

Max. Time: 2 Hours

Max. Marks: 200

General Instructions

- This Test Booklet contains 80 items (questions). Each item comprises four responses (answers). In case you feel that
 there is more than one correct response, mark the response which you consider the best. In any case, choose ONLY
 ONE response for each item.
- 2. You have to mark all your responses **ONLY** on the separate OMR Sheet provided.
- **3.** All items carry equal marks.
- 4. Penalty for wrong answers:
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third (0.33)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.

(iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

Direction for the following 8 (eight) items: Read the following six passages and answer the items (1-8) that follow. Your answers to these items should be based on the passages only.

Passage-1

Human history abounds in claims and theories confining the right of governing to a few select citizens. Exclusion of the many is justified on the ground that human beings may be rightfully segregated for the good of society and viability of the political process.

- 1. Which one of the following statements is least essential as a part of the argument in the above passage ?
 - (a) Man seeks control over external things affecting him.
 - (b) In society, there are 'super' and 'sub' human beings.
 - (c) Exceptions to universal citizen participation are conducive to systemic efficacy.
 - (d) Governing implies recognition of disparities in individual capacities.

Passage-2

By 2050, the Earth's population will likely have swelled from seven to nine billion people. To fill all those stomachs — while accounting for shifting consumption patterns, climate change, and a finite amount of arable land and potable water — some experts say food production will have to double. How can we make the numbers add up ? Experts say higher yielding crop varieties and more efficient farming methods will be crucial. So will waste reduction. Experts urge cities to reclaim nutrients and water from waste streams and preserve farmland. Poor countries, they say, can improve crop storage and packaging and rich nations could cut back on resource-intensive foods like meat.

- 2. Which one of the following statements *best sums up* the above passage ?
 - (a) The population of the world is growing very fast.
 - (b) Food security is a perennial problem only in developing countries.
 - (c) The world does not have enough resources to meet the impending food scarcity.
 - (d) Food security is increasingly a collective challenge.

Passage-3

Many people in India feel that if we cut our defense expenditure on weapon-building, we can create a climate of peace with our neighbours, subsequently reducing the conflict or creating a no-war situation. People who proclaim such ideas are either the victims of war or the propagators of false argument.

- 3. With reference to the above passage, which of the following is the *most valid assumption* ?
 - (a) Building of weapons systems by us has instigated our neighbours to wage wars against us.
 - (b) The greater spending on weapon-building by us would lessen the possibility of armed conflict with our neighbours.
 - (c) It is necessary to have state of the art weapons systems for national security.
 - (d) Many people in India believe that we are wasting our resources on weapon-building.

Passage-4

India accounts for nearly a fifth of the world's child deaths. In terms of numbers, it is the highest in the world — nearly 16 lakhs every year. Of these, more than half die in the first month of life. Officials believe that the reason for this is the absence of steps to propagate basic health practices relating to breast feeding and immunisation. Also, the large reproductive population of 2.6 crore remains bereft of care during the critical phases of pregnancy and post-delivery. Added to this is the prevalence of child marriages, anaemia among young women and lack of focus on adolescent sanitation, all of which impact child death rates.

- 4. Which is the *critical inference* that can be made from the above passage ?
 - (a) A lot of Indians are illiterate and hence do not recognize the value of basic health practices.
 - (b) India has a very huge population and the government alone cannot manage public health services.
 - (c) Universalization and integration of maternal health and child health services can effectively address the problem.
 - (d) The nutrition of women in child bearing age does not affect child mortality rate.

Passage-5

Foods travel more than the people who eat them. Grocery stores and supermarkets are loaded with preserved and processed foods. This, however, often leads to environmental threats, such as pollution generated by long distance food transportation and wastage of food during processing and transportation, destruction of rain forests, reduced nutritional content, increased demand for preservation and packaging. Food insecurity also increases as the product comes from regions that are not feeding their own population properly.

- 5. With reference to the above passage, which of the following statements is/are true ?
 - **1.** Consuming regionally grown food and not depending on long travelled food is a part of eco-friendly behaviour.
 - **2.** Food processing industry puts a burden on our natural resources.

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-6

I must say that, beyond occasionally exposing me to laughter, my constitutional shyness has been of no disadvantage whatever. In fact I can see that, on the contrary, it has been all to my advantage. My hesitancy in speech, which was once an annoyance, is now a pleasure. Its greatest benefit has been that it has taught me the economy of words. I have naturally formed the habit of restraining my thoughts. And I can now give myself the certificate that a thoughtless word hardly ever escapes my tongue or pen. I do not recollect ever having had to regret anything in my speech or writing. I have thus been spared many a mishap and waste of time. Experience has taught me that silence is part of the spiritual discipline of a votary of truth. Proneness to exaggerate, to suppress or modify the truth, wittingly or unwittingly, is a natural weakness of man, and silence is necessary in order to surmount it. A man of few words will rarely be thoughtless in his speech; he will measure every word. We find so many people impatient to talk. There is no chairman of a meeting who is not pestered with notes for permission to speak. And whenever the permission is given the speaker generally exceeds the time-limit, asks for more time, and keeps on talking without permission. All this talking can hardly be said to be of any benefit to the world. It is so much waste of time. My shyness has been in reality my shield and buckler. It has allowed me to grow. It has helped me in my discernment of truth.

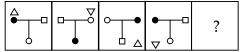
- 6. The author says that a thoughtless word hardly ever escapes his tongue or pen. Which one of the following is not a valid reason for this?
 - (a) He has no intention to waste his time.
 - (b) He believes in the economy of words.
 - (c) He believes in restraining his thoughts.
 - (d) He has hesitancy in his speech.
- 7. The most appropriate reason for the author to be spared many a mishap is that
 - (a) he hardly utters or writes a thoughtless word.
 - (b) he is a man of immense patience.
 - (c) he believes that he is a spiritual person.
 - (d) he is a votary of truth.
- 8. For the author, silence is necessary in order to surmount
 - (a) constitutional shyness.
 - (b) hesitancy in speech.
 - (c) suppression of thoughts.
 - (d) tendency to overstate.
- 9. Twelve people form a club. By picking lots, one of them will host a dinner for all once in a month. The number of dinners a particular member has to host in one year is
 - (a) One
 - (b) Zero
 - (c) Three
 - (d) Cannot be predicted
- 10. An automobile owner reduced his monthly petrol consumption when the prices went up. The price-consumption relationship is as follows:

Price (in \gtrless per litre)40 50 60 75Monthly consumption (in litres)60 48 40 32

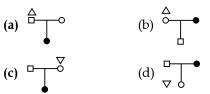
If the price goes up to ₹80 per litre, his expected consumption (in litres) will be

- (a) 30 (b) 28
- (c) 26 (d) 24

11. Consider the figures given below:



To fit the question mark, the correct answer is



12. Consider the following matrix:

3	8	10	2	?	1
6	56	90	2	20	0

What is the missing number at '?' in the matrix ?

(a)	5	(b) 0	
(c)	7	(d) 3	

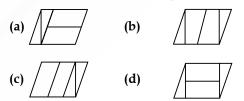
13. What is the missing number 'X' of the series 7, X, 21, 31, 43 ?

(a)	11	(b)	12
(c)	13	(d)	14

14. Four cardboard pieces of specific shapes are shown in the following figure:



Which one of the following figures given can be formed by joining these pieces together ?



15. In a test, a candidate attempted only 8 questions and secured 50% marks in each of the questions. If he obtained a total of 40% in the test and all questions in the test carried equal marks, how many questions were there in the test?

- (c) 15 (d) 16
- 16. A father is nine times as old as his son and the mother is eight times as old as the son. The sum of the father's and the mother's age is 51 years. What is the age of the son ?

- (a) 7 years
- (c) 4 years (d) 3 years
- 17. Four persons A, B, C and D consisting of two married couples are in a group. Both the women are shorter than their respective husbands. A is the tallest among the four. C is taller than B. D is B's brother. In this context, which one of the following statements is not correct ?

(b) 5 years

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

18. Consider the following statements:

- **1.** A man had a wife, two sons and two daughters in his family.
- **2.** The daughters were invited to a feast and the male members of the family went out to take part in a picnic.
- **3.** The man's father did not return from his work.

Which of the following statements is true?

- (a) Only the man's wife was left at home.
- (b) It is likely that the man's wife was left at home.
- (c) None was left at home.
- (d) More than one person was left at home.
- 19. Geeta: Naresh has become a better boxer since he started meditation.

Radha: Impossible. A boxer's most important asset is his aggressiveness.

Radha's statement reflects her belief that

- (a) meditation tends to make a person less aggressive.
- (b) meditation has little or no effect on the person who practises it.
- (c) Naresh was a poor boxer earlier because he was not aggressive enough.
- (d) Naresh would not have taken to meditation as he was a boxer.
- 20. All good athletes want to win and all athletes who want to win eat a well-balanced diet; therefore all athletes who do not eat a wellbalanced diet are bad athletes.

The best conclusion from this statement is that

- (a) no bad athlete wants to win.
- (b) no athlete who does not eat well-balanced diet is a good athlete.
- (c) every athlete who eats a well-balanced diet is a good athlete.
- (d) all athletes who want to win are good athletes.

Direction for the following 8 (eight) items: Read the following seven passages and answer the items (21-28) that follow. Your answers to these items should be based on the passages only.

