Directions for the following 4 (four) items:
*Read the following **three** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

Passage – 1

Just a decade ago the idea of happiness policy was something of a novelty. While it remains on the fringes in some locales, notably the United States, in much of the world there has been a surge of interest in making happiness an explicit target of policy consideration. Attention has largely shifted, however, to a broader focus on well-being to reflect not just happiness but also other welfare concerns of citizens, and dozens of governments now incorporate well-being metrics in their national statistics.

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

1. Governments worldwide are increasingly prioritizing happiness over other policy objectives.
2. The United States is leading the global trend in implementing happiness policies.

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

Asymmetric information occurs when one party to an economic transaction possesses greater material knowledge than the other party. This typically manifests when the seller of a good or service possesses greater knowledge than the buyer; however, the reverse dynamic is also possible. Almost all economic transactions involve information asymmetries. Asymmetric information can also be viewed as the specialization and division of knowledge, as applied to any economic trade. For example, doctors typically know more about medical practices than their patients.

Q.2) **With reference to the passage, which of the following *inferences* can be drawn?**

a) Economic transactions are made possible because of the existence of asymmetric information.
b) Symmetric information leads to fair and equitable economic exchanges.
c) Asymmetric information is not always an undesirable outcome in an economy.
d) Regulation of asymmetric information is essential for a country to develop.

Passage – 3

Over half of PM 2.5 - the most harmful pollutant - emissions in India are formed in a "secondary" way in the upper atmosphere when different types of gaseous pollutants from one area such as ammonia, mix with other gaseous pollutants from another place. This secondary form spreads farther and wider than primary PM 2.5 and travels across states, cities, and crosses jurisdictional borders. The air pollution challenge in India is, therefore, inherently multi-sectoral and multijurisdictional, requiring an "airshed" approach. An airshed can be defined as a region that shares a common flow of air, which may become uniformly polluted and stagnant. Air quality within an airshed will largely depend on pollution sources within it. Because the formation of secondary particles and the transporting of primary and secondary particles occur over large geographic areas, airsheds can extend over several hundred kilometres, well beyond the boundaries of cities. India, therefore, needs to look beyond its cities and take action at the sub-national level for effective air pollution control strategies and apply a new set of tools for airshed-based management.

Q.3) Which one of the following statements *best reflects the most rational action* required to address the challenge of air pollution in India?

a) Prioritizing uniform national-level policy for addressing air pollution challenges.
b) Establishing international partnerships to address air pollution issues effectively.
c) Instituting city-level emission reduction measures as the primary solution to air quality issues.
d) Collaborative efforts among neighbouring states to address air quality issues.

Q.4) Based on the above passage, the following *assumptions* have been made:

1. Air pollution in India is primarily caused by industrial emissions.
2. Airshed-based management is a cost-effective approach to deal with the problem of air pollution.

Which of the assumptions given above is/are correct?

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

Q.5) 512 small but identical cubes have been put together to form a large cube. How many more such small cubes will be required to cover this large cube completely?

a) 225
b) 488
c) 217
d) 555

Q.6) For school annual day function, Seema was given the task to decorate the hall. She started alone and completed 3/5ᵗʰ part of the decoration work in just one week. Then Sarita joined her and they both working together finished the decoration in 3 days. In how many days could Sarita alone complete the decoration work?

a) 35 days
b) 71 days
c) 21 days
d) 25 days

Q.7) If 5 boys or 9 girls can finish a piece of work in 57 days, then 3 boys and 6 girls will do the same work in how many days?

a) 45 days
b) 50 days
c) 40 days
d) 35 days

Q.8) For the Diwali function in a society, a group consists of people of certain ages in such a way that each person has a 6-month difference in their ages. If the youngest person is just 12 years old and the sum of the ages of all the people is 450 years, then find out the total number of people who attended the function.

a) 75
b) 25
c) 55
d) None of these

Q.9) Choose the group which is different from others.

a) 8, 43, 29
b) 11, 58, 38
c) 14, 73, 47
d) 17, 72, 90

Q.10) Find the sum of all three digit numbers less than 200 which are divisible by 5.

a) 2800
b) 3000
c) 2950
d) 2850

Directions for the following 4 (four) items:
*Read the following **four** passages and answer the items that follow each passage.*

Your answers to these items should be based on the passages only.

