PASSAGE 1 (Q.1 – Q.4)

Everything is made of atoms. That is the key hypothesis. The most important hypothesis in all of biology, for example, is that everything that animals do, atoms do. In other words, there is nothing that living things do that cannot be understood from the point of view that they are made of atoms acting according to the laws of physics. This was not known from the beginning: it took some experimenting and theorizing to suggest this hypothesis, but now it is accepted, and it is the most useful theory for producing new ideas in the field of biology. If a piece of steel or a piece of salt, consisting of atoms one next to the other, can have such interesting properties; if water–which is nothing but these little blobs, mile upon mile of the same thing over the earth–can form waves and foam, and make rushing noises and strange patterns as it runs over cement; if all of this, all the life of a stream of water, can be nothing but a pile of atoms, how much more is possible? If instead of arranging the atoms in some definite pattern, again and again repeated, on and on, or even forming little lumps of complexity like the odor of violets, we make an arrangement which is always different from place to place, with different kinds of atoms arranged in many ways, continually changing, not repeating, how much more marvelously is it possible that this thing might behave? Is it possible that that "thing" walking back and forth in front of you, talking to you, is a great glob of these atoms in a very complex arrangement, such that the sheer complexity of it staggers the imagination as to what it can do? When we say we are a pile of atoms, we do not mean we are merely a pile of atoms, because a pile of atoms which is not repeated from one to the other might not have the possibilities which you see before you in the mirror.

Q.1) With reference to the passage, the following assumptions have been made:

1. Experimentation and theory precede hypothesis

2. There are endless possibilities of recombination of atoms

3. There are multiple levels of complexity of atomic arrangement found in nature

4. Physics explains various phenomena occurring in the universe

Which of these assumptions are valid?

a) 1 and 2 only

b) 1 and 4 only

c) 1, 2 and 3 only

d) 2,3 and 4

Q.2) What is the crux of the passage?

a) The discovery of atoms transformed our understanding of the world

b) Despite the dazzling array of variety in the world, atoms are its building blocks

c) We should look at the world around us with a scientific temperament

d) The complexity of the world is staggering to the mind

Q.3) What is the most rational inference that can be made from the passage?

a) The existence of atoms is proven scientific fact

b) There are infinite possible arrangements of atoms

c) The behaviour of atoms in biological systems is not the same as in physical systems

d) Our perspective defines how we see the world around us

Q.4) Which of the following statements best indicates the motivation of the author of the passage

a) To simplify a complex concept

b) To demonstrate the application of a theory

c) To arouse interest in the reader's mind about a scientific fact

d) To propose a hypothesis

PASSAGE 2 (Q.5)

There is nothing new in what Gandhi said, believed or did. He himself once admitted when he said: "I have nothing new to teach the people. Truth and Non-Violence are as old as the hills". But the genius of Gandhi is that he articulated these concepts in a way nobody had done in the past; offering entirely a new interpretation to suit the requirement of his time, and in the context of the present predicaments that the world confront today, these ideas have become pivotal to guide the human destiny. Mahatma Gandhi left behind a prolific mass of literature on every aspect of life—political, social, economic, and ethical. Gandhi's writings consist of seven books, numerous articles and editorials in the weekly journals he edited at various times in his life. Besides the voluminous writings, Gandhi's own intervention in the political and social life of India during the period of empire and thereafter in South Africa and India reveals a remarkable journey of a man built on - truth and Non-violence, love and compassion, moral courage, simplicity and integrity. His vision of enduring commitment to social justice, normative economics, religious pluralism, and relentless striving for harmony between nature and human being have become excruciatingly important in the context of today and humanity can gain much from his moral wisdom which was the basis of his action.

Q.5) Which one of the following statements best reflects the central idea of the passage given above?
a) Gandhi's satyagraha became a major tool in the Indian struggle against British imperialism
b) Gandhi was a prolific writer
c) The enduring significance of Gandhi is due to his multifarious contributions to India and the World
d) We should push for more awareness and appreciation of Gandhi's contributions

PASSAGE 3 (Q.6)

The issue of 'migrants' has dominated the politics in Northeast India since the 1930s. It continues to play a decisive role in the region's politics during the postcolonial period. During 1979-85 it was the central issue in the anti- foreign national movement in Assam. In the discourse on ethnic or ethno-nationalist politics in Northeast India, the migrants are often alluded to as "outsiders" by the indigenous communities. In terms of group identities, migrants and indigenous communities broadly belong to different ethnic groups. In tribal areas, the differences between the migrants and indigenous communities are often manifested in the form of differences between the tribal and non-tribal groups. The tribal areas in the Northeast have often witnessed anti-outsider or antimigrant movements resulting in violence. Migration has been an important issue in election campaigns, non-electoral mobilisation, debates within the legislatures, and popular discourse in different states of Northeast India, especially Assam, Mizoram, Tripura and Meghalaya. The arrival of refugees from East Pakistan in the wake of the partition of the country or later Bangladesh and the question of citizenship in this century has also become central to political mobilisation in Northeast India.

