Directions for the following 6 (Six) items:

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

Passage 1

It is well known that in the middle ages the German Emperors put the just then arising towns under Imperial Governors, "advocati," to protect these towns against the surrounding nobility. As soon as growing population and wealth gave them sufficient strength and independence to resist, and even to attack the nobility, the towns also drove out the noble Governors, the advocati.

- In the light of the above passage, the nature of "advocati" is best described as
 - (a) the arrangement of nobility and German emperors to exercise power over common people.
 - (b) an instrument of the German emperors to keep the new towns under their control.
 - (c) an army of the German emperors to fight the nobility.
 - (d) Imperial Governors who maintain separation of power between emperors, nobility and commoners.

Passage 2

Many ecosystem services are 'public goods' or 'common goods': they are often open access in character and non-rival in their consumption. In addition, their benefits are felt differently by people in different places and over different timescales. However, private and public decisions affecting biodiversity rarely consider benefits beyond the immediate geographical area. They can also overlook local public benefits in favour of private benefits, even when local livelihoods are at stake, or focus on shortterm gains to the detriment of the sustained supply of benefits over time.

- The keynote that seems to be emerging from the passage is that
 - (a) we must prevent private sector participation in decisions involving biodiversity.
 - (b) we should not rely on ecosystem services which are limited and unsustainable.
 - (c) we should learn from nature and stop its consumption for our developmental needs.
 - (d) we should approach biodiversity in an inclusive, global and sustainable manner.

Passage 3

Geothermal energy is the energy produced by the internal heat of the earth, which is concentrated in areas where there are volcanoes or geysers, known as geothermal reservoirs, which can produce clean energy indefinitely. The heat or thermal energy is transferred to the surface, and the force generated by the steam is used to power a turbine that moves an electric generator, in a plant within or near a producing field. Given the environmental vulnerability of Central America and the impacts that climate change is already causing, with phenomena such as increasingly long droughts, it is vital for the region to depend less on hydropower generation and to make greater efforts to develop geothermal energy.

- With reference to the above passage, the following assumptions have been made:
 - 1. Central America has a good geothermal energy potential.
 - 2. Climate change can potentially make hydro power generation unreliable.

Which of these assumptions is/are valid?

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

The Intergovernmental Panel on Climate Change's (IPCC) latest report indicates that the Caribbean states are expected to be heavily impacted by climate change. Most if not all states depend on the fisheries and the regional tourism industry - which grew from four million visitors in 1970 to an estimated 25 million visitors today - earns an estimated 25 billion dollars in revenue and supports about six million jobs. The findings of the IPCC's report is further strengthened by that of the Caribbean Marine Climate Change Report Card (2017) which stated: "The seas, reefs and coasts on which all Caribbean people depend are under threat."

- **4.** With reference to the above passage, the following assumptions have been made:
 - 1. Fish can be as badly affected by climate change as any human being.
 - 2. Climate change can have adversarial effects on tourism industry.
 - Which of these assumptions is/are valid?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

Passage 5

In ruling monarchies the monarch can often unilaterally form or terminate the government. However, in case of a democratic parliamentary monarchy, only the freely elected parliament forms and terminates the government. In a constitutional monarchy, by contrast, there is a strong element of dual legitimacy in that parliament and the monarch need each other's support in order to form or terminate a government.

- In the light of the above passage, the nature of democratic parliamentary monarchy is best described as
 - (a) most orthodox form of monarchy with negligible political rights for common people.
 - (b) better than constitutional monarchy but worse than ruling monarchies.
 - (c) the best form of democracy where human rights are secure.
 - (d) more democratic than constitutional monarchy and ruling monarchy.

Published in the journal Climatic Change, a study shows how warming air lessens the ability of airplane wings to generate lift. Here is what happens - when temperatures rise, the air warms and the air spreads out and its density declines, making the air very thin. Wings of aircraft generate less lift as they race across a runway when the air is thin. Depending on the aircraft model, runway length, and other factors, at some point a packed plane may be unable to take off safely if the temperature gets too high.

- 6. The keynote that seems to be emerging from the passage is that
 - (a) aircrafts will be more affected from temperature rise compared to other means of transport.
 - (b) climate change will lead to building of lighter aircrafts.
 - (c) global warming may compromise the safety and efficiency of aircrafts.
 - (d) investment in bullet trains is necessary to replace aircrafts.

Directions for the following 3 (three) items:

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

There is a family of six persons P, Q, R, S, T and U. They are accountant, businessman, chemist, doctor, engineer and fire-fighter, not necessarily in the same order. P, the accountant, is married to the lady chemist. Businessman is a male and is married to firefighter. U, the male unmarried engineer, is the brother of R who is unmarried female doctor. Businessman is the father of doctor. There are two fathers and two sons in the family.