Passage – 1

A new study reported that adults aged 60 and older who took a daily multivitamin for two years scored higher on memory and cognitive tests than those who took a placebo — a rare example of a clinical trial finding that a nutritional supplement might benefit healthy people. The research was part of a larger trial involving more than 21,000 older adults looking at whether supplements can protect against several age-related diseases, called the Cocoa Supplement and Multivitamin Outcomes Study (COSMOS). People in both the multivitamin and placebo groups improved their cognitive scores over two years, possibly because they were already familiar with the tests. However, the participants taking the multivitamin showed a slightly greater gain, with the biggest bump coming on memory assessments.

Q.11) Which of the following statements *can be inferred* from the above passage?

1. Daily multivitamin intake might partially offset age-related cognitive decline, with memory benefiting the most.
2. The benefits of multivitamins consumption are not confined to the aged people only.

Choose the correct answer using the codes given below.

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

Passage – 2

In our everyday lives, we confront a host of moral issues. Once we have deliberated and formed judgments about what is right or wrong, good or bad, these judgments tend to have a marked hold on us. Although in the end, we do not always behave as we think we ought, our moral judgments typically motivate us, at least to some degree, to act in accordance with them.

Q.12) What is the author's view on moral judgments?

a) Moral judgments, once formed, strictly dictate human actions.
b) Moral judgments have an impact on our behaviour.
c) Moral judgments are always socially determined.
d) Moral judgments can be ignored at convenience in cases of social repression.

Passage – 3

Sand and gravel have long been used as aggregate for the construction of roads and buildings. Today, the demand for these materials continues to rise. In India, the main sources of sand are river floodplains, coastal sand, paleo channel sand, and sand from agricultural fields. River sand mining is a common practice as habitation concentrates along the rivers and the mining locations are preferred near the markets or along the transportation route, to reduce the transportation cost. River sand mining can damage private and public properties as well as aquatic habitats. Excessive removal of sand may significantly distort the natural equilibrium of a stream channel.

Q.13) Which one of the following best reflects *the most logical, rational, and practical message* conveyed by the author?

a) To prevent environmental damage, a blanket ban on sand mining is required.
b) The construction industry should cease its reliance on sand and gravel with immediate effect.
c) Sustainable sand mining practices should be implemented to mitigate its environmental and social impacts.
d) Governments should prioritise economic development over environmental concerns to meet the rising demand for construction materials.

Passage – 4

When global warming reduces agricultural outputs through severe droughts and soil depletion, it makes farming households poorer, and more likely to have to resort to child labour (in agriculture or off the farm) to meet their subsistence needs. At the same time, climate related droughts and soil depletion can reduce agricultural productivity, in turn encouraging families to lessen the time children spend in agricultural work since their labour on the farm becomes less valuable. But diminishing agricultural productivity may also make adult agricultural labour less valuable, inducing adults to move to off-farm jobs, in turn increasing the need for children working on the farm. The net impact of climate change on child labour in any given context depends on the interaction and relative strength of these different effects.

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

1. Rate of global warming always has a linear relation with the increase in child labour.
2. Farmers are disproportionately affected by global warming.

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

Q.15) If 17 Φ 19 Φ 20 = 11, 25 Φ 15 Φ 30 = 7, and 11 Φ 17 Φ 21 = 13, what must be the value of 33 Φ 14 Φ 15 = ?

a) 5
b) 6
c) 8
d) 11

Q.16) In a temple row, there are 121 persons, such that the ratio of females to males is 4:7. Sejal is a female standing 27th from the start of that row, such that 7 females are in front of her.
How many males are behind her?

a) 80
b) 53
c) 46
d) 58

Q.17) In a group of 6 dancers, there are two couples. One of the couple dances Salsa and the other dances Ballerina. The other two are Kathak dancer and Bharatanatyam dancer. Bharatanatyam dancer's wife is a poet and the Kathak dancer is a spinster. How many female members are there in this group of 6 dancers?

a) More than 4
b) Less than 3
c) The number of female dancers is equal to the number of male dancers.
d) None of these

Q.18) If a number is divided by 72, we get 5 as remainder. If the cube of that number is divided by 9, what will be the remainder?

a) 1
b) 8
c) 6
d) 2

Q.19) In a certain exam, three students A, B and C scored 7/10, 2/25 and 6/15 marks of the total. What will be the correct order of their ranks in ascending order?

a) A, B, C
b) C, A, B
c) B, A, C
d) B, C, A

Q.20) Raghuram has a digital locker. He changes the code of the digital locker every day is such a way that the code on any particular day is determined by the sum of the codes that were used for the last two days. What was the code on the fifth day if the code on day 1 was 1 and the code on day 2 was 2?

    a) 3
    b) 5
    c) 13
    d) 8

Directions for the following 3 (three) items:

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

Passage – 1

Soft power is the ability to affect others to obtain the outcomes one wants through attraction and persuasion rather than coercion or payment. A country's soft power rests on its resources of culture, values, and policies. A smart-power strategy combines hard and soft-power resources. Public diplomacy has a long history as a means of promoting a country's soft power. Smart public diplomacy requires an understanding of the roles of credibility, self-criticism, and civil society in generating soft power. As authoritarian states today use new cyber technologies and other means to disrupt political processes in democracies, questions arise about the boundaries of soft power and the appropriate policies for public diplomacy.

