Exercise – 1

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

Once in Persia ruled a king,
Who upon his signet ring
Graved a motto true and wise,
Which, when held before his eyes,
Gave him counsel at a glance
Fit for any change or chance.
Solemn words, and these were they:
"Even this shall pass away."
Trains of camels through the sand
Brought him gems from Samarkand;
Fleets of galleys through the seas
Brought him pearls to rival these.
Yet he counted little gain
Treasures of the mine or main.
"Wealth may come, but not to stay;
Even this shall pass away."

'Mid the revels of his court,
In the zenith of his sport,
When the palms of all his guests
Burned with clapping at his jests,
He, amid his figs and wine,
Cried: "Oh, precious friends of mine,
Pleasures come, but not to stay;
Even this shall pass away."

Fighting in a furious field,
Once a javelin pierced his shield;
Soldiers with a loud lament
Bore him bleeding to his tent.
Groaning from his wounded side,
"Pain is hard to bear!" he cried.
"But with patience, day by day,
Even this shall pass away."
Towering in the public square,
Twenty cubits in the air,
Rose his statue grand in stone;
And the king, disguised, unknown,
Gazing on his sculptured name,
Asked himself: "And what is fame?
Fame is but a slow decay;
Even this shall pass away."

Struck with palsy, sere and old,
Standing at the gates of gold,
Spoke he thus in dying breath:
"Life is done, and what is death?"
Then, in answer to the king,
Fell a sunbeam on the ring,
Answering, with its heavenly ray:
Even death shall pass away.

1. The Persian king got the motto engraved on his signet ring because
(A) it would always be with him.
(B) it would be a constant reminder.
(C) it was a royal prerogative.
(D) he liked rings with mottos engraved on them.

2. What did the king advocate to help his soldiers withstand pain?
(A) A soothing balm
(B) The realisation that it would not last
(C) Patience and endurance
(D) The ministrations of his soldiers

3. The symbol that represented the fame of the king was
(A) the signet ring.
(B) a grand statue.
(C) gems from Samarkand.
(D) trains of camels.

4. The central idea of the poem is that
(A) nothing is permanent in life.
(B) lasting happiness can be found only in Heaven.
(C) the pleasures of life are fleeting.
(D) there is hope even after death.

PASSAGE – II

It is 2030 and a Chinese university lecturer is explaining how a decadent America went the way of the British and Roman empires. Ruinous economic policies led to crippling debt, much of it owned by China. "Now they work for us," he says with a smirk, to prolonged sniggers from his students.

This depiction of the future comes from a television advertisement attacking Barack Obama's policies, during America's election campaign, Mr. Obama himself seems haunted by similar fears. He often gives warning that China and other developing countries are beating America in the race for the "jobs of the future".

The belief the America is losing its economic edge is pervasive. Americans are more pessimistic about their country's prospects than at any point since Gallup, a polling firm, first started asking them in 1959. The grandees of Washington, DC, share their concern. Almost any weekday morning at one of the city's many think-tanks a America packed audience of academics, journalists and government officials can be found agonizing over the country's waning competitiveness. The recession may gradually be receding, the worry goes, but long-ignored impediments to growth will hobble the recovery and prevent future generations from achieving the American dream.

Outsiders are anxious too. The World Economic Forum, which draws up international rankings on competitiveness, considers the United States only the world's seventh fittest economy, a big slide from the first place, just four years ago. It faults America's infrastructure its primary education and healthcare , its institutions and above all its macroeconomic environment . The only category in which the country still ranks first is market size, a slot it is destined to lose to China sooner or later.

The misgivings are easy to understand. Growth is sluggish, unemployment is high and investors are wary. America's public debt is approaching $17 trillion, more than 100% of GDP. Much of this stems from the transitory effects of the recession, but it will get worse rather than better. On the current trajectory, the soaring costs of Medicare and Medicaid - the government's healthcare schemes , along with social security, the state pension scheme, will consume all federal revenues within a generation, leaving nothing for anything else.

America's politicians have been feckless in the face of this impending disaster. All the bickering over budgets of the past two years had done little to diminish this soon to be crushing burden. Whenever either party suggests trimming "entitlements", the other immediately accuses it of betraying the poor or the elderly. Republicans and Democrats are so much at odds that decisions are only ever made at the 11th hour and in an ill-considered and piecemeal fashion. Words like "shut down" and "default" have become part of Washington's everyday language.