- Who is the mother of engineer?
 - (a) Chemist

7.

- (b) Fire-fighter
- (c) Doctor
- (d) None of the above
- **8.** If the oldest lady is Q whose son is S, who is the fire-fighter?
 - (a) T
 - (b) P
 - (c) U
 - (d) Cannot be determined.

Passage 6

- **9.** What is the relationship between the accountant and doctor?
 - (a) Grandmother granddaughter
 - (b) Grandfather granddaughter
 - (c) Father daughter
 - (d) Mother daughter

Directions for the following 2 (two) items:

Read the line graph given below and answer the 2 (two) items that follow:

The line graph shows the number of male and female faculty members in the different departments of an institute.



- **10.** Out of all the teachers for the given subject which of the following subjects has the highest percentage of male teachers?
 - (a) Chemistry
 - (b) Mathematics
 - (c) Botany
 - (d) Economics
- 11. If two more female teachers join the Mathematics department, what shall be the new ratio of male to female teachers in the Mathematics department?
 - (a) 4:1
 - (b) 7:2
 - (c) 14:5
 - (d) 14:4

A = (45% of P) - (15% of Q) and B = (25% of P)
+ (20% of Q). In which of the following cases is
A - B positive?

- (a) P = 700 and Q = 400
- (b) P = 700 and Q = 300
- (c) P = 700 and Q = 500
- (d) None of the above

- **13.** In a neighbourhood, 12% of the people are less than 30 years of age, 6% of the people are more than 70 years old, 22% of the people are more than 50 years old and 990 people are between 30 years and 50 years of age. How many people are between 50 and 70 years of age?
 - (a) 250
 - (b) 240
 - (c) 230
 - (d) 225

Directions for the following 8 (Eight) items:

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

Passage 1

The doctrine of judicial activism which justifies easy and constant readiness to set aside decisions of other branches of Government is wholly incompatible with a faith in democracy and in so far it encourages a belief that judges should be left to correct the result of public indifference it is a vicious teaching.

- **14**. Which one of the following views corroborates the above statement?
 - (a) Separation of power between the branches of the government is in the interest of democracy.
 - (b) Judiciary acts as the custodian of democracy by keeping other branches of the government in check.
 - (c) Public indifference in a democracy should be settled through elections and not through judicial interference.
 - (d) In democracy, legislature and executive should keep judiciary in check and not the vice-versa.

Passage 2

It is not always easy to answer the question, What is a real election? Even under the republic, the Romans never accepted the principle of "one man, one vote." Decision in legislation and in the choice of the principal officials was by a plurality of "centuries" or by a plurality of "tribes": within each of these constituencies one man, one vote prevailed, but the units varied in size. It was tactically important that each of them had some local basis, but locality was not decisive in their composition.

8

- Which of the following statements is/are correct regarding elections?1. Though the institutions of democracy are
 - modern, the ideas and practices date back to history.
 - The process of election has varied across time and hence may not be defined homogeneously.
 - 3. Conducting election does not guarantee that everyone is equal.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 only

15.

- (c) 2 and 3 only
- (d) 1, 2 and 3.

Passage 3

In one sense democracy is an insane idea. While voting may be perceived as an attempt to reach the best decisions about what to do, it is not always about good decision-making but about legitimacy. A government gains its right to govern by the assent of the people. From that point of view it does not matter how wise or informed or intelligent the voter is, or voters in general may be. Therefore, modern governments face two quite different fundamental issues: they have to be legitimate - in the sense that they have to govern with the broad assent of the people, but on the other hand, governments have to try to find good solutions to complicated problems.

- **16**. Which of the following is the *best explanation* of the above passage?
 - (a) While a democratic government may be more legitimate, it generally lacks the ability to take good decisions.
 - (b) In a democracy, every decision has to be taken with the prior consent of those who are being ruled.
 - (c) The role of any government is to first ensure legitimacy and then take decisions which solve complicated problems.
 - (d) If governments prefer correct decisions over the popular ones, their legitimacy may be compromised.

Passage 4

The introduction of universal adult suffrage is considered one of the most important decisions that changed India for the better. Granting voting rights to all is no mean achievement for the founding fathers of Indian Constitution, especially Dr B.R. Ambedkar. It provided the government with "unchallengeable legitimacy against any military intervention" or secessionist movements. Besides achieving gender equality by giving women the right to vote, it eliminated untouchability and ensured equal opportunities for backward class people as well.

- 17. Which among the following is the most logical and essential message conveyed by the above passage?
 - (a) Universal adult suffrage gave legitimacy as well as egalitarian character to the Indian democracy.
 - (b) Out of all features and components of the Indian Constitution, Universal adult suffrage is the best.
 - (c) Universal adult suffrage satisfied everyone and ensured that no group felt the need of succession.
 - (d) Poverty and inequality can be reduced by granting universal adult suffrage to everyone irrespective of their identity.