Q.6) Which among the following statements best reflects the corollary to the passage given above?
a) The discourse over citizenship is a transitory phase in the politics of North Eastern India
b) Historical baggage of migration fuels the persistence of clashes in the region
c) The Government's approach to managing inter group dynamics is state dependent
d) Citizenship in the northeast has been a contentious issue since colonial times

Q.7) A drank Sprite and Sting, B drank Sprite and Cola, C drank Cola, Sting and Pepsi. After taking beverages, B and C fell sick. In the light of above facts, it can be said the cause of sickness is
a) Sprite
b) Sting
c) Cola
d) Pepsi

Q.8) *Statement:* Only good dancers are invited to the conference. No one without long legs is a good dancer

Conclusions:
1. All invited dancers in the conference have long legs.
2. Those dancers who do not have long legs are not invited to the conference.

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

Q.9) Shagun started early in the morning on the road towards the Sun. After some time, she turned to her left. Again, after some time she turned to her right. After moving some distance, she again turned to her right and began to move. At this time, in what direction was she moving?

a) South
b) North-West
c) North-East
d) East

Q.10) Gauhar is older than her cousin Muskaan. Muskaan's brother Viplow is older than Gauhar. When Muskaan and Viplow visit Gauhar, they like to play chess. Muskaan wins the game more often than Gauhar.

Based on the above information, four conclusions, as given below, have been made. Which one of these logically follows from the information given above?

a) While playing chess with Gauhar and Muskaan, Viplow often loses.
b) Gauhar is the oldest among the three.
c) Gauhar hates to lose the game.
d) Muskaan is the youngest of the three

Q.11) Statements:
A. Some actors are singers.
B. All the singers are dancers.

Conclusions:
1. Some actors are dancers.
2. No singer is an actor.

a) Only conclusion (1) follows
b) Only conclusion (2) follows
c) Either (1) or (2) follows
d) Neither (1) nor (2) follows

Q.12) I have a few sweets to be distributed. If I keep 2 or 4 in a pack, I am left with one sweet. If I keep 3 in a pack, I am left with none. What is the minimum number of sweets I have to pack and distribute?

a) 25
b) 09
c) 54
d) 49

Q.13) Examine the following statements:
1. Only those, who have a pair of spectacles, can become the members of the Special eye's club.
2. Some members of the Special eye's club have lenses.
3. Those members who have lenses can take part in ramp walk contests.

Which one of the following conclusion can be drawn from the above statements?

a) All those who have a pair of spectacles are members of the Special eye's club.
b) All members of the Special eye's club have a pair of spectacles.
c) All those who take part in ramp walk contests are members of the Special eye's club.
d) No conclusion can be drawn.

Direction for (Q.14): Examine the following three figures in which the numbers follow a specific pattern

432	
6	12

144	
4	9

704	
?	11

Q.14) The missing number (?) m the third figure above is

a) 8
b) 16
c) 10
d) 12

Q.15) If 4+9= 18, 5+8=20 and 5+6 =15, then the value of 8+112=?

a) 120
b) 448
c) 364
d) 520

Direction for (Q.16 – Q.20): There are eight friends namely A, B, C, D, E, F, G and H sitting around a circular table facing the centre. Moreover, each of them likes a different car, viz Ferrari, Volkswagen, Fiat, Safari, Scorpio, Mercedes, Ambassador and Duster, but not necessarily in the same order.

- F, who likes Ferrari, cannot be an immediate neighbour of C. E does not like Scorpio.
- C sits second to the right of A and he likes Duster. There are only two persons between A and D.
- E and G are immediate neighbours, while D and F are also immediate neighbours. B, who likes Fiat, sits third to the left of F.
- G does not like Mercedes or Scorpio. D sits third to the left of G.
- The person who likes Ambassador is sitting to the right of person who likes Duster. H likes Safari and is on the immediate right of the person who likes Ferrari.

