

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

Success often emerges from the crucible of setbacks, revealing the symbiotic relationship between achievement and the lessons learned through failure. Every triumph bears the silent scars of past challenges, and every setback carries the potential for growth and resilience. Understanding life allows for a holistic perspective, encouraging an embrace of both light and shadow. It's a reminder that growth often sprouts from the soil of challenges and that every peak is preceded by a valley. In navigating this we find wisdom in accepting both sides, forging a path that acknowledges the intricate beauty of life's dualities.

**Q.1) Which of the following statements best reflects the logical inference from the passage given above?**

- a) In the journey to success, patience and perseverance act as compass.
- b) Without perseverance and wisdom, being successful in life is challenging.
- c) Life is a coin; success and failure share the same currency of experience.

- d) Knowledge through understanding success and failures is the ultimate objective of life.

**Passage – 2**

The times of war conflict require leaders to make swift, strategic decisions under intense pressure. While innate traits like resilience and adaptability contribute, structured training cultivates the skills needed to navigate the complexities of warfare. Military leaders undergo rigorous training to hone tactical acumen, strategic thinking, and the ability to inspire and lead troops. The synthesis of inherent leadership qualities and the discipline acquired through training forges commanders capable of navigating the turbulent landscape of war, steering their teams through adversity with courage, precision, and a profound sense of responsibility.

**Q.2) Which of the following statements best reflects the crux of the passage?**

- a) War experience is essential for acquiring leadership qualities.
- b) Leadership in times of war demands a unique blend of innate qualities and rigorous training.
- c) Leadership for navigating wars cannot be taught, it can only be self-acquired.

- d) Leaders having war experience are better than leaders who have acquired skills through training alone.

### Passage – 3

The Public Stockholding (PSH) program, a crucial element for India's food security, faces challenges under WTO rules. India's minimum support prices (MSP) and procurement quantities for staples like rice and wheat often exceed permissible limits, triggering concerns. Data indicates that a significant percentage of India's population depends on agriculture for livelihood, making food security a paramount concern. However, the clash between India's domestic support programs and WTO norms creates tension. The need to uplift millions from poverty and hunger clashes with the demands of international trade agreements. Rising population pressure and the unpredictability of climate change underscore the urgency of ensuring food security.

**Q.3) Which one of the following is *best implied* in the passage?**

- a) India needs to adhere to international trade norms by reforming its agricultural policies.
- b) India should not be a member of WTO if it is not able to fulfil its food security commitments.

- c) WTO norms are discriminatory, restricting India's commitment to ensure food security for its poor population.
- d) Balancing food security concerns with international trade agreements is a complex issue for the Indian government.

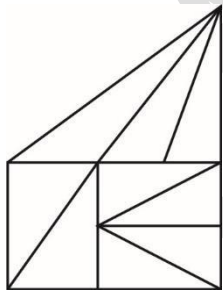
### Passage – 4

Implementing measures to reduce greenhouse gas emissions, transition to renewable energy sources, and enhancing climate resilience necessitate financial investments. These costs encompass not only the deployment of clean technologies but also the restructuring of industries, the development of sustainable infrastructure, and the adoption of climatesmart agricultural practices. Moreover, the economic impact extends beyond direct expenses. Industries relying on fossil fuels may face restructuring costs, and regions vulnerable to climate impacts may bear the economic burden of adapting to changing conditions. However, the cost of inaction far exceeds the investment required for climate mitigation and adaptation. Ultimately, viewing the costs of climate action as an investment in a sustainable and resilient future underscores the importance of proactive measures.

**Q.4) Which one of the following is *the most logical and rational inference* that can be made from the above passage?**

- a) Compared to developed countries, developing countries need more funding to fight the consequences of changing climate.
- b) Without proper funding and pre-emptive action, almost everyone will face the consequences of climate change.
- c) The best approach to tackle the impact of climate change is to implement mitigation and adaptation measures.
- d) Climate change is a real global challenge demanding collective solutions.

**Q.5) Consider the following figure.**



Which among the following can be concluded with respect to the total number of triangles and rectangles in it?

- a) The total number of triangles and rectangles is a prime number.

- b) The product of the total number of triangles and rectangles is a multiple of 7.
- c) The total number of triangles and rectangles is a multiple of 3.
- d) None of these

**Q.6) If = stands for  $\div$ ; + stands for  $-$ ; - stands for  $+$ ;  $\times$  stands for  $=$ ;  $\div$  stands for  $\times$ ; which of the following is true?**

- a)  $3 \div 3 + 1 \times 9 + 1 = 1$
- b)  $3 \div 3 + 1 \times 3 + 1 = 1$
- c)  $3 \div 3 + 1 \times 13 + 1 = 1$
- d)  $3 \div 3 + 1 \times 3 + 1 = 1$

**Q.7) Sachita can finish a work in 48 days by working 9 hours a day. Shikha can finish the same work in 36 days by working 16 hours a day. In how many days can they finish the work by working together  $7\frac{5}{7}$  hours a day?**

- a) 32 days
- b) 34 days
- c) 36 days
- d) 38 days

**Q.8) An electronic equipment can be produced by three machines X, Y and Z. Machine X takes 30 hours to produce 1 lakh units. Machine Y is thrice as fast as machine X. Machine Z takes the same amount of time to produce 1 lakh units as X and Y running together. How much time will be**

required to produce 1 lakh units if all the three machines are used simultaneously?