Passage 5

The arms trade is one of the most corrupt trades in the world, fuelling conflict and poverty. Since the early 1990s there has been efforts to review and develop arms-transfer principles and codes of conduct to ensure that arms are not sold to human rights violators. The US, EU and others have developed some codes, but they are fraught with problems, loopholes, lack of transparency and are open to corruption. There is a proposed international arms trade treaty to overcome these limitations. However, for various political and profit reasons, some nations seem unwilling to agree to a code of conduct. Aside to security reasons, arms are principal cause of grave violation of human rights in most of countries of world.

- 18. Which among the following is the most logical and rational assumption that can be made from the above passage?
 - (a) Weapon manufacturing states should sell weapons only to democratic nations to avoid these weapons reaching wrong hands.
 - (b) We must arrive at a consensus to halt the production, trade and stockpiling of weapons of mass destruction.
 - (c) A global treaty on arms trade is near impossible because of its growing demand in the contemporary world.
 - (d) The proposed international arms trade treaty could help curb use of arms in conflicts and human rights violations.

The Non-Proliferation Treaty (NPT) was seen by some critics as a means for the five nuclear powers at that time to retain their weapons while telling others not to develop them, and thus allow these five to remain militarily more powerful than other nations. This was feared to then provide a pretext for other countries to develop their own nuclear weapons. NPT was based upon an important trade-off. The non-nuclear weapons states agree not to develop or acquire nuclear weapons, and the nuclear weapons states agree to engage in good faith negotiations for nuclear disarmament. Unfortunately, the nuclear weapons states, and particularly the United States, seem to have made virtually zero progress.

- 19. The main idea of the passage is that
 - (a) Every nation has equal right to possess nuclear weapons for self-defence.
 - (b) NPT is unfair because nuclear weapons states have not kept their side of the bargain.
 - (c) Nuclear weapon states should have a no first use policy and non-nuclear states should sign NPT.
 - (d) NPT should recognize the new states which have developed nuclear weapons as legitimate nuclear powers.

Passage 7

As seen throughout history, empires have sought to expand territorially, politically, economically and even culturally. This leads to conflicts and wars, many of which ultimately have to do with power and economics. In the modern era, this has led to the current form of globalization, which many perceive around the world to be unequal and influenced by the more powerful countries who benefit from it the most. Whether it has been the Roman Empire in the past, or what many consider to be the American Empire and its allies today, many empires also seem to exhibit similar features of power, dominance and the pursuit of policies to attempt to maintain that.

20. The passage seems to suggest that

- (a) the policies and actions of major powers are largely driven by power politics and the pursuit of self-interest.
- (b) contemporary super powers differ from the historical ones due to the growing extent of globalisation.
- (c) globalisation has significantly altered the goals of powerful countries or empires.
- (d) expansionism has taken more aggressive forms over the course of history.

Passage 8

In recent years, the American media has been plagued with all sorts of problems including, sliding profits, scandals about manipulation, plagiarism, propaganda, lower audiences, "dumbing down", and so on. Media omissions, distortion, inaccuracy and bias in the US is something acknowledged by many outside the USA, and is slowly realized more and more inside the US. However, those problems have made it very difficult for the average American citizen to obtain an open, objective view of many of the issues that involve the United States. Those with power and influence know that media control or influence is crucial. If media is not truly free, it paves the way for manipulation and concentration of views, thus undermining democracy itself.

- 21. The keynote that seems to be emerging from the passage is that
 - (a) Ethics and capability of media is better protected in a democratic society.
 - (b) A free and fair press is crucial for the proper functioning of democracy.
 - (c) Nexus between media, corporate and political parties is not in the interest of democracy.
 - (d) Media is more corrupt in the developed nations compared to the developing society.
- A dealer offers a cash discount of 10 % and still makes a profit of 80 %, when he further allows 24 articles to be sold at price of a dozen to a particular customer. How much percent above the cost price were his wares listed?
 - (a) 400%
 - (b) 300%
 - (c) 200%
 - (d) None of these
- **23.** By selling 16 articles, a seller loses the selling price of 4 articles. Find his loss percent.
 - (a) 25%
 - (b) 75%
 - (c) 20%
 - (d) None of these
- 24. In Delhi University examination, 65 % students passed in Mathematics, 60 % in English and 40 % passed in both of these subjects. If 135 students failed in both English and Mathematics, then what is the total number of students?
 - (a) 1125
 - (b) 1050
 - (c) 975
 - (d) 900

- 25. In a group of 1500 people, 700 can speak French, 500 can speak German and 150 can speak both. Find the number of people who can speak at most one language.
 - (a) 1200
 - (b) 900
 - (c) 1350
 - (d) 1050
- **26.** Examine the following statements:
 - 1. None but animals are four footed.
 - 2. Some four-footed creatures are carnivorous.
 - 3. All carnivorous creatures are black.