Q.16) D likes which of the following car?
a) Scorpio
b) Ambassador
c) Safari
d) Volkswagen

Q.17) How many persons are sitting between C and E, when counted in the clockwise direction from C?
a) One
b) Two
c) Three
d) Four

Q.18) 'Mercedes' is liked by who among the following?
a) E
b) A
c) G
d) D

Q.19) If 'Ferrari' is related to 'Scorpio' in a certain way and 'Duster' is related to 'Volkswagen' in the same way, which of the following is 'Fiat' related to, following the same way?
a) Volkswagen

b) Fiat
c) Ambassador
d) Safari

Q.20) G likes which of the following car?
a) Duster
b) Scorpio
c) Mercedes
d) Volkswagen

Passage–3 (Q.21 - Q.23)

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

Justice is the first virtue of social institutions, as truth is of systems of thought. A theory however elegant and economical must be rejected or revised if it is untrue; likewise, laws and institutions no matter how efficient and well-arranged must be reformed or abolished if they are unjust. Each person possesses an inviolability founded on justice that even the welfare of society as a whole cannot override. For this reason, justice denies that the loss of freedom for some is made right by a greater good shared by others. It does not allow that the sacrifices imposed on a few are outweighed by the larger sum of advantages enjoyed by many. Therefore, in a just society, the liberties of equal citizenship are taken as settled; the rights secured by justice are not subject to political bargaining or to the calculus of social interests. The only thing that permits us to acquiesce in an erroneous theory is the lack of a better one; analogously, an injustice is tolerable only when it is necessary to avoid an even greater injustice. Being the first virtues of human activities, truth and justice are uncompromising. These propositions seem to express our intuitive conviction of the primacy of justice. No doubt they are expressed too strongly. It is necessary to work out a theory of justice in the light of which these assertions can be interpreted and assessed.

Q.21) With reference to the passage, which of the following assumptions have been made:

1. Every human being possesses an inalienable right to freedom.
2. Theories that are elegant and economical must be untrue.
3. Without justice, it is not possible for a social institution to function.
4. Humans have an embedded sense of justice in them.

Which of these assumptions given above are valid?

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

Q.22) Which one of the following is the most logical and rational inference implied in the passage?

a) Freedom is not subject to political bargaining.
b) Sometimes injustice is tolerable to humans.
c) Unjust institutions must be reformed.
d) Freedom is a precondition for justice.

Q.23) According to the passage, which one of the following is a reason for acceptance of unjust conditions?

a) When such conditions prevent a greater injustice
b) When the conditions do not compromise the truth
c) Lack of clear theory of justice
d) Availability of equal rights under equal citizenship

PASSAGE 4 (Q.24)

There is a particular set of problems that all people face, problems that are a direct result of the fact that our lives are carried out in finite space and time. What should we do, and leave undone, in a day or in a decade? What degree of mess should we embrace—and how much order is excessive? What balance between new experiences and favoured ones makes for the most fulfilling life? These might seem like problems unique to humans; they're not. For more than half a century, computer scientists have been grappling with, and in many cases solving, the equivalents of these everyday dilemmas. How should a processor allocate its "attention" to perform all that the user asks of it, with the minimum overhead and in the least amount of time? When should it switch between different tasks, and how many tasks should it take on in the first place? What is the best way for it to use its limited memory resources? Should it collect more data, or take an action based on the data it already has? Seizing the day might be a challenge for humans, but computers all around us are seizing milliseconds with ease. And there's much we can learn from how they do it.

Q.24) Which of the following statements best sums up the passage given above?

a) Optimization is an insurmountable challenge for mankind
b) Humans and computers share similar conundrums
c) Resource constraints of computers outnumber those of ordinary humans
d) All people face similar problems

Passage 5 (Q.25)

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

Laughter is usually an immediate, unpremeditated reaction. Normally, the explosion follows whatever it is that makes us laugh as promptly, or even more promptly, as the sneeze follows the snuff. And it is almost as short-lived. It is wholly bound up with the present moment. While we laugh, all thoughts of what lies behind and before us fade into the background. Provided the fit is free and hearty enough, we are defenseless. Laughter does not agree with any strenuous exercise. We are not ready for physical combat as long as we laugh. The serious long-term business of life recedes from our minds, and attention is focused on what goes on here and now. All energies are absorbed in the enjoyment of the present. All other activities are interrupted; we do nothing else; we laugh.

Q.25) Which of the following is the most logical and essential message from the above passage?

a) One cannot laugh in a pre-meditated and prepared fashion.

b) To avoid getting into physical fights, one should laugh regularly.

c) Laughter can be used to mask the painful memories of life.

d) The joy of laughing diminishes all ongoing issues of life, even if momentarily.

