

Directions—(Q. 1–17) Read the following passages and answer the items that follow. Your answers to these items should be based on the passage only.

Passage-1

Ocean currents are the vertical or horizontal movement of both surface and deep water throughout the world's oceans. Currents normally move in a specific direction and aid significantly in the circulation of the Earth's moisture, the resultant weather, and water pollution.

Oceanic currents are found all over the globe and vary in size, importance, and strength. Some of the more prominent currents include the California and Humboldt Currents in the Pacific, the Gulf Stream and Labrador Current in the Atlantic, and the Indian Monsoon Current in the Indian Ocean. These are just a sampling of the seventeen major surface currents found in the world's oceans.

In addition to their varying size and strength, ocean currents differ in type. They can be either surface or deep water.

Surface currents are those found in the upper 400 metres (1,300 feet) of the ocean and make up about 10% of all the water in the ocean. Surface currents are mostly caused by the wind because it creates friction as it moves over the water. This friction then forces the water to move in a spiral pattern, creating gyres. In the northern hemisphere, gyres move clockwise and in the southern they spin counterclockwise. The speed of surface currents is greatest closer to the ocean's surface and decreases at about 100 metres (328 ft) below the surface.

Because surface currents travel over long distances, the Coriolis force also plays a role in their movement and deflects them, further aiding in the creation of their circular pattern.

Finally, gravity plays a role in the movement of surface currents because the top of the ocean is uneven. Mounds in the water form in areas where the water meets land, where water is warmer, or where two currents converge. Gravity then pushes this water down slope on the mounds and creates currents.

Deep water currents, also called thermohaline circulation, are found below 400 metres and make up about 90% of the ocean. Like surface currents, gravity plays a role in the creation of deep water currents but these are mainly caused by density differences in the water.

Density differences are a function of temperature and salinity. Warm water holds less salt than cold water so it is less dense and rises toward the surface while cold, salt laden water sinks. As the warm water rises though, the cold water is forced to rise through upwelling and fill the void left by the warm. By contrast, when cold water rises, it too leaves a void and the rising warm water then forced, through downwelling, to descend and fill this empty space, creating thermohaline circulation.

Thermohaline circulation is known as the Global Conveyor Belt because its circulation of warm and cold water acts as a submarine river and moves water throughout the ocean.

Finally, seafloor topography and the shape of the ocean's basins impact both surface and deep water currents as they restrict areas where water can move and 'funnel' it into another.

Because ocean currents circulate water worldwide, they have a significant impact on the movement of energy and moisture between the oceans and the atmosphere. As a result, they are important to the world's weather. The Gulf Stream for example is a warm current that originates in the Gulf of Mexico and

moves north toward Europe. Since it is full of warm water, the sea surface temperature are warm, which keeps places like Europe warmer than other areas at similar altitudes.

The Humboldt Current is another example of a current that affects weather. When this current is normally present off the coast of Chile and Peru, it creates extremely productive water and keeps the coast cool and northern Chile arid. However, when it becomes disrupted, Chile climate is altered and it is believed that El Nino plays a role in its disturbance.

Like the movement of energy and moisture, debris can also get trapped and moved around the world via currents. This can be man-made which is significant to the formation of trash island or natural such as icebergs. The Labrador Current, which flows south out of the Arctic Ocean along the coasts of Newfoundland and Nova Scotia, is famous for moving icebergs into shipping lane in the North Atlantic. Currents play an important role in navigation as well. In addition to being able to avoid reefs and icebergs, knowledge of currents is essential to the reduction of shipping costs and fuel consumption. Today, shipping companies and even sailing races often use currents to reduce time spent at sea.

Finally, ocean currents are important to the distribution of the world's sea life. Many species rely on currents to move them from one location to another whether it is for breeding or just simple movement over large areas.

Today, ocean currents are also gaining significance as a possible form of alternative energy. Because water is dense, it carries an enormous amount of energy that could possibly be captured and converted into a usable form through the use of water turbines. Currently this is an experi-

mental technology being tested by the United States, Japan, China, and some European Union countries.

1. According to the passage, which of the following factors affect/s the movement of the surface currents

1. Deflection due to the force of the earth's rotation.
2. The temperature of the water.
3. Convergence of currents.
4. Friction of wind over water.

- (A) 1 and 4 (B) 3 and 4
(C) 2, 3 and 4 (D) 1, 3 and 4
(E) All of the above

2. According to the passage, which of the following is/are not true about the deep water currents ?

1. They hold less salt than surface currents.
2. These deep waters sink into the deep ocean basins at regions where the temperatures are cold enough to cause the density to increase.
3. They move water around the world.
4. Topography and shape of the land restrict their movement.

- (A) 1 only (B) 1 and 4
(C) 2 only (D) 1, 2 and 4
(E) 3 only

3. Which of the following can be inferred about the Humboldt Current

- (A) It is caused by 'upswelling'
(B) It is caused by 'downswelling'
(C) It is important to the world's weather
(D) It keeps the South America Cool
(E) It keeps the South America warm

4. "When this cold current is normally present off the coast of Chile and Peru, it creates extremely productive waters and keeps the coast cool and northern Chilean." In the context of the passage the word productive corresponds to which of the following definition ?