Which one of the following conclusions can be drawn the above statements?

- (a) All animals are black.
- (b) All carnivorous four-footed creatures are black.
- (c) All four-footed creatures are carnivorous.
- (d) None of the above conclusions can be drawn.
- 27. Pointing to Asha, John said, "The son of her only brother is the brother of my wife." How is Asha related to John?
 - (a) Grandmother
 - (b) Mother's sister
 - (c) Sister of father-in-law
 - (d) Mother-in-law
- **28.** T is the son of P. S is the son of Q. T is married to R. R is Q's daughter. How is S related to T?
 - (a) Brother-in-law
 - (b) Brother
 - (c) Uncle
 - (d) Father-in-law
- **29.** If the price of a commodity is raised by 25%, then by how much percent a house holder should reduce his consumption of the same commodity so that his expenditure does not increase?
 - (a) 25
 - (b) 20
 - (c) 33.33
 - (d) None of these

- **30.** Weight of a jar alone is 12.5 % of the jar filled with water. When some quantity of water is removed, weight of the jar and the remaining water is 25 % of the original total weight. What fractional part of the water has been removed?
 - (a) 3/7
 - (b) 5/7
 - (c) 6/7
 - (d) None of these
- **31.** A report consists of 10 sheets each consisting of 50 lines and each such line consists of 60 characters. This report is retyped into sheets each of 30 lines, each having 25 characters. The percentage increase in the number of sheets is?
 - (a) 400 %
 - (b) 300 %
 - (c) 200 %
 - (d) None of these
- **32.** The dearness-allowance of Mr. Gupta on basic salary of Rs. 10,000 is increased to 200 % from 100 % and the tax deduction on both is increased to 20 % from 10 %. His net salary must have increased by how much?
 - (a) Rs. 6,000
 - (b) Rs. 9,000
 - (c) Rs. 4,000
 - (d) None of these

Directions for the following 5 (Five) items:

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

Passage 1

Every nation has a foreign policy to ensure that its needs are represented in the global community. However, in the past, especially during the Cold War, and throughout history, power has been used in the international scene to push forward national interests and agendas, sometimes without any regard to the nations and people they may directly or indirectly affect. This has sometimes resulted in a rise in resentment against some of these nations who are then seen as bullies, getting away with many acts of hypocrisy. In the increasingly smaller global community, "national interests" do not necessarily mean that they are good for the international community. It is sometimes difficult to decide when national interests and international concerns should be addressed in a balanced way.

- **33**. The main idea of the passage is that
 - (a) internationalism will lead to more progress of humanity compared to narrow national interests.
 - (b) national interests and international interests are two contradictory forces which can't be simultaneously pursued.
 - (c) national interests should not be pursued with a complete disregard to the international concerns.
 - (d) the foreign policy makers should prioritize their national interests over international issues.

Passage 2

Elderly women may face double discrimination on the basis of both gender and age. Women tend to live longer than men, may lack control of family resources and can face discrimination from inheritance and property laws. Many older women are plunged into poverty at a time of life when they are very vulnerable. Only a few developing countries have safety nets for older people in the form of non-contributory or means-tested pensions.

- **34**. The keynote that seems to be emerging from the passage is that
 - (a) women should be the family head having entitlement over the property.
 - (b) women should be granted equal rights over resources of the family.
 - (c) elderly women should be given property rights after the death of their husbands.
 - (d) health care for men must be improved to increase their life expectancy.

Passage 3

Lincoln once reprimanded a young army officer for indulging in a violent controversy with an associate. "No man who is resolved to make the most of himself," said Lincoln, "can spare time for personal contention. Still less can he afford to take the consequences, including the vitiation of his temper and the loss of self-control. Yield larger things to which you show no more than equal rights; and yield lesser ones though clearly your own. Better give your path to a dog than be bitten by him in contesting for the right. Even killing the dog would not cure the bite."

- **35.** Which one of the following is essentially discussed in the passage?
 - (a) How avoiding controversy can make one more successful.
 - (b) The story and events from the life of Abraham Lincoln.
 - (c) The ways to of avoiding anger and improving self-control.
 - (d) The futility of indulgence into selfcontention and petty issues.