Q.21) Based on the above passage, the following *assumptions* have been made:

1. Soft power is ultimately derived from the size of a country's economy.
2. In diplomatic parlance hard power is more effective than soft power.
3. The rise of authoritarian regimes has diminished the importance of soft power in global politics.

Which of the above assumptions is/are valid?

    a) 1 only
    b) 2 and 3 only
    c) All 1, 2 and 3
    d) None of the above

Q.22) Which of these statements *best represents the crux* of the passage?

a) Using technology is the most ideal way of enhancing soft power.
b) Trade diplomacy should be the first tool in dealing with an international crisis.
c) Effective public diplomacy necessitates a multi-faceted approach to diversify a country's soft power.
d) The skill of persuasion is at the heart of modern diplomacy.

Passage – 2

Sometime late this century, someone will push a button, unleashing a life force on the cosmos. Within 1,000 years, every star you can see at night will host intelligent life. In less than a million years, that life will saturate the entire Milky Way; in 20 million years – the local group of galaxies. In the fullness of cosmic time, thousands of superclusters of galaxies will be saturated in a forever-expanding sphere of influence, cantered on Earth. This won't require exotic physics. The basic ingredients have been understood since the 1960s.

What's needed is an automated spacecraft that can locate worlds on which to land, build infrastructure, and eventually make copies of itself. The copies are then sent forth to do likewise – in other words, they are von Neumann probes (VNPs). We'll stipulate a very fast one, travelling at a respectable fraction of the speed of light, with an extremely long range (able to coast between galaxies) and carrying an enormous trove of information.

Q.23) Which of the following statements *best reflects the logical inference* that can be drawn from the passage?

a) Humans will soon create technology that will spread life throughout the galaxy, potentially threatening the existing life forms.
b) Sending self-replicating probes to spread life is a realistic and achievable method for galactic colonization.
c) Life already exists on most stars visible from Earth, but we just haven't detected it yet.
d) The vast distances in space make interstellar travel and galactic colonization impossible.

Q.24) If A and B are two mutually exclusive and collectively exhaustive events and the probability that the non-occurrence of A is 3/4, then the probability of occurrence of B is

a) 3/4
b) 1/4
c) 4/3
d) 3/7

Q.25) Aman and Mohit entered into a partnership by investing Rs. 18000 and Rs. 12000 respectively. After 3 months, Mohit invested Rs. 4000 more while Aman decided to withdraw Rs. 6000. After 3 more months, Minakshi joined the business with a capital of Rs. 21000. After one year they made a total profit of Rs. 39000. The share of Mohit exceeds that of Minakshi by:

a) Rs. 3000
b) Rs. 4500
c) Rs. 3600
d) Rs. 1800

Q.26) A Math's teacher asked Smita to solve a question. However, while doing so she mistakenly multiplied a number by 2/5 instead of 4/5. What is the percentage error in the calculation she did?

a) 33.33%
b) 50%

c) 25.2%
d) 12%

Q.27) Raman sold a house to Rakesh at a loss of 12% which he sold to Madhuri at a profit of 10%. She sold the house to Jayant at a loss of 15%. If Jayant bought it for Rs. 822.80 (in thousands) then for how much did Raman buy the house?

a) 10 lakhs
b) 9.2 lakhs
c) 12 lakhs
d) Data not sufficient

Direction for the following 2 (two) items:
Study the following information and answer the items that follow.

Out of a group of 185 girls in a hostel, 88 like Dosa, 74 like Bada-pav and 86 like Misal-pav. 14 girls like all the three dishes. The number of girls that like both Dosa and Bada-pav is 37, those that like both Misal-pav and Bada-pav is 45 and those that like both Dosa and Misal-pav is 34.