- (A) Having the power of producing; generative; creative

(B) Producing readily or abundantly; fertile

(C) Causing; bringing about

(D) Producing or tending to produce goods and services having exchange value

(E) Of or pertaining to the language skills of speaking and writing

5. According to the passage, the ocean currents do which of the following

1. They circulate marine life and weather across the globe.
2. They circulate water worldwide.
3. They circulate water pollution.
4. They help the shipping industry.

- (A) 1 and 2
(B) 1, 2 and 3
(C) 2, 3 and 4
(D) All of the above
(E) None of the above

Passage-2

Nothing shows up the schizophrenia of the Indian mind in the face of this challenge than that the two principal leaders of the national struggle for independence Mahatma Gandhi and Mr. Nehru should have come to contrary conclusions. The Mahatma was for an outright rejection of the western civilization, which is often described as Satanic. Mr. Nehru was for all-out industrialization. Both spoke from utter conviction and were extremely articulate in stating their positions. But neither of them thought it worth his while to grapple with the troublesome details when it came to making the reality conform to the vision.

The Mahatma was, of course, most meticulous about detail and when he undertook a job, whether it was the spread of the spinning wheel, revival of village industries or helping the Harijans, he did not regard the smallest matter pertaining to the concerned organization or an individual grievance beneath his personal attention. It was a different story, however, with translating his larger vision of a non-violent society into a blueprint.

He enunciated the general principle very forcefully. But such details as the state structure the new society would build and the social legislation it would undertake, the precise industrial policy it would pursue or the defense policy it would opt for, he left alone or dealt with in bits and pieces. Did he fear that his vision would suffer by raising all these issues at one go ? Or did he realize long before the day of India's tryst with destiny that he would not count on anyone even among his closest colleagues in the Congress to back him ?

Mr. Nehru was in a much better position to carry out his ideas. But the very Constitution-making process became a formal exercise. There was no attempt to think in terms of institutions, which while preserving the substance of democracy, would contain populist pressures, make government more business-like and more productive of results and make for easy and cheap access to justice. All this is not to belittle his role in guiding the young republic in its formative years and setting norms which none of the regimes that came after him were also to live up to. But that does not detract from the processes of decline. The proliferation of slums had begun, and small groups were already hogging up the larger part of the gains of development. No concerted attempt was made to close the loopholes in land laws and little was done to make school education relevant to the needs of a developing society. The language policy was left to flounder.

That the people still look back to the Nehru era with a sense of nostalgia shows that even things which looked manageable in his days are now out of control. Perhaps this is the result of a deterioration in the quality of leadership, a distressing decline in the integrity of political life and an alarming build-up of populist pressure. But it is also the result of the way each government has been busy storing up trouble for future. Can one be sure after all this that the foundations on which the republic rests are durable enough ?

What light does this throw on the Indian mind ? The Indian mind delights in ambiguity in ambivalence,

in trying to have the best of both worlds, in harboring a medley of conflicting ideas without much discomfort. Whatever the public rhetoric, the practice is always based on half-measures, of leaving things half done, of a refusal to anticipate trouble and a tendency to wake up when the crisis has already matured, this may be an exaggeration. But the slovenliness of approach to every problem is a fact of life which hits in the eye even the most sympathetic foreign observer.

It is not surprising that the Indian genius which excelled in production myths, which created works of sculpture "which endow spirit with a body" and a music which enthalls the mind as well as the spirit, was often at a loss in facing up to the problems of state building. The Indian mind still falters as it tires to come to grips with these problems.

6. What is the main idea expressed in the passage ?
 - (A) The passage expresses the vision and dreams of Indian leaders for a better future
 - (B) The passage expresses the shaping up of a disorganized state due to the constricted vision of our leaders
 - (C) The passage is an account of a successful democratic set up of the Indian government as a result of the policies made by our leaders
 - (D) The passage explains how the Constitution was made and what clauses it included
7. What are the writer's feelings towards the subject of the passage ?
 - (A) The writer is not satisfied with the present situation of mismanagement
 - (B) The writer is comfortable with the medley of conflicting ideas present in today's world
 - (C) The writer is nostalgic about the times when Nehru led India
 - (D) The writer is depressed because of lack of efforts on part of Indian leaders to implement their ideas into practice
8. What is the purpose of the writer behind mentioning Mahatma Gandhi and Nehru ?
 - (A) To give an example of effective leadership to today's incompetent leaders
 - (B) To explain that they were incapable of putting their vision into practice, this has resulted in the present situation
 - (C) To bring out a contrast in the thinking of the two leaders towards the industrialization
 - (D) To explain their policies and vision they held for all around development of India

9. What is the writer's interpretation of the way Indians have accepted the situations ?
 - (A) Indians are delighted with the excellent conditions present
 - (B) Indians are sentimental about the glorious past of Nehru's times
 - (C) Indians are disappointed by non-implementation of the dreams of leaders into reality
 - (D) Indians have comfortably accepted the existing state of India along with its shortcomings and disorder
10. Which of the following lies beyond the scope of the passage ?
 - (A) Mahatma Gandhi favoured the use of spinning wheel in place of western culture
 - (B) Mahatma Gandhi dealt with the formation of the structure of the state in bits and pieces
 - (C) The government did not make an effort to remove the deficiency in the laws of land
 - (D) Mahatma could not give personal attention to the revival of village industries since he felt that his vision would not materialize as a whole

Passage-3

According to Riggs, the pace of development in any society is related mainly to the sources of change. The western societies were able to adjust their effective behaviour gradually to the evolving behaviour since they had relatively long time span for their development. Consequently, these societies experienced less heterogeneity, formalism and overlapping (transitional) societies.

