

Directions for (1-2) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: The philosopher could provide a defense to artists who are not producers. Their interaction with the outside environment influences their work. Artists frequently make observations about wealth, power, and politics. They may or may not engage with human problems, which are also heavily influenced by the culture in which we live. This pattern is also the source of non-Western artwork, such as totems and masks from Africa or Oceania becoming more noticeable in the last few decades. For instance, reality started to be captured through photography and video, which are sometimes supported and sometimes staged. Pop artists have taken a shine to our insignia. Additionally, a new wave of artists uses their prominence to criticize, intimidate, or inform the audience.

Q 1. Based on the above passage, the following assumptions have been made:

1. In their work, the artists must interact with society and its culture.
2. The art not only reflects the realities of society but also helps in creating awareness as well.

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

- (a) Non-Western societies have to learn how to use art to its fullest to beat other societies.
- (b) To preserve their cultures, societies need to make heavy investments in the arts.
- (c) For artists to comprehend society, they should always keep prejudice against their own culture.
- (d) Just as a society grows, art evolves with time to reflect the realities of society.

Q 3. There are 160 students in a particular class. 40% of students play volleyball, 25% of students play basketball and 20% of students play both games. What is the number of students who play none of the games?

- (a) 100
- (b) 120
- (c) 88
- (d) 80

Q 4. In a row of persons, the position of Ravish from the left side of the row is 38th, the position of Ravi from the right side of the row is 5th and 3 persons are between Ravish and Ravi. Find the maximum and minimum number of students in the row.

- (a) 46, 38
- (b) 58, 26
- (c) 46, 24
- (d) None of the above

Q 5. Person P can complete 5% of the work in 6 days and another person Q can complete 10% of the same work in 15 days. If they work together, in how many days will 60% of the work be completed?

- (a) 60
- (b) 40
- (c) 30
- (d) 21

Q 6. How many five-digit prime numbers can be obtained by using all the digits 3, 4, 5, 6 and 9 without repetition of digits?

- (a) Ten
- (b) Nine
- (c) Zero
- (d) One

Directions for (7-8) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: Simulated intelligence frameworks can learn and adjust as they simply decide. Semi-autonomous vehicles, for instance, have tools that let drivers and other vehicles know about upcoming traffic jams, road construction, or other potential traffic obstacles in the traffic area. Vehicles can utilize the experience of different vehicles out without human intercession, and every one of their pieces of information can be moved to different vehicles with a comparable setup. Their high-level calculations, sensors, and cameras draw on experience from flow activities and use dashboards and visual showcases to introduce information continuously with the goal that human drivers figure out continuous traffic and vehicles. Advanced systems can fully control and make all navigational decisions in fully autonomous vehicles.

Q 7. Consider the statement and decide which of the given assumptions is implicit.

1. Artificial intelligence makes completely independent vehicles more secure than semi-independent vehicles.
2. The use of artificial intelligence in vehicles will expand the expense of the creation of vehicles.

Select the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) 1 and 2
- (d) None

Passage: Pleasure is the state of happiness. It's more of a passing emotion than a permanent characteristic. A person's happiness is easily altered by outside factors, such as a shift in surroundings, due to its transient nature. Happiness and contentment are sometimes confused since the latter is a deeper, more inward state of mind. Since contentment lasts longer than happiness, it's usually a preferable goal to pursue. People tend to think that a person's circumstances determine how happy they are. A person who lives in a perpetual state of disorder or disorganized clutter may feel overburdened all the time, which makes it difficult for them to feel content and peaceful regularly. The adoption of a minimalist lifestyle may significantly improve contentment and general well-being. That's because it's addressing the root cause.

Q 8. Based on the above passage, the following assumptions have been made:

1. Ancient philosophers properly referred to happiness as the highest than contentment.
2. The disorderly and chaotic outside of the world is the primary influence on an individual's happiness.
3. Establishing a set of using meditation to practice self-control can lead to happiness.

Which of the above assumptions is/are invalid?

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

Q 9. In a certain code, CUTE is written as DYCU. How is NICE written in that code?

- (a) OMLU
- (b) OLUM
- (c) OLMU
- (d) LOUM

Q 10. In the question below is given a statement followed by two assumptions numbered I and II. Consider the statement and decide which of the given assumptions is implicit.

Statement:

Of all the newspapers published in New Delhi, the readership of the Hindu is the largest in the Metropolis.

Assumptions:

- I. The Hindu is not popular in mofussil areas.
 - II. The Hindu has a popular feature of cartoons on burning social and political issues.
- (a) Only assumption I is implicit
 - (b) Only assumption II is implicit
 - (c) Either I or II is implicit
 - (d) Neither I nor II is implicit

Q 11. Consider the following addition problem:

$3M + 4M + 5MM + 6MM = NL08$; where L, M and N are different digits.

What does the arithmetic mean of all such possible sums?

- (a) 988
- (b) 1148
- (c) 1278
- (d) 1578

Q 12. A scored 44 marks more than B in an Examination and C scored 24 marks more than B. If B scored 11% less marks than A, then how much did C score?

- (a) 356
- (b) 360
- (c) 378
- (d) 380

Directions for (13-14) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: The Mandala pattern a centuries-old motif intended to describe the universe, has been adopted by artists worldwide, who have all painted it as their own and added their interpretations. Although the scale has constantly varied, Liverpool, UK residents are currently in awe of a mandala made by artist James Brunt in Halewood Park out of rocks and leaves that are the size of 1.5 football fields. The land artwork will be on display for the next few weeks, after which the elements of nature will deteriorate. Mandala, which in Sanskrit means 'circle' or 'center,' is characterized by a geometric arrangement that typically includes a circular shape in one way or another. As though the mandala pattern is essentially continuous and can also be made in the shape of a square. It is thought to have its origins in Buddhism and initially appeared in India in the first century BC. It was spread to various areas over the course of the following few centuries by Buddhist missionaries who traveled the Silk Road. As early as the sixth century, mandalas were documented in Tibet, China, Korea, Japan, and Indonesia. The Rig Veda is the first where Hinduism's use of mandala images initially emerged.

Q 13. Concerning the above passage, what inference can be made from the following statements?

1. Mandala work is done on silk cloths.
2. All art forms have a religious context.

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

Passage: Adverse effects are linked to the digital divide. There are theories that the digital divide could lead to inequality in technology, immaterial goods, society, and education. In knowledge-based economies and societies, people without access to information technology are at a disadvantage. Furthermore, e-government plays a significant role in removing obstacles and providing all residents

with government help. The use of digital media is a powerful indicator of political engagement suggesting that a digital divide could lead to political alienation for individuals without access to digital media.

Q 14. Based on the above passage, the following assumptions have been made:

1. Constructing cybercafés may aid in closing the gap in digital access.
2. Bridging the digital divide may contribute to citizens' political and technological empowerment.

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 15. Read the following information carefully and answer the questions given below.

4 % E 2 0 N 3 # Z ! @ \$ T G W 8 1 + A B 7 9 6 1 R H
U X ^ 1 5

Which of the following elements is sixth to the left of the eighteenth element from the right end in the given series?

- (a) T
- (b) %
- (c) !
- (d) #

Q 16. Based on the information given, answer the question given below.

**7 people are standing in a row.
Their arrangement is as follows.**

- I. Chandani is between Bheem and Mohit
- II. Anil is at the leftmost end.
- III. There are 3 people in between Chandani and Geeta.
- IV. Bheem is between Anil and Chandani.

Who is standing in the middle?

- (a) Bheem
- (b) Geeta
- (c) Chandani
- (d) Mohit

Q 17. Student S asks one of his three friends P how much money he had? P replied, "If Q gives me 100 rupees, then Q will have half of as much as R, but if R gives me 200 rupees, then three of us will have an equal amount." Statements:

- I. The sum of the total money is 1000 rupees
- II. Q has twice the money that of P

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

- (a) Statement I is true
- (b) Statement II is true
- (c) Both the statements are true
- (d) None of the statements are true

Q 18. Three Statements S1, S2, and S3 are given below concerning four numbers A, B, C and D followed by a Question:

S1: C is greater than A as well as B.

S2: D is not the largest one.

S3: D is greater than B but not greater than A

Question: Among the four numbers A, B, C and D, which one is the smallest?

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

- (a) S1 alone is sufficient to answer the question.
- (b) S2 and S3 alone are sufficient to answer the question.
- (c) Either S1 & S3 together or S2 & S3 together are sufficient to answer the question.
- (d) S1 and S3 together are not sufficient to answer the question.

Directions for (19-20) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: Invasive species affect the way ecosystems work; they might be one of the biggest environmental issues affecting the preservation of natural regions. Additionally, invasive species result in significant economic loss and misery for people. Gaining more knowledge about the many kinds of invasive species and the theories put out by scientists regarding their capacity to colonize unfamiliar areas may help to enhance methods for eradicating them. Even with annual spending of billions of dollars, once invasive species have established themselves, they are extremely difficult to eradicate.

Q 19. Based on the above passage, the following assumptions have been made:

- 1. Invasive species, if not eliminated in the future, could threaten the food security of people.
- 2. If invasive species are not allowed to change the ecosystem function, natural areas can be conserved.

Which of the above assumptions is/are valid?

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

Passage: During his recent Germany visit, External Affairs Minister S Jaishankar reaffirmed India's strong ties with Russia, emphasizing that Russia/USSR has historically not harmed India's interests. India's refusal to reduce engagement with Moscow has irked the West, with military hardware and energy supplies influencing India's stance on Russia's Ukraine invasion. The enduring bilateral relationship spans 67 years, with Russia/USSR consistently supporting India in the UN Security Council. Despite India's potential as a mediator in the Russia-Ukraine conflict, Jaishankar clarified that India won't take the initiative but aims to broaden its unique relationship with Russia in new domains.

Q 20. What can be inferred about India's stance on the Russia Ukraine conflict from the passage?

- I. India has provided military support to Russia during the conflict.
 - II. India has maintained a neutral stance, offering diplomatic support to Russia without openly criticizing it.
 - III. India is actively seeking to mediate in the conflict.
- (a) (I) only
 - (b) (II) only
 - (c) (III) only
 - (d) Both (I) and (II)

Q 21. How many times in a day, the hands of a clock are straight?