- a) 6.5 hours
- b) 7.5 hours
- c) 3.75 hours
- d) 8 hours

**Q.9)** The password of a secured lock changes every day as per the pattern described below: Password for day 1: TREWQ Password for day 2: REWQT Password for day 3: EWQTR What would be the password for day 4?

- a) WQTRE
- b) WQERT
- c) WERTQ
- d) WQTER

**Q.10)** The L.C.M and the H.C.F of two 3-digit numbers p12 and 7q4 are 25088 and 16 respectively. Find p and q.

- a) 6, 7
- b) 5, 8
- c) 7, 8
- d) 6, 8

**Directions for the following 4 (four) 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

Economic development has long been a focus of economic strategies, but it is only in the last few decades that sustainability has risen to the centre of economic discourse and acquired substantial significance. According to modified neoclassical growth theories, to provide economic stability for future generations, it is critical to accomplish sustainability. Over time, environmental sustainability has become increasingly important. It instils a sense of resource scarcity and the importance of limiting environmental damage. It is often assumed that when people's fundamental requirements are met, they develop a desire to preserve the ecosystem. Even though gaining this knowledge has profoundly impacted the sustainable discourse, one part of it, namely social sustainability, still lacks a cohesive, unambiguous, and usable definition.

**Q.11)** Based on the above passage, the following *assumptions* have been made:

1. Fulfilling the basic necessities of people naturally inspires among them a desire to protect the environment.
2. Growth-only traditional economic development has detrimental effects on the environment and sustainability.

Which of the assumptions given above is/are valid?

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

### Passage – 2

In the 1970s, U.S. capitalists discovered that it was no longer necessary to raise wages: they had less need for workers and more people looking for jobs. And every capitalist in the U.S. realized what many had learned at M.B.A. school could be put into effect, namely, the great lesson that if you don't have to raise the wages of your workers, don't do it. You make more money. We've had thirty-plus years in which the real wage, on average, hasn't improved in the United States. Americans do more hours of paid labour per year than any other working class in any advanced industrial country. To keep alive the American dream American workers have been working more. Men started taking second jobs. The women left the home and entered the workforce.

**Q.12) Which of the following statements can be inferred from the above passage?**

- 1. Reduced bargaining power of workers contributed to wage stagnation in the US.

- 2. Working class Americans are less happy than their counterparts in other developed countries.

Select the correct answer using the codes given below.

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

### Passage 3

We need to take the spirit of critical pedagogy with absolute seriousness. This is possible only when children are encouraged to realise and trust their potential, and teachers, far from just "completing" the official syllabus, engage in a meaningful dialogue with young students. This is like walking together, seeing beyond the burden of bookish knowledge, overcoming the dead weight of ready-made "facts, definitions and theories", asking new questions, and thinking creatively. An important reason behind rote learning is that students are hardly encouraged or trained to see beyond textbooks, study the literature outside the syllabus, relate the classroom to the larger world, and think differently and creatively. The prevalent pattern of school examinations demands nothing more than the capacity to memorise.

**Q.13) Which of the following statements reflects the *best logical inference* from the passage given above?**

- a) The spirit of critical pedagogy is hampering the growth of students in the current education system.
- b) Students should be made to learn facts, definitions, and theories in order to gain knowledge and secure better jobs.
- c) There is a need to bring reforms in the prevalent education system.
- d) The students should not question things taught by the teacher and should follow instructions with obedience.

**Passage – 4**

Unemployment is not India's problem. Our problem is underemployment, so productivity is low. So, the job that can be done by one person often gets done by two people or maybe three people. And that is where the real challenge of jobs is- creating well-paid productivity jobs. India is a labour-abundant and capital-scarce country. What we have done is put much of the capital in very selective sectors which are in any case very capitalintensive. We have a situation where much of the capital is working with very few workers. And we have a host of workers in agriculture in micro and small enterprises where the capital is hardly present.

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

- a) Jobless growth is the main issue facing the Indian Economy.
- b) There is a need to invest more in capitalintensive industries in order to create employment opportunities for all.
- c) Though there are many well-paid productive jobs, there is a shortage of labour in the market.
- d) There exists a capital-labour mismatch in the country.