In a prismatic society, (*i.e.*, a transitional or developing society) the

pressure for change is external as well as internal. When it is external, it is called 'exo-genous' change and when internal, it is called 'endo-genous' change. Further, when the change is caused by both external and internal pressures, it is called 'equi-genetic change'.

Riggs stated that greater heterogeneity (*i.e.*, simultaneous presence of different kinds of practices, viewpoints and systems), formalism (*i.e.*, incongruence or divergence between the formally prescribed and effectively practiced) and overlapping (*i.e.*, coexistence of differentiated structures of a diffracted society with undifferentiated structures of a fused society) are likely to exist in an 'exoprismatic' society (the society where the pressure for change is primarily external) than in an 'endoprismatic' society (the society where the pressure for change is primarily internal).

The reason is that in an 'endogenetic' change, effective behaviour precedes the establishment of new formal institutions, while in an 'exogenetic' change the sequence is reversed. The prismatic (transitional) societies face the problems of greater heterogeneity, formalism and overlapping in their bid to absorb the externally induced change in the shortest possible time.

11. As per Riggs, the western societies experienced less heterogeneity formalism and overlapping than the contemporary developing societies. What was the reason for this ?
 - (A) The change in western societies came from within *i.e.*, it was endogenetic change.
 - (B) The western societies were quickly able to adjust to change.
 - (C) The western societies had relatively long time span for their development and adapting to it.
 - (D) All of the above
12. In a society where the pressure for change is external (exoprismatic society), the following is true :
 1. Heterogeneity and homogeneity both are likely to coexist.
 2. Such a society is likely to have greater formalism, heterogeneity and overlapping.

3. The change in such society precedes the establishment of formal institutions.
 4. Formal institutions get established before the change.
- (A) 2 and 4 (B) 2 and 3
(C) 1 and 3 (D) 1 and 4
13. In a prismatic society which of the following is true ?
- (A) They face greater transitional problems in their effort to absorb the pressure of change at the earliest
- (B) They are not likely to face the problems of heterogeneity
- (C) They react slowly to change
- (D) All of the above

Passage-4

The Voice had to be listened to, not only on account of its form but for the matter which it delivered. It gave a message to the country that it needed greatly. It brought to the common people a realization of their duty to concern themselves with their affair. The common people were made to take an interest in the manner in which they were governed in the taxes they paid in the return they got from those taxes. This interest in public affairs politics as you may call it was to be the concern no longer of the high educated few but of the many—the poor, the property less, the working-men in town and country. Politics was not to be the concern of a small aristocracy of intellect or property of the masses. And with the change in the subjects of politics that voice brought about also a change in the objects of politics. Till then politics had busied itself mainly with the machinery of Government towards making its personnel more and more native, with proposals for a better distribution of political power, with protests against the of omission and of commission of the administration. This voice switched politics on to concern for the needs of the common people. The improvement of the lot of the poor was to be the main concern of politics and the politician.

The improvement, especially of the lives of the people of the neglected villages, was to be placed before Governments and political organizations as the goal of all political endeavour. The raising of the

standard of living of the people of the villages, to finding of subsidiary occupations which would give the agricultural poor took for their enforced leisure during the off season an addition to their exiguous income, the improvement of the housing of the poor, the sanitation of the villages—these to be the objectives to be kept in view. In the towns, the slums and cherries we receive special attention. There was especially a class the poor for which compassionate voice pleaded and protested. This was for the so-called depressed classes, the outcastes Hindu society. The denial of elementary human rights to this class people it considered the greatest blot on Hindu society a history. It raised its passionate protest against the age-old wrongs of this class and forced those that listened to it to endeavour remove the most outrageous of them like untouchability caused a revolution in Hindu religious practice be having Hindu temple thrown, to these people. It made the care of them a religious duty of the Hindus by remaining those Harijans.

14. Why had people to listen to 'The Voice' of Mahatma Gandhi ?
- (A) To follow him
- (B) Necessary for revolution
- (C) On accounts of its form and matter
- (D) For raising the standard of living of the people
15. Why had people to take an interest in politics ?
1. To know how they governed
 2. What citizens get from the taxes they paid ?
 3. To participate in the politics.
 4. For the improvement of the lot of the poor.
- Which of the given statement is/are correct ?
- (A) 1 and 2 (B) 2 and 4
(C) 1 and 2 (D) 1, 2, 3 and 4
16. What was the change brought about in the objects of politics ?
- (A) Concern for the needs of the common people ?
- (B) Improvement of the people of the neglected villages.
- (C) Improvement of the lot of poor
- (D) All the above

17. What improvements were made for the common man ?
1. Standard of living of villagers were raised.
 2. Subsidiary occupation for agricultural poor.
 3. Housing of the poor was improved.
 4. Untouchability was removed.