Q.26) If the L.C.M. and H.C.F. of two expressions are $(x^2 + 6x + 8)(x + 1)$ and $(x + 1)$ respectively and one of the expression is $(x^2 + 3x + 2)$ find the other.

a) $x^2 + 5x + 4$

b) $x^2 - 5x + 4$

c) $x^2 + 4x - 5$

d) $x^2 - 4x + 5$

Q.27) Rehman earns a profit of 25% on selling a knife at 40% discount on the printed price. The ratio of Cost price and the printed price is:

a) 25: 12

b) 12: 25

c) 13: 27

d) 27: 13

Q.28) Three friends start running on a circular path of a park. f_1, f_2, and f_3 complete one round in 30 minutes, 45 minutes and 15 minutes respectively. Then how many times they meet in 6 hours (excluding the time they start).

a) 2

b) 4

c) 3

d) Not even once

Q.29) The monthly average salary paid to all the employees of a company was Rs. 12000. The monthly average salary paid to male and female employees was Rs. 14000 and Rs. 10000 respectively. Then the percentage of males employed in the company is:

a) 40%

b) 60%

c) 50%

d) 80%

Q.30) When all the soldiers of a battalion are made to stand in a row of 45, 55 such rows are formed. If the soldiers are made to stand in a row of 25. How many such rows can be formed?

a) 81

b) 121

c) 99

d) 132

Q.31) All the six faces of a cube of a cube are coloured with six different colours - orange, indigo, silver, saffron, beige and grey.

1. Saffron face is opposite to the orange face.
2. Silver face is between saffron and orange faces.
3. Grey face is adjacent to beige face.
4. Indigo face is adjacent to grey face.
5. Saffron face is in the bottom.

Which face is opposite to silver?

a) Saffron
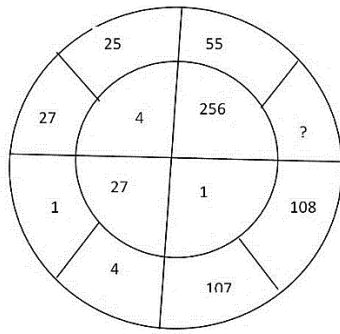
b) Beige

c) Grey

d) Indigo

Q.32) Pointing to a boy in the photograph Simi said, "He is the only son of the only child of my grandfather." How Simi is related to that boy?

a) Mother

b) Sister

c) Aunt

d) Cannot be determined

Q.33) A sum of Rs. 299 is divided between A, B, C in the ratio $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$. find the amount of B.

a) 104

b) 78

c) 117

d) 13

Figure for (Q.34)

Q.34) Find the missing number from the above figure?
a) 201
b) 51
c) 100
d) 47

Q.35) Statements:
A. All the tiger are leopard.
B. No leopard is an elephant.
Conclusions:
1. Some tigers are leopard.
2. No tiger is an elephant.
a) Only (1) conclusion follows
b) Only (2) conclusion follows.
c) Both (1) and (2) follows.
d) Neither (1) nor (2) follows

Q.36) Aryan and Bipasha are married couple. Shyamal and Yogesh are brothers. Shyamal is the brother of Aryan. How is Yogesh related to Bipasha?
a) Brother-in-law
b) Brother
c) Son-in-law
d) Cousin

Q.37) Which one is incorrect in the series given below;
9, 10, 14, 26, 39
a) 10
b) 14
c) 26
d) 39

Q.38) The islands P, Q and R are on a straight line. Island R is between P and Q. The distance between P and Q is 250 km and the distance between P to Q is 25% more than the distance from R to Q. How far is P from R?
a) 50 km
b) 40 km
c) 80 km
d) 200 km

Q.39) Two bikes pass each other in same direction and the difference of their speed is 180 m/s. How long they would take to be 400 km apart?
a) 2.2 hrs.
b) 3 hrs.
c) 8 hrs.
d) 5 hrs.