Passage-2

The richer states have a responsibility to cut down carbon emissions and promote clean energy investments. These are the States that got electricity, grew faster and now have high per capita income, making them capable of sharing India's burden of becoming eco-friendly. Delhi, for example, can help by generating its own clean electricity using solar rooftop panels or even help poor States finance their clean energy projects. It is no secret that State Electricity Boards, which control 95% of the distribution network, are neck-deep in losses. These losses further discourage State utilities from adopting renewable energy as it is more expensive than fossil fuels.

- 21. Which among the following is the *most logical and rational assumption* that can be made from the above passage ?
 - (a) The richer States must lead in the production and adoption of renewable energy.
 - (b) The poor States always have to depend on rich States for electricity.
 - (c) The State Electricity Boards can improve their finances by undertaking clean energy projects.
 - (d) The high economic disparity between the rich and poor States is the major cause of high carbon emissions in India.

Passage-2

Set against a rural backdrop, 'Stench of kerosene1 is the story of a couple, Guleri and Manak, who have been happily married for several years but do not have a child. Manak's mother is desperate to have a grandchild to carry on the family name. Hence, she gets Manak remarried in Guleri's absence. Manak, who acts as a reluctant but passive spectator, is meanwhile, informed by a friend that Guleri, on hearing about her husband's second marriage, poured kerosene on her clothes and set fire to them. Manak is heartbroken and begins to live as if he were a dead man. When his second wife delivers a son, Manak stares at the child for a long time and blurts out, "Take him away! He stinks of kerosene."

- 22. This is a sensitive issue-based story which tries to sensitise the readers about
 - (a) Male chauvinism and infidelity
 - (b) Love and betrayal
 - (c) Lack of legal safeguards for women
 - (d) Influence of patriarchal mindset

Passage-3

The ultimate aim of government is not to rule or control by fear, nor to demand obedience, but conversely, to free every man from fear, that he may live in all possible security. In other words, to strengthen his natural right to exist and work without injury to himself or others. The object of government is not to change men from rational beings into beasts or puppets. It should enable them to develop their minds and bodies in security, and to employ their reason unshackled.

- 23. Which among the following is the *most logical and rational inference* that can be made from the above passage?
 - (a) The true aim of government is to secure the citizens their social and political freedom.
 - (b) The primary concern of government is to provide absolute social security to all its citizens.
 - (c) The best government is the one that allows the citizens to enjoy absolute liberty in all matters of life.
 - (d) The best government is the one that provides absolute physical security to the people of the country.

Passage-4

Our municipal corporations are understaffed. The issue of skills and competencies of the staff poses an even greater challenge. Urban services delivery and infrastructure are complex to plan and execute. They require a high degree of specialization and professionalism. The current framework within which municipal employees, including senior management, are recruited does not adequately factor in the technical and managerial competencies required. Cadre and recruitment rules only specify the bare minimum in academic qualifications. There is no mention of managerial or technical competencies, or of relevant work experience. This is the case with most municipal corporations. They also suffer from weak organisation design and structure.

- 24. Which among the following is the *most logical and rational assumption* that can be made from the above passage ?
 - (a) The task of providing urban services is a complex issue which requires the organisational expansion of municipal bodies all over the country.
 - (b) Our cities can provide better quality of life if our local government bodies have adequate staff with required skills and competencies.
 - (c) Lack of skilled staff is due to the absence of institutions which offer the requisite skills in city management.
 - (d) Our country is not taking advantage of the demographic dividend to manage the problems associated with rapid urbanization.

Passage-5

Flamingos in large flocks in the wild are social and extremely loyal. They perform group mating dances. Parents are very fond of their chicks, gathering them into creches for protection while both males and females fly off to search for food.

25. Which among the following is the *most logical corollary* to the above passage ?

- (a) Mass nesting in all species of birds is essential to ensure complete survival of their offspring.
- (b) Only birds have the capacity to develop social behaviour and thus can do mass nesting to raise their chicks in safety,

- (c) Social behaviour in some species of birds increases the odds of survival in an unsafe world.
- (d) All species of birds set up creches for their chicks to teach them social behaviour and loyalty.

Passage-6

Vast numbers of Indian citizens, without bank accounts live in rural areas, are financially and functionally illiterate, and have little experience with technology. A research study was conducted in a particular area in which electronic wage payments in Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) are meant to go directly to the poor. It was observed that recipients often assume that the village leader needs to mediate the process, as was the case under the previous paper-based system. Among households under this research study area who claimed to have at least one bank account, over a third reported still receiving MGNREGS wages in cash directly from a village leader.

- 26. What is the *most logical, rational and crucial message* that is implied in the above passage ?
 - (a) MGNREGS should be extended only to those who have a bank account.
 - (b) The paper-based system of payments is more efficient than electronic payment in the present scenario.
 - (c) The goal of electronic wage payments was not to eliminate mediation by village leaders.
 - (d) It is essential to provide financial literacy to the rural poor.

Passage-7

Individuals, groups and leaders who promote human development operate under strong institutional, structural and political constraints that affect policy options. But experience suggests broad principles for shaping an appropriate agenda for human development. One important finding from several decades of human development experience is that focusing exclusively on economic growth is problematic. While we have good knowledge about how to advance health and education, the causes of growth are much less certain and growth is often elusive. Further, an unbalanced emphasis on growth is often associated with negative environmental consequences and adverse distributional effects. The experience of China, with its impressive growth record, reflects these broader concerns and underlines the importance of balanced approaches that emphasize investments in the non-income aspects of human development.

- 27. With reference to the above passage, consider the following statements:
 - **1.** In developing countries, a strong institutional framework is the only requirement for human development and policy options.
 - 2. Human development and economic growth are not always positively interrelated.
 - **3.** Focusing only on human development should be the goal of economic growth.

Which of the above statements is/are correct?

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

- 28. With reference to the above passage, the following assumptions have been made:
 - **1.** Higher economic growth is essential to ensure reduction in economic disparity.
 - **2.** Environmental degradation is sometimes a consequence of economic growth.

Which of the above is/are valid assumption/ assumptions ?

- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
- 29. If A runs less fast than B, and B runs as fast but not faster than C; then, as compared to A, C runs
 - (a) slower than A
 - (b) faster than. A
 - (c) with same speed as A
 - (d) Given data is not sufficient to determine
- 30. Each of A, B, C and D has ₹ 100. A pays ₹ 20 to B, who pays ₹ 10 to C, who gets ₹ 30 from D. In this context, which one of the following statements is not correct?

- (a) C is the richest.
- (b) D is the poorest.
- (c) C has more than what A and D have together,
- (d) B is richer than D.
- 31. In a town, 45% population read magazine A, 55% read magazine B, 40% read magazine C, 30% read magazines A and B, 15% read magazines B and C, 25% read magazines A and C; and 10% read all the three magazines. What percentage do not read any magazine?
 - (a) 10% (b) 15%
 - (c) 20% (d) 25%
- 32. Examine the following statements:
 - **1.** Lady's finger is tastier than cabbage.
 - 2. Cauliflower is tastier than lady's finger.
 - 3. Cabbage is not tastier than peas.

The conclusion that can be drawn from these statements is that

- (a) peas are as tasty as lady's finger.
- (b) peas are as tasty as cauliflower and lady's finger.
- (c) cabbage is the least tasty of the four vegetables.
- (d) cauliflower is tastier than cabbage.
- 33. Shahid and Rohit start from the same point in opposite directions. After each 1 km, Shahid always turns left and Rohit always turns right. Which of the following statements is correct?
 - (a) After both have travelled 2 km, the distance between them is 4 km,
 - (b) They meet after each has travelled 3 km.
 - (c) They meet for the first time after each has travelled 4 km.
 - (d) They go on without ever meeting again.
- 34. In a 500 metres race, B starts 45 metres ahead of A, but A wins the race while B is still 35 metres behind. What is the ratio of the speeds of A to B assuming that both start at the same time ?

(a) 25 : 21	(b)	25:20
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(c) 5:3 (d) 5:7

- 35. Two equal glasses of same type are respectively 1/3 and 1/4 full of milk. They are then filled up with water and the contents are mixed in a pot. What is the ratio of milk and water in the pot ?
 - (a) 7:13 (b) 1:3
 - (c) 9:21 (d) 11:23
- 36. Out of 130 students appearing in an examination, 62 failed in English, 52 failed in Mathematics, whereas 24 failed in both English and Mathematics. The number of students who passed finally is
 - (a) 40 (b) 50 (c) 55 (d) 60
- 37. In a group of persons travelling in a bus, 6 persons can speak Tamil, 15 can speak Hindi and 6 can speak Gujarati. In that group none can speak any other language. If 2 persons in the group can speak two languages only and one person can speak all the three languages, then how many persons are there in the group?
 - (a) 21 (b) 22 (c) 23 (d) 24
- 38. In a parking area, the total number of wheels of all the cars (four-wheelers) and scooters/ motorbikes (two-wheelers) is 100 more than twice the number of parked vehicles. The number of cars parked is

(a)	35	(b)	45
(c)	50	(d)	55

39. The mangroves can shed tons of leaves per acre every year; fungi and bacteria break down this leaf litter and consume it, they then are consumed by tiny worms and crustaceans, which in turn feed small fish, which feed larger fish and birds and crocodiles.

Which among the following is the *most logical inference* of the above statement ?