Q.28) What is the difference between the total number of only Dosa and Bada-pav lovers to only Dosa lovers?

a) 8 girls
b) 23 girls
c) 6 girls
d) 21 girls

Q.29) The total number of only Dosa lovers, only Bada-pav lovers and only Misal-pav lovers is

a) 68
b) 63
c) 58
d) 46

Q.30) Tina goes to her office by car. She usually reaches the office at 10:10 AM. One day she drove at 4/5 th (four- fifth) of her usual speed and reached the office at 10:30 AM. What is the time taken by her to reach the office at her usual speed?

a) 100 minutes
b) 80 minutes
c) 70 minutes
d) None of these

Directions for the following 4 (four) items:
*Read the following **three** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

Passage – 1

The term "deepfake" refers to an AI-based technique that synthesizes media. This includes superimposing human features on another person's body and/or manipulating sounds—to generate a realistic human experience. There is the open question of whether this technology will help or hurt talent overall. On the positive side, the scalability of allowing an actor to appear in commercials or on websites for e-commerce all over the world (without requiring trips to the studio, learning a new language, or improving accent work) could be empowering. On the other hand, the widespread adoption of deep fakes could allow for the supplanting of actors who are not celebrities, leading to job losses.

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

1. Every technology, including deep fake, has its pros and cons for the people who are using it.
2. Disparity in income earned by actors could increase if deep fake technology is widely adopted.

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

Passage – 2

The proliferation of space systems and their dual nature, the growing dependence of societies on space services, and the appearance of hostile behaviours make it necessary to analyse space security more

broadly. International law applies to outer space, especially the UN Charter and the 1967 Outer Space Treaty. This legal framework must be complemented with concrete measures, such as greater transparency on space activities.

Q.32) Based on the above passage, the following *assumptions* have been made:

1. The increasing dependency of societies on space services is a potential risk factor for space security.
2. Transparent information sharing among nations indulging in space activities is imperative.

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 – 3

The future of the Indian transport industry will be carved by radical transformations through major disruptive technologies based on intelligent transport systems driven by Industry 4.0, data analytics, and artificial intelligence from hyperloop to autonomous and remotely piloted vehicles. The current transportation sector will also witness an overhaul in its pursuit of cleaner energy and greener low-carbon energy fuel with electric-mobility, biofuel-driven, and hydrogen-powered vehicles taking the lead. This would enable India to fulfil its commitment to cutting greenhouse gas (GHG) emissions intensity by 33% to 35% per cent below 2005 levels by 2030 and acting as an enabler of energy security by reducing dependence on imports.

Q.33) Based on the above passage, the following *assumptions* have been made:

1. Governments should moderate the pace of change in the transport industry in order to prevent large scale job losses.
2. Adoption of artificial intelligence can offset the need for switching to clean fuels in the Indian transport sector.

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.34) Which of the following is the *most logical implication* based on the above passage?

 a) The transport industry has the highest inertia to the adoption of new technology.
 b) International climate commitments are often misaligned with the needs of bluecollar workers.
 c) Skilling in the latest technologies will be needed to ensure a smooth transition in the Indian transport industry.
 d) Both (a) and (b)

Q.35) Which of the following numbers should appear next in the series 56, 52, 48, 44, ...

 a) 40
 b) 42
 c) 43
 d) 46

Q.36) The average weight of 17 men is 74 kg and that of 51 women is 63 kg. What is the average weight of all the men and women together?

 a) 65.75 kg
 b) 54.75 kg
 c) 67.75 kg
 d) 69.75 kg

Q.37) A couple invites five people for a party. At the party all the members shake hands with each other. There is no handshake between the host couple. What is the total number of handshakes in the party?

 a) 10
 b) 24
 c) 9
 d) 20

Q.38) Find the greatest number by which 1135, 900 and 618 can be divided, leaving the same remainder each time.

 a) 37
 b) 47
 c) 57
 d) 67

Q.39) Mahesh and Suresh are ranked 7th and 11th respectively from the top of their class. If the number of students in the class is 31, then what will be the sum of the ranks of Mahesh and Suresh from the bottom of the class?

 a) 44
 b) 46
 c) 48
 d) None of the above.

Q.40) Seven students – P, Q, R, S, T, U and V appeared for a test. No two students scored the same number of marks. V scores more than P. P scores more than Q. Either R scores the max and T scores the least or S scores the max and U or Q scores the least. If V is ranked fifth in the test, then which of the following statements are true?

  a) R is ranked second.
  b) R is ranked fifth.
  c) S is first.
  d) (d)T is ranked third.

Directions for the following 4 (four) items:
*Read the following **two** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

Passage – 1

Veblen goods are products that increase in demand as the price rises, resulting in an upward-sloping demand curve instead of a downward-sloping demand curve. Veblen goods seem to violate the law of demand because the higher the price of a good the more people want it. There are many reasons why people are attracted to Veblen goods. The first is that a higher price is perceived as an indication of higher quality. Status symbols are the second main reason why people are attracted to Veblen goods. Veblen goods are a unique category in the world, but they are easy to spot.