- (a) 22
- (b) 24
- (c) 44
- (d) 48

Q 22. A is the father of B who is the son of C. To know the relation of A to D, which of the statement/statements is/are necessary?

1. D is the brother of C.
2. The daughter of B is the granddaughter of C.
- (a) Only (1)
- (b) Only (2)
- (c) Either (1) or (2)
- (d) (1) and (2) both

Q 23. Three Statements followed by three Conclusions are given below.

You have to take the Statements to be true even if they seem to be at variance from the commonly known facts.

Read all the Conclusions and then decide which of the given Conclusions logically follows/follow from the Statements, disregarding the commonly known facts:

Statements:

1. Some hands are legs.
2. All legs are ears.
3. All ears are eyes.

Conclusions:

- I. Some eyes are hands.
- II. All ears are hands.
- III. Some ears are hands.

Which one of the following is correct?

- (a) Only Conclusion-I
- (b) Only Conclusion-II
- (c) Both Conclusion-I and Conclusion-III
- (d) Both Conclusion-I and Conclusion-II

Q 24. How is M related to N?

Statement I: N's sister F has married H's brother G.

Statement II: M is the only daughter of G and F.

- (a) If the statement I alone is sufficient
- (b) If statement II alone is sufficient
- (c) If both statements I and II together are sufficient
- (d) If either statement I or II is sufficient.

Directions for (25-26) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: Governance is often equated with government. Governance occurs at all levels and encompasses the ways that formal government, non-governmental groups, community organizations, and the private sector manage resources and affairs. Three

factors that largely determine the efficacy of any system of governance are the quality of leadership, the characteristics of the governed, and the nature of the structures and processes employed to exercise authority and meet human needs. The capacity of any institution to effect and manage change, and to respond creatively to challenges that lie before it, increases with the development of several critical skills. These include the ability to maintain a clear perception of social reality and the forces operating in it. To assess the resources of the community properly; and to implement decisions with an openness and flexibility that avoid all traces of dictatorial behavior, among others. This constellation of skills must draw on both intellectual and moral resources.

Q 25. Based on the above passage, the following assumptions have been made:

1. Not only the government but citizens are also responsible for governance outcomes.
2. Rigid and closed implementation of decisions reduces the capacity of governing institutions.

Which of the above assumptions is/are valid?

- (a) 1 only
- (b) 2 only
- (c) 1 and 2
- (d) None of the above

Passage: The failure to recognize how class strife forces people to distinguish between classes. Republicanism aims to maintain order amongst various social divisions by institutionalizing class differences into a balanced representative framework. The pursuit of total anarchic disorder is another since it disobeys the law. For societal order to be preserved in a republic, both the government and the individual must uphold the law, which is usually maintained in the form of a constitution.

Q 26. Which one of the following statements best reflects the crux of the passage?

- (a) Limitations of democracy regarding social order can be handled through the constitution.
- (b) Democracy due to inherent flaws is not the best political model for governance.
- (c) Only governments following a constitution can guarantee the preservation of social order.
- (d) The pursuit of equality in a democracy is the bedrock for preventing class conflicts.

Q 27. If today is Tuesday, then which day is it exactly on 2010th day?

- (a) Thursday
- (b) Monday
- (c) Wednesday
- (d) Saturday

Q 28. Pushpa starts walking from point P towards south, then turns to the right after walking 6 km and after walking 3 km he turns to the left and walks 4 km. And then he goes back 10 km straight. Raashi walks 5 km east from point P. She then turns right and after walking 9 km she turns left and walks for 5 km. Again, she turns left and walks for 9 km. Find the shortest distance between Pushpa and Raashi and what is the direction of Raashi with respect to Pushpa?

- (a) 13km, North-West
- (b) 13km, West
- (c) 13km North-East
- (d) 13km, East

Q 29. PQ and RS are 2-digit numbers. Multiplying PQ with RS results in a 3-digit number STU. Adding STU to another 3-digit number VWX results in 975. Further P, Q, R, S, T, U, V, W, X are distinct digits, If T = 0, U = 8, then what is P+Q+R equal to?

- (a) 5
- (b) 4
- (c) 6
- (d) 8

Q 30. Several teams take part in a competition, each of which must play one game with all the other teams. How many teams took part in the competition if they played 66 games in all?

- (a) 15
- (b) 12
- (c) 10
- (d) 16

Directions for (31-33) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: The plague of the modern era is over consumption. The enormous volumes of waste produced by humans are disposed of in landfills and waste-to-energy incinerators. Millions of tons of trash, including micro plastics, wind up in the ocean instead of in landfills or incinerators. The removal of carbon dioxide from the atmosphere depends on zooplankton, which is disturbed and choked by this waste. Wet

organic waste with a poor calorific content makes up around 60% of household waste in India. This renders solutions like incinerators that convert garbage.

Q 31. Which one of the following statements best reflects the crux of the passage?

- (a) Incineration is not the best technological solution for waste processing in India.
- (b) Reducing consumption will solve the issue of waste generation.
- (c) Incinerators shall be established in and around the landfills for faster processing of waste.
- (d) India should develop customized incinerators to ensure the processing of organic waste.

Passage: A model citizen is created, not born. We should become experts in the subjects that are essential to societal advancement and harmonious living, such as respect, empathy, equality, solidarity, and critical thinking, just as we do in mathematics and languages. We will have a hard time creating a better world without other moral precepts that make us who we are as people. This idea focuses on the moral values that are instilled in education to build more civil and democratic communities. Therefore, value education emphasizes the defense of human rights, and the protection of ethnic minorities and other vulnerable groups, for the preservation of the environment. While promoting tolerance and understanding above and beyond our political, cultural, and religious differences respect education. Education in value should not only come from schools; it should come from all of us. The best places to impart those moral precepts are the family, schools, corporations, and athletics. Nevertheless, for several years, nations such as Australia and the UK have been considering integrating value education into mandatory schooling.

Q 32. Which of the following is/are the most rational and logical inference/inferences that can be made from the passage?

1. Value education is personal and must be contextualized as per the needs of society.
2. It should not rely solely on schools for value education. Schools are not crucial to the development of values.

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 33. Which one of the following statements best reflects the message conveyed by the author of the passage?

- (a) India should consider implementing mandatory value education like Australia and the UK.
- (b) Without value education, society would be intolerant, consumer-driven, individualistic, and ethnocentric.
- (c) It is advisable to leave social and public institutions when it comes to raising excellent citizens.
- (d) To create peaceful societies and a better world, value education should be converted into moral education.

Q 34. A man pointing to a photograph says, 'The lady in the photograph is my nephew's maternal grandmother.' How is the lady in the photograph related to the man's sister who has no other sister?

- (a) Cousin
- (b) Mother
- (c) Sister-in-law
- (d) Mother-in-law

Q 35. A person spends 40% of his monthly income on household items and out of the remaining, he spends 20% on travel, 10% on entertainment, and 40% on shopping, and the remaining amount of Rs. 5400 is saved. What is his monthly income?

- (a) Rs. 36,000
- (b) Rs. 30,000
- (c) Rs. 50,000
- (d) Cannot be determined

Q 36. A person borrows 5000 at 10% simple interest for 5 years. After 2 years, he invests the same amount at 12% simple interest for the remaining 3 years. At the end of 5 years, how much will he pay extra? (in rupees)

- (a) 500
- (b) 600
- (c) 700
- (d) 1000

Q 37. A cuboid of dimensions (12 cm x 6 cm x 8 cm) is painted black on both the surfaces of dimensions (12 cm x 6 cm), green on the surfaces of dimensions (6 cm x 8 cm) and red on the surfaces of dimensions (8 cm x 12 cm). Now the block is divided into various smaller cubes of side 2 cm. each. The smaller cubes so obtained are separated. The ratio of cubes with all three colors on them and cubes with red color on one side?

- (a) 1:3
- (b) 1:6
- (c) 1:8
- (d) 1:4

Q 38. Twenty-five employees can finish a project in 40 days. After how many days should 10 employees leave the job so that the project is finished in 50 days?

- (a) 18
- (b) 20
- (c) 30
- (d) 25

Directions for (39-40) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: The Ministry of Information & Broadcasting issued an advice on Monday requiring all private television networks in the nation to broadcast "national interest content" every day. In what ways does this commitment affect what we watch on television, and what specifically are the channels expected to do to meet this obligation? One of the new policy requirements for television channel up linking and down linking is that private broadcasters must provide 30 minutes of public service broadcasting each day based on themes provided by the I&B ministry. The ministry has made it clear in the advisory released on January 30 that content of national interest need not be shown for 30 minutes at a time and can instead be included in the shows that are being broadcast a long way. According to the government, the public service announcement can be divided up into smaller time intervals, but not from midnight to six in the morning. For a period of ninety days, the broadcasters must now maintain a record of the content they transmitted. The record will be maintained by the I&B Ministry's Electronic Media Monitoring Center. Additionally, the government mandates that broadcasters use the Broadcast Seva Portal to submit a monthly report online. Broadcasters are now able to share content, and rebroadcasting it on one or more channels is now permitted.

Q 39. Which of the statements given below can be inferred from the passage?

1. A channel's national interest content will not be the exclusive property of that channel.
2. The national interest content can be shown in fragments.
3. The government's action will not foster social harmony throughout the country via channel.

Select the correct answer using the codes given below.

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

Passage: China has had the world's greatest population for most of recorded human history up until quite recently, by a considerable margin. Therefore, even if it has been projected for a while, the news that China's population is declining and will eventually be exceeded by India's this year is significant. As a specialist in Chinese demographics, I am aware that the data the Chinese government released on January 17, 2023, indicating that, for the first time in six decades, the number of deaths in the preceding year exceeded the number of births, is not a one-time event. 2022 marks a turning point in the decline, whereas 1961 the year of the great leap forward economic collapse, in which an estimated 30 million people perished from starvation represented a departure from the norm. It is the beginning of what is probably going to be a prolonged downturn. The United Nations predicts that the population of China will decline by 45% by the end of the century. And that's if China keeps its current fertility rate of about 1.3 children per couple something it might not do. China has made a significant economic transition from one centered on agriculture to one centered on manufacturing and services in the span of 40 years. The standard of living and income levels have increased in tandem with this. However, the Chinese leadership has long understood that the labor-intensive economic growth model of the past is no longer viable for the nation. Technological advances and competition from countries that can provide a cheaper workforce such as Vietnam and India have rendered this old model largely obsolete.