- (a) Coastal areas cannot have food chains without mangroves.
- (b) Mangroves are an essential component of all marine ecosystems.
- (c) Mangroves have a crucial role in some of the coastal food chains.
- (d) The composition of marine flora and fauna is largely determined by mangroves.

40. "By liberty I mean the eager maintenance of that atmosphere in which men have the opportunity to be their best selves."

Which one of the following expresses the *view implied* in the above statement ?

- (a) Liberty is the absence of restraint on human action.
- (b) Liberty is what law permits people to perform.
- (c) Liberty is the ability to do what one desires.
- (d) Liberty is the maintenance of conditions for the growth of human personality.

Direction for the following 7 (seven) items: Read the following six passages and answer the items (41-47) that follow. Your answers to these items should be based on the passages only.

Passage-1

Climate change is already making many people hungry all over the world, by disrupting crop yields and pushing up prices. And it is not just food but nutrients that are becoming scarcer as the climate changes. It is the poorest communities that will suffer the worst effects of climate change, including increased hunger and malnutrition as crop production and livelihoods are threatened. On the other hand, poverty is a driver of climate change, as desperate communities resort to unsustainable use of resources to meet current needs.

- 41. Which among the following is the *most logical corollary* to the above passage?
 - (a) Government should allocate more funds to poverty alleviation programmes and increase food subsidies to the poor communities.
 - (b) Poverty and climate impacts reinforce each other and therefore we have to re-imagine our food systems.
 - (c) All the countries of the world must unite in fighting poverty and malnutrition and treat poverty as a global problem.
 - (d) We must stop unsustainable agricultural practices immediately and control food prices.

Passage-2

The Global Financial Stability Report finds that the share of portfolio investments from advanced economies in the total debt and equity investments in emerging economies has doubled in the past decade to 12 percent. The phenomenon has implications for Indian policy makers as foreign portfolio investments in the debt and equity markets have been on the rise. The phenomenon is also flagged as a threat that could compromise global financial stability in a chain reaction, in the event of United States Federal Reserve's imminent reversal of its "Quantitative Easing" policy.

- 42. Which among the following is the *most rational and critical inference* that can be made from the above passage?
 - (a) Foreign portfolio investments are not good for emerging economies.
 - (b) Advanced economies undermine the global financial stability.
 - (c) India should desist from accepting foreign portfolio investments in the future.
 - (d) Emerging economies are at a risk of shock from advanced economies.

Passage-3

Open defecation is disastrous when practised in very densely populated areas, where it is impossible to keep away human faeces from crops, wells, food and children's hands. Groundwater is also contaminated by open defecation. Many ingested germs and worms spread diseases. They prevent the body from absorbing calories and nutrients. Nearly one-half of India's children remain malnourished. Lakhs of them die from preventable conditions. Diarrhoea leaves Indians' bodies smaller on average than those people in some poorer countries where people eat fewer calories. Underweight mothers produce stunted babies prone to sickness who may fail to develop their full cognitive potential. The germs released into environment harm rich and poor alike, even those who use latrines.

43. Which among the following is the *most critical inference* that can be made from the above passage?

208

- (a) The Central and State governments in India do not have enough resources to afford a latrine for each household.
- (b) Open defecation is the most important public health problem of India.
- (c) Open defecation reduces the human capital of India's workforce.
- (d) Open defecation is a public health problem in all developing countries.

Passage-4

We generally talk about democracy but when it comes to any particular thing, we prefer a belonging to our caste or community or religion. So long as we have this kind of temptation, our democracy will remain a phoney kind of democracy. We must be in a position to respect a man as a man and to extend opportunities for development to those who deserve them and not to those who happen to belong to our community or race. This fact of favouritism has been responsible for much discontent and ill-will in our country.

- 44. Which one of the following statements best sums up the above passage?
 - (a) Our country has a lot of diversity with its many castes, communities and religions.
 - (b) True democracy could be established by providing equal opportunities to all.
 - (c) So far none of us have actually understood the meaning of democracy.
 - (d) It will never be possible for us to establish truly democratic governance in our country,

Passage-5

The existence/establishment of formal financial institutions that offer safe, reliable, and alternative financial instruments is fundamental in mobilising savings. To save, individuals need access to safe and reliable financial institutions, such as banks, and to appropriate financial instruments and reasonable financial incentives. Such access is not always available to all people in developing countries like India and more so, in rural areas. Savings help poor households manage volatility in cash flow, smoothen consumption, and build working capital. Poor households without access to a formal savings mechanism encourage immediate spending temptations.

45. With reference to the above passage, consider the following statements:

- **1.** Indian financial institutions do not offer any financial instruments to rural households to mobilise their savings.
- **2.** Poor households tend to spend their earnings/savings due to lack of access to appropriate financial instruments.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
- 46. What is the crucial message conveyed in the passage?
 - (a) Establish more banks
 - (b) Increase the Gross Domestic Product (GDP) growth rate
 - (c) Increase the interest rate of bank deposits
 - (d) Promote financial inclusion

Passage-6

Governments may have to take, steps which would otherwise be an infringement on the Fundamental Rights of individuals, such as acquiring a person's land against his will, or refusing permission for putting up a building, but the larger public interest for which these are done must be authorized by the people (Parliament). Discretionary powers to the administration can be done away with. It is becoming more and more difficult to keep this power within limits as the government has many number of tasks to perform. Where discretion has to be used, there must be rules and safeguards to prevent misuse of that power. Systems have to be devised which minimise, if not prevent, the abuse of discretionary power. Government work must be conducted within a framework of recognised rules and principles, and decisions should be similar and predictable.

- 47. Which among the following is the *most logical assumption* that can be made from the above passage?
 - (a) Government should always be given wide discretionary power in all matters of administration.
 - (b) The supremacy of rules and safeguards should prevail as opposed to the influence of exclusive discretion of authority.
 - (c) Parliamentary democracy is possible only if the Government has wider discretionary power.
 - (d) None of the above statements is a logical assumption that can be made from this passage.
- 48. A selection is to be made for one post of Principal and two posts of Vice-Principal. Amongst the six candidates called for the interview, only two are eligible for the post of Principal while they all are eligible for the post of Vice-Principal. The number of possible combinations of selectees is
 - (a) 4 (b) 12
 - (c) 18 (d) None of the above

49. A student has to opt for 2 subjects out of 5 subjects for a course, namely Commerce, Economics, Statistics, Mathematics I and Mathematics II. Mathematics II can be offered only if Mathematics I is also opted. The number of different combinations of two subjects which can be opted is

,	1
(a) 5	(b) 6
(c) 7	(d) 8

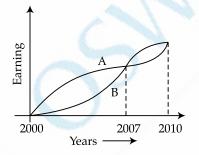
- 50. A person ordered 5 pairs of black socks and some pairs of brown socks. The price of a black pair was thrice that of a brown pair. While preparing the bill, the bill clerk interchanged the number of black and brown pairs by mistake which increased the bill by 100%. What was the number of pairs of brown socks in the original order?
 - (a) 10 (b) 15
 - (c) 20 (d) 25
- 51. The number of persons who read magazine X only is thrice the number of persons who read magazine Y. The number of persons who read magazine Y only is thrice the number of persons who read magazine X. Then, which of the following conclusions can be drawn?
 - 1. The number of persons who read both the magazines is twice the number of persons who read only magazine X.
 - 2. The total number of persons who read either one magazine or both the magazines is twice the number of persons who read both the magazines.

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

52. The graph below depicts the earnings of A and B over the period 2000 to 2010:



From the graph, which one of the following can be concluded?

- (a) On the average A earned more than B during this period.
- (b) On the average B earned more than A during this period.

- (c) The earnings of A and B were equal during this period.
- (d) The earnings of A were less as compared to B during this period.
- 53. Two pipes A and B can independently fill a tank completely in 20 and 30 minutes respectively. If both the pipes are opened simultaneously, how much time will they take to fill the tank completely?
 - (a) 10 minutes (b) 12 minutes
 - (c) 15 minutes (d) 25 minutes
- 54. Each of the six different faces of a cube has been coated with a different colour i.e., V, I, B, G, Y and O. Following information is given:
 - 1. Colours Y, O and B are on adjacent faces.
 - 2. Colours I, G and Y are on adjacent faces.
 - 3. Colours B, G and Y are on adjacent faces.
 - 4. Colours O, V and B are on adjacent faces.

Which is the colour of the face opposite to the face coloured with O?

- (a) B (b) V (d) I
- (c) G
- 55. Consider the following statements followed by two conclusions:
 - Statements : Some men are great. Some men are wise. **Conclusion I** : Men are either great or wise.
 - **Conclusion II**: Some men are neither great nor wise.

Which one of the following is correct?

- (a) Only conclusion I is valid
- (b) Only conclusion II is valid
- (c) Both the conclusions are valid
- (d) Neither of the conclusions is valid

Consider the following statements: 56.

- 1. Some claim to have seen UFOs (Unidentified Flying Objects).
- 2. Life on other heavenly bodies is considered to be a possibility.