**Q.15) By interchanging which numbers and signs will the following equation become balanced?  $8 + 15 - 20 \times 10 \div 5 = 47$**

- a) + and -, 8 and 15
- b)  $\times$  and  $\div$ , 5 and 8
- c)  $\times$  and -, 15 and 20
- d) + and  $\div$ , 10 and 20

**Q.16) In 2020, Anuj's salary was Rs. 24000 but due to a pandemic in 2021, his salary was reduced by 20% which is equal to that of Ajay's salary in 2021. Ajay's salary in 2022 was 20% more than his salary in 2021. Anuj's salary in 2022 was the same as his salary in 2020. By what percentage is the sum of the salaries of Ajay in 2021 and 2022 more/less than that of Anuj in both these years combined?**

- a)  $(22/9)\%$
- b)  $(18/7)\%$
- c)  $(20/9)\%$
- d) None of these

**Q.17)** Twice the difference between a two-digit number and the number formed by reversing its digits is two less than the sum of the number and the number formed by reversing the digits of the number. If the original number is greater than the number formed by reversing the digits, then what is the original number?

- a) 62
- b) 72
- c) 82
- d) 92

**Q.18)** To 5 litre of 20% sulphuric acid, 7.5 litre of 80% sulphuric acid is added. What is the strength of the acid in the mixture now?

- a) 56%
- b) 50%
- c) (c) 64%
- d) (d) 60%

**Q.19)** A water tank has three taps X, Y and Z. X fills 3 buckets in 4 minutes, Y fills 5 buckets in 6 minutes and Z fills 8 buckets in 10 minutes. If all the taps are opened together a full tank is filled in 1 hour. If a

bucket can hold 2 gallons of water, what is the capacity of the tank (in gallons)?

- a) 287
- b) 284
- c) 285
- d) 286

**Q.20)**  $P = (40\% \text{ of } A) + (60\% \text{ of } B)$  and  $Q = (75\% \text{ of } A) - (25\% \text{ of } B)$ , where Q is greater than P. In this context, which of the following statements is correct?

- a) A is greater than B
- b) B is greater than A
- c) A is equal to B
- d) None of the above can be concluded with certainty.

**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

Child-rearing involves nurturing and guiding a child through various stages of development. Parents navigate a dynamic journey, adapting to the changing needs and personalities of their children. Understanding and meeting a child's needs requires a multifaceted approach. Effective communication, setting boundaries, and providing a supportive environment



contribute to a child's emotional well-being. Balancing discipline with love and fostering independence while ensuring safety present intricate challenges. Parents often find joy in the process of imparting values, skills, and knowledge. Providing a secure foundation for a child's exploration of the world contributes to the fulfilling nature of parenting.

**Q.21) Which of the following is/are the most rational and logical inference/inferences that can be made from the passage?**

1. Only parents can contribute to the emotional well-being of their children.
2. A supportive environment and good communication are ingredients of a good child-rearing practice.

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

**Q.22) Which one of the following is best implied by the passage?**

- a) Child-rearing is the art of nurturing young minds to bloom into responsible and compassionate model citizens.

- b) Child rearing depends on societal values.
- c) If one wants their child to succeed in life, he should focus on the process of child-rearing.
- d) Child-rearing is a complex yet profoundly rewarding process.

**Passage – 2**

Multinational corporations, international media, and the internet play influential roles in disseminating a shared set of cultural references and norms. As a result, local traditions and practices face the risk of erosion or assimilation into a globalized culture. This phenomenon is often associated with the spread of Western values, consumerism, and media, which can overshadow and replace local traditions, languages, and customs. While it promotes interconnectedness and shared experiences, it also raises concerns about the loss of cultural diversity. Indigenous languages, traditional knowledge, and unique customs face the threat of extinction as globalized trends become dominant.

**Q.23) Which one of the following is the most logical and rational inference that can be made from the above passage?**

- a) Globalization intertwines cultures, creating a vibrant



tapestry of shared experiences and values.

- b) Globalization threatens local culture through cultural homogenization.
- c) In the backdrop of the loss of local culture, there is a need for de-globalization.
- d) The promotion of Western culture should be countered by the promotion of local culture globally.

**Q.24) Find the missing letter pair in the following matrix.**

LX	GT	DK
IR	TV	KP
XU	?	NM

- a) TN
- b) RD
- c) MN
- d) YD

**Q.25) Consider the following Question and the**

Statement 1: The ratio of the sales of A and B is 4:5

Statement 2: The ratio of the expenditures of A and B is 3:4.

Question: Companies A and B earned profit in 2022. Is the profit of company A less than that of company B in 2022?

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

- a) The Question can be answered by using one of the Statements alone, but cannot be answered by using the other Statement alone.
- b) The Question can be answered by using either Statement alone.
- c) The Question can be answered by using both the Statements together, but cannot be answered by using either Statement alone.
- d) The Question cannot be answered even by using both the Statements together.