Which of the given statement is/are correct ?

- (A) 1 and 3 (B) 2 and 4
(C) 1 and 2 (D) 1, 2, 3 and 4

18. Organisational Communication has several goals. Consider the following

1. Information Sharing
2. Control
3. Decision-making and Problem solving
4. Group Building

Which of the above are correct ?

- (A) 1 and 4 only
- (B) 2 and 3 only
- (C) 1, 2 and 3 only
- (D) 1, 2, 3 and 4

19. Communication over long distance takes place usually through—

- (A) Verbal communication
- (B) Non-verbal communication
- (C) Both (A) and (B)
- (D) None of these

20. An organisation provides a number of channels for the flow of information, that is an organisation has a network of communication channels.

Consider the following :

1. These channels can be either intentionally designed, or they may develop of their own accord.
2. When a channel is intentionally created/prescribed for the flow of communication in the Organisation, we call it a formal channel.
3. The communication passing through a formal channel is formal communication.
4. On the other hand, channels, outside the formal channels, are referred to as informal channels.

Which of the above are correct ?

- (A) 1 and 4 only
- (B) 2 and 3 only
- (C) 1, 2 and 3 only
- (D) All of the above

21. Consider the following :

1. The authority relationships indicate the direction of communication flow in an organization.
2. An organisational chart shows the direction of formal communication flow.
3. A formal communication takes place between a superior and subordinate in the form of instructions and directions.
4. Such a flow takes place in the upward direction.

Which of the above are correct ?

- (A) 1 and 4 only
- (B) 2 and 3 only
- (C) 1, 2 and 3 only
- (D) All of the above

22. Consider the following :

1. Formal communication can also take place between one division of an organisation and another.
2. Formal communication may pass across organisational levels and can help in co-ordination and quality control.
3. Formal communication may also arise between the organisation and outside parties, e.g., suppliers, customers, Government, etc. This may happen when the management is required to provide information on certain aspects of the working of the organisation.
4. Communication of this kind is usually one-way.

Which of the above are correct ?

- (A) 1 and 4 only
- (B) 2 and 3 only
- (C) 1, 2 and 3 only
- (D) All of the above

23. What is communication that explicitly tells us who we are by labeling us and our behaviours ?

- (A) Direct Definition
- (B) Self-fulfilling Prophecy
- (C) Identity Scripts
- (D) Attachment Styles

24. Central to competent interpersonal communication is the ability to engage in dual perspective. In this quote what does the phrase dual perspective consist of ?

- (A) Awareness of tendency to view things from own perspective, and resistance to the inclination.
- (B) Listening to others expression of thoughts and feelings to gain clues of items of meaning and how the individual feels.
- (C) Asking others to explain how they feel, what something means, how they view a situation.
- (D) All of the above

25. Interpersonal communication is—

- (A) a selective, systemic, unique, and ongoing process of interaction between individuals who reflect and build personal knowledge of one another and create shared meanings
- (B) the foundation of personal identity and growth
- (C) involves only intimate contexts
- (D) All of the above
- (E) (A) and (B)

26. What is dual perspective ?

- (A) understanding both our own and another person's perspectives beliefs, thoughts or feelings
- (B) understanding your own perspectives beliefs, thoughts or feelings
- (C) understanding others' perspectives beliefs, thoughts or feelings
- (D) exactly the same as empathy

27. A father tells his son, "I don't care whether you like it or not, you are going to clean your room !" The content level of meaning in the father's communication says—

- (A) the father has more power than his son
- (B) the father wants the room cleaned
- (C) the son has not cleaned his room in the past and his father has the authority to make him clean it !
- (D) the father is responsive to his son's interests

Directions—(Q. 28–30) Answer these question on the basis of the information given below :

Five friends meet every morning at Sree Sagar Restaurant for an Idli-Vada breakfast. Each consumers a different number of Idlis and Vadas. The number of Idlis consumed are 1, 4, 5, 6 and 8 while the number of Vadas consumed are 0, 1, 2, 4 and 6. Below are some more facts about who eats what and how much—

- (i) The number of Vadas eaten by Viru is three times the number of Vadas consumed by the person who eats four Idlis.
- (ii) Three persons, including the one who eats four Vadas, eat without Chutney.
- (iii) Sandeep does not take any Chutney.
- (iv) The one who eats one Idli a day does not eat any Vadas or Chutney. Further, he is not Mukesh.
- (v) Balvir eats Idli with Chutney and also eats Vada.
- (vi) Mukesh, who does not take Chutney, eats half as many Vadas as the person who eats twice as many Idlis as he does.
- (vii) Bimal eats two more Idlis than Viru but Viru eats two more Vadas than Bimal.