Q 40. Concerning the above passage, which of the following can be inferred?

1. China has the largest population throughout human history.
2. China had a labor-intensive economic growth model in the past.
3. Manufacturing industry combined with rising living standards.
4. In the preceding year, deaths outnumbered births for the first time in six decades in China.

Select the correct answer using the codes given below.

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

Q 41. A small town's population is expected to increase by 15% yearly. At the beginning of the year 1994 it was recorded to be 500 members. If P represents the population of the town after k years, then which one of the following equations best represents the expected population growth of the town?

- (a) $P = 500 + 5k$
- (b) $P = 500 + 0.15k$
- (c) $P = 500(1.15)^k$
- (d) $P = 500(1+5k)$

Q 42. If only the second and fourth Saturdays and all the Sundays are taken as holidays and there is no holiday other than these.

Statements

1. The minimum number of possible working days of any month of any year will be 22 days
2. The minimum number of possible working days of any month of any year will be 23 days
3. The maximum number of possible working days of any month of any year will be 25 days

Which of the above statement/s is/are true?

- (a) Only 1
- (b) Only 2 and 3
- (c) Only 1 and 3
- (d) None of the above

Directions for (43-44) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: Despite huge water resources in the South-Asian region, its mismanagement -- and the inability of countries in the region to reach mutually beneficial agreements -- could invite more conflicts in the days ahead. India and Bangladesh share 54 common rivers, which can survive only through joint management. What is required is international initiative, regional cooperation and the implementation of sustainable development strategies in the days to come. If the river linking project in India is implemented properly -- keeping in view environmental and sociological concerns -- it can benefit the entire region. A decision on this project should be taken on merit and not based on the adversarial politics which unfortunately plagues this region.

Q 43. Based on the above passage, the following assumptions have been made?

1. Mismanagement of water resources in the South-Asian region could lead to increased conflicts in the future, highlighting the importance of cooperative agreements between countries.
2. Proper implementation of projects like the river linking project in India, with consideration for environmental and sociological concerns, can bring benefits to the entire region.
3. The region lacks the necessary water resources to sustain joint management efforts, leading to inevitable conflicts over water usage.
4. International initiatives and regional cooperation alone are insufficient to address the challenges of water mismanagement in the South-Asian region.

Which of the above assumptions are valid?

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

Passage: The transition zone between mind and body, matter and spirit, lies within your own awareness. It is the mistake of the intellect that has confused the map for the territory and split matter and spirit into two. Peeling back the layers of this artificial division is at the heart of the Vedic teachings of yoga and meditation. These tools and their allied disciplines exist as bridges back to the unity you have forgotten. Through their practice, you don't

gain a mere intellectual understanding of the underlying unity at the heart of reality, but you experience it directly.

Q 44. Which of the following statements best reflects the most logical and rational conclusion which can be drawn from the above passage?

- (a) The practice of yoga and meditation serves as a means to transcend the artificial division between mind and body, matter and spirit, leading individuals to directly experience the underlying unity at the heart of reality.
- (b) The intellect is solely responsible for the confusion between matter and spirit, and the practice of yoga and meditation does not address this issue effectively.
- (c) Yoga and meditation primarily provide intellectual understanding rather than direct experiential knowledge of the unity of reality.
- (d) The transition zone between mind and body is merely a conceptual construct with no practical significance in understanding the unity of reality.

Q 45. There are thirteen two-digit consecutive odd numbers. If 39 is the average of the first five such numbers, then what is the average of all the thirteen numbers?

- (a) 47
- (b) 49
- (c) 51
- (d) 45

Q 46. PQ is a two-digit number, if PQ is divided by reverse of PQ i.e. QP, it leaves 45 as the remainder.

1. Maximum value of PQ can be 95
2. The Difference of PQ and QP will be 44

Which of the above statement/s is/are true?

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

Q 47. The average rainfall in a city for the first four days was recorded to be 0.40 inches. The rainfall on the last two days i.e. 5th & 6th was in the ratio of 4: 3. The average of six days was 0.50 inches. What was the rainfall on the fifth day?

- (a) 0.60 inch
- (b) 0.70 inch
- (c) 0.80 inch
- (d) 0.90 inch

Q 48. Consider the following statement

1. X works thrice as fast as Y,
2. X and Y together can work four times as fast as Z.
3. If X, Y and Z together work on a job

Conclusions:

1. X will earn twice the money of Z
2. Y and Z will earn an equal amount.

Which of the above conclusion/s is/are correct?

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

Directions for (49-50) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: There is a popular assumption that war, or even increased military spending, will boost a nation's economy. True, when a nation goes to war the surge of government investment into war-related industries can lead to short-term economic gains. However, these gains are short-lived, affect only certain, usually isolated, industries ("conflict industry", "war profiteers"), and are no consolation for the long-term economic cost of war. A study of six major U.S. wars (World War II, the Korean War, the Vietnam War, the Cold War, and the wars in Afghanistan and Iraq) finds the costs of war to negatively affect the national economy, taxes, debt, jobs, investment, and inflation. Key findings of the report show that in most wars public debt, inflation, and tax rates increase, consumption and investment decrease, and military spending displaces more productive government investment in high-tech industries, education, or infrastructure—all of which severely affect long-term economic growth rates. While military spending may offer some short-term economic benefit, after the fighting starts, and especially after it ends, the unintended consequences of military spending on the economy are severe and numerous. "War is good for the economy" is a myth.

Q 49. Based on the above passage, the following conclusions can be made:

1. The assumption that war or increased military spending boosts a nation's economy is a myth, as evidenced by the negative long-term economic effects observed in the aftermath of wars.
 2. While there may be short-term economic gains from government investment in war-related industries during conflicts, the long-term economic costs, including increased public debt, inflation, and reduced investment in productive sectors, outweigh these benefits.
 3. Military spending often displaces more productive government investments in areas such as high-tech industries, education, and infrastructure, hindering long-term economic growth and development.
 4. Wars and increased military spending always result in positive economic outcomes for a nation, despite any short-term fluctuations or negative consequences observed during or after conflicts.
- (a) 1 and 2
 - (b) 1, 2, 3 and 4
 - (c) 1, 2 and 4
 - (d) 1, 2 and 3

Passage: The first person to receive a brain-monitoring device from Neuro-technology company Neuralink can control a computer cursor with their mind, Elon Musk, the firm's founder, revealed this week. But researchers say that this is not a major feat—and they are concerned about the secrecy around the device's safety and performance. Controlling a computer mouse with one's thoughts could enable people living with paralysis to regain some independence and functionality.

Q 50. Which of the following statements best reflects the most logical and rational conclusion which can be drawn from the above passage?

- (a) Elon Musk's unveiling of the brain-monitoring device marks a significant breakthrough in neuroscience and represents a major feat in human achievement.
- (b) The concerns raised by researchers regarding the secrecy surrounding the device's safety and performance indicate that the technology is likely to pose significant risks to users.
- (c) The development of brain-monitoring technology by Neuralink has potential implications for individuals with paralysis, offering them the possibility of regaining independence and functionality through mind-controlled devices.
- (d) The ability to control a computer cursor with one's mind is a trivial achievement and does not hold significant promise for improving the lives of individuals with paralysis.

Q 51. Consider the following relationships among members of a family of six persons A, B, C, D, E and F. The number of males equals that of females. A and E are sons of F. D is the mother of two, one boy and one girl. B is the son of A. There is only one married couple in the family at present. Which one of the following inferences can be drawn from the above?

- (a) A, B and C are all females.
- (b) A is the husband of D.
- (c) E and F are children of D.
- (d) D is the daughter of F.

Q 52. The monthly incomes of X and Y are in the ratio of 4 : 3 and their monthly expenses are in the ratio of 3 : 2. However, each saves Rs. 6,000 per month. What is their total monthly income?

- (a) Rs. 28,000
- (b) Rs. 42,000
- (c) Rs. 56,000
- (d) Rs. 84,000

Q 53. There are certain two-digit numbers. The difference between the number and the one obtained on reversing it is always 27. How many such maximum two-digit numbers are there?

- (a) 6
- (b) 4
- (c) 5
- (d) 3

Q 54. Suppose the average weight of 9 persons is 50 kg. The average weight of the first 5 persons is 45 kg, whereas the average weight of the last 5 persons is 55 kg. Then the weight of the 5th person will be

- (a) 45 kg
- (b) 47.5 kg
- (c) 50 kg
- (d) 52.5 Kg

Directions for (55-56) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: Overfishing and overcapacity are well-recognized challenges in the fisheries sector. According to the 2022 FAO report, The State of World Fisheries and Aquaculture, "it is estimated that up to 35 percent of the global fisheries and aquaculture production is either lost or wasted every year" (FAO, 2022b). The report mainly attributes these losses to inefficiencies in value chains, a trend that has remained consistent over time. In 2009, the World Bank highlighted the consequences of global fleet overcapacity, estimating a yearly gap

of approximately \$50 billion between potential and actual net economic benefits from marine fisheries.

Q 55. Which of the following statements best reflects the most logical and rational inference which can be drawn from the above passage?

1. Inefficient value chains contribute significantly to the loss and waste of global fisheries and aquaculture production.
 2. The FAO report suggests that overfishing is the primary cause of the estimated 35 percent loss or waste in global fisheries and aquaculture production.
 3. The World Bank report implies that the economic benefits from marine fisheries have increased since 2009.
 4. Overcapacity in the global fleet has no impact on the economic benefits derived from marine fisheries.
- (a) Only 1 and 2
 - (b) Only 1
 - (c) All 1, 2, 3 and 4
 - (d) Only 1 and 3

Passage: The major debates revolve around whether a legal guarantee of MSP is at all practically possible. A legal guarantee means that there will be legal provisions for farmers to get the MSP for all 23 crops when they sell them. One opinion is that it is practically impossible to create a legal provision for MSP. The combined value of all crops covered under MSP, produced in 2020, was Rs 10 lakh crore. India's total budgeted expenditure in 2023-24 is around 45 lakh crores; so, it is practically impossible to spend 10 lakh crores only to buy crops from farmers.