3. Voyage to space is now an established fact. From the above statements, it may be concluded that

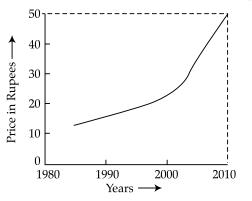
- (a) UFOs are heavenly bodies
- (b) UFOs are sent from other heavenly bodies
- (c) Some living species in other heavenly bodies are more intelligent than man
- (d) Nothing definite can be said about the **UFOs**

57. If ABC \times DEED = ABCABC; where A₁ B₁ C, D and E are different digits, what are the values of D and E?

(a)
$$D = 2, E = 0$$

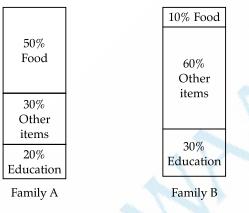
(b)
$$D = 0, E = 1$$

- (c) D = 1, E = 0
- (d) D = 1, E = 2
- 58. Year-wise variation of the price of a certain commodity is shown in the following graph:



The price of the commodity in the year 1990

- (a) must have been ₹ 10/-
- (b) must have been ₹ 12/-
- (c) must have been anywhere between ₹ 10/and ₹ 20/-
- (d) is higher than that in the year 1991
- 59. The proportion of expenditure on various items by two families A and B are represented in the following Bar Charts:





₹ 20,000 per month ₹ 1,00,000 per month

From these charts, we can conclude that

- (a) Family A spent more money on food than Family B.
- (b) Family B spent more money on food than Family A,
- (c) Family A and Family B spent the same amount on food.
- (d) The expenditure on food by Family A and Family B cannot be compared.
- 60. Usha runs faster than Kamala, Priti runs slower than Swati, Swati runs slower than Kamala. Who is the slowest runner?

(a)	Kamala	(b)	Priti
(c)	Swati	(d)	Usha

Direction for the following 7 (seven) items: Read the following four passages and answer the items (61-67) that follow. Your answers to these items should be based on the passages only.

Passage-1

India has suffered from persistent high inflation. Increase in administered prices, demand and supply imbalances, imported inflation aggravated by rupee depreciation, and speculation have combined to keep high inflation going. If there is an element common to all of them, it is that many of them are the outcomes of economic reforms. India's vulnerability to the effects of changes in international prices has increased with trade liberalisation. The effort to reduce subsidies has resulted in a continuous increase in the prices of commodities that are administered.

- 61. What is the most logical, rational and crucial message that is implied in the above passage?
 - (a) Under the present circumstances, India should completely avoid all trade liberalisation policies and all subsidies.
 - (b) Due to its peculiar socio-economic situation, India is not yet ready for trade liberalisation process.
 - (c) There is no solution in sight for the problems of continuing poverty and inflation in India in the near future.
 - (d) Economic reforms can often create a high inflation economy.

Passage-2

No right is absolute, exclusive or inviolable. The right of personal property, similarly, has to be perceived in the larger context of its assumed legitimacy. The right of personal property should unite the principle of liberty with that of equality, and both with the principle of cooperation.

- 62. In the light of the argument in the above passage, which one of the following statements is the *most convincing explanation*?
 - (a) The right of personal property is a Natural Right duly supported by statutes and scriptures.
 - (b) Personal property is a theft and an instrument of exploitation. The right of personal property is therefore violative of economic justice.
 - (c) The right of personal property is violative of distributive justice and negates the principle of cooperation.
 - (d) The comprehensive idea of economic justice demands that the right of each person to acquisition of property has to be reconciled with that of others.

Passage-3

The conflict between man and state is as old as state history. Although attempts have been made for centuries to bring about a proper adjustment between the competing claims of State and the individual, the solution seems to be still far off. This is primarily because of the dynamic nature of human society where old values and ideas constantly yield plate to new ones. It is obvious that if individuals are allowed to have absolute freedom of speech and action, the result would be chaos, ruin and anarchy.

63. The author's viewpoint can be best summed *up* in which of the following statements?

- (a) The conflict between the claims of state and individual remains unresolved.
- (b) Anarchy and chaos are the obvious results of democratic traditions.
- (c) Old values, ideas and traditions persist despite the dynamic nature of human society.
- (d) Constitutional guarantee of freedom of speech is not in the interest of society.

Passage-4

Climate change is a complex policy issue with major implications in terms of finance. All actions to address climate change ultimately involve costs. Funding is vital for countries like India to design and implement adaptation and mitigation plans and projects. Lack of funding is a large impediment to implementing adaptation plans. The scale and magnitude of the financial support required by developing countries to enhance their domestic mitigation and adaptation actions are a matter of intense debate in the multilateral negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). The Convention squarely puts the responsibility for provision of financial support on the developed countries, taking into account their contribution to the stock of greenhouse gases (GHGs) in the atmosphere. Given the magnitude of the task and the funds required, domestic finances are likely to fall short of the current and projected needs of the developing countries. Global funding through the multilateral mechanism of the Convention will enhance their domestic capacity to finance the mitigation efforts.

- 64. According to the passage, which of the following is/are a matter of intense debate in the multilateral negotiations under UNFCCC regarding the role of developing countries in climate change?
 - 1. The scale and size of required financial support.
 - 2. The crop loss due to climate change in the developing countries.

3. To enhance the mitigation and adaptation actions in the developing countries.

Select the correct answer using the code given below:

- (a) 1 only (b) 2 and 3 only
- (c) 1 and 3 only (d) 1, 2 and 3
- 65. In this passage, the Convention puts the responsibility for the provision of financial support on the developed countries because of
 - 1. their higher level of per capita incomes.
 - their large quantum of GDP. 2.
 - their large contribution to the stock of 3. GHGs in the atmosphere.

Select the correct answer using the code given below:

- (b) 1 and 2 only (a) 1 only
- (c) 3 only (d) 1, 2 and 3
- 66. With regards to developing countries, it can be inferred from the passage that climate change is likely to have implications on their 1. domestic finances.
 - 2. capacity for multilateral trade.

Select the correct answer using the code given below:

- (b) 2 only (a) 1 only
- (c) Both 1 and 2 (d) Neither 1 nor 2
- 67. Which one of the following is essentially discussed in the passage?
 - (a) Conflict between developed and developing countries regarding support for mitigation
 - (b) Occurrence of climate change due to excessive exploitation of natural resources by the developed countries
 - (c) Lack of political will on the part of all the countries to implement adaptation plans
 - (d) Governance problems of developing countries as a result of climate change
- 68. Between 6 PM and 7 PM the minute hand of a clock will be ahead of the hour hand by 3 minutes at
 - (a) 6:15 PM (b) 6:18 PM (c) 6:36 PM (d) 6:48 PM
- 69. There are 5 tasks and 5 persons. Task-1 cannot be assigned to either person-1, or person-2. Task-2 must be assigned to either person-3 or person-4. Every person is to be assigned one task. In how many ways can the assignment be done?

(a)	6	(b)	12
(c)	24	(d)	144

(c) 24

- 70. The monthly incomes of Peter and Paul are in the ratio of 4 : 3. Their expenses are in the ratio of 3 : 2. If each saves ₹ 6,000 at the end of the month, their monthly incomes respectively are (in ₹)
 - (a) 24,000 and 18,000
 (b) 28,000 and 21,000
 (c) 32,000 and 24,000
 (d) 34,000 and 26,000
- 71. Two cities A and B are 360 km apart. A car goes from A to B with a speed of 40 km/hr and returns to A with a speed of 60 km/hr. What is the average speed of the car?
 - (a) 45 km/hr (b) 48 km/hr
 - (c) 50 km/hr (d) 55 km/hr

Direction for the following 2 (two) items: Read the following passage and answer the two items (72-73) that follow:

A, B, C, D, E and F are cousins. No two cousins are of the same age, but all have birthdays on the same day of the same month. The youngest is 17 years old and the oldest E is 22 years old. F is somewhere between B and D in age. A is older than B. C is older than D. A is one year older than C.

- 72. Which one of the following is possible?
 - (a) D is 20 years old (b) F is 18 years old
 - (c) F is 19 years old (d) F is 20 years old
- 73. What is the number of logically possible orders of all six cousins in terms of increasing age?

(a) 1	(b) 2
(c) 3	(d) 4

74. In a society it is customary for friends of the same sex to hug and for friends of opposite sex to shake hands when they meet. A group of friends met in a party and there were 24 handshakes.

Which one among the following numbers indicates the possible number of hugs?

(a)	39	(b) 3	0
(c)	21	(d) 2	0

75. Two men, Anil and David, and two women, Shabnam and Rekha are in a sales group. Only two speak Tamil. The other two speak Marathi. Only one man and one woman can drive a car. Shabnam speaks Marathi. Anil speaks Tamil. Both Rekha and David can drive.

Which of the following statements is true ?

- (a) Both the Tamil speakers can drive a car.
- (b) Both the Marathi speakers can drive a car.
- (c) Both of those who can drive a car speak Marathi.

- (d) One of those who can drive a car speaks Tamil.
- 76. In a plane, line X is perpendicular to line Y and parallel to line Z; line U is perpendicular to both lines V and W; line X is perpendicular to line V.

Which one of the following statements is correct?

- (a) *Z*, *U* and *W* are parallel.
- **(b)** X, V and Y are parallel.
- (c) Z, V and U are all perpendicular to W.
- (d) Y, V and W are parallel.
- 77. A cow costs more than 4 goats but less than 5 goats. If a goat costs between ₹ 600 and ₹ 800, which of the following is a *most valid conclusion*?
 - (a) A cow costs more than \gtrless 2,500.
 - (b) A cow costs lees than ₹ 3,600.
 - (c) A cow coats between ₹ 2,600 and ₹ 3,800.
 - (d) A cow costs between ₹ 2,400 and ₹ 4,000.
- 78. A society consists of only two types of people — fighters and cowards. Two cowards are always friends. A fighter and a coward are always enemies. Fighters are indifferent to one another. If A and B are enemies, C and D are friends, E and F are indifferent to each other, A and E are not enemies, while B and F are enemies.