Q.40) The ratio between the speed of A and B is 4: 3. B takes 44 minutes to reach the destination. How much time did A take to reach the same destination?
a) 36 mins
b) 40 mins
c) 33 mins
d) 30 mins

PASSAGE 6 (Q.41 - Q.44)
The problem of evil is one that has taxed human thought and evolved various and conflicting solutions. To the rationalist who does not believe in anything, not material, the problem does not exist. Everything is in nature as the result of evolution. Nature is blind and unintelligent and has therefore no conception of good or evil; the conception belongs to the human mind and is the result of the social sense and the ideas of pleasure and pain developed in human beings by a perfectly intelligible natural process. It is to men who believe in Intelligence as governing and developing the world that the problem exists. Why did evil come into existence and what is its purpose?
The unwillingness of the devout soul to admit that evil can have its existence in God has led to variations of the Manichean theory which sees a double control in the world, God as the Principle of good and Satan as the Principle of evil. Those who regard the belief in the existence of an intelligent evil power as superstition, find the origin of evil in a man who abuses his freedom and by his revolt and self-will gives birth to sin. This solution solves nothing, for it does not explain why there should have been a possibility of evil at all. Unless we limit our conception of God as the source and creator of all, that from which all proceeds, we must admit that evil as part of the economy of the world must have proceeded from Him no less than good. To our mind, there is no escaping from the belief that, if God exists, He is All. All proceeds from Him; from what other source can it proceed? All exist in Him; in what other being or continent can it exist? Therefore, evil must proceed from Him, evil must exist in Him. Since He is All-Wise, for all knowledge is His, it must exist for some wise and perfect purpose.

Q.41) With reference to the above passage, consider the following statements:

1. Some people find it difficult to accept that God can be a source of evil.
2. Rationalists do not face any kind of problems at all.
3. The conception of evil and good finds its genesis in the human mind.
4. Those who believe in God must accept that He is the source of both good and evil.

Which of the inferences drawn in the above statements are correct?

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

Q.42) Which of the following statements correctly describe the Manichean theory given in the passage?

a) God has created the good in the world and man has created the evil.
b) God is the source of both good and evil in the world.
c) The origin of evil is in a man who abuses his freedom.
d) The evil emanates from Satan and the good emanates from God.

Q.43) Which of the following inference has been made about the nature in the above passage?

a) Nature is indifferent to human needs and wants.
b) Nature does not have the differentiation between good and bad.
c) Rationalists do not believe in the evolution of nature.
d) Nature acts like God often, without any distinction.

Q.44) Which of the following statements give the most logical and essential message from the above passage?

a) If we believe in God, we must believe him as the source of evil.
b) If we believe in God, we must believe in evil.
c) Satan is as necessary as God in the functioning of the world.
d) Most humans have a limited understanding of good and bad.

PASSAGE 7 (Q.45)

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

Participation and empowerment are two significant strategies in organisational development. The most important outcomes of these strategies are acceptance of change on behalf of employees and enhanced performance as a result of goal-oriented behaviour. Further, they also promote awareness about the organisation, its structure, process and practices and also increase the involvement of the employees in the goal achievement process of the organisation. Participation and empowerment also enhance organisational citizenship. The benefits of adoption of these two practices may not be immediate, though, in long term, it will result in a highly positive organisational culture and well-developed human resources.

Q.45) Which among the following is the most rational inference from the above passage?

a) Human resources are key in the development of an organisation.
b) We must set goal-oriented behaviour to promote organisational development.
c) The benefits of participation and empowerment trickle down slowly.
d) Higher participation of empowered employees lead to higher growth in the organisation.

PASSAGE 8 (Q.46)

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

The record of India's achievements is not easy to dismiss, but is that the whole story? An agreeable picture of a country in a rapid march forward towards development with justice would definitely not be a comprehensive or even a balanced, account of what has been actually happening: indeed far from it. There are many major shortcomings and breakdowns – some of them gigantic – even though privileged groups, and especially the celebratory media, are often inclined to overlook them. We also have to recognize with clarity that the neglect – or minimizing – of these problems in public reasoning is tremendously costly since democratic rectification depends crucially on public understanding and widespread discussion of the serious problems that have to be addressed.

Q.46) Which of the following statement can be described as the most logical and essential message from the above passage?
a) The records of achievements of India are incomplete without her shortcomings.
b) Public debate is imperative to address issues of the country.
c) Many people tend to ignore the shortcomings of the country.
d) Public understanding is limited as no debate occurs regularly.

PASSAGE 9 (Q.47)
Read the following passage and answer the items that follow each passage. Your answers to these items should be based on the passage only.

The problem of discipline is really quite complex because most of us think that through some form of discipline we shall eventually have freedom. Discipline is the cultivation of resistance, is it not? By resisting, by building a barrier within ourselves against something which we consider wrong, we think we shall be more capable of understanding and of being free to live fully; but that is not a fact, is it? Surely, it is only when there is freedom, real freedom to think, to discover−that you can find out anything.

Q.47) Which of the following is the most crucial message from the above passage?
a) True freedom is freedom of thought.
b) Discipline and freedom are closely interrelated.
c) We can live fully if we have discipline.
d) Through discipline, we can achieve greater freedom.