Q 56. Which of the following statements best reflects the most logical and rational conclusion which can be drawn from the above passage?

- (a) The MSP for all 23 crops in India was guaranteed legally in 2020, as evidenced by the combined value of the crops produced.
- (b) India's total budgeted expenditure for 2023-24 will exceed 10 lakh crores, making it feasible to allocate funds for purchasing crops at MSP.
- (c) The debate surrounding the legal guarantee of MSP revolves solely around the financial feasibility rather than considering other factors such as administrative challenges or market dynamics.
- (d) Implementing a legal guarantee for Minimum Support Price (MSP) for all 23 crops in India would require a substantial portion of the national budget, which might not be feasible given the budget constraints and the significant value of the crops covered.

Q 57. Consider the following statements:

1. $P = (40\% \text{ of } A) + (65\% \text{ of } B)$
2. $Q = (50\% \text{ of } A) + (50\% \text{ of } B)$,

Where A is greater than B.

Conclusions:

- (a) P is greater than Q.
- (b) Q is greater than P.
- (c) P is equal to Q.
- (d) Cannot be determined

Q 58. A freight train left Delhi for Patna at an average speed of 60 km/hr. Two hours later, an express train left Delhi for Patna, following the freight train on a parallel track at an average speed of 80 km/hr. How far from Delhi would the express train meet the freight train?

- (a) 480 km
- (b) 260 km
- (c) 240 km
- (d) 120 km

Q 59. In a test, Ravi obtained more marks than the total marks obtained by Kavi and Deepak. The total marks obtained by Kunal and Shashi are more than those of Ravi. Sonali obtained more marks than Shashi. Nishu obtained more marks than Ravi. Who amongst them obtained the highest marks?

- (a) Ravi
- (b) Nishi
- (c) Sonali
- (d) Data are inadequate for the solution

Q 60. In a certain code, '256' means 'red colour shirt'; '589' means 'green colour cap' and '245' means 'white colour shirt'. Which digit in that code means 'white'?

- (a) 2
- (b) 4
- (c) 5
- (d) 8

Directions for (61-62) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: The consequences of bullying can be serious and long-lasting. Young people who are bullied are at increased risk for negative psychological and emotional impacts including anxiety, depression, low self-esteem, alcohol and drug abuse, hostility, delinquency, self-harming behavior (particularly for

girls), and violent or criminal behavior (particularly for boys). Those who are severely bullied are also statistically more likely to attempt or commit suicide, and studies have shown that suicidal ideas are particularly common among bully-victims. Bullying can trigger mental health problems in victims who did not previously have any, and it can exacerbate problems in young people with existing mental health issues. Research has also shown that bullying victims tend to suffer declines in academic performance.

Q 61. Which of the following statements best reflects the most logical and rational conclusion which can be drawn from the above passage?

- (a) Only girls are prone to self-harming behavior as a result of bullying, while boys are more likely to engage in violent or criminal behavior.
- (b) Bullying is associated with a range of negative psychological and emotional impacts, including anxiety, depression, low self-esteem, substance abuse, and suicidal ideation.
- (c) Bullying solely affects young people and does not have any impact on adults.
- (d) Academic performance is not affected by bullying, as it primarily pertains to social interactions rather than educational outcomes.

Passage: Animal experimentation, also called animal testing, has contributed to many important scientific and medical discoveries. Breakthroughs include the development of many antibiotics, insulin therapy, modern anesthesia, vaccines for whooping cough and other diseases, the use of lithium in mental health treatments, and the discovery of hormones. Studies using animals have also led to the development of new surgical techniques and medical devices. Scientists use animals for testing the safety of products, known as toxicology testing, and for evaluating the effects of biological, nuclear, and chemical weapons. Unlike field research, which involves observing animals in their natural habitats, animal experimentation takes place at laboratories in universities, medical schools, government facilities, and commercial facilities, such as those run by pharmaceutical and cosmetics manufacturers. Experiments on animals can involve testing drugs and other substances as well as performing behavioral tests, such as those conducted on dogs by Russian physiologist Ivan Pavlov in the early twentieth century.

Q 62. Which of the following statements reflects the assumptions made in the above passage?

- (a) All experiments conducted on animals are solely for medical purposes and do not include other areas such as cosmetic testing or military research.
- (b) Animals used in experimentation are only subjected to physical testing and do not undergo behavioral experiments.
- (c) Animal experimentation has played a significant role in advancing scientific and medical knowledge, leading to the development of various treatments, vaccines, and medical devices.
- (d) Animal experimentation is universally accepted and uncontroversial, with no ethical concerns or debates surrounding its practice.

Q 63. A person ordered 5 pairs of red socks and some pairs of blue socks. The price of a red pair was thrice that of a blue pair. While preparing the bill, the bill clerk interchanged the number of red and blue pairs by mistake which increased the bill by 100%. What was the number of pairs of blue socks in the original order?

- (a) 10
- (b) 15
- (c) 20
- (d) 25

Q 64. P, Q, and R working independently can do 40 % of a piece of work in 4, 6 and 8 days respectively. P alone works on Monday, Q alone works on Tuesday, R alone works on Wednesday; P alone, again works on Thursday and so on.

Consider the following statements:

- 1. The work will be finished on Tuesday.
- 2. The work will be finished in 16 days.

Which of the above statements is/are correct?

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

Q 65. There are 9 cups placed on a table arranged in equal number of rows and columns out of which 6 cups contain coffee and 3 cups contain tea. In how many ways can they be arranged so that each row should contain at least one cup of coffee?

- (a) 18
- (b) 27
- (c) 54
- (d) 81

Q 66. Consider the following statement

If the alphabet is written in the reverse order and every alternate letter starting with Y is dropped

Conclusions:

- 1. M will be exactly in the middle of the remaining letters of the alphabet.
- 2. J will be in 5th place from the left side of the letters of the alphabet.

Which of the above conclusion/s is/are correct?

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

Directions for (67-68) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: Overwhelming scientific evidence supports the existence of both global warming and climate change. Through the United Nations' (UN) Intergovernmental Panel on Climate Change (IPCC), thousands of scientists work together to collect and analyze the latest available research related to climate change, its effects, and potential responses. In an interim update to its Sixth Assessment Report (AR6) in 2023, the IPCC estimated that global surface temperatures increased by 1.1°C (1.98°F) between the latter half of the nineteenth century and the first two decades of the twenty-first century. The IPCC has linked climate change and global warming to the increased occurrence and severity of storms, floods, droughts, and wildfires, warning that such disasters will increase further if temperatures continue to rise. The scientists' group also identifies water availability and food production as well as health and wealth being as experiencing observable, widespread, and substantial changes related to climate change. These threats have led scientists to identify global warming and climate change as a climate crisis. The IPCC recognizes human activity, particularly industrialization and certain agricultural practices that release carbon dioxide (CO₂), as the primary driver of global warming and climate change. Despite substantial evidence and a consensus among the scientific community, a vocal minority continues to challenge the science behind climate change. These critics characterize climate change as a natural phenomenon and dispute assertions that human activity has contributed to rising global temperatures. This position may be referred to as climate denial, and those who reject the scientific consensus are considered climate deniers. Fossil fuel climate companies often provide financial support to politicians, media campaigns, and organizations that promote denial.

Q 67. What can be the inferences drawn with respect to the above passage?

1. The IPCC, comprised of thousands of scientists, provides robust evidence supporting the existence of global warming and climate change, attributing it primarily to human activities such as industrialization and certain agricultural practices.
 2. Despite the overwhelming scientific consensus on climate change, a vocal minority, often supported by financial backing from fossil fuel companies, continues to challenge the scientific evidence and promote climate denial.
 3. The IPCC's findings on climate change focus solely on temperature increases and do not address other aspects such as sea level rise or biodiversity loss.
 4. Climate denial is only promoted by fossil fuel companies and does not involve other actors such as political figures or media personalities.
- (a) 1 and 4
(b) 1 and 2
(c) 1, 2 and 3
(d) 2 and 4

Passage: Vaping is inhaling the steam or vapor created by any type of electronic "smoking" device. The vapor may contain nicotine as well as other substances, flavors, and chemicals. In 2014, vaping became the most common form of tobacco use among people under 25 years of age. Usage increased among teens until 2020, when fewer teens reported having recent use of electronic cigarettes than the year prior. In 2021, the Centers for Disease Control and Prevention (CDC) reported that nearly 3 percent of middle school students and about 11 percent of high school students had used electronic cigarettes in the past 30 days. While e-cigarettes may be an effective way to stop smoking traditional cigarettes, the CDC states that vaping is unsafe for youth, young adults, pregnant women, or adults who do not currently use tobacco products.

Q 68. Which of the following statements best reflects the most logical and rational inference which can be drawn from the above passage?

- (a) Despite a decrease in teenage vaping rates in 2020, electronic cigarette use remains prevalent among middle and high school students, as reported by the Centers for Disease Control and Prevention (CDC) in 2021.
- (b) Vaping has entirely replaced traditional cigarette smoking among people under 25 years of age, based on its popularity since 2014.
- (c) The Centers for Disease Control and Prevention (CDC) supports the use of e-cigarettes as a safe alternative to traditional cigarettes for all age groups.
- (d) There is no correlation between vaping and tobacco use among youth, as indicated by the data provided.

Q 69. Is the average age of the students of a school less than 17 years?

Statement 1: The strength of class VIII is less than 25% of the strength of the school.

Statement 2: The average age of the students of class VIII of the school is 18 years and that of the remaining classes is 16 years.

- (a) If the data in statement 1 alone is sufficient to answer the question, while the data in statement 2 alone is not sufficient to answer the question
- (b) If the data in statement 2 alone is sufficient to answer the question, while the data in statement 1 alone is not sufficient to answer the question
- (c) If the data either in statement 1 alone or in statement 2 alone is sufficient to answer the question
- (d) If the data in both statements 1 and 2 together are necessary to answer the question.

Q 70. A class of 12 students planned a picnic, and they decided to split the cost of Rs. 48000 evenly among themselves. However, 4 students decided not to go before the picnic, and thus the cost per remaining student increased. After the picnic, the teacher decided to contribute Rs. 8000 to reduce the cost for each student.

Consider the following statements.