28. Which of the following statements is true ?

- (A) Balvir eats 5 Idlis
- (B) Viru eats 8 Idlis
- (C) Bimal eats 1 Idli
- (D) Bimal eats 6 Idlis

29. Which of the following statements is true ?

- (A) Sandeep eats 2 Vadas
- (B) Mukesh eats 4 Vadas
- (C) Viru eats 8 Vadas
- (D) Bimal eats 4 Vadas

30. Which of the following statements is true ?

- (A) Mukesh eats 8 Idlis and 4 Vadas but no Chutney
- (B) The person who eats 5 Idlis and 1 Vada does not take Chutney
- (C) The person who eats equal number of Vadas and Idlis also takes Chutney
- (D) The person who eats 4 Idlis and 2 Vadas also takes Chutney

Directions—(Q. 31–35) Each question has a set of four statements. Each statement has three segments. Choose the alternative where the third segment in the statement can be logically deduced from the preceding two.

31. 1. Some babies are girls; Some girls are mothers; Some babies are mothers.
 2. Some movies are books; Some books are good; Some movies are good.
 3. Some animals are cute; Some monkeys are cute; Some animals are monkeys.
 4. Some mothers have babies; Some babies are girls; Some mothers have girls.
 (A) 2 only
 (B) 2 and 3
 (C) 4 only
 (D) None of these
32. 1. No S is P; All X is S; No X is P.
 2. Some S is not P; Some X is S; Some X is not P.
 3. Some S is not P; Some X is S; Some X is not P.
 4. Some S is not P; All X is S; All X is not P.
 (A) 3 only (B) 1 and 2
 (C) 1 only (D) 4 only
33. 1. No Martian is tall; Some humans are not tall; Some humans are Martians.
 2. All Martians are green; Glx is green; Glx is a martian.
 3. No martian is fair; Mlx is a martian; Mlx is not fair.
 4. No Martian is fair; Alx is a Martian; Alx is green.
 (A) 1 only (B) 4 only
 (C) 3 only (D) 3 and 4
34. 1. Some apples are sour; This fruit is an apple; This fruit is sour.
 2. Sita is a nurse; All nurses are tall women; Gita is a tall woman.
 3. Army officers are smart; Airforce officers are smart; Military officers are smart.
 4. No animal likes fire; Aardvarks are animals; Aardvarks do not like fire.

- (A) 2 only
 (B) 4 only
 (C) 3 only
 (D) None of these
35. 1. Computers are four nerds; Ramesh is a nerd; Computers are for Ramesh.
 2. Goodness is for saints; Some people are saints; Goodness is for people.
 3. Capital punishment is for killers; Seema is a killer; Capital punishment is for Seema.
 4. Liquor is for drinking; Coke is for drinking; Some liquor is coke.
 (A) 1 only (B) 4 only
 (C) 1 and 3 (D) 1 and 2
36. You have been asked to give an explanation for not attending an important official meeting. Your immediate boss who has not informed you about the meeting is now putting pressure on you not to place an allegation against him/her. You would—
 (A) send a written reply explaining the fact
 (B) seek an appointment with the top boss to explain the situation
 (C) admit your fault to save the situation
 (D) put the responsibility on the coordinator of the meeting for not informing
37. A local thug (bad element) has started illegal construction on your vacant plot. He has refused your request to vacate and threatened you of dire consequences in case you do not sell the property at a cheap price to him. You would—
 (A) sell the property at a cheap price to him
 (B) go to the police for necessary action
 (C) ask for help from your neighbours
 (D) negotiate with the goon to get a higher price
38. You have to accomplish a very important task for your Headquarters within the next two days. Suddenly you meet with

- an accident. Your office insists that you complete the task. You would—
 (A) ask for an extension of deadline
 (B) inform headquarters of your inability to finish on time
 (C) suggest alternate person to headquarters who may do the needful
 (D) stay away till you recover
39. You are an officer-in-charge for providing basic medical facilities to the survivors of an earthquake affected area. Despite your best possible effort, people put allegations against you for making money out of the funds given for relief. You would—
 (A) let an enquiry be set up to look into the matter
 (B) ask your senior to appoint some other person in your place
 (C) not pay attention to allegations
 (D) stop undertaking any initiative till the matter is resolved
40. You have been made responsible to hire boats at a short notice to be used for an area under flood. On seeing the price mentioned by the boat owners you found that the lowest price was approximately three times more than the approved rate of the Government. You would—
 (A) reject the proposal and call for a fresh price
 (B) accept the lowest price
 (C) refer the matter to the Government and wait
 (D) threaten the boat owners about a possible cancellation of the licence
41. You are the officer-in-charge of a village administering distribution of vaccine in an isolated epidemic hit village, and you are left with only one vaccine. There is a requirement of that vaccine from the Gram Pradhan and also a poor villager. You are being pressurized by the Gram Pradhan to issue the vaccine to him. You would—
 (A) initiate the procedure to expedite the next supply without issuing the vaccine to either