PASSAGE 10 (Q.48)
Read the following passage and answer the items that follow each passage. Your answers to these items should be based on the passage only.

The literature is doomed if liberty of thought perishes. Not only is it doomed in any country which retains a totalitarian structure; but any writer who adopts the totalitarian outlook, who finds excuses for persecution and the falsification of reality, thereby destroys himself as a writer. There is no way out of this. No tirades against "individualism" and the "ivory tower", no pious platitudes to the effect that "true individuality is only attained through identification with the community", can get over the fact that a bought mind is a spoiled mind. Unless spontaneity enters at some point or another, literary creation is impossible, and language itself becomes something totally different from what it is now, we may learn to separate literary creation from intellectual honesty.

Q.48) Which among the following is the most logical corollary from the above passage?
a) A good writer must write against totalitarianism.
b) Some writers find excuses to write for falsification of reality.
c) Good writing emanates from spontaneity and intellectual honesty.
d) Liberty is vital for the writers to achieve individuality.

Q.49) When the sun's altitude changes from 30° to 45°, the length of the shadow of a tower decreases by 50m. What is the height of the tower?
a) 38 m
b) 120.6 m
c) 68.3 m
d) 55.9 m

Q.50) Two equal vessels are respectively $\frac{1}{2}$ and $\frac{1}{3}$ full of milk. They are filled up with water and contents are mixed in a large vessel. Find the ratio of milk and water in large vessel.
a) 12: 13
b) 5: 9
c) 5: 7
d) 12: 11

Q.51) A and B can complete a task in 9 days. B alone can do it in 18 days. B worked for 6 days alone then A joined and both worked together for 6 days. After 12 days B left the work, how much work is done by A alone?
a) $\frac{15}{16}$
b) $\frac{1}{7}$
c) $\frac{3}{5}$
d) None of these

Q.52) Find CP if SP is 200 and loss is 25%

a) 150

b) 225.5

c) 266.67

d) 175

Q.53) Statements: Any employee who does not behave properly while in the office brings a bad name to himself and also for the company.

Conclusions:

1. Such employee should be removed from the company.
2. Stricter discipline does not improve the behaviour of the employees.

a) Only conclusion 1 follows

b) Only conclusion 2 follows

c) Neither 1 nor 2 follows

d) Both 1 and 2 follow

Direction for (Q.54 – Q.56): Six members of a family P, Q, R, S, T and U. There are two couple each having one unmarried child in the family. Each having a profession namely Doctor, Musician, Actor, Engineer, Pilot and Soldier not in same order as written.

- R is father of Soldier
- Pilot marries T, who is neither Engineer nor Soldier
- Q is a doctor and married to an Engineer
- U, the son of Pilot is an Actor
- P is neither a soldier nor an Engineer.
- R and P are brothers.
- S is son of Q

Q.54) What is occupation of P?

a) Pilot

b) Soldier

c) Engineer

d) Can't determine

Q.55) T is married to?

a) R

b) U

c) P

d) S

Q.56) What is occupation of S?

a) Pilot

b) Soldier

c) Engineer

d) Can't determine

Q.57) Statements:

A. All cups are books.

B. All books are shirts.

Conclusions:

1. Some cups are not shirts.
2. Some shirts are cups.

a) Only 1 conclusion follows

b) Only 2 conclusion follows

c) Either 1 or 2 follows

d) Neither 1 nor 2 follows

Q.58) Statement: BRICS NDB sanctions $250 million for India's renewable energy scheme.

Courses of Action:

1. India should use financial assistance from other international financial organisations to develop its renewable energy.
2. India should not seek such financial assistance from international financial agencies.

a) If only course of action 1 follows

b) If only course of action 2 follows

c) If both 1 and 2 follows

d) If neither course of action 1 nor 2 follows.

Q.59) Statement: Some serious blunders were detected in the Accounts section of the company.

Courses of Action:

1. An efficient team of auditors should be appointed to check the Accounts.
2. A show cause notice should be issued to all the employees involved in the irregularity.

a) If only course of action 1 follows

b) If only course of action 2 follows

c) If both 1 and 2 follows

d) If neither course of action 1 nor 2 follows.

Q.60) *Statement:* There has been less than 35 percent voter turnout in the recent Karnataka elections.

Courses of Action:

1. The election commission should cancel the entire election process as the votes cast are not adequate to represent people.

2. The election commission should take away the voting rights of those who did not exercise their rights.

a) If only course of action 1 follows

b) If only course of action 2 follows

c) If both 1 and 2 follows

d) If neither course of action 1 nor 2 follows.