Which of the following statements is correct?

- (a) B, C and F are cowards.
- (b) A, E and F are fighters.
- (c) B and E are in the same category.
- (d) A and F are in different categories.
- 79. In a box of marbles, there are three less white marbles than the red ones and five more white marbles than the green ones. If there are a total of 10 white marbles, how many marbles are there in the box?
 - (a) 26 (b) 28
 - (c) 32 (d) 36
- 80. Candidates in a competitive examination consisted of 60% men and 40% women. 70% men and 75% women cleared the qualifying test and entered the final test where 80% men and 70% women were successful.

Which of the following statements is correct?

- (a) Success rate is higher for women.
- (b) Overall success rate is below 50%.
- (c) More men cleared the examination than women.
- (d) Both (a) and (b) above are correct.

OMR SHEET

Q.No.	Response		Q.No.	Response	Q.No.	Response		Q.No.	Response
1.	a b c d		21.	a b c d	41.	a b c d		61.	a b c d
2.	a b c d		22.	a b c d	42.	a b c d		62.	a b c d
3.	a b c d		23.	a b c d	43.	a b c d		63.	a b c d
4.	a b c d		24.	a b c d	44.	a b c d		64.	@ @ © @
5.	a b c d		25.	a b c d	45.	a b c d		65.	a b c d
6.	a b c d		26.	a b c d	46.	a b c d		66.	a b c d
7.	a b c d		27.	a b c d	47.	a b c d	3	67.	a b c d
8.	a b c d		28.	a b c d	48.	a b c d		68.	a b c d
9.	a b c d		29.	a b c d	49.	a b c d		69.	a b c d
10.	a b c d		30.	a b c d	50.	a b c d		70.	a b c d
11.	a b c d		31.	a b c d	51.	a b c d		71.	a b c d
12.	a b c d		32.	a b c d	52.	a b c d		72.	a b c d
13.	a b c d		33.	a b c d	53.	a b c d		73.	a b c d
14.	a b c d		34.	a b c d	54.	a b c d		74.	a b c d
15.	a b c d		35.	a b c d	55.	a b c d		75.	a b c d
16.	a b c d	~	36.	a b c d	56.	a b c d		76.	a b c d
17.	a b c d		37.	a b c d	57.	a b c d		77.	a b c d
18.	a b c d		38.	a b c d	58.	a b c d		78.	a b c d
19.	a b c d		39.	a b c d	59.	a b c d		79.	a b c d

ANSWERS WITH EXPLANATION

1. Option (a) is correct.

All human beings are not equal. Some have capabilities to govern while others are inclined to be governed by others due to their subservient qualities. This segregation is good for society. This obviates the unnecessary conflict. Hence, this leads to efficiency in governance.

Based on the explanation given above, it is correct to say that society is divided into a 'super' and 'sub' human beings. Option (b) is relevant and important implication based on the passage.

Option (c) is right in upholding the exception to equal rights of all the citizens in society. This division is essential for efficiency. It is the most important part of the argument.

Option (d) is also incoherent with the passage. It simplifies the message of the author in the passage. Hence, this is not the least important message.

Option (a) is out of the scope of the passage. It is not related to the ongoing argument that focuses on the division of society on basis of competencies. Hence, it is the most appropriate answer choice.

2. Option (d) is correct.

Statement (a) is not the best point that the author is trying to make throughout this passage. The population is growing at a fast pace. But the main point is the problems associated with it which are missing in this option.

Statement (b) limits the problem of food security to only developing countries which is not true according to the passage. So, it can be neglected.

Statement (c) does not find support from the passage. Nowhere, the passage mentions that resources are not available to meet the increasing demand.

The passage says that the population is increasing and hence to feed such big numbers food production has to be increased. With the limited arable land and potable water, it is a challenge for the world community.

3. Option (b) is correct.

Statement (a) seems to be an illogical assumption. If a country is having a small armoury and it is vulnerable to foreign attacks; then all the small countries shall have been merged with the big countries. Moreover, this statement is not supported by the passage.

Statement (b) finds relevance with the views of

the author in the passage. The passage suggests the reduction of weapon building to create an environment of peace and trust.

This is a good step to build trust in neighbouring countries. This is the best assumption based on the passage.

Statement (c) is against the spirit of the passage. Statement (d) is not an assumption; it is a stated fact in the passage.

4. Option (c) is correct.

Use the elimination strategy to solve this question.

Statement (c) is the least relevant. The author has not recommended that people shall help the government in solving the problem of poor public health service.

Statement (d) is totally against the content of the passage. According to the passage, the health of the mother is very important for the health of a newly born child.

Statement (a) is next to be eliminated as even though ignorance is the major reason for poor health conditions the literate might also be getting the services of poor public health systems. Hence, this statement is an incomplete one and not a correct inference.

Statement (c) best captures the essence of the passage. It is a correct inference based on the facts of the passage. This correctly connects maternal health and child care health services in the public health care services.

5. Option (c) is correct.

Statement 1 is correct. It is very beneficial to consume locally grown food as it will be easily and sufficiently available . It promotes healthy eating habits . It is also eco-friendly.

Statement 2 is correct. Large-scale food processing leads to overproduction, an increase in demand for preservation and wastages that subsequently leads to a burden on the natural resources.

6. Option (a) is correct.

It is the speaker who has been allowed to speak on the podium that is a waste of time. It is not related to the author's habit of not speaking thoughtlessly and the use of unnecessary words.

Rather his shyness and restraint on speaking have saved him from wasting the time.

The author has mentioned that his habit of hesitancy in speech has taught him the importance of the economy of words. He has developed a habit of restraining his thoughts. Option (b), option (c) and option (d) are correct as per the passage.

7. Option (a) is correct.

The author has mentioned in the passage that his habit of balanced and thoughtful speaking has saved him from wasting time and mishaps. He appreciates this habit and says that he has never regretted it because of this.

Other options are fictitious ones and not related to the habit of the author. The passage does not mention the author as a man of patience.

Spirituality and votary come with observing silence but this is not a reason for which no incident of conflict happened in the life of the author.

8. Option (d) is correct.

The author states that the experience has taught him the importance of silence. Silence is necessary to surmount the habit of using exaggeration, suppressing or modifying the truth and overstating things.

Option (d) is the correct option as mentioned in the passage.

9. Option (d) is correct.

Given that host of dinner is picked by lot. So, we cannot know that a particular person will chosen as host how many times?

We cannot product number of dinners by a particular host.

10. Option (a) is correct.

Given the price of petrol and consumption. We can see clearly that price and consumption are inversely proportional.

: Expenditure = Price × Consumption = $40 \times 60 = ₹ 2400$

∴ Consumption, when price is ₹ $80 = \frac{2400}{80}$

As per diagram, we can observe that triangle is changing its position from one corner to another clockwise and also inverting on each shift. Rest of figures are changing their position anti-clockwise.



12. Option (a) is correct.

We can obseve the pattern of numbers, if we represent the numbers in first row as *a* & second row as *b*.

Then, b = a(a - 1)

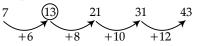
For example, $6 = 3(3 - 1) = 3 \times 2 = 6$ $90 = 10(10 - 1) = 10 \times 9 = 90$

Similarly,
$$20 = a(a-1)$$

 $\Rightarrow 5 \times (5-1) = a(a-1)$
 $\Rightarrow a = 5$
So, missing number is 5

13. Option (c) is correct.

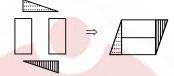
The sequence of number are as follows:



Missing number, X = 13

14. Option (d) is correct.

If we join given pieces, we will get figure in option (d).



15. Option (b) is correct.

Let each question is of 10 marks.

 $\therefore 50\% \text{ of } 10 = 5$

Total marks scored by candidate = $5 \times 8 = 40$ \therefore Candidate scored 40% of the maximum marks

 \Rightarrow Maximum marks = $\frac{100}{40} \times 40 = 100$

Number of questions = $\frac{100}{10} = 10$

16. Option (d) is correct.

Let the age of son = x year \therefore Age of father = 9x year & age of mother = 8x year According to question

$$9x + 8x = 51$$

$$\Rightarrow 17x = 51$$

$$\Rightarrow x = \frac{51}{17} = 3$$

So, the age of sun = 3 year

17. Option (c) is correct.

= 301

As per given information, A is male (A is tallest and women are shorter) D is male (D is brother of B) \therefore A is husband of B and D is husband of C (Family have 2 married couples.) Their heights in decreasing order is A > D > C > B

18. Option (b) is correct.

Given that male members were not at home and man's father did not return from his work.

Also, there is no information given about man's wife but after analysing given statements we can

conclude that it is likely that man's wife was left at home.

19. Option (a) is correct.

Radha does not agree with Geeta that person becomes a better boxer after meditation. According to Radha aggression is the most important for boxer. Thus, reflects that mediation tends to make person less aggressive.

20. Option (b) is correct.

Based on given information, we make diagram.



We can clearly conclude that no athlete who does not eat a well-balanced diet is a good athlete.

