

Q1) Question: How many numbers in the form of $2^n - 1$, which are less than 1000 are prime numbers?

Statement I: " n " is a natural number.

Statement II: Only two factors are possible for a natural number to be a prime number.

Which one of the following is correct in respect of the above question and the statements?

- a) The question can be answered by using one of the statements alone, but cannot be answered using the other statement alone.
- b) The question can be answered by using either statement alone.
- c) The question can be answered by using both the statements together, but cannot be answered using either statement alone.
- d) The question can be answered even without using any of the statements.

Q2) X is a number formed by writing 9 for 99 times. What will be the remainder of this number when divided by 7?

- a) 1
- b) 3
- c) 4
- d) 5

Q3) The average of 3 consecutive natural numbers (which are in increasing order) is " n ". If two more consecutive numbers, just next the first set of numbers, is added, then the new average becomes:

- a) $n+2$
- b) $n+1$
- c) $(2n+1)/2$
- d) $n-1$

Q4) If $X^2 = \text{ABCDEFEDCBA}$, Where A, B, C, D, E and F are different non-zero digits, then how many digits does the number X have?

- a) 5
- b) 6
- c) 9
- d) 11

Q5) If a number ABCDEF.....96D is divisible by 8, then what is the value of A, B & C?

- a) A= 2, B=4, C=8
- b) A=1, B=2, C=0
- c) A= 4, B= 2, C= 8
- d) A, B, C can be any digit

Q6) A five-digit number XY235 is divisible by 3 where X and Y are digits satisfying $X + Y \leq 5$. What is the number of possible pairs of values of (X, Y)?

- (a) 5 (b) 6 (c) 7 (d) 9

Q7) It is given that 5 does not divide $n - 1$, n and $n + 1$, where n is a positive integer. Which one of the following is correct?

- (a) 5 divides $(n^2 + 1)$
- (b) 5 divides $(n^2 - 1)$
- (c) 5 divides $(n^2 + n)$
- (d) 5 divides $(n^2 - n)$

Q8) What is the remainder when

$70 \times 71 \times 72 \times 73 \times 74 \times 75 \times 76 \times 77 \times 78 \times 79$

is divided by 1000?

- (a) 3 (b) 2 (c) 1 (d) 0

Q9) The digit in the unit place of the resulting number of the expression $(A1)^{100} + (B5)^{101} + (C6)^{102}$ is

- (a) 6
(b) 4
(c) 2
(d) 0

Q10) XYZ is a 3-digit number, where X, Y, Z are distinct non-zero digits. The difference between the two 3-digits numbers XYZ and YXZ is 90. How many possible values exist for the sum $(X + Y)$?

- (a) 9
(b) 8
(c) 7
(d) 6

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

Passage-1

Political theorists no doubt have to take history of injustice, for example, untouchability, seriously. The concept of historical injustice takes note of a variety of historical wrongs that continue into the present in some form or the other and tend to resist repair. Two reasons might account for resistance to repair. One, not only are the roots of injustice buried deep in history, injustice itself constitutes economic structures of exploitation, ideologies of discrimination and modes of representation. Two, the category of historical injustice generally extends across a number of wrongs such as economic deprivation, social discrimination and lack of recognition. This category is complex, not only because of the overlap between a number of wrongs, but because one or the other wrong, generally discrimination, tends to acquire partial autonomy from others. This is borne out by the history of repair in India.

Q11) What is the main idea that we can infer from the passage?

- (a) Untouchability in India has not been taken seriously by political theorists.
(b) Historical injustice is inevitable in any society and is always beyond repair.
(c) Social discrimination and deprivation have their roots in bad economies.
(d) It is difficult, if not impossible, to repair every manifestation of historical injustice.

Q12) On the basis of the above passage, the following assumptions have been made:

1. Removal of economic discrimination leads to removal of social discrimination.
2. Democratic polity is the best way to repair historical wrongs.

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-2

Artificial Intelligence (AI) has emerged as a transformative force shaping contemporary societies across the globe. Its influence extends beyond technological innovation into economic structures, social relationships and systems of governance. AI-driven automation has enhanced efficiency and

productivity, but it has also disrupted traditional forms of employment and raised concerns about inequality. Moreover, the increasing reliance on algorithmic decision-making has implications for accountability, transparency and ethical responsibility. These challenges are not isolated; they overlap and reinforce one another, making policy responses complex. While AI offers possibilities for improved healthcare, education and public administration, its benefits are unevenly distributed and often depend on existing social and economic conditions. As with earlier technological revolutions, the impact of AI is shaped not only by the technology itself but also by the political and institutional frameworks that govern its use.