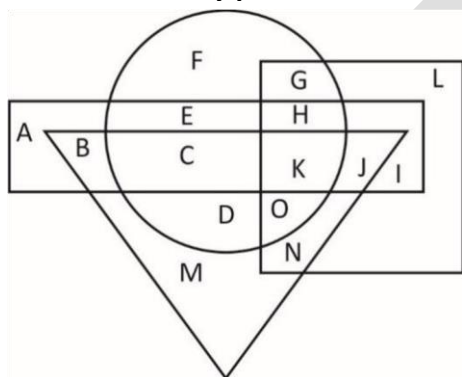
**Q.26) In a row of children, Manoj is tenth from the left and Kamal is thirteenth from the right. Vimal is 20<sup>th</sup> from the right end and third to the right of Manoj. How many children are there between Manoj and Kamal?**

- a) 9
- b) 10
- c) 8
- d) 6

**Q.27)** Six persons are standing around a circular table facing the center. Balram is between Kamal and Kishan. Manoj is between Sanjay and Vishal. Kamal is on the left of Sanjay. Who is on the left of Kishan?

- a) Balram
- b) Vishal
- c) Kamal
- d) Sanjay

**Q.28)** In the following Venn diagram, circle represents businessman, square represents lawyer, triangle represents artist and rectangle represents thief. A letter is written on every part.



What part is described by the letter K?

- a) Lawyer, artist, businessman
- b) Thief, businessman, artist
- c) Lawyer, thief, artist, businessman
- d) None of these

**Q.29)** Select the option wherein the numbers have the same relationship, as the numbers in the set given below.

(33, 77, 275)

- a) (25, 95, 120)
- b) (10, 56, 100)
- c) (19, 31, 125)
- d) (14, 99, 158)

**Q.30)** Total expenses of a guest house are partly fixed and partly varying linearly with the number of guests arriving. Average expense per guest is Rs. 1000 when there are 50 guests and Rs. 800 when there are 100 guests. What is the average expense (in Rs) per guest when there are 200 guests?

- a) 650
- b) 600
- c) 500
- d) 700

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

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

#### Passage – 1

When a country exports goods and services, it contributes to its gross domestic product (GDP), stimulating economic expansion. The positive correlation between exports and economic growth is evident through various channels. Exports boost a nation's income by generating revenue from foreign markets. This influx of funds can be utilized for

domestic investment, infrastructure development, and social programs, all of which contribute to economic advancement. Additionally, exporting facilitates job creation as industries expand to meet international demand, reducing unemployment rates and increasing consumer spending. Exposure to global markets encourages innovation and efficiency. To compete internationally, businesses often invest in research and development, adopting advanced technologies and improving production processes. This not only enhances the competitiveness of domestic industries but also elevates overall productivity, fostering sustained economic growth.

**Q.31) Based on the above passage, the following *assumptions* have been made:**

1. In today's world no country can have a closed economy.
2. Economic growth is possible only when businesses compete internationally with some tariff protection.

Which of the above assumptions is/are valid?

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

**Q.32) Which of the following statements *best reflects the crux* of the passage?**

- a) Winds of prosperity often blow with the sails of strategic export endeavours.
- b) Exports alone cannot ensure economic growth and social prosperity in any country.
- c) For economic growth, nations should have net-zero imports.
- d) India must reap the benefits of exports by focusing on internationally competitive products.

**Q.33) At present, the ratio of Ajay's age to Sachin's age is 4:5. Ten years ago, the ratio was 19:25. If Suresh is 12 years older than Ajay, then what is the present average age of Ajay, Sachin, and Suresh?**

- a) 52 years
- b) 48 years
- c) 56 years
- d) None of these

**Q.34) Rahul build a water tank of capacity 'x' liters. He connected the tank with two inlet pipes A and B and an outlet pipe C. Pipe A supplies water at 50 liters/hour. Pipe B can fill the tank in 4 hours, which pipe C can empty it in 12 hours. All the pipes are simultaneously opened and the tank gets filled in 1 hour. What is the value of 'x'?**

- a) 40 liters
- b) 50 liters
- c) 60 liters
- d) 80 liters

**Q.35)** The sum of infinite geometric series is 27 and the sum of the squares of the terms is 243. Find the common ratio.

- a)  $\frac{1}{2}$
- b)  $\frac{1}{3}$
- c)  $\frac{1}{4}$
- d)  $\frac{2}{3}$

**Q.36)** Anuj takes 42 minutes to travel from Pratapgarh to Prayagraj, while Pradeep takes 56 minutes to travel from Prayagraj to Pratapgarh. Anuj and Pradeep start from Pratapgarh and Prayagraj respectively at 7:30 am towards Prayagraj and Pratapgarh respectively. If they take the same route, when will they meet?

- a) 7:48 am
- b) 7:51 am
- c) 7:54 am
- d) 7:58 am

**Q.37)** The value obtained, if a number is multiplied by three-fourth of itself, is 14700. Find out the number.

- a) 210
- b) 140
- c) 120
- d) 160

**Q.38)** The number 3798125P369 is divisible by 3. What is the minimum possible value of the digit P?

- a) 1
- b) 4
- c) 7
- d) 6

**Q.39)** Anuj wants to buy some stationary. He buys pencil, pens and notebooks spending a total of Rs. 50. If each pen costs Rs. 6, each pencil costs Rs. 5, each notebook costs Rs. 3 and Anuj wants to buy at least 3 items of each kind, then in how many ways can he purchase these items?