1. After the teacher's contribution, each of the remaining students paid less than the original plan.
2. The final amount paid by each student was Rs.2000 less than it would have been without the teacher's contribution.

Which of the above statements is/are correct?

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

Q 71. In a local election between two candidates, M and N, 70% of registered voters participated in the voting process. There were no invalid votes, and the NOTA (None of the Above) option was unavailable. Candidate C secured 65% of the total votes cast, winning the election by a margin of 840 votes. What is the total number of registered voters?

- (a) 8000
(b) 4200
(c) 2000
(d) 4000

Q 72. Five different books (P, Q, R, S, and T) need to be arranged on a shelf. Which book is placed in the middle?

Statements:

1. Book Q is placed to the left of Book S, but to the right of Book P.
2. Book T is placed at one of the ends, and Book R is not placed next to Book S

Which of the following is correct regarding the question and the Statements?

- (a) Statement-1 alone is sufficient to answer question
- (b) Statement 2 alone is sufficient to answer question
- (c) Both Statement-1 and Statement-2 are sufficient to answer the Question
- (d) Both Statement-1 and Statement-2 are not sufficient to answer the Question.

Directions for (73-74) passages:

Read the following two passages and answer the questions asked. Your answers to these questions should be based on the passages only.

Passage: As online processes become more salient in political action, digital technology resources become increasingly relevant for movements. But while scholars have found persistent inequalities in digital participation in general, they have given scant attention to the implications of class difference for online mobilization. Meanwhile, studies of the role of the internet in movement dynamics have not grappled with the implications of digital divide research. Despite much discussion of how readily available online resources bring new tactics that can broaden democratic participation in political contention, stratification in the use of such resources implies that the incorporation of new technologies will be uneven.

Q 73. Which of the following statements best reflects the most logical and rational conclusion which can be drawn from the above passage?

- (a) The digital divide research suggests that online resources are equally accessible to all social classes, leading to uniformity in online mobilization for political action.
- (b) The incorporation of new technologies into political contention will inevitably lead to a reduction in democratic participation due to stratification in the use of digital resources.
- (c) Studies of the role of the internet in movement dynamics have extensively addressed the implications of class differences for online mobilization.
- (d) Scholars have identified persistent inequalities in digital participation and suggest that class differences may impact online mobilization in political movements.

Passage: Care work pays less than other occupations after controlling for the education and employment experience of the workers, many occupation and industry characteristics, and (via individual fixed effects) unmeasured, stable characteristics of those who hold the jobs. Both men and women in care work pay this relative wage penalty. However, more women than men pay the penalty, since more women than men do this kind of work.

Q 74. Which of the following statements best reflects the most logical and rational conclusion which can be drawn from the above passage?

- (a) Women in care work receive higher wages compared to men in the same field due to the larger proportion of women engaged in care work.
- (b) The wage penalty in care work is solely attributed to gender disparities, neglecting other factors such as job demand, skill requirements, and societal perceptions of care work.
- (c) All individuals in care work face the same relative wage penalty, regardless of their specific roles, responsibilities, or job tenure within the field.
- (d) Care work occupations experience a relative wage penalty compared to other occupations experiences, even after accounting for various factors such as education, employment, occupation and industry characteristics, and individual fixed effects.

Q 75. Four persons A, B, C and D consisting of two married couples are in a group.

Consider the following statements

1. Both women are shorter than their respective husbands.
2. A is the tallest among the four.
3. C is taller than B. D is B's brother.

In this context, which one of the following statement/s is/are not, correct?

- (a) All four have family ties.
- (b) B is the shortest among the four.
- (c) C is taller than D.
- (d) A is B's husband.

Q 76. In a class, 20% of the members own only two cars each, 40% of the remaining own three cars each and the remaining members own only one car each.

Which of the following statements is definitely true from the given statements?

- (a) Only 20% of the total members own three cars each.
- (b) 48% of the total members own only one car each.
- (c) 60% of the total members own at least two cars each.
- (d) 80% of the total members own at least one car.

Q 77. Among the five friends, L, M, N, O and P, who is the third youngest?

Consider the following statements

- 1. O is younger than L but older than P.
- 2. N is the oldest.
- 3. M is not the youngest.
- 4. Only one person is older than L.

How many statements are required to answer the question?

- (a) Only two
- (b) Only three
- (c) All four
- (d) The question cannot be answered using all four statements

Q 78. The lengths of trains A and B are in the ratio of 2: 3.

They pass a static pole in 4 and 5 seconds, respectively.

Conclusions:

- 1. In 50 seconds, they will cross each other when they move in the same direction
- 2. In less than 5 seconds they will cross each other when they move in the opposite direction

Which of the above conclusion/s is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) None of the above

Q 79. Consider the following statements:

- 1. Between 3:16 pm. and 3:17 pm, both hour hand and minute hand 'coincide.
- 2. Between 4:58 pm. and 4:59 p.m. both minute hand and second hand coincide.

Which of the above statements is/are correct?

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

Q 80. 9 pumps working 8 hours a day can empty a filled reservoir in 18 days. How many such pumps working 9 hours a day will empty 50% of the same reservoir in 12 days?

- (a) 8
- (b) 6
- (c) 3
- (d) 12

CSAT BATCH TEST (SOLUTIONS)

Q 1. Ans. (b)

Explanation

- Statement 1 is incorrect because artists are not isolated from society. Their interaction with the outside environment influences their work. It is not up to us to dictate how artists should engage with culture and society.
- Statement 2 is accurate since the final sentence makes it very evident that art can be utilized to comprehend societal truths. It aids in people's education as well.

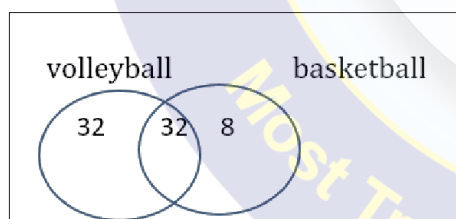
Q 2. Ans. (d)

Explanation

- Option (d) is correct in that it meant to be a required reliance rather than a bias. The sentence references a new generation of artists who utilize their prominence to educate the public about the relationship between art and society.
- Option (a) is incorrect because the passage makes no mention of teaching non-Western nations how to utilize art to its fullest potential.
- Option (b) is incorrect because there is no debate in the paragraph about funding the promotion of art for the spread of their civilizations.
- Option (c) is incorrect because the passage makes no mention of politics, wealth, or power that an artist may concerned about. Culture's artistic expressions don't have to be prejudiced or biased. It demonstrates how artists are influenced by their society.

Q 3. Ans. (c)

Explanation



The number of students who play none of the games = $160 - (32 + 32 + 8) = 88$

Q 4. Ans. (a)

Explanation

Maximum = $38 + 5 + 3 = 46$
 Taking the position of Ravish from the right side of the row is 1st
 So, Minimum value = 38

Q 5. Ans. (b)

Explanation

For P, 5% of the work in 6 days. So, 100% of the work in 120 days

For Q, 10% of the work in 15 days. So, 100% of the work in 150 days

So, in one day together they will complete $(1/120) + (1/150) = 9/600$ work

\Rightarrow 100% of the same work will be completed in $600/9$ days

Hence, 60% of the same work will be completed in = $(600/9) \times (3/5) = 40$ days

Q 6. Ans. (c)

Explanation

Sum of 3, 4, 5, 6 and 9 = 27. which is divisible by 3 and 9

So, no prime number will be obtained by using all the digits 3,

4, 5, 6 and 9 without repetition of digits.

Q 7. Ans. (d)

Explanation

- Statement 1 is incorrect because exceptional frameworks can control the vehicle or truck. There is no relative examination of the security guidelines of independent and semi-independent vehicles.
- Statement 2 is mistaken because there is no data in the section concerning the expense of the creation of artificial intelligence-based vehicles. Thus, this choice is beyond the extent of the section.

Q 8. Ans. (d)

Explanation

- Statement 1 is not valid because the passage doesn't discuss the ideas of ancient philosophers regarding happiness.
- Statement 2 is invalid because the author values contentment more highly than happiness. Since the paragraph does not compare the variables influencing happiness and contentment.
- Statement 3 is once more invalid because the passage does not address the context of established routines or meditation. Therefore, this presumption goes beyond what the passage states.

Q 9. Ans. (a)

Explanation

Adding squares of 1, 2, 3 and 4 in the subsequent alphabet

Q 10. Ans. (d)

Explanation

- Neither I nor II is implicit
- Words mofussil areas and burning social issues in Assumptions are not support the statement.

Q 11. Ans. (c)

Explanation

M is added 4 times on LHS resulting 8 in units placed on RHS

The values of M such that $M \times 4$ will give 8 in units place are 2 and 7.

If $M = 2$, then on LHS we have $32 + 42 + 522 + 622 = 1218 \Rightarrow N = 1, L = 2$ and $O = 1$

And the number is 1218

If $M = 7$, then LHS = $37 + 47 + 577 + 677 = 1338$

$\Rightarrow N = 1, L = 3$ and $O = 3$, the number is 1338

So, arithmetic mean = $(1218 + 1338)/2 = 1278$

Q 12. Ans. (d)

Explanation

$$A = B + 44$$

$$C = B + 24$$

Given $11\% = 44$. So, $100\% = 400$

Hence, $A = 400, B = 356$ and $C = 380$

Q 13. Ans. (d)

Explanation

- Statement 1 is incorrect because the passage makes no mention of the Mandala art being done on silk fabrics. The majority of the chapter discusses the development, history, and characteristics of mandala painting. Not like a mandala painting being done on a silk garment.
- Statement 2 is incorrect because the mandala art form is thought to have its origins in Buddhism. However, it would be inaccurate to argue that all kinds of mandala arts have a religious undertone. For this reason, this assertion is false.

Q 14. Ans. (b)

Explanation

- Statement 1 is incorrect and not based on the information given in the passage and goes beyond the scope. Nowhere in the passage discusses cybercafes or their impact on minimizing the digital divide.
- Statement 2 is correct because the digital divide may cause technological and political participation. A digital divide may result in political alienation of those who lack digital media access. So, it will lead to technological and political empowerment.