Q13) What is the main idea that we can infer from the passage?

- (a) Artificial Intelligence will inevitably eliminate most forms of human employment.
- (b) The impact of Artificial Intelligence is multifaceted and shaped by social and institutional contexts.
- (c) Ethical concerns related to AI are more important than its economic benefits.
- (d) Technological change always leads to greater social inequality.

Q14) On the basis of the above passage, the following assumptions have been made:

1. The consequences of Artificial Intelligence cannot be understood independently of social and economic structures.
2. Strong political and institutional frameworks are necessary to manage the effects of Artificial Intelligence.

Which of the above assumptions is/are valid?

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

Q15) If $11x + 5y$ is a prime number where x, y are natural numbers, then what is the minimum value of $(x + y)$?

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

Q16) If x is a negative real number, then which of the following are not correct?

1. There is some natural number k such that $kx > 0$
2. $x^2 + x > 0$ always
3. $2x < x < -x$
4. x^2 is always a rational number

Select the correct answer using the code given below

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

Q17) Every prime number of the form $3k + 1$ can be represented in the form $6m + 1$ (where, k and m are integers), when

- (a) k is odd
- (b) k is even

- (c) k can be both odd and even
(d) No such form is possible

Q18) If $A_n = P_n + 1$, where P_n is the product of the first n prime numbers, then consider the following statements

1. A_n is always a composite number.
2. $A_n + 2$ is always an odd number.
3. $A_n + 1$ is always an even number.

Which of the above statements is/are correct?

- (a) Only 1
(b) Only 2
(c) Only 3
(d) 2 and 3

Q19) What is the smallest natural number n such that the total number of zeros in the product of $n \times (n - 1) \times (n - 2) \times \dots \times 3 \times 2 \times 1$ will be 12?

- (a) 51 (b) 52 (c) 53 (d) 54

Q20) If $I = a^2 + b^2 + c^2$, where a and b are consecutive integers and $c = ab$, then I is

- (a) an even number and it is not a square of an integer
(b) an odd number and it is not a square of an integer
(c) square of an even integer
(d) square of an odd integer

Q21) Question: What is the present age of the youngest member of the family?

Statement I: Three years prior to the present time, the average age of all the members then living in a family was 18 years.

Statement II: After that time, a new member was added to the family and the average age of all the members at present is numerically equal to the average age that existed three years ago.

Which one of the following is correct in respect of the above question and the statements?

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

Q22) Question: What is the selling price of the land, if a man sold this land at a profit of 8%.

Statement I: If the plot had been sold at a profit of 5%, the selling price would have been ₹ 270 less than the earlier selling price.

Statement II: If the same plot had been sold at a profit of 15%, the selling price would have been ₹ 630 more than the earlier selling price.

Which one of the following is correct in respect of the above question and the statements?

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

Q23) A question is given followed by two Statements I and II. Consider the question and the Statements and mark the correct option.

Question : If the price of petrol goes up by 20%, by what percentage should the consumption be reduced, so that the expenditure remains the same?

Statement I: The price of petrol per litre was ₹ 90.

Statement II: Consumption was 24 L before the price hike.

Which one of the following is correct in respect of the above question and the statements?

- (a) The question can be answered by using one of the statements alone, but cannot be answered using the other statement alone
- (b) The question can be answered by using either statements alone
- (c) The question can be answered by using both the statements together, but cannot be answered using either statements alone
- (d) The question cannot be answered even without using any of the statements

Q24) A shopkeeper makes a profit of 20% by selling a book. What would be the percentage change in the profit percent had he paid 10% less for it and the customer paid 10% more for it?

- (a) 120%
- (b) 125%
- (c) 133.33%
- (d) 150%

Directions for the following 4 (four) items:

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

Passage-1

With the digital phenomenon restructuring most social sectors, it is little surprise that global trade negotiations are now eyeing the digital area in an attempt to pre-emptively colonise it. Big Data is freely collected or mined from developing countries, and converted into digital intelligence in developed countries. This intelligence begins to control different sectors and extract monopoly rents. A large foreign company providing cab service, for instance, is not a work of cars and drivers, it is digital intelligence about commuting, public transport, roads, traffic, city events, personal behavioral characteristics of commuters and drivers and so on.

Q25) Which one of the following is the most logical and rational corollary to the above passage?