- a) 4
- b) 1
- c) 2
- d) 3

**Q.40)** Nine different hamlets namely L, M, N, O, P, Q, R, S and T not necessarily in the same order, lie on the left bank of a river that passes through a jungle. The distance between two adjacent hamlets is 1 km. P is 4 km east from L and T is 4 km east from P. Distance between N and T is 3 km. What is the distance between L and N?

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

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

As AI applications become more integrated into healthcare systems, questions about consent, data ownership, and transparency arise. Patients must have control over how their health data is used and shared. Robust cybersecurity measures are essential to prevent unauthorized access and protect against potential breaches. AI algorithms often rely on vast datasets, including sensitive health information, to train and improve their performance. The handling of such data demands stringent privacy measures to safeguard individuals' confidentiality. Regulatory frameworks with penalty provisions must evolve to address

the unique challenges posed by AI in healthcare. Establishing clear guidelines for data usage, ensuring transparency in algorithmic decision-making, and enforcing strict privacy standards are pivotal to fostering trust in AI driven healthcare solutions.

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

1. Balancing innovation with privacy safeguards is integral to realising the transformative potential of AI in the healthcare.
2. Governments need to formulate laws and policies to address the privacy threats posed by the use of AI in healthcare.

Which of the above assumptions is/are valid?

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

**Q.42)** Which of the following statements *best reflects the crux* of the passage?

- a) From predictive analytics to robotic surgeries, AI will shape the future of healthcare delivery.
- b) Ensuring transparency and enforcing strict privacy standards is

fundamental to innovations in AI in healthcare.

- c) Without addressing privacy concerns, the use of AI in healthcare could be dangerous.
- d) None of the above

### Passage – 2

In modern India, the traditional perception of marriage as a sacrament is transforming, reflecting the evolving social fabric. The once deeply ingrained societal norms surrounding matrimony are encountering challenges as individuals increasingly prioritize personal autonomy and career aspirations. The rise in inter-cultural and inter-faith marriages, as well as an increase in instances of late or chosen marriages, indicates a departure from conventional views. The prevalence of diverse relationship models, cohabitation before marriage, and a growing acceptance of alternative family structures contribute to the changing landscape of marital values. Economic independence and educational empowerment, particularly for women, have contributed to this paradigm shift. The discourse on the value of marriage as a sacrament in modern India reflects a clear transition from traditional to modern perspectives.

**Q.43) Which of the following is/are the most rational and logical inference/inferences that can be drawn from the passage?**

1. The notion of marriage as a sacrament is subjective, and can differ among different segments of society and individuals.
2. The institution of marriage is heavily influenced by the Western constructs worldwide.

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

**Q.44) Which of the following is *most definitively implied* by the above passage?**

- a) The transition of marriage from a traditional to a modern construct reflects the loss of culture and values in society.
- b) There is a need to reverse the transformations in the institution of marriage to preserve the culture.
- c) Marriage, as an institution, undergoes metamorphosis, only due to redefined gender roles.
- d) Societal changes, fostering an environment of choice and flexibility, impact the institution of marriage.

**Q.45)** All the students of a class are sitting in a row. Raman is 7<sup>th</sup> from the left and Rohan is 14<sup>th</sup> from the right. The number of students sitting in between them is  $\frac{1}{4}$ <sup>th</sup> of the total of students in the row. How many students are sitting in the row?

- a) 18
- b) 26
- c) 30
- d) 28

**Q.46)** A vessel contains 10 liters of honey. 1 liter of honey is taken out and replaced by an equal amount of sugar syrup. Then 1 liter of mixture is taken out and replaced by an equal amount of sugar syrup. Find the ratio of honey and sugar syrup in the final mixture.

- a) 81:100
- b) 81:19
- c) 19:81
- d) 19:100

**Q.47)** Raghu borrows Rs. 36000 from Hari at 10% simple interest per annum. He lent the sum borrowed to Kunal at 20% p.a. compound interest. Kunal repaid the loan at the end of two years. Had Kunal repaid the loan at the end of three years, the additional profit for Raghu would have been:

- a) Rs. 6148
- b) Rs. 7244

- c) Rs. 6588
- d) Rs. 6768

**Q.48)** A village in the country side can be reached by six roads viz – X, Y, Z, 1, 2 and 3. The road Y gets blocked in storm and floods affect the roads X, 1 and 3. When road 1 is blocked, road Z also gets blocked. In a particular season when the village was flooded due to a storm, which of the following roads can be used?