Q.61) In a code language MANGO is written as NCROE and CAT is written as DCX, then MOUSE is written as?

a) NQXAU

b) NQYZV

c) NQYAU

d) NQXWJ

Q.62) If 30% of a number is 14 more than 20% of that number then, find the number.

a) 100

b) 240

c) 140

d) 280

PASSAGE 11 (Q.63)

Personalized cloning therapies are likely to be labor intensive and expensive. This has raised social justice concerns. Perhaps cloning therapies will only be a realistic option for the very rich? Some have replied to this concern by pointing out that Cloning therapies may become cheaper, less labor intensive and more widely accessible after time. Moreover, cloning may cure diseases and not only treat symptoms.

Q.63) Which of the following is essentially implied in the above passage?

a) Cloning is a technology that can cure all diseases in the future.

b) Cloning can never follow the social justice principle.

c) Alternatives to the cloning should be promoted.

d) Currently, cloning technology is out of the reach of the common masses.

PASSAGE 12 (Q.64)

All persons, whatever their occupations or tasks, were teachers, and the purpose of education—which was political life itself—was to develop a greater (a nobler, stronger, more virtuous) public community. So, politics was more than regulating or ordering the affairs of the community; it was also a "school" for ordering the lives—internal and external—of the citizens. Therefore, the practice of Athenian democratic politics was not only a means of engendering good policies for the city, but it was also a "curriculum" for the intellectual, moral, and civic education of her citizens.

Q.64) What is the most logical and rational inference that can be made from the above passage?

a) The universal system of moral education is incompatible with individual freedom.

b) The purpose of political life In Athens was the self-development of the citizens.

c) Athenians had well developed system of higher education.

d) Formulation of good public policy was the only aim of Athenian political setup.

PASSAGE 13 (Q.65)

In the United States, crypto miners have started to tap an unconventional new energy source: drilled gas, collected at oil and gas wells. The miners argue that this gas would otherwise have been flared or vented into the atmosphere, so no excess emissions are created. The reality is not that clear cut: If the presence of those crypto miners disincentivizes oil and gas companies from piping away that gas to be used elsewhere, any savings effect is blunted.

Q.65) Which among the following is the most critical inference that can be made from the above passage?
a) Cryptomining is highly energy-intensive and generates outsize emissions.
b) As interest in cryptocurrencies grows and more people start mining, more energy is required to mine a single Bitcoin.
c) Oil and gas companies are getting massive profit from the boom in Crypto currencies.
d) Crypto miners are looking for alternate sources of energy.

PASSAGE 14 (Q.66)
Air pollution mainly affects those living in large urban areas, where road emissions contribute the most to the degradation of air quality. There is also a danger of industrial accidents, where the spread of a toxic fog can be fatal to the populations of the surrounding areas. The dispersion of pollutants is determined by many parameters, most notably atmospheric stability and wind.

Q.66) Which of the following is the most crucial message from the above passage?
a) Human activities are solely responsible for the air pollution.
b) Air pollution negatively impacts the health of the people.
c) Road emission can be reduced by electrical vehicles.
d) Atmospheric stability contributes to the pollution.

PASSAGE 15 (Q.67)
COVID-19 is causing the biggest economic downturn that developing countries have ever seen. Governments and the international community have prepared for a tropical storm, but it increasingly looks like a Category 5 hurricane. They need to act and they need to act fast to assure that the government is adequately financed to withstand the collapse in tax revenues and the need for increased health and social expenditures. Absence of such action will lead to a combination of currency, debt, and banking crises. Recovery from such avoidable events is slow and painful.

Q.67) Which of the following is the most logical and rational inference from the above passage?
a) COVID-19 impacted developing countries more as compared to the developed countries.
b) COVID-19 economic crisis was bigger than any other financial crisis in the world history.
c) COVID-19 can lead to the loss of government revenue and debt crisis.
d) The international community is neither prepared for the COVID-19 nor for a Category 5 hurricane.

PASSAGE 16 (Q.68 – Q.70)
Air pollution and climate change are closely related. Climate is the other side of the same coin that reduces the quality of our Earth. Pollutants such as black carbon, methane, tropospheric ozone, and aerosols affect the amount of incoming sunlight. As a result, the temperature of the Earth is increasing, resulting in the melting of ice, icebergs, and glaciers.