- (a) Globalization is not in the interests of India as it undermines its socio-economic structures.
- (b) India should be careful to protect its digital sovereignty in global trade talks.
- (c) India should charge monopoly rents from multinational companies in exchange for Big Data.
- (d) The loss of Big Data from India is proportional to the degree/value of its foreign trade.

Q26) Which of the following is most definitively implied by the above passage?

- (a) Big Data is the key resource in the digital space.
- (b) Big economies create Big Data.
- (c) Access to Big Data is the prerogative of developed countries.
- (d) Access to and possession of Big Data is a characteristic of developed countries.

Passage-2

India's aspiration to become the world's third largest economy is shaped as much by structural constraints as by growth opportunities. While rapid expansion in services, digital infrastructure and domestic consumption has driven recent economic momentum, persistent challenges remain. Low labour productivity, uneven industrial growth and a large informal sector limit the capacity for sustained high growth. Inadequate human capital development, particularly in health and education,

further constrains long-term competitiveness. Moreover, infrastructural bottlenecks, fiscal pressures and regional disparities complicate policy execution. These challenges are interlinked; deficiencies in one area often reinforce weaknesses in others. Consequently, economic size alone does not guarantee resilience, and the quality of institutions, governance and inclusive growth strategies will determine whether India's economic ascent can be sustained.

Question 27) Which one of the following is the most logical and rational corollary to the above passage?

- (a) India must prioritize rapid GDP growth even at the cost of social sector spending.
- (b) Structural reforms and institutional strengthening are essential for sustaining India's economic rise.
- (c) India's informal sector is the principal driver of its economic growth.
- (d) Economic size alone is sufficient to ensure global economic leadership.

Question 28) Which of the following is most definitively implied by the above passage?

- (a) India's economic growth is primarily driven by manufacturing expansion.
- (b) Challenges to India's growth are isolated and can be addressed independently.
- (c) Long-term economic success depends on improving productivity and human capital.
- (d) Regional disparities have little impact on national economic outcomes.

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

Passage-1

Natural selection cannot anticipate future environments on the earth. Therefore, the set of existing organisms can never be fully prepared for environmental catastrophes that await life. An outcome of this is the extinction of those species which cannot overcome environmental adversity. This failure to survive, in modern terms, can be attributed to the genomes which are unable to withstand geological vagaries or biological mishaps (infections, diseases and so on). In biological evolution on the earth, extinction of species has been a major feature. The earth may presently have up to ten million species, yet more than 90% of species that have ever lived on the earth are now extinct. Once again, the creationist doctrines fail to satisfactorily address why a divine creator would firstly bother to create millions of species and then allow them to perish. The Darwinian explanation for extinct life is once again simple, elegant and at once convincing — organisms go extinct as a function of environmental or biological assaults for which their inheritance deems them ill-equipped. Therefore, the so-called Darwinian theory of evolution is not a theory at all. Evolution happens — this is a fact. The mechanism of evolution (Darwin proposed natural selection) is amply supported by scientific data. Indeed, to date no single zoological, botanical, geological, paleontological, genetic or physical evidence has refuted either of the central two main Darwinian ideas. If religion is not taken into consideration, Darwinian laws are acceptable just like the laws proposed by Copernicus, Galileo, Newton and Einstein — sets of natural laws that explain natural phenomena in the universe.

Q29) According to the passage, natural selection cannot anticipate future environments on the earth as

- (1) species not fully prepared to face the environmental changes that await them will face extinction.
- (2) all the existing species would get extinct as their genomes will not withstand biological mishaps.
- (3) inability of the genome to withstand environmental changes would result in extinction.
- (4) extinction of species is a common feature.

Select the correct answer using the code given below:

- (a) 1, 2 and 3

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

Q30) The passage suggests that Darwinian theory of evolution is not a theory at all because

- (a) it does not satisfy the creationist doctrine
- (b) extinction is a function of environment and biological assaults
- (c) there are no evidences to refute it
- (d) existence of organisms is attributed to a creator

Q31) With reference to the passage, the following assumptions have been made:

- (1) Only species that have the ability to overcome environmental catastrophes will survive perpetually.
 - (2) More than 90% of the species on the earth are in the danger of getting extinct due to drastic changes in the environment. Darwin's theory explains all the natural phenomena.
- Which of the above assumptions is/are valid?