- (B) arrange vaccine for the poor villager from the distributor of another area
- (C) ask both to approach a doctor and get an input about the urgency
- (D) arrange vaccine for the Gram Pradhan from the distributor of another area
42. You have taken up a project to create night-shelters for homeless people during the winter season. Within a week of establishing the shelters, you have received complaints from the residents of the area about the increase in theft cases with a demand to remove the shelters. You would—
- (A) ask them to lodge a written complaint in the police station
- (B) assure residents of an enquiry into the matter
- (C) ask residents to consider the humanitarian effort made
- (D) continue with the project and ignore their complaint
43. You, as an administrative authority, have been approached, by the daughter-in-law of an influential person regarding harassment by her in-laws on account of insufficient dowry. Her parents are not able to approach you because of social pressures. You would—
- (A) call the in-laws for an explanation
- (B) counsel the lady to adjust, given such a circumstance
- (C) take action after her parents approach you
- (D) ask her to lodge a complaint with the police
44. In a row at a bus stop, A is 7th from the left and B is 9th from the right. They both interchange their positions. A becomes 11th from the left. How many people are there in the row?
- (A) 18 (B) 19
- (C) 20 (D) 21
45. A, B, C, D and E are wearing shirts of different colours, *i.e.*, Orange, Yellow, Green, Red and Blue respectively. They are all coming down a ladder. Their positions on the ladder are explained below :

- (i) Yellow is not at the tail end, but is between those in Green and Red.
- (ii) The boy in Green is in between those in Yellow and Orange.

What colour shirt is the last boy wearing ?

- (A) Red (B) Green
- (C) Blue (D) Orange
- (E) Yellow

Directions—(Q. 46–49) There is a group of five persons A, B, C, D, E. One of them is horticulturist, One is physicist, another is journalist, then there is an industrialist and the last one is an advocate.

- (a) A, C and the advocate prefer tea to coffee.
- (b) B and the journalist prefer coffee to tea.
- (c) The industrialist and D and A are friends of one another.
- (d) The horticulturist is C's brother.
- (e) The horticulturist is neither the friend of A nor likes coffee or tea.
- (f) Physicist is the friend of A but does not like coffee.
- (g) Advocate is not a friend of A.

Based on above information answer the questions given below :

46. Who is the horticulturist ?
- (A) A (B) B
- (C) C (D) D
- (E) E
47. Who is the journalist ?
- (A) A (B) B
- (C) C (D) D
- (E) E
48. Who is the physicist ?
- (A) C (B) D
- (C) A (D) E
- (D) B
49. Which of the following includes the person who likes tea and is also the advocate?
- (A) DE (B) BC
- (C) AC (D) BD
50. How many meaningful English words can be formed by using any two letters of the word 'NOT' ?

- (A) One
- (B) Two
- (C) Three
- (D) More than three

51. In a queue, Mr. X is fourteenth from the front and Mr. Y is seventeenth from the end, while Mr. Z is exactly in between Mr. X and Mr. Y. If Mr. X is ahead of Mr. Y and there are 48 persons in the queue, how many persons are there between Mr. X and Mr. Z ?

- (A) 6 (B) 7
- (C) 8 (D) 9

Directions—(Q. 52 to 54) Each question is independent of the others.

52. Two-fifths of the voters promise to vote for P and the rest promise to vote for Q. Of these, on the last day, 15% of the voters went back on their promise to vote for P and 25% of voters went back on their promise to vote for Q, and P lost by 2 votes. Then the total number of voters is—
- (A) 100 (B) 110
- (C) 90 (D) 95
53. Boxes numbered 1, 2, 3, 4 and 5 are kept in a row, and they are to be filled with either a red or a blue ball, such that no two adjacent boxes can be filled with blue balls. How many different arrangements are possible, given that all balls of a given colour are exactly identical in all respects ?
- (A) 8 (B) 10
- (C) 15 (D) 22
54. Number of persons in Dighoshpur who read only Ganashakti is :
- (A) 121 (B) 83
- (C) 79 (D) 127
55. In a monthly test, marks obtained in Mathematics by 15 students of a class are 0, 0, 2, 2, 3, 3, 3, 5, 5, 5, 5, 6, 6, 7, 8. The arithmetic mean of the marks is—
- (A) 2 (B) 3
- (C) 4 (D) 5
56. Two men X and Y started working for a certain company of similar jobs on January 1, 2000, X asked for an initial salary of ₹ 300 and with an annual increment of ₹ 30. Y asked for an

initial salary of ₹ 200 with a rise of ₹ 15 every six months. If there is no change in the arrangement till December 31, 2009 and salary is paid on the last day of the month. What is the total amount paid to them as salary during the period ?

- (A) 93,000 (B) 93,100
(C) 93,200 (D) 93,300

57. A change making machine contains 1 rupee, 2 rupee and 5 rupee coins. The total number of coins is 300. The amount is ₹ 960. If the number of ₹ 1 coins and the number of 2 rupee coins are interchanged, the value comes down by ₹ 40. The total number of 2 rupee coins are—

- (A) 60 (B) 100
(C) 140 (D) 150

58. A mixed double tennis game is to be played between two teams (each team consists of one male and one female). There are 4 married couples. No team is to consist of a husband and his wife. What is the maximum number of games that can be played ?

