)  $1.1^6$  of initial investment  
(b)  $1.2^6$  of the initial investment  
(c)  $1.1^3 \times 1.2^3$  of the initial investment  
(d)  $1.1 \times 1.2^5$  of the initial investment

74. If the length of a rectangle is increased by 20% and the breadth is increased by 25%. What will be the net percentage increase in the area of the rectangle?
- (a) 20%  
(b) 25%  
(c) 50%  
(d) 40%
75. Salary of A and B is 30% and 40% more than the salary of C respectively. If A's salary is X% of the salary of B, then X is equal to -
- (a) 105 (2/13)  
(b) 140  
(c) 105 (5/7)  
(d) 92 (6/7)

**Directions for the following 2 (two) items:**

*Read the following passage and answer the items that follow it. Your answers to these items should be based on the passage only.*

**Passage – 1**

There is growing evidence that organic farming is a rapidly expanding economic sector in the U.S. However, an unanswered question is whether organic farmers are better off than conventional farmers when it comes to farm household income. Using large farm-level data and a matching estimator, one of the studies explores the relationship between organic certification and farm household income with its various components. Contrary to expectations, certified organic farmers do not earn significantly higher household income than conventional farmers. Though certified organic crop producers earn higher revenue, they incur higher production expenses as well. In particular, certified organic producers spend significantly more on labour, insurance, and marketing charges than conventional farmers. The results suggest that the lack of economic incentives can be an important barrier to conversion to organic farming.



76. Which of the following is/are **the most rational and logical inference/inferences** that can be made from the passage?

1. Research on farm-level data is required to reduce the cost of organic farming in comparison with conventional farming.
2. The net profit in organic farming is significantly higher than conventional farming due to higher revenues from certified organic crops.

Select the correct answer from the code given below:

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

77. Which one of the following statements **best reflects the crux** of the passage?

- (a) As conventional farming is highly profitable, the adoption of organic farming will be challenging.
- (b) Lower profits in organic farming have reduced the growth of organic farming in the U.S.
- (c) Rationalising the expenses of labour, insurance, and marketing will make organic farming more profitable.
- (d) Despite the low returns of organic farming, it is important to adopt it for environmental sustainability.

78. A shopkeeper sold an article offering a discount of 5 % and earned a profit of 14 %. What would have been the percentage of profit earned if no discount was offered?

- (a) 19%
- (b) 9%
- (c) 20%
- (d) None of these

79. A sum of money is invested at a certain rate of interest per annum. After 2 years, the amount becomes 2.25 times the original sum. If the interest is compounded annually, what is the rate of interest?

- (a) 45%
- (b) 62%
- (c) 58%
- (d) 50%

80. The amount of work in a factory is increased by 50%. By what percent is it necessary to increase the number of workers to complete the new work in previously planned time, if productivity of the new workers is 150% more?

- (a) 20%
- (b) 30%
- (c) 33.33%
- (d) None of these

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