- a) Only Y
- b) Only 2
- c) Only 3
- d) Z and 2

**Q.49)** Q.45) If  $9^{3x-1} + 9^{3x+1} = 246$ , then what is the value of x ?

- a) 1
- b) 2.5
- c) 0.5
- d) 2

**Q.50)** Ramesh has a triangular plot of land on which all the sides are equal. He wants to plant some trees on his plot such that there are equal number of trees on each side and every consecutive row has one less tree than the previous row (starting from any side of the triangle). If he plants a total



of 55 trees, how many trees are there on each side of the plot?

- a) 9
- b) 10
- c) 11
- d) 12

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

AI can democratise access to training and enable individuals from diverse backgrounds to develop their skills and excel in their respective fields. For instance, in industries with a high volume of customer complaints, training customer service representatives to handle various scenarios can be a challenging task, especially when training needs to be conducted at scale. Traditional methods like role-playing exercises can be expensive, time-consuming, and difficult to replicate realistically. By generating simulated complaint scenarios, AI systems could help with large-scale individualised training.

**Q.51) Based on the passage above, which of the following impacts is AI-driven training likely to have on customer service**

**in industries with a high volume of complaints?**

1. It is likely to reduce the need for human customer service representatives.
2. It is likely to lead to a decline in customer satisfaction due to automated responses.

Select the correct answer using the codes given below.

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

**Passage – 2**

Considering how likely we all are to be blown to pieces by it within the next five years, the atomic bomb has not roused so much discussion as might have been expected. The newspapers have published numerous diagrams, not very helpful to the average man, of protons and neutrons doing their stuff, and there have been many reiterations of the useless statement that the bomb "ought to be put under international control." But curiously little has been said, at any rate in print, about the question that is of most urgent interest to all of us, namely: "How difficult are these things to manufacture?"

**Q.52) What is the author's view on the level of discussion about the atomic bomb?**

- a) The discussion has been extensive and holistic.
- b) The discussion about atom bombs is useless.
- c) The discussion has been inadequate.
- d) The discussion has been non-technical.

**Passage – 3**

India is one of the fastest-growing large economies in the world. While the country's energy consumption per capita is only one-third of the global average, India's energy demand is expected to grow rapidly as the economy expands. This calls for a phasing down of fossil-based energy sources in line with India's goal of achieving net zero by 2070. The industrial sector is the main driver for future growth of energy demand and emissions, and green hydrogen can play a critical role in initially decarbonizing the hard-to-abate industrial sectors, such as fertiliser and refinery industries, and later heavy industries, including iron and steel. India has achieved impressive progress in renewable energy installed capacity and a decline in costs. Scaling up the production of renewable energy will accelerate the transition to low-carbon electricity and support the emergence and expansion of the green hydrogen sector.

**Q.53) Consider the following statements:**

- 1. India's target of achieving net zero by 2070 is not likely to be met.
- 2. Green hydrogen can be deployed in stages to effectively help India transition to a lowcarbon future.

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

**Q.54) If a book containing 250 pages is numbered from 1 to 250, then which one of the following would be correct?**

- a) The total number of digits printed in the book is less than 700.
- b) The total number of digits in 3-digit page numbers is less than 550.
- c) Both the options (a) & (b) are correct.
- d) Neither option (a) nor (b) is individually correct.

**Q.55) Average of ten numbers is 1100. If highest and lowest numbers are removed then average becomes 1000. If the ratio of highest number to lowest number is 7 : 5, then highest number is approximately what percent of the sum of all the ten numbers?**

- a) 12%
- b) 25%
- c) 16%
- d) 26%

**Q.56) Three statements followed by three conclusions I, II and III are given below. You have to consider the statements to be true, even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusion(s) follow from the given statements.**

**Statements:**

- Some cars are bikes.
- All buses are bikes.
- No bike is train.

**Conclusions:**

- I. Some cars are buses.
- II. All trains being buses is a possibility.
- III. No car is a bus.

Select your answer using the codes given below.

- a) Only I follows
- b) Either I or III follows
- c) All follow
- d) None of these

**Direction for the following 3 (three) items:**  
*Read the information given below carefully and answer the questions that follow.*

Rohan arranged seven water bottles (having different weights), labeled as M, N, O, P, Q, R, and S, in a straight line. The weight of bottle O is greater than that of bottle Q, which is just heavier than bottle S. Two bottles have weights between bottle Q and bottle M. Bottle S is lighter than bottle M, which is heavier than bottle O. The weight of bottle P is 15 kg more than that of bottle N, while the weight of bottle N is 22 kg. The weight of bottle P is not the maximum. Two bottles are heavier than M.

**Q.57) Which bottle has the maximum weight?**

- a) M
- b) R
- c) O
- d) P

**Q.58) How many water bottles are heavier than bottle S?**

- a) Less than three bottles
- b) Only four bottles
- c) Only two bottles
- d) More than five bottles

**Q.59) Which of the following *cannot* be concluded?**

- a) Weight of bottle R can be 50 kg.
- b) Weight of bottle Q can be 12 kg.
- c) Weight of bottle O can be 29 kg.