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

Passage-2

If presents bring less thrill now that we are grown up, perhaps it is because we have too much already; or perhaps it is because we have lost the fullness of the joy of giving, and with it the fullness of the joy of receiving. Children's fears are poignant, their miseries are acute, but they do not look too forward nor too far backward. Their joys are clear and complete, because they have not yet learnt always to add 'but' to every proposition. Perhaps we are too cautious, too anxious, too sceptical. Perhaps some of our cares would shrink if we thought less about them and entered with more single-minded enjoyment into the happiness that come our way.

Q32) With reference to the passage, which one of the following statements is correct?

- (a) It is not possible for adults to feel thrilled by presents.
- (b) There can be more than one reason why adults feel less thrilled by presents.
- (c) The author does not know why adults feel less thrilled by presents.
- (d) Adults have less capacity to feel the joy of loving or being loved.

Q33) The author of the passage is against

- (a) worrying too much about the past and future
- (b) being in the habit of thinking about presents
- (c) not being thrilled by new things
- (d) giving and receiving joy only partially

Q34) The product of two integers p and q , where $p > 60$ and $q > 60$ is 7168 and their HCF is 16. The sum of these two integers is

- (a) 256
- (b) 184
- (c) 176
- (d) 164

Q35) Three cars A, B and C started from a point at 5 pm, 6 pm and 7 pm, respectively and travelled at uniform speeds of 60 km/h, 80 km/h and x km/h, respectively in the same direction. If all the three meet at another point at the same instant during their journey, then what is the value of x ?

- (a) 120
- (b) 110

- (c) 105
(d) 100

Q36) X, Y and Z travel from the same place with uniform speeds 4 km/h, 5 km/h and 6 km/h respectively. Y starts 2 h after X. How long after Y must Z start in order that they overtake X at the same instant?

- (a) $3/2$ h
(b) $4/3$ h
(c) $9/8$ h
(d) $11/8$ h

Q37) The strength of a school increases and decreases in every alternate year by a%. It started with an increase in the year 2020. Then, the percentage change in the strength of the school in 2023, as compared to that in 2020, is

- (a) Increase of $(a^2/100)$
(b) Decrease of $(a^2/100)$
(c) Increase of a
(d) Decrease of a

Q38) In a hostel the rent per room is increased by 20%. If the number of rooms in the hostel is also increased by 20% and the hostel is always full, then what is the percentage change in the total collection at the cash counter?

- (a) 30%
(b) 40%
(c) 44%
(d) 48%

Q39) A person sold an article for ₹ 75 which cost him ₹ x. He finds that he realised x% profit on his outlay. What is x equal to?

- (a) 20
(b) 25
(c) 50
(d) 100

Q40) A question is given followed by two Statements I and II. Consider the question and the statements and mark the correct option.

Question: The ratio of P's salary to Q's salary is 6 : 5. How much is P's expenditure?

Statement I: The ratio of P's saving to Q's saving is 3 : 2.

Statement II: The ratio of P's expenditure to Q's expenditure is 1 : 1.

Which one of the following is correct in respect of the above question and the statements?

- (a) The question can be answered by using one of the statements alone, but cannot be answered using the other statement alone.
(b) The question can be answered by using either statement alone.
(c) The question can be answered by using both the statements together, but cannot be answered using either statements alone.
(d) The question cannot be answered even by using both the statements together.

Q41) If P^2 varies as R and Q^2 varies as $R(P + Q)$, then which of the following are correct?

1. $P^2 + Q^2$ varies as R

2. PQ varies as R
3. $P^2 - Q^2$ varies as R

Select the correct answer using the code given below :

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

Q42) p varies directly as q and inversely as square of r, what is the percentage increase in p due to an increase in q by 20% and a decrease in r by 20%?

- (a) 87.5%
(b) 85%
(c) 82.5%
(d) 80%

Q43) The average of the first 5 natural numbers is "m". If the next 3 natural numbers are included, then the average of these 8 numbers will be how much more than m?

- a) 2
b) 1
c) 1.5
d) 1.6

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

Passage-1

To tackle the problem of pollution in cities, policy makers think that drastic actions like temporary use of odd-even number scheme for vehicles, closing schools, factories, construction activities, and banning the use of certain type of vehicles are a way forward. Even then the air is not clean. Vehicles more than 15 years old comprise one percent of the total; and taking them off the road will not make any difference. Banning certain fuels and car types arbitrarily is not proper. Diesel engines produce more PM 2.5 and less CO_2 than petrol or CNG engines. On the other hand, both diesel and CNG engines produce more NO_x than petrol engines. No one has measured the amount of NO_x that CNG engines are emitting. Arbitrary bans on vehicles that have passed mandated fitness tests and periodic pollution tests are unfair. What is needed is the scientific and reliable information about the source of pollutants on a continuing basis and the technologies that will work to reduce pollution from them.