- (A) 12 (B) 21
(C) 36 (D) 42

59. In one day cricket match the captain of one of the teams scored 30 runs more than the average runs scored by the remaining six batsmen of that team who batted in the match. If the total runs scored by all the batsmen of that team were 310, how many runs did the captain score ?

- (A) 50 (B) 60
(C) 70 (D) 80

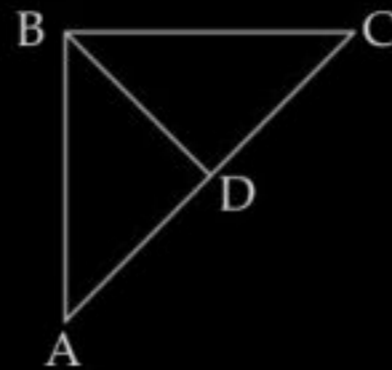
60. What would be the expenditure in 30 days at the rate of 50 paise per unit, if a bulb of 100w is used five hours per day ?

- (A) ₹ 5-50 (B) ₹ 7-50
(C) ₹ 8-50 (D) ₹ 9-50

Directions—(Q. 61–63) A road network connects cities A, B, C and D, all road segments are straight lines. D is the mid-point on the road connecting A and C. Roads AB and BC are at right angles to each other with BC shorter than AB. The segment AB is 100 km long.

Mr. X and Mr. Y leave A at 8.00 a.m., take different routes to city and

reach at the same time. X takes the highway from A to B to C and travels at an average speed of 61.875 km/hr. on segment AD. Y's speed on segment DC is 55 km/hr. It is given that Y takes the direct routes AC and Travels at 45 km/hr.



61. What is the average speed of Y ?

- (A) 49.5 km/hr
(B) 48.5 km/hr
(C) 47.5 km/hr
(D) 46.5

62. The total distance travelled by Y during the journey is approximately—

- (A) 100 km (B) 105 km
(C) 110 km (D) 115 km

63. What is the length of the road BD ?

- (A) 50 km (B) 52.5 km
(C) 55 km (D) 56.4 km

64. The number of five digit numbers that can be formed out of the digits 3, 4 and 5, each digit being used at least once is—

- (A) 147
(B) 150
(C) 153
(D) None of these

Directions—(Q. 65 and 66) are based on the following information: Ghosh Babu is staying at Ghosh Housing Society, Aghosh Colony, Dighoshpur, Kolkata. In Ghosh Housing Society 6 persons read daily Ganshakti and 4 read Anand Bazar Patrika : in his colony there is no person who reads both. The total number of persons who read these two newspapers in Aghosh Colony and Dighoshpur is 52 and 200 respectively. The number of persons who read Ganashakti in Aghosh Colony and Dighoshpur is 33 and 121 respectively; while the persons who read Anand Bazar Patrika in Aghosh Colony and Dighoshpur are 32 and 117 respectively.

65. Number of persons in Aghosh Colony who read both these newspapers is—

- (A) 13 (B) 20
(C) 19 (D) 14

66. Number of persons in Aghosh Colony who read only one newspaper is—

- (A) 29 (B) 19
(C) 39 (D) 20

67. The fourth term of an arithmetic progression is 8. What is the sum of the first 7 terms of the arithmetic progression ?

- (A) 7
(B) 64
(C) 56
(D) cannot be determined

68. A water tank has three taps A, B and C. A fills four buckets in 24 min, B fills 8 buckets in 1 hour and C fills 2 buckets in 20 minutes. If all the taps are opened together a full tank is emptied in 2 hours. If a bucket can hold 5 litres of water, what is the capacity of the tank ?

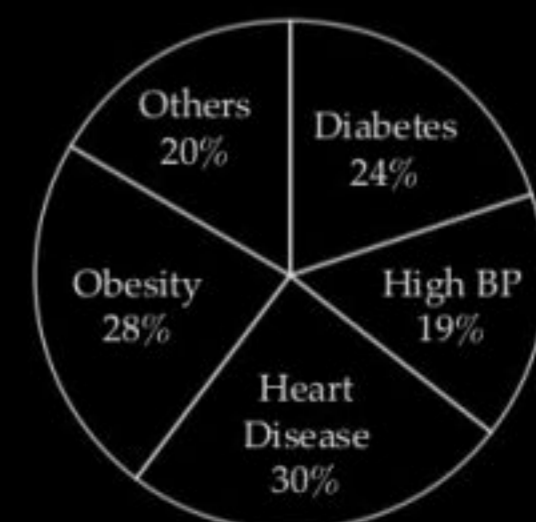
- (A) 120 litre (B) 240 litre
(C) 180 litre (D) 60 litre

Directions—(Q. 69 and 70) The following pie charts show the break-up of disease categories recorded in the patients from two towns, Town A and Town B. Pie charts plot the disease categories as percentage of the total number of patients. Based on these, answer the two items that follow the charts.