- d) None of the above.

**Q.60) Consider the following Question and the**

**Statements:**

Statement 1: Arun and Banwari together get a sum of Rs. 80.

Statement 2: Banwari and Chandan together get a sum of Rs. 100.

**Question:** A sum of Rs. 160 is shared among Arun, Banwari and Chandan. How much of it does Banwari get?

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

- a) The Question can be answered by using one of the Statements alone, but cannot be answered by using the other Statement alone.
- b) The Question can be answered by using either Statement alone.
- c) The Question can be answered by using both the Statements together, but cannot be answered by using either Statement alone.
- d) The Question cannot be answered even by using both the Statements together.

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

As smartphones become an integral part of daily life, many individuals find themselves compulsively reaching for their phones, even in seemingly inconsequential moments. The addictive allure of notifications, social media updates, and constant connectivity can lead to a dependency that impacts both mental and physical wellbeing. The constant exposure to screens may disrupt sleep patterns, leading to fatigue and a decline in overall health. Social relationships can suffer as individuals prioritize virtual connections over face-to-face interactions. The addictive nature of phones is exacerbated by the fear of missing out (FOMO) and the pressure to stay digitally always connected. Fostering a balanced relationship with technology becomes essential for maintaining overall well-being and reclaiming control over one's time and attention.

**Q.61) Which of the following is/are the most rational and logical inference/inferences that can be made from the passage?**

1. The dopamine-driven cycle of viral news makes it impossible to break free from phone addiction.
2. In today's world, people value full isolation more than face-to-face interactions.

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 – 2

Rising temperatures, shifting rainfall patterns, and increased frequency of extreme weather events will directly impact crop yields, livestock health, and water availability - essential resources for agriculture. These impacts will disproportionately affect marginalized communities and small-scale farmers, who often have limited access to technology, financial resources, and social safety nets. Moreover, climate change-induced disruptions in food production can lead to price volatility, food insecurity, and even conflicts over scarce resources. To address climate justice in agriculture, it is imperative

to prioritize sustainable and resilient farming practices, support innovation in climate-smart agriculture, enhance access to climate information and financial resources, and promote policies that prioritize social and environmental equity in food systems.

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

1. Conflicts over scarce resources are necessarily related to climate change.
2. Climate justice needs the cooperation of global organizations and governments.

Which of the above assumptions is/are valid?

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

### Passage – 3

Projections suggest a steady increase in the world's population, with estimates reaching 9 billion by 2050. In tandem, India has become the world's most populous nation, surpassing China. The future trajectory of global population growth and its impact on economic sectors, particularly in India, is poised to shape the landscape of welfare

policies. The services sector, including technology and finance, is likely to witness heightened demand globally, driven by an expanding middle class. In India, with its youth-dominated demographic, this shift could further amplify the prominence of the information technology and services sectors. However, ensuring job creation and sustained economic growth requires a concurrent focus on manufacturing and agriculture, sectors that often employ a significant portion of the population.

**Q.63) Based on the above passage, the following *assumptions* have been made:**

1. High population growth aids in reaping better demographic dividend.
2. The expansion of the middle class in India depends on the faster growth of the services sector.

Which of the above assumptions is/are valid?

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

**Q.64) The ratio of the efficiencies of M and N is 7 : 5. Working together, they can complete a work in 45/2 days. Consider the following statements:**

1. M alone will complete 70% of the same work in 27 days.
2. M alone will complete 40% of the same work in 15.4 days.

**Which of the above statements is/are correct?**

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

**Q.65) Anuj and Basant had a total of 50 chocolates with them. The sum of the squares of the number of chocolates with them is 1300. Anuj sells each chocolate at Rs. 5 and Basant sells each chocolate at Rs. 6. Find the total amount they get.**

- a) Rs. 270
- b) Rs. 280
- c) Rs. 210
- d) Either (a) or (b)

**Q.66) The average monthly income of Ananya for the first 9 months of a year was Rs. 12000, while her average monthly income for the last 3 months of that year was Rs. 16000. Find her average monthly income (in Rs.) for that year.**

- a) Greater than Rs. 15000
- b) Less than Rs. 13800
- c) Greater than Rs. 16000

d) Less than Rs. 13000

**Q.67) Find the value of  $(5 + 1)(5^2 + 1)(5^4 + 1)(5^8 + 1)(5^{16} + 1)$ .**

- a)  $(5^{32} - 1)/4$
- b)  $(5^{22} + 1)/4$
- c)  $(5^{32} - 1)/8$
- d)  $(5^{42} - 1)/4$

**Q.68) What is the sum of squares of the digits of the least number, which when divided by 5, 9 and 24 leaves the remainder 8 in each case and is also divisible by 13?**

- a) 117
- b) 125
- c) 119
- d) 182

**Q.69) Consider the following Question and the**

**Statements:**

Statement 1: The marked price of the article was 30% more than the cost price.