5. The American politicians have been 'feckless in the face'. What can be inferred from this?
(A) They are vituperative about the current state of affairs
(B) They are freckle-faced
(C) They are weak and irresponsible
(D) They are scornful

6. The politicians don't see eye to eye on anything, they debate on budgets, and 'trimming entitlements' remain a bone of contention between them. How can these facts be perceived in the present economic scenario?
(A) The political gridlock is hobbling America's economy
(B) The politicians form an infallible framework of support for the old and the needy
(C) The fund for entitlements is planned to be whisked away by politicians
(D) America has a strong economy and hence trimming entitlements is completely asinine

7. The mundane US vocabulary includes the words 'shutdown' and 'default'. What is the contextual meaning of 'default' according to the passage?
(A) The Americans are left with no choice other than being sluggish in the present situation
(B) The US economy is rumbling under unpaid debts
(C) The US government, by default, is engineered to face challenges
(D) America is cowering due to the lack of its natural competitiveness

8. America's future is envisioned to follow that of the Roman empire. Select the best reason, for this from among the options given below
(A) China's emergence as an economic giant towering over the once prominent America
(B) Barack Obama's election promises and policies are indicated after his swearing in as the US President
(C) America's languid response to economic recession
(D) A combination of ludicrous political arguments, clumsy economic policies, unemployment and waning competitiveness

PASSAGE – III

It is important to remember that 250 years ago there did not exist the great disparities in income that exist today between nations. As the years went by, however, a new generation of historians emerged who began to challenge the classic picture. These scholars expended great time and effort interpreting the historical data. One of them concluded that the land tax had not been exorbitant – by 1900 it was only 5 per cent of the agricultural output, which was less than half the average per capita tax burden. Another agreed that there had been a "drain of wealth" from India to Britain, especially in the nineteenth century, but it was only 1.5 per cent of GNP every year. The revisionist historians argued that India's payments to Britain were for real military and civilian services and to service capital investments . Also, the overhead cost to maintain the British establishment was quite small. They conceded that India did have a balance of payments surplus which Britain used to finance its part of the deficit, but they said that India was partially compensated for it through the import of gold and silver into India.

The revisionists' serious challenge was to the nationalist thesis that Britain had deliberately deindustrialized India. They agreed that Indian industry declined in the nineteenth century. They calculated that India enjoyed 17.6 per cent of the world's industrial production in 1830, while Britain's share was 9.5 per cent. By 1900, India's share had declined to 1.7 per cent while Britain's had grown to 18.6 per cent. But this decline, they argued, was caused by technology. The machines of Britain's industrial revolution wiped out Indian textiles, in the same way that traditional handmade textiles disappeared in Europe and the rest of the world. Fifty years later, Indian textiles would have destroyed them. India's weavers were thus the victims of technological obsolescence.

Handlooms all over the world gave way to mill-made cloth, and weavers everywhere lost their jobs. Unfortunately, there were more weavers affected in India because India was the largest maker of textiles in the world. This is not to take away from the great misery and enormous suffering caused by their impoverishment. If the British Raj had been sensitive to their plight, it might have erected trade barriers in India. This might have cushioned the impact and Indian handmade textiles might have survived for a period.

After 1850, Indian entrepreneurs began to set up their own modern textile mills. By 1875, India began to export textiles again and slowly recaptured the domestic market. In 1896, Indian mills supplied only 8 per cent of total cloth consumed in India; in 1913, 20 per cent; in 1936, 62 per cent; and in 1945, 76 per cent. Both British and Indian capitalists made large profits during the First World War. While the British business remitted their wartime profits to England, Indian businessmen reinvested theirs in new industrial enterprises after the war. Thus, Indian industry began to grow rapidly after the war.

9. The author in this passage,
- (A) accuses the British of exploiting India when it was their colony.
- (B) debunks the revisionists' version of Indian history.
- (C) compares the revisionist version with the nationalist version of India under the British.
- (D) points to why India was backward at the time of independence.

10. In what way did India finance the industrial revolution in Britain?
- (A) India produced the cotton that fed the mills in Britain.
- (B) India's trade surplus was utilised by the British.
- (C) Indians bought English mill-made clothes.
- (D) The farmers grew cash crop instead of food crops.