In February 324, Alexander at last reached the city of Susa. Desperate to retain his leadership and recruit more soldiers, he tried to connect Persian nobles to Macedonians in order to create a ruling class. To this end, at Susa he commanded that a large number of Macedonians marry Persian princesses. After Alexander managed to recruit tens of thousands of Persian soldiers into his army, he dismissed many of his existing Macedonian soldiers. This enraged the soldiers, who spoke critically of Alexander's new troops and condemned him for adopting Persian customs and manners.

- **36.** With reference to the above passage, which of the following statements is/are true?
 - 1. He found Persian soldiers more capable than his own Macedonian soldiers.
 - 2. Alexander was willing to shake hands with foreign people if it served his interests.

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

Passage 5

The true patriotism, the only rational patriotism, is loyalty to the Nation all the time, loyalty to the Government when it deserves it.

- **37**. Which one of the following is the **best justification** of the above passage?
 - (a) In the realisation that a government's interest may contradict the national interest.
 - (b) In the understanding that government and nation are synonyms of each other.
 - (c) In identifying nation and government as two independent and conflicting bodies.
 - (d) In the assumption that an elected government can't do any wrong.

38. Consider the following statements followed by two conclusions:

Statements: I: Some bikes are buses. II: All buses are trucks.

Conclusions: I: Some bikes are trucks. II: No truck is bike.

Which of the following conclusions is correct?

- (a) Only conclusion I is valid
- (b) Only conclusion II is valid
- (c) Both the conclusion are valid
- (d) Neither of the conclusion is valid
- 39. Which of the following Venn diagram correctly represents the relationship between Circles, Polygons and Rhombus?
 - (a)



(b)

(c)





(d)



40. Study the following diagram carefully and answer the question that follows:

The triangle represents the boys who play cricket, square represents the boys who play badminton and circle represent by the boys who play football.



How many boys play football but do not play badminton?

- (a) B
- (b) D
- (c) B +D
- (d) None of the above options is correct.
- **41.** In a class of 120 students, 62 like English, 52 like Mathematics and 24 like both English and Mathematics. What percentage of students in the class do not like both the subjects?
 - (a) 30%
 - (b) 27%
 - (c) 25%
 - (d) 21%

Direction for the following 2 (two) items:

Read the following information carefully and answer the 2 (two) items that follow:

> G1H means G is the father of H. G2H means G is the mother of H. G3H means G is the sister of H. G4H means G is brother of H. G5H means G is son of H. G6H means G is the daughter of H.

- **42.** How is M related to D in the expression D1H5K3M?
 - (a) M is D's wife's sister
 - (b) M is D's wife's brother
 - (c) M is D's uncle
 - (d) Either of (a) of (b) may be true.

- **43.** A and B are son and daughter of H and G respectively. B is married to C and A's wife, D, is daughter in law of G. How is C related to H?
 - (a) Daughter in law
 - (b) Son in law
 - (c) Son
 - (d) Daughter
- **44.** There is a sample of milk with 50% water in it in one container and an equal volume of pure milk in another container. If 1/4th of the diluted milk from first container is added to half of the pure milk contained in the second container, then what will be the percent component of water in the new mixture?
 - (a) 16.67%
 - (b) 25%
 - (c) 30%
 - (d) 40%
- **45.** A person has invested some money in a policy that gives 10% return for the first year and 20% return for the subsequent years. What will be the value of the money for the amount a person invests after a period of six years?
 - (a) 1.1^6 of initial investment
 - (b) 1.2^6 of the initial investment
 - (c) $1.1^3 \times 1.2^3$ of the initial investment
 - (d) 1.1×1.2^5 of the initial investment
- **46.** If the length of a rectangle is increased by 20% and the breadth is increased by 25%. What will be the net percentage increase in the area of the rectangle?
 - (a) 20%
 - (b) 25%
 - (c) 50%
 - (d) 40%
- **47.** The monthly income of Parul and Palak are in the ratio 4:3 and the ratio of their expenditure is 3:2. If each of them saves Rs. 6000 then by what percentage is Parul's income more than that of Palak's income?
 - (a) 25%
 - (b) 33.33%
 - (c) 50%
 - (d) Cannot be determined

- **48.** H is the brother of I. J is the sister of H. L is the brother of Q. Q is the daughter of R, who is married to I. S is the father of J. Who is the uncle of L?
 - (a) Q
 - (b) S
 - (c) H
 - (d) J
- **49.** A is the brother of B and C. D is C's mother. E is A's father. Which of the following statements cannot be definitely true?
 - (a) E is D's husband
 - (b) A is D's son
 - (c) D is A's mother
 - (d) B is E's son

Directions for the following 6 (Six) items:

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

Passage 1

The ultimate weakness of violence is that it is a descending spiral, begetting the very thing it seeks to destroy. Instead of diminishing evil, it multiplies it. Through violence you may murder the hater, but you do not murder hate. In fact, violence merely increases hate. Returning violence for violence multiplies violence, adding deeper darkness to a night already devoid of stars. Darkness cannot drive out darkness; only light can do that.