21. Option (a) is correct.

Renewable energy is expensive. The small states can't adopt the new energy. The larger states have to shift to cleaner energy as they can afford it. They must lead in the production and adoption of renewable energy. They must share the larger burden in India becoming eco-friendly. Hence, option (a) is the most appropriate answer.

Statement (b) is not mentioned in the passage. Statement (c) is illogical as the state electricity boards have to spend their resources on clean energy projects to become eco-friendly. It is not vice versa.

Statement (d) is not correct as the author has not linked the disparity in income of rich and poor states as the reason for the high carbon emission rates. The logic behind this assumption seems misplaced as a disparity of income can only be linked with high emission rates if the high earning states have stopped the carbon emissions, but this is not the case.

22. Option (d) is correct.

The story is not related to male domination. As the main male character is seen accepting the verdict of his mother and was deeply in love with his first wife. He was forced to remarry by his family due to a patriarchal mindset. They wanted a son from his wife. He was gone in deep sorrow when his wife died, this shows her love for her. So, this is not the story of infidelity or betrayal either. Options (a) and (b) can be ignored. Social security is not the main point of discussion. The story might be the story of many households in a patriarchal society, but the passage is not concerned about the legal aspects of the rights of women. Hence, option (c) can be discarded.

Only (d) seems logical. Hence, this is the correct answer.

23. Option (a) is correct.

The responsibility of the government is discussed explicitly in the passage concerning all possible securities – political and social. Every citizen shall live free from fear. The state shall create such an environment that natural human rights can be guaranteed and shall not make such rules to make them puppets or beasts. Let them be reasonable human beings. This is the intent of the author.

Option (a) is the best one to reach the viewpoint of the author.

Option (b) could have been true if it has not used the word 'absolute'. Absolute social security is not mentioned in the passage. How the state will guarantee 'absolute' social security. Crimes happen in societies only. The passage is more or less about the natural social security for freedom of expression.

Option (c) is also wrong. No state can give absolute freedom in all matters of life. Liberty has to be restrained as the liberty of one person can become a problem for the other. Justified liberty shall be given to citizens, not the absolute one.

Option(d) is wrong as it is not a statement that finds relevance in the passage.

24. Option (b) is correct.

Option (a) fails to discuss the competencies. It only reflects the requirement of expansion. Hence, this is not the correct answer.

Option (b) gives importance to both strength and competencies. Hence, it is aligned with the views of the author as expressed in the passage. The cities are large and complex hence, they require competent staff in proper strength, basic necessary qualification is not adequate to meet this requirement. Option (b) is almost near to the gist of the passage. Mark this as your option.

Option (c) is out of the context of the passage. It seems illogical also. Even if the institutions are available and municipalities are not raising the requirement of competency, candidates will not go there to take training.

Option (d) does not relate to the content of the passage. The passage has not even mentioned the demographic divide as the reason for the poor performance of local bodies.

25. Option (c) is correct.

This question can be solved by the elimination method.

Option (d) can be rejected first. The use of the word 'all' is not correct. It is not mentioned in the passage that all the birds follow the pattern of flamingos for securing their little ones.

Option (a) is also incorrect for this reason. It is wrong to apply the process of safety adopted by flamingos to all the birds while the author has not mentioned it. Avoid the far-fetched assumption.

Option (b) is wrong in using the word 'only'. Human beings and other animals also do the same thing. This option is not verified by the passage.

Option (c) is the best option. It is based on the passage that corroborates that the behaviour of some birds increases the odds of survival in an unsafe world.

26. Option (d) is correct.

Implications can be recognized as a tool for making inferences or figuring out what the writer isn't directly saying in a passage.

Option (a) is far from the message of the author in the passage. This will increase the problem rather solving the problem.

Option (b) is in fact against the intent of the author in the passage. The author is in favour of a fast and transparent way of transferring wages to the labours. Paper-based systems need the interference of village leaders. This interference leads to the exploitation of labours and hinders the transparent and full payment of wages under national schemes to true beneficiaries. Hence, it is required to remove middlemen from the process. Based on this discussion, option (c) is incorrect.

Option (d) is the most appropriate implication. Surely, the true purpose of online transfer of wages to the beneficiary's accounts is not possible without the financial literacy of the poor labourers. In the absence of knowledge of using the banking systems, they are open to exploitation by the middlemen.

27. Option (c) is correct.

The passage advocates a balanced approach to growth that includes economic growth and other human growth as well. These growths can be related to happiness, freedom of expression, health or any other indices that do not take account of the economic aspect.

Statement 1 limits the scope of the passage to developing countries only while the passage is general with universal applicability. Hence, this statement is wrong.

Statement 2 is correct and in coherence with the content of the passage as discussed above.

Statement 3 is inclined towards human development and incorrect in ignoring the importance of economic growth. The passage says that an unbalanced emphasis on growth is often associated with negative environmental consequences and adverse distributional effects. Hen, both types of growths are required.

28. Option (b) is correct.

The passage states that sometimes due to high economic growth, other aspects related to human development like the environment are neglected. The several decades of human development experience are that focusing exclusively on economic growth is problematic. The growth is often associated with negative environmental consequences and adverse distributional effects.

Hence, statement 2 is correct.

The passage is concerned about the noneconomic aspects of the growth and not about the economic disparity in society.

Hence, statement 1 is incorrect in the context. Only option (b) is correct.

29. Option (b) is correct.

According to given information: A < B and B = C

 $\Rightarrow A < B = C$

 \Rightarrow C runs faster than A

30. Option (c) is correct.

Given that A pays ₹ 20 to B

⇒ B has ₹ (100 + 20) and A has ₹ (100 – 20)

Now, B pays ₹ 10 to C and D is also getting ₹ 30 from D.

∴ Money with $C = \mathbb{P}(100 + 10 + 30) = \mathbb{P} 140$

Money with D = ₹(100 - 30) = ₹ 70

Money with B = ₹(120 - 10) = ₹ 110

Money with A = ₹(100 - 20) = ₹ 80

 \Rightarrow C is richest among four. D is the poorest and B is richer than D.

A and D have = $\overline{\mathbf{T}}(70 + 80) = \overline{\mathbf{T}} 150$

 \Rightarrow C has not more money than A & D together have.

31. Option (c) is correct.

Let the population of town = 100

 \therefore Population read magazine A, n(A) = 45

Population read magazine B, n(B) = 55

Population read magazine C, n(C) = 40

Population read magazine A and B, $n(A \cap B) = 30$

Population read magazine B and C, $n(B \cap C) = 15$

218

Population read magazine C and A, $n(A \cap C) = 25$ Population read magazine A, B and C, $n(A \cap B)$

 \cap C) = 10 Population read either of magazine A, B or C = $n(A \cup B \cup C)$

 $\therefore n(A \cup B \cup C) = n(A) + n(B) + n(C)$

 $-n(\mathbf{A} \cap \mathbf{B}) - n(\mathbf{B} \cap \mathbf{C}) - n(\mathbf{C} \cap \mathbf{A}) + n(\mathbf{A} \cap \mathbf{B} \cap \mathbf{C})$

- = 45 + 55 + 40 30 15 25 + 10 = 80
- ... Population not reading any magazine
- = 100 80 = 20 or = 20%

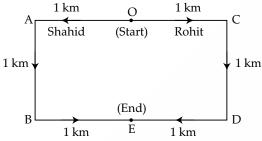
32. Option (d) is correct.

According to question, cabbage < lady finger lady finger < cauliflower cabbage ≤ peas

On comparing all inequalities, we can conclude that cauliflower is more tasty than cabbage.

33. Option (b) is correct.

According to question, the direction diagram will be



From the diagram it is clarly seen that they will meet after travelling 3 km.

34. Option (a) is correct.

According to question,

Distance travelled by A = 500 m

and distance covered by B = 500 - (45 + 35) = 420 m

: Both takes some time, say "t" sec

Ratio of speeds =
$$\frac{\frac{500}{t}}{\frac{420}{420}} = \frac{50}{42} = \frac{25}{21} = 25 : 21$$

35. Option (a) is correct.

Let the volume of both glasses = 121 (LCM of 3 & 4)

$$\therefore \text{ Milk in first glass} = \frac{1}{3} \times 12 = 4 \text{ l},$$

Milk in
$$2^{nd}$$
 glass = $\frac{1}{4} \times 12 = 31$

and water in first glass = 12 - 4 = 81& water in 2^{nd} glass = 12 - 3 = 91Both contants are mixed in pot :. milk in pot = 4 + 3 = 71& water in pot = 8 + 9 = 171Ratio = 7:17

36. Option (a) is correct.

As per given information, No. of students failed in English, n(e) = 62No. of students failed in mathematics, n(m) = 52No. of students failed in both subjects, $n(e \cap m)$

= 24

No. of students failed in either at subjects

$$= n(e \cup m)$$

∴ $n(e \cup m) = n(e) + n(m) - n(e \cap m)$
= $62 + 52 - 24 = 90$

 \Rightarrow No. of students who passed = 130 - 90 = 40

37. Option (c) is correct.

Number of persons who can speak Tamil, n(T) = 6

Number of persons who can speak Hindi, n(H) = 15

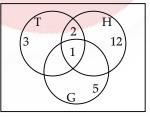
Number of persons who can speak Gujarati, n(G) = 6

Two persons can speak 2 languages.