Q44) Which one of the following statements best reflects the most logical and rational implication conveyed by the passage?

- (a) Arbitrary curbs on vehicles to reduce pollution are difficult to implement.
(b) Knee-jerk reactions cannot solve the problem of pollution but an evidence-based approach will be more effective.
(c) A heavy penalty should be enforced on those driving without periodic pollution tests.
(d) In the absence of laws to deal with the problem of pollution, the administration tends to make arbitrary decisions.

Passage-2

Good corporate governance structures encourage companies to provide accountability and control. A fundamental reason why corporate governance has moved onto the economic and political agenda worldwide has been the rapid growth in international capital markets. Effective corporate governance enhances access to external financing by firms, leading to greater investment, higher

growth and employment. Investors look to place their funds where the standards of disclosure, timely and accurate financial reporting, and of equal treatment to all stakeholders are met.

Q45) Which of the following statements best reflects the logical inference from the passage given above?

- (a) It is an important agenda of the countries around the world to ensure access to good external financing.
- (b) Good corporate governance improves the credibility of the firms.
- (c) International capital markets ensure that the firms maintain good corporate governance.
- (d) Good corporate governance paves the way for robust supply chains.

Passage-3

Elephants are landscape architects, creating clearings in the forest, preventing overgrowth of certain plant species and allowing space for the regeneration of others, which in turn provide sustenance to other herbivorous animals. Elephants eat plants, fruits and seeds, propagating the seeds when they defecate in other places as they travel. Elephant dung provides nourishment to plants and animals and acts as a breeding ground for insects. In times of drought, they access water by digging holes which benefits other wildlife.

Q46) Which one of the following statements best reflects the most logical and rational inference that can be drawn from the passage?

- (a) The home range of elephants needs to be a vast area of rich biodiversity.
- (b) Elephants are the keystone species and they benefit the biodiversity.
- (c) Rich biodiversity cannot be maintained in the forests without the presence of elephants.
- (d) Elephants are capable of regenerating forests with species as per their requirement.

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

Passage -1

When a child reaches adolescence, there is apt to be a conflict between the parents and the child, since the latter considers himself to be by now quite capable of managing his own affairs, while the former are filled with parental solicitude, which is often a disguise for love of power. Parents consider, usually, that the various moral problems which arise in adolescence are peculiarly their province. The options they express, however, are so dogmatic that the young seldom confide in them and usually go their own way in secret.

Q47) Based on the above passage, the following assumptions have been made:

1. The adolescent does not feel comfortable with his parents because they tend to be dominating and assertive.
2. The adolescent of modern times does not have much respect for parents.

Which of the assumptions given above is/are valid?

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

Q48) Which one of the following statements best reflects the central idea of the above passage?

- (a) Parents in general may not be of much help when children are on their way to becoming adults.
- (b) When children reach adolescence, involvement of parents in their lives is unnecessary.
- (c) Modern-day nuclear families are not capable of bringing up children properly.

(d) In modern societies, adolescents tend to be stubborn, disobedient and careless.

Passage-2

Unlike religion and science, poetry does not posit or expect an abiding belief in absolute truths. Those forces or individuals who claim to have absolute truths in their grasp tend to turn dictatorial and tyrannical. Truth usually does not admit any contradictions or imperfections. It is unitarian. It is, therefore, not of much use for poetry. Poetry abides by the plurality of life and existence. Perhaps poetry follows reality which is plural, anachronistic, full of contradictions. Against the tyranny of truth, poetry remains a partisan of democratic reality. Against the arrogance of power, wealth and hierarchy, poetry proposes both humility and defiance.

(49) Which one of the following statements best reflects the most logical and rational message conveyed by the above passage?

- (a) It is the poetry, not science or religion, which recognizes and accepts imperfections in humans.
- (b) Truth is revealed through science or religion and poetry is anathema to truth.
- (c) Poetry is romantic, imaginary and is about feeling whereas science and religion are about truth.
- (d) In a world of violence, tyranny and bigotry, poetry is a form of dynamic resistance.

Passage-3

The flower was not invented to please us. It flaunted its petals and spread its perfume to attract an insect. The insect carries the pollen from flower to flower so that pollen is not carried away by wind and thus not wasted. What we call a flower's beauty is merely a by-product and a human invention. The perfume is not there to please us, it pleases us because it is there and we have been conditioned to it.