- **50**. The keynote that seems to be emerging from the passage is that
 - (a) we should address violence through nonviolence and love.
 - (b) we should address all the modern day issues through non-violence.
 - (c) we should not just kill the hater but the hate as well.
 - (d) we must realise that violence can bring peace only to the winning side.

Passage 2

Increasing population is an important driver of the rising demand for natural resources and the ecosystem services they provide, including food and energy. Africa, in particular, faces the critical challenge of its population continuing to grow at a rapid rate while natural resources, arable, grazing, forest lands, and water resources become increasingly scarce and degraded. Food is mostly produced by small-scale farmers who may not have the resources, or be in an enabling economic and policy environment, to close the "yield gap" between current and potential yields. Hence the increase in food needs of the rising population in Africa has been met by expanding agriculture into new lands which are often marginal, semi-arid zones that are climatically risky for agriculture - changing the local landscape, economy and society. Such change in land use has been recorded as a major cause of land degradation in Africa.

- **51**. The main idea of the passage is that
 - (a) African countries should import food from food surplus countries instead of destroying the vulnerable lands.
 - (b) semi-arid lands should be made fertile to support growing population.
 - (c) agricultural lands should be obtained by clearing forests and not the semi-arid regions.
 - (d) population growth should be regulated to ease the burden on natural resources.

Passage 3

For a while now, pharmaceutical companies have been criticized about their priorities. It seems the profit motive has led to emphasis on research that is aimed more at things like baldness and impotence, rather than various tropical diseases that affect millions of people in developing countries. Unfortunately, while a large market therefore exists, most of these people are poor and unable to afford treatments, so the pharmaceutical companies develop products that can sell and hence target wealthier consumers.

- **52.** The main idea of the passage is that
 - (a) health for all can't be achieved without poverty elimination.
 - (b) There should be a balance between private profit and public health.
 - (c) Wealthier population will be healthier than the poor ones.
 - (d) public money should be spend on basic health requirements and not over cosmetics.

The shorter the time required for training up to a particular sort of work, the smaller is the cost of production of the worker, the lower is the price of his labour-power, his wages. In those branches of industry in which hardly any period of apprenticeship is necessary and the mere bodily existence of the worker is sufficient, the cost of his production is limited almost exclusively to the commodities necessary for keeping him in working condition. The price of his work will therefore be determined by the price of the necessary means of subsistence.

- **53.** The main idea of the passage is that
 - (a) labours should be made stakeholders instead of wage earners in the industries.
 - (b) labour cost is an important component of cost of production.
 - (c) hiring unskilled labour will improve the profitability of industries.
 - (d) training of labour force will help in raising their wages.

Passage 5

Does a worker in a cotton factory produce only cotton? No. He produces capital. He produces values which serve a new to command his work and to create by means of it new values.

- 54. In the light of the above passage, the nature of 'values' is best described as
 - (a) the moral values generate in a factory by the hard work of the workers.
 - (b) the moral and ethical guidelines in a factory which the workers generally obliges while performing their work.
 - (c) the work done by the workers which generates capital and keeps the factory alive.
 - (d) the resources which can be used to generate more resource in a factory with the help of workers.

Passage 6

Twenty years ago, nobody forecast the stagnation of Japan in the 1990s, and its continuing relative loss of clout ever since. Thus, while Asian economic successes, including that of South Korea and some of the ASEAN countries, have been tremendously impressive, the crystal ball for global economic handicapping in years beyond the immediate future remains cloudy.

- 55. Which one of the following is the best justification of the above passage?
 - (a) In any economy, the economic boom is generally followed by stagnation.
 - (b) Asian countries generally lack the ability to capitalise on good economic foundations.
 - (c) It is difficult to accurately predict the future course of an economy.
 - (d) The nature of ASEAN economy and Japanese economy are very similar.
- 56. A man earns m% on the first Rs. 3,000 and n% on rest of the income. If he earns Rs. 1,050 from income of Rs 6000 and Rs 1350 from income of Rs 7500, find the value of n.
 - (a) 15
 - (b) 25
 - (c) 20
 - (d) None of these