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

1. Economic theories and the associated exceptions always coexist.
2. Veblen goods exist only in developed countries because people have higher purchasing power.

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

Q.42) With reference to the passage, which one of the following *inferences* can be drawn?

  a) Veblen goods are restricted to luxury items like cars and electronics.
  b) Veblen goods must be regulated by the government.
  c) Consumers who purchase Veblen goods are bad at decision making.
  d) The demand for Veblen goods could be driven by their association with a particular lifestyle.

Passage – 2

There is no typical older person. Some 80-year-olds have physical and mental capacities like many 30-yearolds. Other people experience significant declines in capacities at much younger ages. The diversity seen in older age is not random. A large part arises from people's physical and social environments and the impact of these environments on their opportunities and health behaviour. The relationship we have with our environments is skewed by personal characteristics such as the family we were born into, our sex, and our ethnicity, leading to inequalities in health. Older people are often assumed to be frail or dependent and a burden to society. Globalization, urbanization, migration, and changing gender norms are influencing the lives of older people in direct and indirect ways. A public health response must take stock of these current and projected trends and frame policies accordingly

Q.43) Which one of the following statements *best reflects the most rational action* required to address the problems associated with ageing?

    a) Promotion of research on reversing the ageing process.
    b) Envisaging family as the best support system for the elderly.
    c) Implementation of comprehensive public health programs tailored to the diverse needs of the elderly.
    d) None of the above

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

1. Work efficiency is inversely proportional to the age of the person.
2. In the age of globalisation, protectionism is needed to deal with the challenges associated with ageing.

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

Q.45) Five employees of a bank – A, B, C, D and E apply for a leave, not necessarily in the given order, on a particular day. The manager uses a policy according to which the person who applies for the leave first of all is accepted while the remaining are rejected. What is the probability that A's application is accepted?

    a) 1
    b) 1/5
    c) 1/2
    d) Either 1 or 0

Q.46) Ram starts running at a speed of 2 metres/second on a circular ground which has a periphery of 400 metres. Shyam starts running on the same circular path 2.5 minutes after Ram and with a speed double than that of Ram, from the same point and in the same direction. What will be Shyam's position with respect to Ram after Shyam completes one round?

a) 200 metres behind Ram
b) 100 metres behind Ram
c) 100 metres ahead of Ram
d) 200 metres ahead of Ram

Q.47) Raj's wife enquired him the day on which his new shop will get inaugurated. Raj replied, "My shop will open 1095 days after my brother's birthday this month". If Raj's brother's birthday is on Monday, then on which day will Raj open his shop?

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

Q.48) In a family there were x people. The expenditure on pulses per month in this family is directly proportional to 10 times the square of the number of people in the family. If the elder daughter left the family after her marriage, there was a decrease in consumption of pulses by 50 kg per month. What is the value of x?

a) 6
b) 7
c) 8
d) None of these

Q.49) Two taps can fill a tank in 8.33 minutes and 12.5 minutes respectively and a third tap can take out 162 litres of water from the tank in 1 min. When the tank was full, all the three taps were opened simultaneously. It caused the entire tank to get emptied in 4 minutes. What is the capacity of that tank?

a) 360 litres
b) 380 litres
c) 420 litres
d) None of the above

Q.50) Jupiter tailors is making a dress. For this dress they need 1 meter of black fabric, 1.5 meters of red fabric and 0.5 meter of white fabric. Black fabric costs Rs. 950 per meter, red fabric costs Rs. 775 per meter and white fabric costs Rs.700 per meter. If they buy just enough fabric to make that dress and also pay 5% GST on the bill, then what will be the approximate amount spent by them?

a) Rs. 2162
b) Rs. 2485
c) Rs. 2285
d) Rs. 2585

Directions for the following 3 (three) items:
Read the following **three** *passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

Passage – 1

The threat from bioterrorism is real, with current reports indicating that individuals, terrorist groups and criminals have both the capability and intention to use biological agents to cause harm to society. Access to knowledge and data is also increasingly available through the internet, and criminals use hidden and anonymous streams of communication, such as the Darknet, to buy, sell and share data and communicate with each other. The spread of an infectious or toxic biological agent can happen without warning, while the response to a biological event, whether naturally occurring, accidental or deliberate, relies on coordination across multiple sectors.