Q 15. Ans. (d)

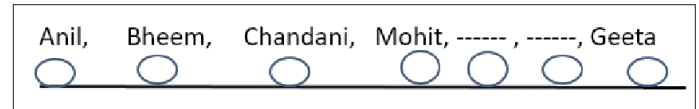
Explanation

4 % E 2 0 N 3 # Z ! @ \$ T G W 8 1 + A B 7 9 6 1 R H U X
^ I 5

G is the 18th elements from right end (starting from 5), So, # will be the required number 6th left from G

Q 16. Ans. (d)

Explanation



Q 17. Ans. (b)

Explanation

- Condition 1: $Q - 100 = R/2$
- Condition 2: $R - 200 = Q = P + 200$
- From conditions 1 and 2
- We get, $P = 200$ rupees, $Q = 400$ rupees and $R = 600$ rupees
- So, the sum of the money = 1200 rupees

Q 18. Ans. (c)

Explanation

- S1: C is greater than A as well as B.
- Case 1: $C > A > B$
- Case 2: $C > B > A$
- S2: D is not the largest one.
- S3: A is the largest among A, B and D.
- By combining S1 & S3 or by S2 & S3 we will get our required answer.

Q 19. Ans. (d)

Explanation

- Statement 1 is incorrect because it goes out of the scope of the passage. Nowhere in the passage discusses the food security of the future.
- Statement 2 is not correct because the worst environmental problems facing the conservation of natural areas, because of their role in changing ecosystem functioning is one of the worst environmental problems. It does not guarantee that natural areas can be conserved by keeping a check on invasive species. Many other causative factors are degrading our environment.

Q 20. Ans. (b)

Explanation

- The passage suggests that India has offered diplomatic support to Russia in the Ukraine war but hasn't engaged actively in mediating the conflict. Military support from India to Russia in the context of the Ukraine war is not mentioned. Thus, option ii is accurate, while options i and iii lack support in the passage

Q 21. Ans. (c)

Explanation

- In 12 hours, the hands coincide or are in the opposite direction 22 times.
- In 24 hours, the hands coincide or are in the opposite direction 44 times a day.

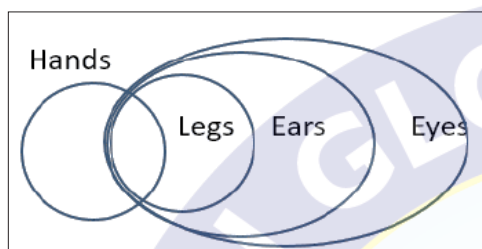
Q 22. Ans. (a)

Explanation

- A is the father of B and B is the son of C.
- Hence, C is the mother of B.
- From (1), D is the brother of C
- Therefore, A is the brother-in-law of D because C is the wife of A.
- From (2), the daughter of B, is the granddaughter of C. From this we do not get any relation of A to D.

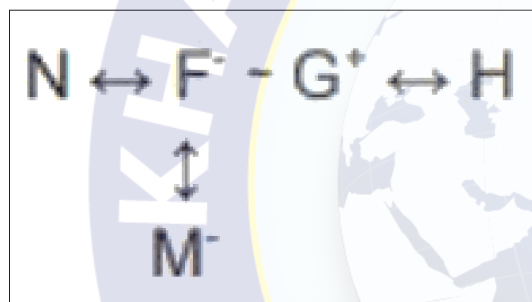
Q 23. Ans. (c)

Explanation



Q 24. Ans. (c)

Explanation



- Where, + denotes male, - denotes female, ~ denotes couple, \leftrightarrow denotes siblings, \updownarrow denotes children

Q 25. Ans. (c)

Explanation

- Statement 1 is accurate since it refers to the idea that effective leadership determines how successful any form of government is. The traits of the nation's government are a reflection of its people. Therefore, effective governance outcomes are also the responsibility of the people.
- Statement 2 is true due to an institution's ability to manage change, implement it, and find innovative solutions for problems that arise. Thus, the institution's capability rises when choices are carried out in an open and adaptable manner.

Q 26. Ans. (a)

Explanation

- Option (a) is correct because the paragraph illustrates the limitations of democracy, but it also highlights

how a constitution aids the government and people in upholding the laws that support social order.

- Option (b) is incorrect since the passage does not compare democracy to any other form of government to determine whether democracy is the best model or not.
- Option (c) is incorrect because there is no evidence to support the claim that only governments operating a constitution ensure the maintenance of social order, option.
- Option (d) is incorrect because class conflicts arise from the pursuit of equality rather than ignorance of class inequalities.

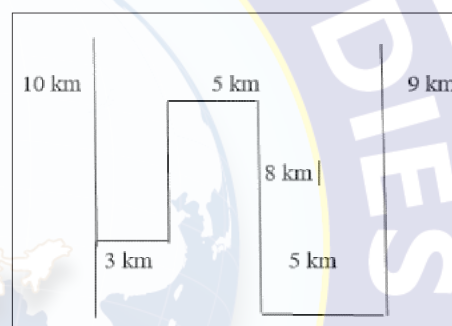
Q 27. Ans. (c)

Explanation

As we know that there are 7 days in a week, so by dividing 20^{10} by 7 we get: 2857142857 weeks and 1 day. The remainder of 1 days means that the 20^{10} th day is 1 day after Tuesday i.e Wednesday.

Q 28. Ans. (d)

Explanation



Q 29. Ans. (c)

Explanation

Given $PQ \times RS = STU$ and $STU + VWX = 975$, and also $T = 0$, $U = 8$. So, $PQ \times RS = S08$, and $S08 + VWX = 975$. $S08 + VWX = 975$, is possible only when $X = 7$. If $X = 7$ then W must be 6. So, $W = 6$. And $S + V = 9$. But 8, 7, and 6 are occupied, so the only pair available for S and V is 4 and 5 or vice versa. This leaves only 1, 2 and 3 for the values of P , Q and R . So, $P + Q + R = 1 + 2 + 3$ (in any order) = 6.

Q 30. Ans. (b)

Explanation

Let the total no. of teams = n
As they playing in a single league tournament (one game with others) therefore
 $n(n-1)/2 = \text{total number matches}$
 $n(n-1)/2 = 66$
 $n^2 - n - 132 = 0$
By solving we get
 $n = 12$

Q 31. Ans. (a)

Explanation

- Option (a) is correct because wet organic waste with a low calorific content makes up almost 60% of home waste. We consider that burning organic garbage is not the ideal method of disposing of it in India. Option (b) is incorrect because the passage does not suggest that cutting back on consumption is always a solution. Option (c) is wrong since the passage makes no mention of where incinerators are located. Option (d) goes false because the paragraph makes no mention of the development of customized incinerators

Q 32. Ans. (d)

Explanation

- Statement 1 is incorrect because value education fosters understanding and tolerance in an environment that is not socially contextual. Our disparities in politics, culture, and religion, with a focus on the protection of human rights. Therefore, the passage opposes the contextualization of value-based learning. Statement 2 is incorrect because everyone has a responsibility to teach values, not just in schools. The statement "schools are the most important agent" is incorrect because there is no such information in the passage.

Q 33. Ans. (b)

Explanation

- Option (b) is correct because it will be challenging for us to create a better world without the value of education and the ethical values that make us who we are as people. Education based on values fosters acceptance and understanding beyond political, cultural, and religious divides. Therefore, this option best conveys the author's point of view. Option (a) is incorrect because the passage mentions that value education is being considered for compulsory schooling in the UK and Australia. There is no suggestion that India should accept their choice. Option (c) is incorrect because value education is everyone's responsibility and not only the job of schools. Option (d) is incorrect because there is no comparison between morality and value education.

Q 34. Ans. (b)

Explanation

- Clearly, the lady is the grandmother of man's sister's son means the mother of the mother of man's sister's son i.e., the mother of man's sister. So, the lady is the man's mother

Q 35. Ans. (b)

Explanation

Household expenditure = 40%
Remaining = 60%
On the remaining amount, he spends: -

Traveling = 20%
Entertainment = 10%
Shopping = 40%
Total = 70% \Rightarrow Remaining = (100 - 70) % of 60%
Rest amount \Rightarrow Rs 5400 = 30% of 60%
 \Rightarrow 18% = Rs 5400
 \Rightarrow 100% = Rs 30,000

Q 36. Ans. (c)

Explanation

The principal amount borrowed = Rs. 5000
Period = 5 years
Rate of interest = 10%
Hence final amount to be repaid = $5000 + 5000 \times 10/100 \times 5 = 5000 + 250 = \text{Rs. } 7500$
So, Interest = $7500 - 5000 = 2500$
Amount gained by loaning at 12% = $5000 \times (12/100) \times 3 = \text{Rs. } 1800$
Hence, amount to be paid extra = $2500 - 1800 = \text{Rs. } 700$.

Q 37. Ans. (b)

Explanation



Number of cubes with all the colours = 8 (all corners)
And the number of cubes with red colour on one side = 48
So, Ratio = 8: 48 = 1: 6

Q 38. Ans. (d)

Explanation

Let x be the number of days when 10 employees left the project.
Total work done = $25 \times 40 = 1000$
 $25x + (50 - x) 15 = 1000$
 $25x + 750 - 15x = 1000$
 $10x = 250$
 $x = 25$
Hence, after 25 days 10 employees left the job.

Q 39. Ans. (a)

Explanation

- Statement 1 is correct because the broadcasters can exchange content; it is not their private property. This suggests that a channel's content will not be its exclusive property and should be in the public interest.
- Statement 2 is correct since the paragraph makes it clear that content of national importance need not be 30 minutes long and can be integrated into shows that

are being televised. It should break up the broadcast into shorter segments.

- Statement 3 is incorrect because there is no indication in the passage that the nation's social cohesion will arise from the telecasting of the content of national interest.

Q 40. Ans. (a)

Explanation

- Statement 1 is incorrect because China did not have the largest population throughout much of history. In the past, China was not the largest populated country. Statement 2 is correct because at present Chinese government has long recognized that the country can no longer rely on the labor-intensive economic growth model of the past. It can be inferred that in the past, China had a labor-intensive growth model. Statement 3 is correct because China has largely completed a historic transformation from an agrarian based economy to the manufacturing and the service-based economy. Statement 4 is correct because, from the previous six decades, this has been the first time that deaths have outnumbered births. So, it is a correct statement.