- 57.
 - What will be the cost of a commodity, which costs Rs 1,000 now, 2 years from now if the rate of inflation is likely to be 200 % for the first year and 300 % for the second year ?
 - (a) Rs. 5,000
 - (b) Rs. 6,000
 - (c) Rs. 10,000
 - (d) Rs. 12,000
- **58.** The amount of work in a factory is increased by 50%. By what percent is it necessary to increase the number of workers to complete the new work in previously planned time, if productivity of the new workers is 150% more?
 - (a) 20%
 - (b) 30%
 - (c) 33.33%
 - (d) None of these
- 59. By selling 110 items for Rs. 1,000 a man loses10%. How many for Rs. 1,000 should he sell to get a gain of 10%?
 - (a) 85
 - (b) 100
 - (c) 95
 - (d) 90
- 60. A shopkeeper sold an article offering a discount of 5 % and earned a profit of 14 %. What would have been the percentage of profit earned if no discount was offered?
 - (a) 19%
 - (b) 9%
 - (c) 20%
 - (d) None of these
- 61. A man buys an article for 20% less than its value (actual cost price) and sells it for 20 % more than its value. His gain percent is:
 - (a) 50%
 - (b) 44%
 - (c) 40%
 - (d) None of these

- **62.** Examine the following statements:
 - 1. I go to the Maldives only if I need a leisure.
 - 2. I never need a leisure when my family members are with me.
 - Whenever I go to Mumbai I take my family members along.

Which one of the following conclusions is valid in the context of the above statements?

- (a) If I need a leisure, I go to the Maldives.
- (b) If I need a leisure, I seek my family members' company.
- (c) If I do not need a leisure, I do not go to the Maldives.
- (d) If I am not with my family members, then I go to the Maldives.
- **63.** Consider the following statement followed by two conclusions:

Statement:

Eating green vegetables is good for health.

Conclusions:

- 1. All healthy people eat green vegetables.
- 2. Eating green vegetables is essential for maintaining good health.
- Which of the following conclusion is correct?
- (a) Only conclusion 1 is valid.
- (b) Only conclusion 2 is valid.
- (c) Both conclusion are valid
- (d) Neither of the conclusion is valid
- **64.** Consider the following statements:
 - 1. Some people claim to have seen aliens.
 - 2. Life on other planets may exist.
 - 3. Space travel is now a fact.

From the above statements, it may be concluded that:

- (a) Aliens exist on other planets.
- (b) Aliens come from other planets.
- (c) Some living species in other planets are more intelligent than man.
- (d) Nothing definite can be said about aliens.

Directions for questions 65 and 66:

Refer to the chart given below and answer the following questions based on it:

The following graph gives the Air Quality Index (AQI) of some cities of India on a certain date:



Description of the air quality based on the Air Quality Index (AQI) is as follows:

Description	AQI
Good/ Satisfactory	0 - 100
Moderate	101 - 200
Poor	201 - 300
Very Poor	301 - 400
Severe	401 - 500

- **65.** On the given date, how many cities have non severe air quality?
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
- 66. On the given date, in which of the following cities, persons having respiratory disease(s) needed to be the most cautious?
 - (a) Bengaluru
 - (b) Delhi
 - (c) Mumbai
 - (d) Lucknow
- **67.** P, who is Q's daughter, says to R, 'Your mother S is the younger sister of my father, who is the third child of T.' How is R related to T?
 - (a) Daughter
 - (b) Granddaughter
 - (c) Grandson
 - (d) Cannot be determined

Directions for the following 6 (Six) items:

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

Passage 1

In Nigeria, a typical developing African nation, not many people are aware that medical waste (MW) contributes substantially to environmental pollution and hazards. This is reflected by lack of awareness and specific policy to address the menace of healthcare facility (HCF) waste, some of which is deemed hazardous. It is important to note that healthcare wastes, if not properly managed, could pose an even greater threat and hazards than the original diseases. It is the duty of hospital and healthcare centres to take care of public health issues such as MW. Carefree handling and disposal of MW impacts both directly and indirectly on staff, patient and environment. This is because the hospitals represent a unique environment, providing healthcare to patients and work environment for medical and other staff.

- 68. Which among the following is the most logical and rational assumption that can be made from the above passage?
 - (a) Public awareness is the most important step in ensuring proper handling and disposal of medical waste.
 - (b) The level of awareness about medical waste and its harmful impacts is considerably low in the world.
 - (c) It is the collective responsibility of the staff as well as the patients to ensure proper handling of MW.
 - (d) Improperly handled medical wastes makes hospital and nearby region prone to diseases and hazards.

After World War II, the entire world was breaking free. Africa's new leaders were planning to build a regional economy and emulating the United States. This is why potentially wealthy countries of Africa and Latin America were destabilized. If they had been permitted to develop, the wealth of the world would be in those countries, not in Europe. Virtually every nation which developed did so under the opposite development philosophies being forced upon the developing world.

- 69. Which among the following is the *most logical corollary* to the above passage?
 - (a) European model of development may not work for developing world as they have different set of challenges.
 - (b) Development cannot be achieved by following the US Model of economy.
 - (c) Developing nations should emulate US and European nations development strategies.
 - (d) Developing nations should resist Western pressure and frame development policies as per their needs.