11. Which of the following strengthens the conclusion 'India's weavers were the victims of technological obsolescence'?
- (A) India was the largest producer of textiles in the world.
- (B) The British government put up trade barriers in 18th-century England against Indian textile.
- (C) Trade barriers in India might have cushioned the impact.
- (D) In Europe and also in the rest of the world also traditional handmade textiles disappeared.

12. What was the point on which the revisionists agreed with the classic picture of India's decline?
- (A) India's share of industrial production declined sharply while that of England went up.
- (B) England was responsible for the decline of industry in India.
- (C) The improvement of England in production was the result of the decline in India.
- (D) The fortunes of the two counties were not related.

13. The reason for the divergence of the economic fortunes of India and England in the 19th century was all the following EXCEPT :
- (A) England had the necessary conditions to make the most of technological opportunities.
- (B) England failed to protect the Indian market.
- (C) England used India's trade surplus for its own development.
- (D) The deliberate attempt of the British to deindustrialize India.

14. Indian industry began to flourish after the first world war, thanks to
- (A) the Indian businessmen who invested their profits in the industry.
- (B) the British who realised the need to develop India industrially if only to serve their own interest.
- (C) the war which gave a boost to industrial production.
- (D) the Indian nationalist who correctly viewed the country's future.

PASSAGE – IV

Philippe Legrain, a liberal economist has already written a book stoutly defending globalisation. Now he takes on an even more emotive subject in the book 'Immigrants: Your country needs them'. There is not a shadow of doubt about his own views. He wants open borders. He believes that they will, on balance, enrich both sending and receiving countries; and he detests bureaucratic restrictions on human freedoms. "Immigrants are not an invading army," he points out. "They are no different from someone who moves from Manchester to London, or Oklahoma to California, because that is where the jobs are."

Mr. Legrain has assembled powerful evidence to undermine the economic arguments against immigration. In the case of skilled migrants, that is relatively easy. But for migrants there are hardly any legal tracks across borders. Yet, he argues, they too bring economic benefits and do "little or no harm" to the wages or employment prospects of native workers.

Mr Legrain makes a robust economic case – though he surely understates the impact of immigrants on holding back the pay of the poorest. He is more successful at rebutting the argument that taxpayers give willingly only to those with whom they feel some kinship and that immigration, therefore, jeopardizes support for the welfare state. A willingness to pay taxes to support the poor is independent of levels of immigration, he shows.

Less convincing are his proposals for encouraging immigrants to go home after a period of working abroad. If immigration were temporary people might tolerate it more readily. So why not get immigrants to post a bond on arrival or have a portion of their wages withheld until they leave? The trouble with such ingenious ideas is that immigrants from the world's poorer countries have many reasons to stay overseas, especially in Europe or America. The financial gains are huge, but they are by no means the only rewards. Life is much easier where there is the rule of law, less petty corruption and a better health-care system than exists at home.

But hospitality to immigration is not just about economics. It is based on fear of change and on racism. It has also been based on growing worries about Muslim terrorism. Such anxieties are not easily assuaged by economic logic. It is striking how little serious protest there was in Britain at the absorption of over 500,000 east European immigrants in the two years after Poland and nine other countries acceded to the European Union in May 2004. Surely at least one reason was that these white Christian Europeans look and think extraordinarily like most British people, and their children will be distinguishable only by their unpronounceable names.

By contrast, many Muslim immigrants and their children have become more estranged. Their ambivalence towards the West and its secular liberalism has appeared to grow, not diminish. It is wholly unreasonable to see most Muslims as potential terrorists – but reason may not have much chance here.

So no government in the rich world is likely to open its borders to all comers, as Mr Legrain urges. For politicians, the tricky question is who to let in. The harsh truth is that voters find it easier to accept immigrants who look and behave as they do than those who are different. That, as a basis for policy, still leaves most of mankind outside the gates.

15. The word 'here' in '…. reason may not have much chance here' refers to
(A) the United Kingdom.
(B) the book by Philippe Legrain.
(C) issues such as immigration.
(D) people's attitude.

16. Which of the following is NOT the reviewer's views?
(A) Mr. Legrain does not feel that immigrants hurt the wages of domestic labour.
(B) Tax payers are not willing to support an immigrant population.
(C) Mr. Legrain's suggestion of allowing immigrants to stay for a fixed period is not feasible.
(D) Immigration is not an issue that can be settled by economics alone.