Q.51) Which one of the following is *implied* by the passage?

a) Bioterrorism is not a major concern because rapid development and deployment of vaccines is now possible.

b) It is not easy to prevent a biological event, but the need for a robust prevention, preparedness and response strategy is critical.

c) Internet lies at the root of the imminent threats of bioterrorism.

d) Both (a) and (b)

Passage – 2

Despite rising evidence of the harmful impacts of social media on adolescent mental health, there is still a paucity of empirical research on how teenagers understand social media, notably as a body of wisdom, or how they can use the larger modern media discourses to voice an opinion. The youth access social media in high numbers, which leads to chronic sleep deprivation, having a detrimental impact on cognitive ability, school performance, and socio-emotional functioning. Ethical social media use can increase opportunities for connection and communication, boosting one's self esteem, promoting one's health, and accessing crucial medical information. Clinicians can collaborate with young people and their families to mitigate the potential risks associated with social media and smart phone use by employing open, non-judgmental, and developmentally appropriate strategies, such as education and practical problem-solving.

Q.52) Which one of the following *best represents the crux* of the passage?

a) Social media has a predominantly negative impact on adolescent mental health due to cyber bullying and addiction.

b) The impact of social media on adolescent mental health is

multifaceted, involving potential downsides and upsides.

c) Adolescents should shun using social media for their overall mental well-being.

d) The adverse psychological effects of social media on adolescents are overrated.

Passage – 3

There has been a visible impact of solar energy in the Indian energy scenario during the last few years. Solar energy-based decentralized and distributed applications have benefited millions of people in Indian villages by meeting their cooking, lighting, and other energy needs in an environment-friendly manner. The social and economic benefits include a reduction in drudgery among rural women and girls engaged in the collection of fuel wood from long distances and cooking in smoky kitchens, minimization of the risks of contracting lung and eye ailments, employment generation, and creation of opportunity for economic activities at village level.

Q.53) Based on the above passage, the following *assumptions* have been made:

1. Harnessing solar energy has led to improvements in the standard of living in Indian villages.
2. Solar energy is the core component of Indian government's emphasis on sustainable growth.

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

Q.54) Consider the following Question and the Statements:

Statement 1: When X = 7, W = 41
Statement 2: When X = 9, W = 49
Question: If W = XY + Z, then what must be the value of Y and Z?

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

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

Q.55) Shardul has a sum of money invested at a 4.6% per annum interest rate for 2 years. If he had invested the same sum at a 3.2% per annum interest rate for the same time period, he would receive Rs. 196 less. Find the sum he invested.

a) Rs. 6870
b) Rs. 7000
c) Rs. 8700
d) Rs. 9200

Q.56) Lalji walked 30 meters from his house towards North to meet his ill friend Ramji, then turned to his right and walked 20 meters. There he bought fruits for Ramji and then turned to his right and walked 10 meters. Again, he turned to his right and walked 10 meters to buy medicine for Ramji. Then he turned to his left and walked 20 meters to buy some sweets for Ramji and again turned to his left and walked 10 meters. Then suddenly he realized that he forgot chocolates for his friends' kids, so he turned to his right and walks 10 meters to get chocolates, and then he turned to his right and walked 30 meters and reached Ramji's home. What is the least distance from Lalji's house to his friend's house?

a) 10√2 meters
b) 10√5 meters
c) 4√5 meters
d) 15 meters

Q.57) Sachin rode his bicycle northward, then turned left and rode 1 Km and again turned left and rode 2 Km. He found himself 1 km west of his starting point. How far did he ride northward initially?

a) 1 km
b) 2 km
c) 3 km
d) 5 km

Q.58) A group of six members meet for a party. In the party hall there are six numbered chairs. The secretary of the group sits on chair number 1 and the other members are free to sit on any of the chairs. In how many different ways can the members be seated?

a) 24
b) 120
c) 720
d) 240

Q.59) Two freight trains, one from Delhi to Mumbai (X) and the other from Mumbai to Delhi (Y), start simultaneously. After they meet, the trains reach their destinations after 25 hours and 36 hours respectively. If the speed of the train X is 72 km/h, then the speed of the train Y is:

a) 86.4 km/h
b) 60 km/h
c) 50 km/h
d) 103.68 km/h

Q.60) Consider the following information, including the Question and the Statements: There are five members in a family namely, O, P, Q, R and S.

Question: What is the relation of S to P?

Statement-1: O and P are a married couple.
Statement-2: R is the father of Q.
Statement-3: S is R's son.
Statement-4: O and Q are sisters.

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

a) Statement-1, Statement-2 and Statement-3 are sufficient to answer the Question.
b) Statement-1, Statement-3 and Statement-4 are sufficient to answer the Question.
c) All four statements together are sufficient to answer the Question.
d) All four statements together are notsufficient to answer the Question.