Passage 3

Freedom of speech means freedom for those who you despise, and freedom to express the most despicable views. It also means that the government cannot pick and choose which expressions to authorize and which to prevent.

- **70**. Which one of the following views corroborates the above statement?
 - (a) Freedom of speech against the government in power is its true test.
 - (b) True freedom in any country is the freedom to make mistakes.
 - (c) A government should fear the power of pen more than the power of the sword.
 - (d) Absolute freedom of speech should be encouraged by the government in power.

Passage 4

Bose had emerged as a popular youth leader. He was admired for his great skills in organization

development. In 1928, during the Guwahati Session of the Congress, a difference in the opinion between the old and new members surfaced. The young leaders, as against the traditional leadership, wanted a "complete self-rule and without any compromise". The senior leaders were in favour of the "dominion status for India within the British rule". The differences were between moderate Gandhi and aggressive Subhash Chandra Bose was swelling. The state was so intense that Subhash Chandra Bose had to defeat Pattabhi Sitaramayya, a presidential candidate, nominated by Gandhiji himself. Bose had won the election but without any second thought he resigned from the party. He then formed the Forward Bloc in 1939.

- **71.** With reference to the above passage, consider the following statements
 - 1. Bose differed from Gandhi on the goals of Indian independence movement.
 - 2. Bose stayed away from the Quit India movement which was led by Gandhi.
 - 3. Bose would have better led the country both pre and post-independence.

Which of the above statements can be inferred from the given passage?

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

Passage 5

Government's view of the economy could be summed up in a few short phrases: If it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it.

- **72**. Which one of the following views corroborates the above statement?
 - (a) Government interference is prerequisite for the proper control and regulation of an economy.
 - (b) Governments usually discard the lagging areas and invest in areas where possibility of growth is more.
 - (c) Government generates revenue from the booming sectors and uses it to boost the lagging sectors.
 - (d) Government is solely responsible for keeping the economy in right track.

We are free today because we are the stronger; we will be slaves again when the government becomes the stronger.

- 73. What does the above passage imply?
 - (a) The governing power should lie with those who are being governed.
 - (b) We need minimum government and maximum governance.
 - (c) A weak government serves its people better in every affair.
 - (d) A compassionate leader is more useful than a strong leader.
- 74. The tank full of petrol lasts for 11 days. If a person starts consuming 10% more every day than he earlier used to do, then how many days will the tank full of petrol last?
 - (a) 10 days
 - (b) 9 days
 - (c) 8 days
 - (d) 7 days
- 75. Mahesh sold a cycle at a gain of 20%. Had he bought it for 25% less and sold it for Rs. 700 less, he would have made a profit of 400/9%. What was the cost price of the cycle?
 - (a) Rs. 8,000
 - (b) Rs. 7,500
 - (c) Rs. 8,500
 - (d) Rs. 6,000
- **76.** In terms of percentage loss, which of the following transactions would be the best?
 - (a) CP = Rs. 300; Loss = Rs. 10
 - (b) CP = Rs. 500; Loss = Rs. 10
 - (c) CP = Rs. 1000; Loss = Rs. 50
 - (d) CP = Rs. 700; Loss = Rs. 70
- 77. Rajesh, a car dealer bought a car for Rs.17,28,000. The car reached Rajesh through three middlemen each of whom have earned a

profit of 20%. What was the original cost of the car?

- (a) Rs. 12,00,000/-
- (b) Rs. 11,00,000/-
- (c) Rs. 9,00,000/-
- (d) Rs. 10,00,000/-
- **78.** A builder sells two premium flats, one at a loss of 20% and another at 15% profit. If the construction costs of the two flats are in the ratio 2:3, what is the net profit or loss accrued in the transaction of these two flats?
 - (a) 1% profit
 - (b) 2% loss
 - (c) 2% profit
 - (d) Cannot be determined
- 79. A jeweller offers the following schemes for the purchasers of gold jewellery from his shop.Scheme 1: Two successive discounts of 10% each.

Scheme 2: A discount of 14% followed by a discount of 6%

Scheme 3: A discount of 12% followed by a discount of 8%

In which of the following schemes, a purchaser can buy the jewellery at the least price?

- (a) Scheme 1
- (b) Scheme 2
- (c) Scheme 3
- (d) Cannot be determined
- **80.** Examine the following statements:
 - 1. All apples are red
 - 2. Some apples are red.
 - 3. No apple is red.
 - 4. Some apples are not red.

Given that statement 4 is true, what can be definitely concluded?

- (a) 1 and 2 are true.
- (b) 3 is true.
- (c) 2 is false.
- (d) 1 is false.