Q50) Based on the above passage, the following assumptions have been made:

The author of the passage believes that flowers are creations of Nature's luxury.

The author of the passage does not believe in the usefulness of flowers except as things of beauty.

Which of the assumptions given above is/are valid?

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

Q51) If average weight of A, B, C and D is given in the following manner

Weight of A = Weight of B ; Weight of B = Weight of C & Weight of C = Weight of D

Value I : Average Weight of A, B and C

Value II : Average Weight of B, C and D

Value III : Average Weight of A, C and D

Which of the following is correct?

- 1) Value-I < Value-II < Value-III
- 2) Value-I > Value-II > Value-III
- 3) Value-I < Value-II = Value-III
- 4) Value-I = Value-II = Value-III

Q52) Question: What is the ratio of work efficiency of A and B?

Statement I: A can do a piece of work in X days and B can do the same work in 4X days.

Statement II: A completes a work in 4 days and B completes the same work in 16 days.

Which one of the following is correct in respect of the above question and the statements?

- (a) The question can be answered by using one of the statements alone, but cannot be answered using the other statement alone.

- (b) The question can be answered by using either statement alone.
- (c) The question can be answered by using both the statements together, but cannot be answered using either statements alone.
- (d) The question can be answered even by using both the statements.

Q53) A, B and C alone work on the same project. A alone completes a work in X days . B is 50% more efficient than A and C is twice as efficient as B.

Value I = Time taken by A to complete the project

Value II = Time taken by B to complete the project

Value III = Time taken by C to complete the project

Which of the following is correct?

- a) Value-I < Value-II < Value-III
- b) Value-I > Value-II > Value-III
- c) Value-I < Value-II = Value-III
- d) Value-I = Value-II = Value-III

Q54) The letters A,B,C,D and E are arranged in such a way that there are exactly two letters between A and E. How many such arrangements are possible?

- a) 12
- b) 18
- c) 24
- d) 36

Q55) There are nine points in a plane such that exactly three points out of them are collinear. Find the number of triangles that can be formed using these points as vertices?

- a) 81
- b) 90
- c) 9
- d) 83

Q56) If AAA and CC6 are both 3 digit numbers such that A, B, C are distinct digits. $AAA + CC6 = 1BBB$ then what are the possible values of $A+B+C$

- a) 9, 15 & 17
- b) 15, 17 & 19
- c) 9, 16 , 17
- d) 15, 16, 17

Q57) Lakshmi, her brother, her daughter and her son are badminton players. A game of doubles is about to begin:

- i. Lakshmi's brother is directly across the net from her daughter.
- ii. Her son is diagonally across the net from the worst player's sibling.
- iii. The best player and the worst player are on the same side of the net.

Who is the best player?

- (a) Her brother
- (b) Her daughter
- (c) Her son
- (d) Lakshmi

Q58) ABE: 8 :: KOL :?

- a) 37
- b) 38
- c) 39

d) 40

Q59) What is X in the sequence

13, 17, 25, 41, X, 113

a) 60

b) 67

c) 69

d) 85

Q60) If $7 \oplus 9 \oplus 10 = 8$, $9 \oplus 11 \oplus 30 = 5$, $11 \oplus 17 \oplus 21 = 13$, what is the value of $23 \oplus 4 \oplus 15$?

(a) 6

(b) 8

(c) 13

(d) 15

Q61) The letters of the word "INCOMPREHENSIBILITIES" are arranged alphabetically in reverse order. How many positions of the letter/letters will remain unchanged?

(a) None

(b) One

(c) Two

(d) Three

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

Passage-1

In our schools, we teach our children all that is there to know about physics, maths and history and what-have-you. But do we teach them about the bitter caste divide that plagues the country, about the spectre of famine that stalks large parts of our land, about gender sensitivity, about the possibility of atheism as a choice, etc.? Equally important, do we teach them to ask questions, or do we teach them only to passively receive our wisdom? From the cocooned world of school, suddenly, the adolescent finds himself/herself in the unfettered world of university. Here he/she is swept up in a turmoil of ideas, influences and ideologies. For someone who has been discouraged from asking questions and forming an opinion, this transition can be painful.

Q62) Which one of the following statements best reflects the central idea of the passage given above?

(a) School curriculum is not compatible with the expectations of children and parents.

(b) Emphasis on academic achievements does give time for development of personality and skills.