*Directions for the following 3 (three) items: Read the following **three** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

Passage – 1

The concept of natural resources refers to naturally occurring living and non-living elements of the Earth system, including plants, fish, and fungi, but also water, soil, and minerals. Natural resources make up a dense web of interdependence, forming ecosystems that also include humans. As such, the distribution of resources shapes the face of our planet and the local distinctiveness of our environments. People have formed different types of cultural, spiritual, and subsistence-based relationships with the natural environment, adopting value systems that go beyond economic framings. Natural resources are often viewed as key assets driving development and wealth creation. Over time and with progressive industrialization, resource use increased. In some cases, exploitation levels came to exceed resources' natural regeneration rates.

Q.61) Which of the following statements reflects *the most logical, rational, and crucial message* conveyed by the author of the passage?

a) Natural resources are essential for the planet and all living beings, but conspicuous consumption can disrupt their natural balance.
b) Human beings living in artificial set up of cities are not a part of natural resources.

c) At the current rate of consumption, management of resources is not quite required.

d) There is a need to inculcate awareness about the inherent value of natural resources among people.

Passage – 2

The end of the Cold War sparked a debate over ideas of security in IR between 'narrowers' and 'wideners'. The narrowers were concerned with the security of the state and often focused on analyzing the military and political stability between the United States and the Soviet Union. Dissatisfied with this, wideners sought to include other types of threats that were not military and that affected people rather than states. Whether one agrees with the wideners or the narrowers, the end of the Cold War indicated that security was an essentially contested concept – 'a concept that generates debates that cannot be resolved by reference to empirical evidence because the concept contains a clear ideological or moral element and defies precise, generally accepted definition'.

Q.62) Which of the following statements can be *inferred* from the above passage?

1. The paradigm of security in the field of International Relations (IR) was influenced by the dynamics of the Cold War.

2. The debate between the proponents of a restricted viewpoint and the advocates of a broad perspective has been conclusively settled.

Choose the correct answer using the codes given below.

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

Passage – 3

Female labour force participation varies with income per capita. When household income is higher and there is more social protection, women can withdraw from the market to work in their households and care for children. At advanced-economy income levels, labour force participation rebounds because of better education, lower fertility, access to labour-saving household technology, and the availability of market based household services. Variations in the gender gap are significant even among OECD countries. For instance, the gender gap in the Japanese labour market stands at 25 percentage points, compared with just over 10 percentage points on average in the major advanced economies and only 6 percentage points in Sweden.

Q.63) Consider the following *assumptions*:

1. Women's labour force participation is influenced by the need for childcare and household work.
2. The rates of men's engagement in the workforce remain consistent across various economies.

Which of these assumptions is/are correct based on the above passage?

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

Q.64) A three-digit number is such that the square of the number at the unit's place when added to the number at the hundred's place gives the smallest two digit number. Which of the following statements are true?

a) All the numbers that satisfy the condition form an Arithmetic Progression.
b) There is only one number that satisfies the condition.
c) There is no number which can satisfy the condition.
d) There are exactly two numbers which satisfy the condition.

Q.65) In a college, four clubs – A, B, C and D, meet every 2nd, 3rd, 5th, and 6th day respectively. If all the clubs meet on the first day of the month, on what date shall all the clubs A, B and D meet together again?

a) 30
b) 15
c) 7
d) None of the above

Q.66) The average monthly income of Mr. Batra is Rs 1200 during first 4 months, Rs 1500 during next three months and Rs 1800 during last five months of the year. If the total expenditure during the year is Rs 15000, then what is Mr. Batra's yearly saving?

a) Rs 3300
b) Rs 2300
c) Rs 3000
d) Rs 2800

Q.67) Choose the option which is different from the others.

a) 12, 15, 17, 19
b) 18, 21, 31, 41
c) 11, 14, 27, 83
d) 10, 17, 31, 53

Q.68) What is the unit digit in the expression $(321)^{216} - (216)^{115}$?

a) 1
b) 5
c) 3
d) 0

Q.70) Weight of which among the following packet(s) lies between that of packet B and C?

a) Only packet E
b) Only packet D
c) Both packets D and E
d) Neither packet D nor packet E

Direction for the following 2 (two) items: *Study the following information and answer the items that follow.*

Ramkumar, a farmer, decided to sell his wheat produce by filling it in packets labelled A, B, C, D and E, each of them having a different weight. Weight of packet A is twice as much as that of packet B, while weight of packet B is four and a half times as much as that of packet C. Weight of packet C is half as much as that of packet D. Weight of packet D is half as much as that of packet E. Weight of packet E is more than that of packet C but less than that of packet A.