Q 41. Ans. (c)

Explanation

In 1994 population was = 500

Increases by 15% every year

In next 'k' years population i.e. $P = 500 \times (115/100)^k$

$P = 500(1.15)^k$

Q 42. Ans. (c)

Explanation

- For Minimum, let us choose a month with a minimum number of days. That would be February for 28 days. These 28 days shall have 4 days of each of the 7 days of the week. Now out of these 28 days, 4 Sundays shall be holiday and 2 Saturdays (second and fourth) shall be holiday. So, the number of working days = $28 - 4 - 2 = 22$.
- For maximum, we can a month of the 31-day and the first day of the month as Monday
- So, Maximum working days = $31 - 6 = 25$
- So, statements I and III are correct

Q 43. Ans. (d)

Explanation:

- 1 is correct. The passage explicitly mentions the mismanagement of water resources in the South-Asian region and the potential for conflicts if cooperative agreements are not reached.
- 2 is correct. The passage suggests that if the river linking project in India is implemented properly, taking into account environmental and sociological concerns, it can benefit the entire region.
- 3 is incorrect. The passage does not support the assumption that the region lacks the necessary water resources for joint management efforts. In fact, it

emphasizes the need for joint management and sustainable development strategies.

- 4 is incorrect. The passage does not explicitly state that international initiatives and regional cooperation alone are insufficient. It emphasizes the importance of these factors along with the proper implementation of projects

Q 44. Ans. (a)

Explanation:

- Option a is correct. The passage explicitly states that the practice of yoga and meditation is aimed at peeling back the artificial division between mind and body, matter and spirit, and allows individuals to directly experience the underlying unity at the heart of reality.
- Option b is incorrect. The passage does not solely blame the intellect but rather describes it as making a mistake by confusing the map for the territory.
- Option c is incorrect. The passage asserts that through the practice of yoga and meditation, individuals don't gain mere intellectual understanding but directly experience the underlying unity. It contradicts the notion that these practices provide only intellectual understanding.
- Option d is incorrect. The passage does not dismiss the transition zone between mind and body as a mere conceptual construct; instead, it emphasizes its significance and suggests that the confusion lies in the intellect's mistake.

Q 45. Ans. (a)

Explanation

- For an odd number of consecutive numbers, the mean is the central number. Here, the mean of the first five numbers is 39 which means that the third number is 39. For 13 consecutive numbers, the mean shall be the 7th number. Now the third number is 39, the fourth shall be 41, the fifth shall be 43, the sixth shall be 45 and the seventh shall be 47.

Q 46. Ans. (d)

Explanation

To ensure that the remainder is the largest possible, we should make one of the numbers as large as possible.

So, one of the two digits must be 9.

Hence, the two numbers will be in the form of $9x$ and $x9$.

Now, we must also ensure that the smaller number do not divide the larger one by more than one time.

Hence, the value of x must not be very small or very large.

Hence, we may try the values 4 and 5. If $x = 5$:

The numbers are 95 and 59.

The remainder got on dividing 95 by 59 = 36

If $x = 4$: The numbers are 94 and 49.

The remainder got on dividing 94 by 49 = 45.

Hence, the highest possible remainder is 45

Q 47. Ans. (c)

Explanation

The average rainfall in the first four days = 0.40 inches.
Thus, total rainfall in the first four days = $4 \times 0.40 = 1.6$ inches..... (1)

The average rainfall in six days = 0.50 inches.
Thus, total rainfall in six days = $6 \times 0.50 = 3.0$ inches..... (2)

Subtracting (1) from (2) we get total rainfall on the fifth and sixth days = $3.0 - 1.6 = 1.4$ inch.... (3)

Now the rainfall on the fifth and sixth day was in the ratio 4: 3.

Let us say rainfall on the fifth day = $4x$ inch and that on the sixth day = $3x$ inch.

Total rainfall = $4x + 3x = 7x = 1.4$ inches [as found out in (3)].

Hence $x = 0.2$ inch and rainfall on fifth day = $4x = 4 \times 0.2 = 0.8$ inch.

Q 48. Ans. (d)

Explanation

The efficiency of X is thrice of Y,

The efficiency of X and Y together 4 times of Z

$\Rightarrow X = 3Y$... (1)

$\Rightarrow X + Y = 4Z$ (2)

By equation (1) and (2) $\Rightarrow Y = Z$ (3)

\Rightarrow So, Z is thrice efficient as Y and Z

\Rightarrow The ratio of earnings of X, Y, and Z = 3 : 1 : 1

Q 49. Ans. (d)

Explanation

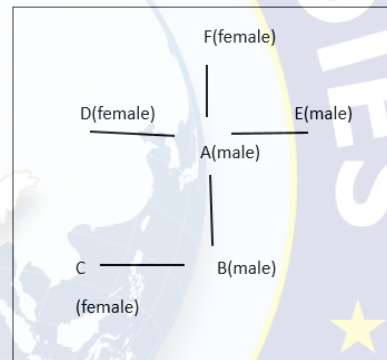
- 1 is correct. The passage explicitly states that the assumption that war or increased military spending boosts a nation's economy is a myth, and it provides evidence by highlighting the negative long-term economic effects observed in the aftermath of wars.
- 2 is correct. The passage supports this conclusion by indicating that while there may be short-term economic gains during conflicts, the long-term economic costs, including increased public debt, inflation, and reduced investment in productive sectors like high-tech industries, education, and infrastructure, outweigh these benefits.
- 3 is correct. The passage affirms this conclusion by stating that military spending often displaces more productive government investments in areas such as high-tech industries, education, and infrastructure.
- 4 is incorrect. The passage contradicts this conclusion, explicitly stating that the assumption "War is good for the economy" is a myth. It provides evidence of the severe and numerous unintended consequences of military spending on the economy, refuting the idea that wars and increased military spending always result in positive economic outcomes for a nation.

Q 50. Ans. (c)

Explanation:

- Option a is incorrect. The passage does not explicitly state that Elon Musk's unveiling of the brain-monitoring device marks a significant breakthrough in neuroscience or represents a major feat in human achievement. It mentions the functionality of the device but does not make an explicit claim about the significance of the breakthrough.
- Option b is incorrect. The concerns raised by researchers are mentioned in the passage, but it does not necessarily indicate that the technology is likely to pose significant risks.
- Option c is correct. The passage supports this conclusion by stating that controlling a computer mouse with one's thoughts using the brain-monitoring device has potential implications for individuals with paralysis, offering them the possibility of regaining independence and functionality.
- Option d is incorrect. The passage does not characterize the ability to control a computer cursor with one's mind as a trivial achievement.

Q 51. Ans. (b)



Q 52. Ans. (b)

Explanation

- Let their incomes be $4x$ and $3x$ respectively and their savings be $3y$ and $2y$ respectively. Thus, savings of X and Y are respectively $4x - 3y$ and $3x - 2y$. Since both have the same savings of Rs. 6000 per month that means: $4x - 3y = 3x - 2y$, which means $x = y$. Now saving of $x = 4x - 3y = 4x - 3x = x = \text{Rs. } 6000$ (given). Thus, their total monthly income = $4x + 3x = 7x = \text{Rs } 42,000$. Thus, the answer is option (b):

Q 53. Ans. (a)

Explanation

Let the number be $10x + y$.

Thus, the number obtained by reversing its digits shall be $10y + x$.

Now as per the given condition, $(10x + y) - (10y + x) = 27$

Thus $9(x - y) = 27$ and $x - y = 3$

Now (x, y) can take the following values: (9,6), (8, 5), (7, 4), (6, 3) (5, 2) and (4, 1).

Q 54. Ans. (c)

Explanation

- The average weight of the first 5 persons = 45 kg
- Therefore, the total weight of the first 5 persons = $5 \times 45 \text{ kg} = 225 \text{ kg} \dots (1)$
- The average weight of the last 5 persons = 55 kg
- Therefore, the total weight of the last 5 persons = $5 \times 55 \text{ kg} = 275 \text{ kg} \dots (2)$
- If we add (1) and (2) we will get the total weight of 9 persons + the weight of the 5th person (because weight of the 5th person will be present in the total weight of the first 5 persons as well as in the total weight of last five persons).
- This means $(1) + (2) = \text{Total weight of 9 person} + \text{weight of 5th person} \dots (3)$
- Total weight of 9 persons = $9 \times 50 \text{ kg} = 450 \text{ kg} \dots (4)$
- Putting values from (1), (2) and (4) in equation (3) we get: Weight of 5th person = $(1) + (2) - (4) = 225 + 275 - 450 = 50 \text{ kg}$.

Q 55. Ans. (a)

Explanation

- 1 is correct. The passage explicitly mentions that inefficiencies in value chains are attributed to the loss and waste of up to 35 percent of global fisheries and aquaculture production. Therefore, the logical and rational inference is that inefficient value chains contribute significantly to these losses.
- 2 is correct. The passage does not directly state that overfishing is the primary cause of the estimated 35 percent loss or waste in global fisheries and aquaculture production. It attributes the losses to inefficiencies in value chains, not specifically to overfishing.
- 3 is incorrect. The World Bank report mentions a yearly gap of approximately \$50 billion between potential and actual net economic benefits, indicating a discrepancy rather than an increase.
- 4 is incorrect. The passage does not provide information to support the inference that overcapacity in the global fleet has no impact on the economic benefits derived from marine fisheries.

Q 56. Ans. (d)

Explanation:

- Option a is incorrect. The passage does not provide information to support the conclusion that the MSP for all 23 crops in India was guaranteed legally in 2020.
- Option b is incorrect. The passage explicitly mentions that India's total budgeted expenditure is around 45 lakh crores, making it practically impossible to spend 10 lakh crores only to buy crops from farmers.
- Option c is incorrect. The passage mentions the financial aspect as a significant factor in the debates, but it does not state that the debate revolves solely around financial feasibility.

- Option d is correct. The passage clearly states that the major debates revolve around whether a legal guarantee of MSP is practically possible, and it provides a specific financial constraint.