(c) Preparing the children to be better citizens should be the responsibility of the education system.

(d) To be a better citizen, the present world order demands societal and life-coping skills in addition to academic content.

Passage-2

The contemporary climate crisis is no longer a distant or abstract concern but a lived reality shaping economic, social and political outcomes across the world. Rising global temperatures have intensified extreme weather events such as floods, droughts and heatwaves, disproportionately affecting vulnerable populations. While technological innovation and renewable energy transitions offer potential pathways to mitigation, their adoption remains uneven and constrained by economic interests and political inertia.

Moreover, climate change has exposed deep structural inequalities between nations. Countries that have contributed least to historical greenhouse gas emissions often bear the heaviest burden of climate-induced losses, ranging from food insecurity to forced migration. International climate

negotiations frequently reflect this imbalance, with commitments diluted by short-term national priorities rather than long-term collective responsibility.

The challenge, therefore, is not merely environmental but institutional and ethical. Addressing climate change requires rethinking development models, aligning economic incentives with ecological sustainability, and fostering global cooperation rooted in equity rather than expediency.

Q63) Which one of the following statements best reflects the central idea of the passage?

- (a) Climate change is primarily an environmental problem caused by technological limitations.
- (b) Extreme weather events are unavoidable consequences of economic development.
- (c) The climate crisis is intertwined with global inequality, governance failures and ethical concerns.
- (d) Renewable energy adoption alone can resolve the current climate crisis.

Q64) On the basis of the above passage, the following assumptions have been made:

Climate change mitigation efforts are hindered more by political and economic factors than by lack of technology.

Effective climate action requires a reorientation of global development priorities toward equity and sustainability.

Which of the assumptions given above is/are valid?

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

Ans: 63: C & 64:C

Passage-3

In India, the segregation of municipal waste at source is rare. Recycling is mostly with the informal sector. More than three-fourths of the municipal budget goes into collection and transportation, which leaves very little for processing/resource recovery and disposal. Where does waste-to-energy fit into all this? Ideally it fits in the chain after segregation (between wet waste and rest), collection, recycling, and before getting to the landfill. Which technology is most appropriate in converting waste to energy depends on what is in the waste (that is biodegradable versus non-biodegradable component) and its calorific value. The biodegradable component of India's municipal solid waste is a little over 50 per cent, and biomethanation offers a major solution for processing this.

Q65) Based on the above passage, the following assumptions have been made:

Collection, processing and segregation of municipal waste should be with government agencies.

Resource recovery and recycling require technological inputs that can be best handled by private sector enterprises.

Which of the assumptions given above is/are correct?

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

Q66) Which one of the following statements best reflects the crux of the passage?

- (a) Generation of energy from municipal solid waste is inexpensive.
- (b) Biomethanation is the most ideal way of generating energy from municipal solid waste.
- (c) Segregation of municipal solid waste is the first step in ensuring the success of waste-to-energy plants.
- (d) The biodegradable component of India's municipal solid waste is not adequate to provide energy from solid waste efficiently/effectively.

Q67) A, B, C, D, E and F are six members of a family. C is not the mother of B but B is the son of C. A and C are a married couple. E is the brother of C. F is the brother of B. D is the daughter of A. Which of the following statements are definitely true?

1. E is D's uncle.
2. F is wife of E
3. A and D are females.
4. B's mother is A.

Select the correct answer using the code given below:

- a) Only One
- b) Only Two
- c) Only Three
- d) Only Four

Q68) Read the following information to answer the questions:

E + F means E is the brother of F.

E - F means E is the sister of F.

E × F means E is the father of F.

E ÷ F means E is the mother of F.

Which of the following shows that T is the grandmother of W?

- (a) $T \times U + V \div W$
- (b) $T + U - V \div W$
- (c) $T + U \div V \times W$
- (d) $T \div U - V \times W$

Q69) Harsha walks 4 kms towards the north, turns right and walks 5 km. Then she turns towards the south and walks 2 km. Again she takes a turn towards west, walks 3 km and stops for a while. Then she further walks 2 km. What is her distance from the starting point?

- (a) 16 km
- (b) 2 km
- (c) 4 km
- (d) 3 km

Q70) If '+' implies '-', '-' implies '÷', '×' implies '÷' and '÷' implies '+', then insert the proper signs between the figures in the given equation:

$$12 _ 8 _ 4 _ 2 _ 1 = 15$$

- (a) ÷, ×, -, +
- (b) ÷, -, +, ×
- (c) +, -, ×, ÷
- (d) -, +, ÷, ×

Q71) In a certain code 'BIGB' is written as '2972' and 'ADO' is written as '146'. What should be the code for 'BINGO' in the same code?