In this vein, climatic changes will affect the incidence and prevalence of both residual and imported infections in Europe. Climate and weather affect the duration, timing, and intensity of outbreaks strongly and change the map of infectious diseases in the globe. Mosquito-transmitted parasitic or viral diseases are extremely climate-sensitive, as warming firstly shortens the pathogen incubation period and secondly shifts the geographic map of the vector. Similarly, water-warming following climate changes leads to a high incidence of waterborne infections. Recently, in Europe, eradicated diseases seem to be emerging due to the migration of population, for example, cholera, poliomyelitis, tick-borne encephalitis, and malaria.

The spread of epidemics is associated with natural climate disasters and storms, which seem to occur more frequently nowadays. Malnutrition and disequilibration of the immune system are also associated with the emerging infections affecting public health.

Q.68) According to the passage, which of the following are consequences of climate change?
1. Melting of glaciers.
2. Increase in viral infections.
3. Increase in malnutrition.
4. Reduction in immunity levels of people.
Select the correct answer from the code given below:
a) 1 and 2 only
b) 1, 3 and 4 only
c) 2, 3 and 4 only
d) 1, 2, 3 and 4

Q.69) With reference to the passage, the following assumptions have been made:
1. The spread of epidemics is caused only due to natural climate disasters and storms.
2. Climate change is being caused by the air pollution.
Which of these assumptions is/are correct?
a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

Q.70) Which one of the following is an essential message implied by the passage?
a) Reducing air pollution will instantly lead to reversal of temperature increase of the earth.
b) Mosquitoes will not thrive in the warmer world.
c) As earth gets warmer, epidemics will be more frequent.
d) The malnutrition will increase due to decline in agricultural production.

Q.71) Statement:
A. In a quarterly report of a company, it is mentioned that "efficiency is decreased than earlier"
B. We should inform all our officers not to read newspapers during office hours - Chief Manager of the company tells Chief Administrator.
Conclusions:
1. Reading newspapers during office hours is a punishable offense.
2. Manager assumes Office efficiency will increase by stopping this.
a) Only conclusion (1) follows
b) Only conclusion (2) follows

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

Q.72) How many necklaces of 14 beads each can be made from 16 beads of different colors?
a) $\frac{18!}{6 \times 24}$
b) $\frac{16!}{2 \times 28}$
c) $\frac{14!}{2 \times 24}$
d) None of these

Q.73) A boy writes all the numbers from 100 to 999. The number of zeroes that he uses is 'a', the number of 4's that he uses is 'b' and the number of 7's he uses is 'c'. What is the value of $\frac{b+c-a}{190}$?
a) 45
b) 343/36
c) 2
d) 5/98

Q.74) The sum of three numbers is 62. If the ratio of first to the second is 2: 3 and that of second to the third is 7:9, then the first number is,
a) 36
b) 14
c) 21
d) 28

Q.75) The ratio of Danish's present age to Shiv's present age is 5: 6 and Shiv's present age is 5 years more than Danish's present age. What will be the ratio between ages of Shiv and Danish after 5 years.
a) 4: 3
b) 6: 5
c) 3: 2
d) 7: 6

Q.76) Machine A produces 10 candles in 5 minutes. Machine A and B working at same time produce 10 candles in 2 minutes. How long will machine B, working alone, take to produce 30 candles?
a) 05 mins
b) 10 mins
c) 15 mins
d) 30 mins

Direction for (Q.77 – Q.79) : Six students Arif, Badri, Chandan, Danish, Evan and Farhan appeared in several tests. Either Chandan or Farhan scores the highest Whenever Chandan scores the highest, then Evan scores the least. Whenever Farhan scores the highest, Badri scores the least.

In all the tests they got different marks; Danish scores higher than Arif, but they are close competitors; Arif scores higher than Badri; Chandan scores higher than Arif.

Q.77) If Farhan stands second in the ranking, then the position of Badri is
a) Third
b) Fourth
c) Fifth
d) Sixth

Q.78) If Badri scores the least, the rank of Chandan will be
a) Second
b) Third
c) Fourth
d) Second or third

Q.79) If Evan is ranked third, then which one of the following is correct?
a) Evan gets more marks than Chandan
b) Chandan may get more marks than Evan
c) Arif is ranked fourth
d) Danish is ranked fifth

Q.80) 'A' started from his house and walked 40 m towards East, where his friend B joined him. They together walked 20 m in the same direction. Then 'A' turned left while 'B' turned right and travelled 4 m and 16 m respectively. Again 'B' turned left to travel 8 m followed by 10 m to his right to reach his office. 'A' turned right and travelled 24 m to reach his office. What is the shortest distance between the two offices?
a) 30 m
b) 34 m
c) 44 m
d) 20 m