Q 57. Ans. (b)

Explanation

- Take $A = 200$ and $B = 100$
- $P = 80 + 65 = 145$
- $Q = 100 + 50 = 150$
- So, Q is greater than P

Q 58. Ans. (c)

Explanation

- Distance travelled by freight train in 2 hours = $2 \times 60 = 120 \text{ km}$.
- Relative speed = $80 \text{ km/hr} - 60 \text{ km/hr} = 20 \text{ km/hr}$
- Hence, the time taken by express train to meet the Freight train = $120 / 20 = 6 \text{ hr}$.
- So, Distance travelled = $6 \times 80 = 480 \text{ km}$.

Q 59. Ans. (d)

Explanation

- $\text{Ravi} > \text{Kavi} + \text{Deepak}$. This means Ravi has got more marks than Kavi and Deepak.
- Thus, Kavi and Deepak are out of the race.
- $\text{Sonali} > \text{Shashi}$ and $\text{Nishu} > \text{Ravi}$.
- This means Shashi and Ravi are out of race.
- And we are left with Sonali and Nishu.
- Now no condition can help us compare the marks of Sonali and Nishu.
- Therefore, the answer is (d) Data are inadequate

Q 60. Ans. (b)

Explanation

- In the first, second and third statements, the common code digit is '5' and the common word is 'colour'. So, '5' means 'colour'. In the first and third statements, the common code digit is '2' and the common word is 'shirt'. So, '2' means 'shirt'. Thus, in the third statement '4' means 'white'.

Q 61. Ans. (b)

Explanation:

- Option a incorrectly suggests specific behaviors are exclusive to one gender.
- Option b is correct. Bullying is associated with a range of negative psychological and emotional impacts, including anxiety, depression, low self-esteem, substance abuse, and suicidal ideation. This is because it directly summarizes the key issues outlined in the passage without excluding or inaccurately representing any group or effect.
- Option c falsely claims bullying only affects young people.
- Option d inaccurately states that bullying does not impact academic performance, contradicting the passage's information.

Q 62. Ans. (c)

Explanation:

- The correct answer is c.
- This is because the passage clearly outlines the contributions of animal experimentation to scientific and medical advancements, mentioning the development of treatments, vaccines, and medical devices.
- The other options are incorrect because they either misrepresent the scope of animal testing (a), ignore the inclusion of behavioral experiments (b), or falsely claim universal acceptance and ignore ethical considerations (d), none of which are supported by the passage.

Q 63. Ans. (d)

Explanation

Let the original number of blue socks be n.

Let the prices of the red and blue socks be x and y respectively

We have, $x = 3y$

The actual bill is $5x + ky$

The bill prepared is $nx + 5y$

According to the condition given in the question

$$2(5x + ny) = nx + 5y$$

Substituting the value of $x = 3y$ and simplifying we get $n = 25$.

Q 64. Ans. (b)

Explanation

P, Q, and R working independently can do 40 % of a piece of work in 4, 6 and 8 days respectively

So, 100 % of the work will be completed by P, Q and R in 10, 15 and 20 respectively.

In the first three days, work will be completed by P, Q and R = $(1/10 + 1/15 + 1/20) = 13/60$

So, after 12 days, left out work = $(1 - 13 \times 4/60) = 8/60 = 2/15$

On 15th day P will do 1/10 of the work so, left out work = $(2/15 - 1/10) = 1/30$

On the 16th day, Q will complete the remaining work.

16th day means Wednesday

Q 65. Ans. (d)

Explanation

The cups will be arranged in a 3 x 3 matrix.

Now, let's consider all the possible cases.

Case 1: Each row has 2 cups of coffee and 1 cup of tea.

One tea cup can be placed in a row in 3 ways.

So, Possible arrangements wherein all rows have 2 coffee cups = $3 \times 3 \times 3 = 27$ ways

Case 2: One row has 3 cups of coffee.

In such a case, one of the rows will have 2 cups of coffee and the other will have 1 cup of coffee.

CCC All 'C' can be arranged in 1 way

CCT 2 C can be arranged in 3 ways

CTT 1 C can be arranged in 3 ways

If the first row has 3 coffee cups, then the possible

arrangements = $3 \times 3 = 9$ ways

The rows having 3, 2 and 1 coffee cups can be arranged in $3! = 6$ ways

So, Possible arrangements where one row has 3 coffee cups = 9×6 ways = 54 ways

Therefore, total possible arrangements = $27 + 54 = 81$ ways

Q 66. Ans. (b)

Explanation

According to the question,

English alphabet is written in the reverse order

Z Y X W V U T S R Q P O N M L K J I H G F E D C B A

After every alternate letter starting with Y is dropped

Z X V T R P N L J H F D B

N is the letter that will be exactly in the middle of the remaining letters of the alphabet, and J will be in 5th place from the left side of the letters of the alphabet.

Q 67. Ans. (b)

Explanation:

- **1 is correct.** The passage states the IPCC provides evidence linking human activities to global warming and climate change, supporting this inference.
- **2 is correct.** It mentions a minority challenging climate science, supported financially by fossil fuel companies, indicating ongoing denial despite scientific consensus.
- Inferences **3 and 4** are incorrect because the passage indicates the IPCC addresses various climate change impacts beyond temperature increases, and climate denial involves broader support than just fossil fuel companies, including politicians and media campaigns

Q 68. Ans. (a)

Explanation:

- **Option a is correct:** Reflects the accurate information from the passage, noting a decline in teenage vaping rates in 2020 but emphasizing that electronic cigarette use remains prevalent among middle and high school students, according to the CDC in 2021.
- **Option b is Incorrect:** Goes beyond the information provided, suggesting that vaping has entirely replaced traditional cigarette smoking, which is not explicitly stated in the passage.
- **Option c Incorrect:** Misrepresents the CDC's stance, as the passage indicates that the CDC considers vaping unsafe for specific groups, including youth, pregnant women, and those who do not currently use tobacco products.
- **Option d is Incorrect:** Incorrect because the passage implies a correlation between vaping and tobacco use among youth by stating that vaping became the most common form of tobacco use among people under 25 since 2014.

Q 69. Ans. (d)

Explanation

- Neither of the statements is independently sufficient as

the average age and the strength of different classes are mentioned in two different statements.

- Combining both statements, even if class VIII forms 25% of the total strength, the average age will be less than 17 years. This is shown below:
- Let the strength of the school be 10k and that of the class VIII students be 2.5k. In that case, the strength of the remaining classes is 7.5k. Hence, the average age of the school $\rightarrow (2.5k \times 18 + 7.5k \times 16)/10k = 16.5$ years
- Hence, the average age will be less than 17 years. If the strength of the VIII class is less than 25%, the average age would be less than 16.5 years.

Q 70. Ans. (d)

Explanation

Original plan = $48000/12 = 4000$

Situation after 4 students out = $48000/8 = 6000$

Final situation after the teacher contribution = $(48000 - 8000)/8 = 5000$

So, both the statements are incorrect.

Q 71. Ans. (d)

Explanation

Given, a value of 30% of votes cast = 840

$\Rightarrow 1\% = 28$

$\Rightarrow 100\% = 2800$

It is given that only 70% of the total registered votes have been cast

So, this is the value of 70%

$\Rightarrow 70\% = 2800$

$\Rightarrow 1\% = 40$

$\Rightarrow 100\% = 4000$

Q 72. Ans. (c)

Explanation

R P Q S T

- Both Statement-1 and Statement-2 are sufficient to answer the Question
- Because 4th and 5th place will be decided by statement 2

Q 73. Ans. (d)

Explanation:

- Option a is incorrect because the passage suggests persistent inequalities in digital participation and limited attention to class differences in online mobilization, indicating that online resources are not equally accessible to all social classes.
- Option b is incorrect as the passage does not predict an inevitable reduction in democratic participation due to the incorporation of new technologies.
- Option c is incorrect because the passage states that studies of the role of the internet in movement dynamics have not extensively addressed the implications of class differences for online mobilization.

- Option d is correct because it accurately summarizes the passage, stating that scholars have identified persistent inequalities in digital participation and suggest that class differences may impact online mobilization in political movements.

Q 74. Ans. (d)

Explanation:

- Option a is incorrect because the passage does not suggest that women in care work receive higher wages compared to men.
- Option b is incorrect as the passage acknowledges that the wage penalty in care work is not solely attributed to gender disparities but includes factors like education and employment experience.
- Option c is incorrect because the passage does not claim that all individuals in care work face the same relative wage penalty; it discusses the penalty affecting both men and women.
- Option d is correct because it accurately captures the main point of the passage. The passage states that care work pays less than other occupations after accounting for various factors like education, employment experience, occupation and industry characteristics, and individual fixed effects.

Q 75. Ans. (c)

Explanation

A, B, C, D - Two married couples

Women are Shorter than their husband

A is the tallest among the 4

Hence, he (A) is a male.

Married

C is taller than B

D is B's brother

All are Married

So, all four have family ties,

A is the wife of B

C is the wife of D

Hence, C is taller than D is the wrong statement.

Q 76. Ans. (b)

Explanation

Let total number of members be 100,

Then, number of members owning only 2 cars = 20.

Number of members owning 3 cars = 40% of 80 = 32.

Number of members owning only 1 car = $100 - (20 + 32) = 48$.

Thus, 48% of the total members own one car each.

Q 77. Ans. (d)

Explanation

- Option (d) is correct.
- Because all the above statements are not inter-related and do not provide sufficient information.

Q 78. Ans. (c)

Explanation

Let the length of the train of A and B is $2x$ and $3x$ respectively.

\Rightarrow Speed of train A = $2x/4$,

Speed of train B = $3x/5$

\Rightarrow Speed in same direction = $3x/5 - 2x/4 = 0.10x$

\Rightarrow Total time taken to cross each other = $(2x + 3x)/0.10x = 5/0.10 = 50$ second

Speed in opposite direction = $3x/5 + 2x/4 = 1.10x$

Total time taken to cross each other = $(2x + 3x)/1.10x = 5/1.10 = 4.5$ second

Q 79. Ans. (c)

Explanation

- Statement – I Between 3:16 pm and 3:17 pm both the hour hand and minute hand coincide
- This statement is true
- Statement-2 Between 4:58 pm and 4:59 pm both minute hand and Second hand coincide. This statement is also true
- During every minute both minute hand and Second hand coincide, hence
- Option 3, Both 1 and 2 is correct

Q 80. Ans. (b)

Explanation

No. of pumps = $(9 \times 8 \times 18 \times 1) / (9 \times 12 \times 2) = 6$