Distribution of diseases in Town-A



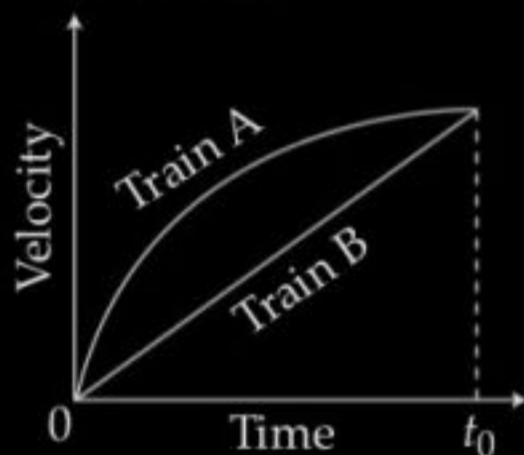
Distribution of diseases in Town-B



69. Which of the two towns has a higher number of persons with Diabetes ?
 (A) Town A
 (B) Town B
 (C) Same in Town A and Town B
 (D) No inference can be drawn

70. What can we say about persons with more than one disease from these graphs ?
 (A) There are likely to be persons with more than one disease in Town A
 (B) There are likely to be persons with more than one disease in Town B
 (C) There are likely to be persons with more than one disease in both Towns A and B
 (D) No inference can be drawn

71. Consider the following Velocity-Time graph. It shows two trains starting simultaneously on parallel tracks.



- With reference to the above graph, which one of the following statements is not correct ?
 (A) Train B has an initial acceleration greater than that of Train A
 (B) Train B is faster than Train A at all times
 (C) Both trains have the same velocity at time t_0 .
 (D) Both trains travel the same distance in time t_0 units.

Directions—(Q. 72 to 78) Which of the phrase (A), (B), (C) and (D) given below each statement should be placed in the blank space provided so as to make a meaningful and grammatically correct sentence ?

72. When we reached the crash site, we were delighted
 (A) on seeing no survivor
 (B) we saw everyone living
 (C) to seeing no one breathing
 (D) to see everyone alive
73. Even though the school premises had a lot of space,

- (A) He is a brilliant performer
 (B) He tried his best to entertain everyone
 (C) His performances are generally boring
 (D) Although he performed after a very long time

74. but today, his performance was fairly interesting and riveted everyone to their seats.
 (A) He is brilliant performer
 (B) He tried his best to entertain everyone
 (C) His Performance are generally boring
 (D) Although he performed after a very long time

75. In order to help the organization come out of the huge losses, the employees
 (A) demanded a compensatory package
 (B) started on agitation against the management
 (C) decided to join the rival organization
 (D) None of these

76. before being packaged for distribution in the market.
 (A) The milk is pasteurized
 (B) After the milk is pasteurized
 (C) Until the milk is pasteurized
 (D) Firstly the pasteurization of milk

77.to control industrial pollution, the pollution from small scale industries has eluded solutions.
 (A) Instead of doing good job
 (B) While a commendable job has been done
 (C) Despite being succeeding
 (D) Even after failing

78. Owing to the scare of the highly contagious disease widespread in the town
 (A) many people thronged to the multiplexes and malls during the long weekend
 (B) people have been advised to gather at the town square
 (C) government has failed to make any arrangement for vaccination
 (D) most of the people decided to stay indoors during the weekend.

Directions—(Q. 79 and 80) In each of the following questions, rearrange the given sentences (A), (B), (C) and (D) and indicate the correct sequence in which these sentences must appear so as to make a meaningful paragraph.

79. (i) By increasing these connections the intelligence is also increased.
 (ii) Classical music has been proved to be very helpful in child
 (iii) Many doctors now a days use it for therapeutic purposes which are based upon the findings of this research.
 (iv) The research has demonstrated that listening to classical music increase the rate of nervous connections in brain.
 (A) ii, iv, iii, i (B) iv, ii, i, iii
 (C) i, iii, ii, iv (D) ii, iv, i, iii
80. (i) This right, however comes along with the responsibility which the press is forced to work with.
 (ii) It means matters related to public and national interest.
 (iii) Such responsibilities include not broadcasting matters related to national security and other sensitive issues.
 (iv) Freedom of press is symbolic of democracy.
 (A) iv, ii, iii, i (B) iv, ii, i, iii
 (C) i, ii, iii, iv (D) ii, iv, i, iii

Answers with Hints

1. (E) 2. (B) 3. (A) 4. (B) 5. (D)
 6. (B) 7. (A) 8. (B) 9. (D) 10. (D)
 11. (C) 12. (A) 13. (A) 14. (C) 15. (C)
 16. (D) 17. (D) 18. (D) 19. (A) 20. (D)
 21. (C) 22. (D) 23. (A) 24. (D) 25. (E)
 26. (A) 27. (B)

For Q. 28–30 : We can prepare a table of information and fill the figures as we draw on conclusions :

Persons	Items		
	Idli	Vada	Chutney
Viru	6	6	Yes
Sandeep	1	0	No
Mukesh	4	2	No
Bimal	8	4	No
Balvir	5	1	Yes