Let, these two persons can speak Tamil & Hindi. $\therefore n(T \cap H) = 2$

Finally, no. of persons can speak all three languages, $n(T \cap H \cap G) = 1$

Using Venn-diagram method



 \therefore Total persons in group = 3 + 2 + 12 + 5 + 1 = 23

38. Option (c) is correct.

Let number of cars = x& number of two-wheelers = yAccording to question, 4x + 2y = 100 + 2(x + y) $\Rightarrow 4x + 2y = 100 + 2x + 2y$ $\Rightarrow 4x - 2x = 100$ $\Rightarrow 2x = 100$ $\Rightarrow x = \frac{100}{2} = 50$ \therefore Number of cars = 50

39. Option (c) is correct.

Option (b) mentions that mangroves are an essential component of all marine ecosystems.

However, the term "all" is not used. So, this is incorrect.

Option (c) is the most logical inference of the passage that Mangroves have a crucial role in "some" of the coastal food chains. This is also correct

Option (d) is completely wrong because the composition of marine flora and fauna is not determined by mangroves.

Option (a) is the logically incorrect inference of the passage that precedes.

40. Option (d) is correct.

Option (a) mentions that liberty is the absence of restraint on human action. This is wrong because if there is no restraint there will be chaos in society.

Option (b) says liberty is what law permits people to perform. So, this is not true. Because if a person has to follow what the law permits people to perform, it is not liberty.

Option (c) mentions that liberty is the ability to do what one desires, but then it is not absolute, rather liberty has limitations. This is also incorrect.

Option (d) Liberty is the maintenance of conditions for the growth of human personality. This statement is correct and it is implied in the passage.

41. Option (b) is correct.

The focus of the author in the passage is on the poor communities and their desperation to use unsustainable resources to meet their current needs. A corollary is a proposition that follows from one already proved .The focus of the author in the passage is Poverty and climate impacts reinforce each other and therefore raise the need to re-imagine the food systems .Here Poverty leads to climate deterioration and viceversa . Hence option (b) is correct.

He does not raise the need to re-imagine the food systems or the collective efforts from all the countries of the world.

Option (a) and Option (c) are not correct.

Option (d) is correct but not a feasible one till the solution of the problem of poor communities is not solved. It is illogical to suggest an infeasible solution.

42. Option (d) is correct.

According to the passage, foreign portfolio investments are increasing in the debt and equity markets but these investments are dependent on the policies of the developed countries. This makes them volatile. The author has associated a threat or a wind of caution with them. Hence, option (d) is the correct inference based on the passage. Option (a) is incorrect. It is not stated in the passage that the FPI is not good for emerging economies.

Option (b) is not correct as it is not explicitly mentioned that developed economies change the policies to disadvantage the developing economies.

Option (c) is a far-fetched judgement that does not relate to the contents of the passage. It just says that policymakers shall remain vigilant for the underlying threat and provide a cushion for policy change in the advanced economies. It does not say that stop the investments.

43. Option (c) is correct.

Option (a) is not logical. A latrine costs a negligible amount that does not look unaffordable to a government of a large country like India.

Option (b) is incorrect. If something is affecting half of the population of children and lakhs of children are dying due to this, then it does not mean that is the most important public health problem in India.

Option (c) is most logical inference .The critical inference of the passage is the open defecation and its ill effects on overall economy and society, which is not visible many times.

Option (d) is incorrect as the use of 'all' is not suitable. The facts given in the passage are insufficient to decide whether open defecation is public health of problem in all the developing countries.

44. Option (b) is correct.

The passage is about equality based on competence and not based on caste, community or religion. Till the democracy is based on favouritism then the Indian democracy is a phoney kind of democracy.

Option (b) is the correct option.

Option (a) is not the essence of the passage. It is an incomplete statement.

Option (d) is the most illogical one. It is not appropriate to say that establishment of democracy is not possible in our country. India is one of the largest democracies in the world. The only concern of the author is that this shall be based on the humanitarian grounds of competence rather than on divisions in society.

45. Option (b) is correct.

The financial instruments are available but not the access to them. The poor people struggle to get the services of these financial instruments offered by banks and financial institutions to put their savings in them.

Statement 1 is incorrect.

Statement 2 is correct. If the money is not saved then there is a temptation to spend the money.

This is the case with poor households as well. This is a stated fact in the passage.

46. Option (d) is correct.

This question shall be solved by elimination as the options are so extreme and fictitious. They are not close ones and can be easily eliminated. Option (b) is rejected as GDP is not the point of discussion in the passage.

Option (c) is rejected as the interests' rates or increase in them is not the concern of the author in the passage.

Only options (a) and (d) are based on the passage.

Establishing more banks does not ensure that more poor households will become part of the organised financial systems but only strategies to financial inclusion the poor shall be promoted. If the awareness of the benefits of saving in financial institutions will be promoted in rural areas, more and more people will be able to take benefit of it. Teach them financial literacy instead of increasing the banks, this is the essential message of the author in the passage.

47. Option (b) is correct.

This question becomes tricky when the last option is 'none of the above. This is not the case with many a question in this exam. Hence, read all the given options very carefully.

Option (a) uses the word 'all' and 'wide'. These two words make it incorrect. Based on the reading of this passage, the author fails to demand wide power in all matters for the government. But he limits his scope to only abuse of discretionary power.

Option (c) is not in coherence with the views of the author as expressed in the passage. The passage does not favour wider discretionary powers but the restrain on the discretionary powers.

The author says that states and their officials shall conduct their business within a framework of recognised rules and principles, and decisions should be similar and predictable. Where discretion has to be used, there must be rules and safeguards to prevent misuse of that power. Hence, option (b) is in perfect sync with the views of the author.

48. Option (d) is correct.

Given that we have two candidates for post of principal and all candidates are eligible forpost of vice-principal. So, we will select one candidate from first two and two candidates from rest of five.

Number of possible selections = ${}^{2}C_{1} \times {}^{5}C_{2}$

$$= \frac{2!}{1! \times 1!} \times \frac{5!}{2! \times 3!} = 5 \times 4 = 20$$

49. Option (c) is correct.

Number of ways to select 2 subjects other than

Mathematics
$$= {}^{4}C_{2} = \frac{4!}{2! \times 2!} = 6$$

If we are selecting Mathematics-II then we have to take mathematics-I. So, we have only 1 way for mathematics-II.

 \therefore Total number of ways = 6 + 1 = 7

50. Option (d) is correct.

Let the number of pairs of brown socks = xand price of pair of brown socks = $\overline{\mathbf{x}}$ y

- ∴ Price of pair of black socks = ₹ 3y
- :. Original amount of all pairs = $\overline{\langle xy + 15y \rangle}$
- & bill amount prepared mistakenly

$$= 5y + x \times 3y$$

According to question,

2(xy + 15y) = 5y + 3xy

[100% increase mans becomes tource]

$$\Rightarrow 2xy + 30y = 5y + 3xy$$

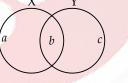
 $\Rightarrow 25y = xy$

$$\Rightarrow x = 25$$

N. of pairs of brain socks = 25

51. Option (d) is correct.

We will solve the question using Venn-diagrams.



No. of people who read magazine-X only = aNo. of people who read magazine-Y ony = cNo. of people who read magazins = bAccording to question.

$$a = 3(b + c)$$

$$a = 3b + 3c$$

$$\Rightarrow \qquad a = 3b + 3c$$

$$\Rightarrow \qquad \frac{a - 3c}{3} = b \qquad \dots(i)$$

$$c = 3(a + b)$$

$$\Rightarrow \qquad c = 3a + 3b$$

$$\Rightarrow \qquad \frac{c - 3a}{3} = b \qquad \dots(ii)$$
Using (i) & (ii)

$$\frac{a - 3c}{3} = \frac{c - 3a}{3}$$

$$\Rightarrow \qquad a - 3c = c - 3a$$

According to first statement: b = 2a

On, using *e.g.*, (i), (ii) & (iii), we cannot conclude that b = 2a

According to second statement: a + b + c = 2b $\Rightarrow \qquad a + c = b$

u + c - t

It cannot be concluded using equations. So, neither of statement can be concluded.

52. Option (a) is correct.

We can clearly observe that area under the curve A is more than area under curve B. So, average earning of A is more than B.

53. Option (b) is correct.

Let tank will be filled in "x" min, when both pipes fill the tank.

Hence,
$$\frac{1}{20} + \frac{1}{30} = \frac{1}{x}$$

 $\Rightarrow \qquad \frac{3+2}{60} = \frac{1}{x}$
 $\Rightarrow \qquad \frac{5}{60} = \frac{1}{x}$
 $\Rightarrow \qquad x = \frac{60}{5} = 12$

54. Option (c) is correct.

Given that, adjacent faces of cube coloured O are faces coloured with Y, B & V. So, opposite face can be I or G.

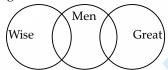
But face B has adjacent faces Y, O, G and V

So, B has opposite face coloured as I.

Therefore, opposite face of O has coloured in G.

55. Option (d) is correct.

As per given information.



Conclusion I: We cannot say that men are either greater wise.

Conclusion II: It cannot be concluded that some men are neither great nor wise.

56. Option (d) is correct.

According to given information given in statements nothing can be concluded clearly.

57. Option (c) is correct.

When we multiply a 3-digit number by 1001, we get number repeated two times.