Q.69) If the weight of packet E is 120 kg, then the possible weight of packet D and packet B respectively can be:

a) 40 kg, 130 kg
b) 55 kg, 160 kg
c) 70 kg, 120 kg
d) 60 kg, 135 kg

Directions for the following 2 (two) items: *Read the following **two** passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.*

Passage – 1

Online sharing within social media sites helps many people stay in touch with friends or connect with new ones. And that may be more important for teenagers than other age groups. Friendships help teens feel supported and play a role in forming their identities. Social media doesn't affect all teens in the same way. The use of social media is linked with healthy and unhealthy effects on mental health. In a study focusing on 12- to 15-year-olds in the United States, spending three hours a day using social media was linked to a higher risk of mental health concerns. With the teenage brain, it's common to choose to think it through. So, teens might post something when they're angry or upset, and regret it later. That's known as stress posting.

Q.71) Which of the following is *the most crucial message conveyed* by the author of the passage?

a) Teenagers should spend around three hours a day with their grandparents.
b) While social media aids in connecting with friends, excessive use and impulsive online behaviour can have detrimental consequences.
c) Teenagers who do not use social media use are immune to all mental health issues.
d) All teenagers are impulsive by nature and engage in stress posting.

Passage – 2

People who live in or near forests know the value of forest resources firsthand because their lives and livelihoods depend directly on these resources. However, the rest of us also derive great benefits from the forests which we are rarely aware of. Forests once extended over large tracts of our country. People have used forests in our country for thousands of years. As agriculture spread in forests, it was left in patches that were controlled mostly by tribal people. They hunted animals gathered plants and lived entirely on forest resources. Deforestation became a major concern in British times when a large amount of timber was extracted for building their ships. This led the British to develop scientific forestry in India. They, however, alienated local people by creating Reserved and Protected Forests which curtailed access to the resources. This led to a loss of stake in the conservation of the forests which led to a gradual degradation and fragmentation of forests across the length and breadth of the country.

Q.72) Which of the following statements *can be inferred* from the above passage?

1. Lack of awareness about the indirect benefits of forests among those who don't live near them might lead to a lack of concern for their conservation.
2. Imposing top-down forest management practices without roping in local communities can lead to negative consequences.

Select the correct answer using the codes given below.

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

Q.73) Find the next term in the following series.8, 24, 12, 36, 18, 54, ?

a) 27
b) 108

c) 66

d) 72

Q.74) Five boys participated in a competition. Ramesh was ranked lower than Sanjay. Vijay was ranked higher than Deepak. Kamal is ranked higher than Vijay but lower than Ramesh. Who was ranked first?

a) Sanjay

b) Vijay

c) Deepak

d) Kamal

Q.75) Consider the series: 1 4 5 6 3 2 2 5 7 3 2 7 2 5 9 8 2 3 5 4 7 1 2 3
Find the number of 5's that are followed by an odd number and preceded by a prime number.

a) 3

b) 0

c) 1

d) 2

Q.76) Read the following information and answer the question that follows.

A + B means 'A' is the father of 'B'.

A - B means 'A' is the mother of 'B'.

A × B means 'A' is the brother of 'B'.

A ÷ B means 'A' is the sister of 'B'. Which of the following shows that 'P' is the aunt of 'T'?

a) P – Q × R ÷ S + T

b) P + Q ÷ R - S × T

c) P ÷ Q + R ÷ S × T

d) P × Q – R + S ÷ T

Q.77) If in a certain code language, T is written as A, C as S, E as D, R as F, A as G, F as H, U as J, N as K, O as L, and M as X. How will MANUFACTURE be written in that code language?

a) XGKJGHSAJED

b) XGKKHGASJFD

c) XGKJHGSAJFD

d) XGKJHGSBIFD

Q.78) Consider the following sequence.

F2S, H3Q, J8N, ?, N112E
Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

a) K6N

b) L10N

c) K6O

d) L27J

Q.79) Find the missing numbers in the matrix given below.

7	10	15
9	12	17
12	15	20
10	?	18
8	?	16
18	21	26

    a) 13, 11
    b) 12, 11
    c) 15, 13
    d) 11, 17

Q.80) Ramesh uses a system of coding numbers. In his system, he replaces every digit by the remainder that the digit gives after dividing by 3. The number **123456** shall be encoded as which of the following in this system?

    a) 123456
    b) 120120
    c) 123123
    d) None of the above