Statement 2: Had the article been sold at a discount of 40%, there would have been a loss of Rs. 50.

**Question:** Is the selling price of an article more than the cost price given

that the article is sold at a discount of 20%?

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

- a) The Question can be answered by using one of the Statements alone, but cannot be answered by using the other Statement alone.
- b) The Question can be answered by using either Statement alone.
- c) The Question can be answered by using both the Statements together, but cannot be answered by using either Statement alone.
- d) The Question cannot be answered even by using both the Statements together.

**Q.70) Study the following series carefully and answer the questions that follows:**

**Q 2 D @ 9 K U % 7 B Y E H 3 L H 5 I \$ 8 F W 6 \* A F 4 O S**

**If the positions of U and A are interchanged and similarly the positions of D and I are interchanged, then how many symbols will be there which is/are either preceded by a vowel or followed by an even number?**

- a) One
- b) Two
- c) Three
- d) None



**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 Digital India initiative has made significant strides in enhancing digital infrastructure, promoting e-governance, and fostering technology adoption, there are critical aspects that warrant analysis. One aspect is the digital divide, which persists across urban-rural and socio-economic lines. Despite increased internet penetration, disparities in access to digital resources and skills hinder the full realization of Digital India's potential. Bridging this gap is crucial for ensuring inclusive growth. Privacy and data security concerns also emerge with the increasing digitization of services. Effective utilization of digital tools requires not only access but also the ability to navigate and leverage them. Initiatives to enhance digital education and skills training are essential to empower citizens fully.

**Q.71) Based on the above passage, the following *assumptions* have been made:**

1. Digital literacy remains a challenge in the country.
2. Due to the inherent challenges, Digital India initiative has not been successful.

Which of the above assumptions is/are **invalid**?

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

**Passage – 2**

Over the decades, educating people about health has been an important strategy for preventing illness and injury. This approach has drawn heavily from the fields of public health, social science, communications, and education. Early experiments with education relied heavily on the delivery of information and facts. Gradually, educational approaches have turned more to skill development and addressing all health aspects, including physical, social, emotional, and mental wellbeing. Educating children and adolescents can instil positive health behaviours in the early years and prevent risk and premature death. It can also produce informed citizens who can seek services and advocate for policies and environments that affect their health. Education for health is an essential component of an effective school health programme, and it is likely to be the most effective.

**Q.72) Based on the above passage, the following *assumptions* have been made:**

1. Health education may be a tool for promoting citizen participation in healthcare governance.
2. Health education should be prioritized in schools for the healthy development of children.

Which of the above assumptions is/are *invalid*?

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

**Q.73) Rohit walks for 3 km in the north direction, turns right and walks 5 km, before again turning right and walking 9 km. Then, he takes a left turn and walks 3 km. How far is he from the starting point?**

- a) (a) 15 km
- b) 16 km
- c) 8 km
- d) 10 km

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

*Read the following information carefully and answer the 3 (three) items that follow:*

In a tennis tournament, four matches are to be scheduled in different cities. Out of the seven possible venues – stadiums A, B and C

are in Tier I cities and stadiums W, X, Y and Z are in Tier II cities. At least two matches have to be held in Tier I cities. Cities B and W are not directly connected to each other. C and Z are also not connected directly and the direct road between W and Y has been damaged due to floods. All the other cities are directly connected with each other. It is known that the matches can be conducted only in those cities which are directly connected to each other.

**Q.74) If Y is selected and B is rejected as venues, which of the following stadium will serve as venues?**

- a) A, C, W and Y.
- b) A, C, X and Y.
- c) A, C, Y and Z.
- d) A, W, Y and Z.

**Q.75) If B is selected and Y is rejected, which of the following four stadiums will serve as venues?**

- a) A, B, C and W.
- b) A, B, C and Z.
- c) A, B, C and X.
- d) A, W, Y and Z.

**Q.76)** If all the Tier I cities are selected as venues, then how many possible combinations of four venues can be selected?

- a) 1
- b) 2
- c) 3
- d) 4

- a) 112
- b) 106
- c) 105
- d) 115

**Q.77)** A certain code is prepared such that two letters are skipped in between any two adjacent letters. Which of the following series may be an output of this coding technique?

- a) MPSVYBE
- b) QSVYZCF
- c) EIMQV
- d) ZCGKMPR

- a) 7
- b) 6
- c) 4
- d) 1

**Q.80)** In a certain code, 478 means 'big rose tree', 701 means 'small rose garden', 476 means 'red rose tree'. The digit in the code that indicates red is

**Q.78)** If 'BDZBKMLN' is the code of 'CALM', then what will be the code for 'TABLE'?

- a) USABCBLMEE
- b) SUBABCNMDF
- c) SUZBACKMDF
- d) USZCAAKRFE

**Q.79)** Find the next term of the following series.

15, 21, 34, 54, 81, ?