Example: $364 \times 1001 = 364364$

 $\therefore \qquad ABC \times 1001 = ABC ABC$

$$\Rightarrow$$
 DEED = 1001

$$\Rightarrow \qquad D = 1 \& E = 0$$

58. Option (c) is correct.

It is clearly visible from graph that the price of commodity must be between $\gtrless 10 \& \gtrless 20$.

59. Option (c) is correct.

Expenditure on food by family A = 50% of 20000

$$= \frac{50}{100} \times 20000 = ₹ 10000$$

Expenditure on food by family B

$$= 10\% \text{ of } 100000$$

$$= \frac{10}{100} \times 100000 = ₹10000$$

... Both families spent equal amount on food.

60. Option (b) is correct.

According to question

Usha	>	Kamala	(i)
Swati	>	Priti	(ii)

On combinin<mark>g all 3 i</mark>nequalities

Usha > Kamala > Swati > Priti

Priti is the slowest among all.

61. Option (d) is correct.

Trade liberalisation connects a country with the international market. As the prices increases in the international markets, the commodity prices increase in local markets as well. This leads to inflation. This is the story related to the opening up of trade in India. Trade liberalisation has its benefits as well. Hence, it cannot be avoided in totality. Option (d) is correct and option (a) is not correct.

Option (c) is out of the context of the passage. The fragile social and economic situation in India is not in discussion in the passage. Option (b) is also not correct.

62. Option (d) is correct.

The passage has linked the right to personal property with the right to equality and the principle of cooperation. These cannot be viewed as a right of absolute liberty. Hence, option (d) is the best explanation.

Option (a) is out of the context in bringing the scriptures into the picture.

Option (b) is a hypothetical judgement and is not relevant to the passage.

Option (c) is incorrect. It does not give the reason that is given in the passage but a reason from out of the passage. It is not acceptable.

63. Option (a) is correct.

If we read the options carefully, we can eliminate two of them easily and bring our search for the right option to the other two.

Option (c) is against the facts given in the passage. The passage states that old values and ideas give way to the new ones while this statement negates this. Hence, it is an incorrect option. Option (b) can also be rejected easily as democracy is not discussed in the passage. This assumes that the discussion is based on the conflicts in a democratic state which might or might not be true.

Option (a) and Option (d) both are close to summarising the passage but option (d) is an incomplete one and fails to include the fact that the conflict in man and the state remains unresolved with the rise of new thoughts and ideas in every generation.

64. Option (c) is correct.

The convention did not discuss food insecurity in developing nations. Statement 2 is not correct.

Statement 1 and Statement 3 are correct. The issue of financial support to developing nations from the developed nations in helping the mitigation and adaptation actions was discussed at length in the passage.

65. Option (c) is correct.

The author says that developed countries are still emitting high Greenhouse gases. Hence, they should pay a price by funding the mitigation and adaptation efforts of the developing nations.

He has not related their high GDP numbers and per capita incomes as the penalty measures. Hence, statements 1 and 2 are incorrect.

66. Option (a) is correct.

The developing countries, if try to mitigate climate change by adopting creative measures for adaptiveness, will face increased financial demand.

This is not a viable option for them looking at their already dwindling domestic finances. The reason given in 1 is correct,

The passage is silent on the issue of multilateral trade. It cannot be an implication for developing nations as it cannot be ascertained from the passage.

67. Option (a) is correct.

The question gives very wide options. It shall be solved by eliminating the irrelevant options. Option (d) is obviously out of the scope of the passage. The passage is not about the governance issue in developing countries. The passage has not mentioned this even in a single place.

Option (b) is the next one to be rejected. This is also not based on the passage. Where in the passage the exploitation of natural resources has been discussed? Nowhere.

If the political will to solve the matter was missing, then why the convention at the global level was held?

Option (c) is also not correct.

Only option (a) is the best essence of the passage. The author has not diverted from raising the conflict in developed and developing nations regarding the division of cost for mitigation and adaptation to climate change. The developed nations shall take the responsibility of paying the cost to developing nations. The scale and scope of global funding is a matter of intense discussion.

68. Option (c) is correct.

We know that minute hand gains $\frac{60}{55}$ min on hour hand in 1 min.

At 6 pm, hour hand is 30 minutes ahead of minute hand and we need minute hand be ahead of hour hand by 3 minute *i.e.*, total 33 minutes ahead.

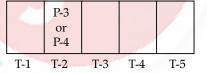
So, time in which minute hand gains 33 min over hour hand

$$\frac{60}{55} \times 33 = \frac{60 \times 3}{5} = 36 \text{ min}$$

So, at 6:36 pm minute hand will be 3 min ahead of hour hand.

69. Option (c) is correct.

Given that, task 2 must be assigned to either 3 or 4. Task 1 cannot be assigned to either 1 to 2.



No. of ways to assign task- $2 = {}^{2}C_{1} = 2$

Now, we have 2 persons other than 1 & 2 to do task-1

 \therefore No. of ways to assign task-1 = ${}^{2}C_{1} = 2$. Now remaining 3 tasks can be assigned to 3 persons in number of ways = 3! = 6

 \therefore Total ways to assign tasks = $2 \times 2 \times 6 = 24$

70. Option (a) is correct.

Let the incomes of Peter and Paul are $\gtrless 4x \&$ ₹ 3*x* respectively and their expenses are ₹ 3*y* & ₹ 2*y* respctively. Their savings are ₹ 6000 each.

$$\therefore 4x - 3y = 6000$$

$$\Rightarrow 4x - 6000 = 3y$$

$$\Rightarrow \frac{4x - 6000}{3} = y \qquad \dots(i)$$

and $3x - 2y = 6000$

$$\Rightarrow 3x - 2\left[\frac{4x - 6000}{3}\right] = 6000 \quad \text{(Using e.g. (i))}$$
$$\Rightarrow 9x - 8x + 12000 = 18000$$
$$\Rightarrow x + 12000 = 18000$$

$$\Rightarrow x + 12000 = 18000$$

 $\Rightarrow x = 6000$

∴ Their monthly incomes are ₹ 24000 & ₹ 18000 respectively.

71. Option (b) is correct.

We know that, average speed

$$= \frac{\text{Total distance}}{\text{Total time}}$$
$$= \frac{360 + 360}{\frac{360}{40} + \frac{360}{60}} = \frac{720}{9 + 6}$$
$$= \frac{720}{15} = 48 \text{ km/hr}$$

72-73: According to given information,

- (i) A > B, C > D, C + 1 = A and F is between B & D.
- (ii) Their ages are 17, 18, 19, 20, 21 and 22 years.
- (iii) E is 22 years old.

From (i) & (ii) we can conclude that A is 21 years old.

 \Rightarrow C is 20 years old.

:: F is between B & D, so we can have two cases Case-1: E > A > C > B > F > D

22 21 20 19 18 17

Case-2: E > A > C > D > F > B

22 21 20 19 18 17

- **72.** Option (b) is correct. In both cases, F is 18 years old.
- 73. Option (b) is correct.

There are two possible orders of all six cousins in terms of increasing age.

74. Option (c) is correct.

Let number of males and females in the party are m & f.

 \therefore No. of hand shakes = m.f = 24 ...(i)

No. of hugs =
$${}^{m}C_{2} + {}^{n}C_{2}$$

= $\frac{m!}{2! \times (m-2)!} + \frac{f!}{2! \times (f-2)!}$
= $\frac{m(m-1)}{2} + \frac{f(f-1)}{2}$...(ii)

Now, possible value for *m* & *f* can be (*m*, *f*) *i.e.* (1, 24), (24, 1), (2, 12), (12, 2), (3, 8), (8, 3), (4, 6) & (6, 4)

Using pair (4, 6) or (6, 4)

No. of hugs =
$$\frac{4 \times 3}{2} + \frac{6 \times 5}{2} = 21$$

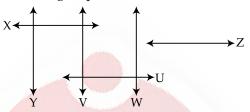
75. Option (d) is correct. According to given information,

Persons	Marathi	Tamil	Drive
Shabnam	1	X	X
Anil	X	1	X
David	Probable	Probable	1
Rekha	Probable	Probable	1

Either David or Rekha can speak Tamil. Therefore, one of those who can drive a car speaks Tamil.

76. Option (d) is correct.

According to question



 \Rightarrow Y, V and W are parallel to each other.

77. Option (d) is correct.

Cost of a goat lies between ₹ 600 & ₹ 800*i.e.*, 600 < cost of 1 goat < 800 $\Rightarrow 2400 < cost of 4 goats < 3200$ or 3200 < cost of 5 goats < 4000 So, possible cost of 1 cow will lie between ₹ 2400 & ₹ 4000.

78. Option (b) is correct.

According to given information, we can conclude that

Fighters are A, E & F and cowards are B, C & D.

79. Option (b) is correct.

No. of white marbles = 10

 \therefore No. of red marbles = 10 + 3 = 13

- and no. of green marbles = 10 5 = 5
- \therefore Total no. of marbles = 10 + 13 + 5 = 28.

80. Option (c) is correct.

Let there are total 100 candidates to appear in exams.

 \therefore No. of men = 60 and no. of women = 40 No. of men passing qualifying exam

$$=\frac{70}{100} \times 60 = 42$$

No. of women passing qualifying exam

$$=\frac{75\times40}{100}=30$$

In final test,

No. of men qualifying = $\frac{80}{100} \times 42 = 33.6$

No. of women qualifying =
$$\frac{70}{100} \times 30 = 21$$

We can see clearly that more men qualify examination than women.