- a) 29476
- b) 29176
- c) 29576
- d) 29976

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

Passage-1

The handloom sector occupies a unique place in India's socio-economic structure, as it provides livelihood support to millions of households with minimal capital investment. Unlike capital-intensive industries, handloom production relies primarily on human skill, local raw materials and traditional knowledge, making it especially suitable for rural and semi-urban areas where alternative employment opportunities are limited. By generating steady income within villages, the sector reduces distress migration and strengthens local economies. Moreover, the handloom industry promotes inclusive growth by engaging women, elderly artisans and marginalised communities who often face barriers in formal employment. The decentralised nature of handloom production allows income to be distributed across a wide base rather than concentrated in a few industrial centres. However, the sector's potential to alleviate poverty is constrained by challenges such as lack of market access, competition from mechanised textiles, inadequate credit facilities and limited technological upgradation. Addressing these constraints through targeted policy support, skill enhancement and market integration can significantly enhance the role of the handloom sector in poverty reduction.

Q72) Which one of the following statements best reflects the central idea of the passage?

- (a) Handloom production is more culturally valuable than industrial textile production.
- (b) The handloom sector can reduce poverty by generating inclusive and decentralised employment, provided structural challenges are addressed.
- (c) Migration from rural areas can be completely eliminated through handloom employment.
- (d) Mechanised textile industries are the main cause of poverty in rural India.

Q73) On the basis of the above passage, the following assumptions have been made:

Employment-intensive sectors are more effective than capital-intensive industries in addressing rural poverty.

The poverty-reducing potential of the handloom sector depends on policy support and better market integration.

Which of the assumptions given above is/are valid?

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

Passage-2

One of the dismal realities of the agricultural sector in independent India has been that it never experienced a high-growth phase, unlike the non-agricultural economy. The highest decadal growth (compound annual growth rate or CAGR) for agriculture has been just 3.5% in the 1980s. Also, after experiencing a spurt in decadal growth during the 1980s, agricultural growth suffered relative stagnation thereafter. This is in sharp contrast to non-agricultural growth, which consistently increased from the 1980s to 2000s.

Q74) Which one of the following statements best reflects the corollary to the above passage?

- (a) The benefit of economic reforms percolates down more slowly to the agriculture sector than in other sectors of the economy.
- (b) For India, the green revolution was not as useful as it was expected to be.
- (c) India lagged behind other countries in adapting mechanized and modern farming.
- (d) Rural-to-urban migration resulted in the stagnant agriculture sector.

Q75) With reference to the passage, the following assumptions have been made:

The growing divergence between the fortunes of the agricultural and non-agricultural economy in India could have been reduced/contained by:

- I. adapting large-scale cultivation of commercial crops and viable corporate farming.

II. providing free insurance for all crops and heavily subsidizing seeds, fertilizers, electricity and farm machinery at par with developed countries.

Which of the above assumptions is/are valid?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Q76) In a certain code 'BISNU' is written as 'YRHMF'. What should be the code for 'PINK' in the same coding system?

- a) KRPM
- b) KXYZ
- c) KRMP
- d) KPMR

Q77) In the question below are given three statements followed by four conclusions numbered I, II, III and IV. You have to take the three given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow(s) from the given statements disregarding commonly known facts.

Statements: All A are B. No B is C. Some D are C

Conclusion:

- I. Some D are A
- II. Some D are B
- III. Some A are C
- (a) Only I follows
- (b) Only III follows
- (c) None of these
- (d) Only II and III follow

Q78) In a 30 day month, there are five Saturdays. What will be the first day of the month?

- a) Saturday
- b) Friday
- c) Friday or Saturday
- d) Sunday

Q79) A is 16th from the left end in a row of boys and V is 18th from the right end. Q is 11th from A towards the right and 3rd from V towards the right end. How many boys are there in the row? (2020)

- (a) 40
- (b) 41
- (c) 42
- (d) Cannot be determined due to insufficient data

Q80) If $x - y = 8$, then which of the following must be true? (2018)

Both x and y must be positive for any value of x and y.

If x is positive, y must be negative for any value of x and y.

If x is negative, y must be positive for any value of x and y.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2 nor 3



EXAM IAS
The Way to Success



EXAM IAS

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