17. The reviewer uses the example of European immigrants to show that
(A) the real issue involved in the acceptance of migrants is racism and fear.
(B) a case by case decision has to be made by the government where immigration is concerned.
(C) people with unpronounceable names are looked at skeptically.
(D) how quickly a given population of immigrants can homogenize with the native population determines their chances of acceptance.

18. All of the following are arguments used in favour of open borders EXCEPT:
(A) Immigrants enrich both their country of birth and adoption.
(B) They move where jobs are available.
(C) They are like the native labourers moving in search of better prospects.
(D) They are in favour of globalisation.

19. The conclusion 'no government in the rich world is likely to open its border to all' is
(A) the reviewer's opinion.
(B) Mr. Legrain's opinion.
(C) the immigrant's opinion.
(D) the politician's view.

20. Pick the statements which are true as per the passage.
(a) Politicians find it easy to decide who should be allowed into the country.
(b) The book and the review are from the Westerner's point of view.
(c) The quality of life leads many immigrants to stay back in the new country.
(d) People's perception of immigrants is affected by the race of the immigrants.
(e) Tax payer's willingness to pay taxes is not connected to the governments immigration policy.
(A) a and b (B) c, d and e
(C) b, c, d and e (D) c and e

PASSAGE – V

Bourgeoisie is a term dating from the thirteenth century which originally denoted a category of town dwellers in medieval Europe, who enjoyed a special status and rights within feudal society. But with the development of capitalism the meaning of the term gradually changed and it came to refer more specifically to wealthy employers who were active in manufacture, commerce and finance – a usage which is partly reflected in Hegel's conception of *burgerliche Gesellschaft* (civil society) as the sphere of private economic interests. Marx started out from Hegel's distinction between the bourgeois and the citizen but soon developed, from his critical study of Hegel's philosophy and still more from his voracious reading of political economy, an entirely different conception of the bourgeoisie as the dominant class in a specific (capitalist) mode of production. As Engels summarised this view, the bourgeoisie 'is the class of the great capitalists who, in all developed countries, are now almost exclusively in possession of all the means of consumption necessary for their production'; and later 'the class of modern capitalists, owners of the means of social production and employers of wage labour'.

Marx's conception formed part of a general theory of history as the succession of modes of production and forms of society, each characterised by a determinate level of development of the forces of production and a particular class structure within which there is endemic conflict. In a capitalist society, which emerged, according to the Marxist view, from the growth of new productive powers and the class struggle of the bourgeoisie against the feudal system, historical change is more rapid than ever before: 'The bourgeoisie, during its rule has created more massive and more colossal productive forces than all preceding generations together' but at the same time it brought into existence a new class, the proletariat, which engages in ever more widespread and intense conflict with it.

Two distinct processes, therefore, go on in capitalist society. The bourgeoisie continues to revolutionise the system of production, one effect of which is an increasing centralisation of capital in large corporations, facilitated by the expansion of credit money provided by the banks, and, in the twentieth century particularly, a massive internationalisation of capital. But bourgeois dominance is also increasingly challenged by the industrial proletariat whose struggle, according to Marx, would eventually give rise to a new, socialist and classless, society. Marx's expectations partly depended on his view that society would be increasingly polarized between the two major classes, a small bourgeoisie formed as a result of the 'expropriation of many capitalists by few', and a large proletariat constituting the 'immense majority' of the population; though he also recognised that there were significant intermediate strata, including the petty bourgeoisie, made up of small independent producers, traders and professionals.

Later Marxists, in the twentieth century, have had to deal with more complex problems arising from the rapid growth of the 'new middle class', higher living standards and more extensive social welfare, which have almost everywhere diminished the intensity of class conflict in recent times. The bourgeoisie of the present day, still immensely wealthy, is nevertheless more constrained in various respects than its nineteenth-century predecessor.

Some social thinkers had always emphasized other aspects of the social role of the bourgeoisie. Max Weber associated the capitalist spirit with the Protestant ethic, and saw the bourgeoisie as being animated by ideas of rationality and enterprise, individual liberty and responsibility, which equipped them for the leadership required to maintain a dynamic and democratic society. J.A.Schumpeter similarly emphasized the importance of entrepreneurship and connected the development of modern democracy with the rise of capitalism, but unlike Weber he saw in socialism a continuation of the bourgeois outlook: 'The ideology of classical socialism is the offspring of bourgeois ideology. In particular, it shares the latter's rationalist and utilitarian background and many of the ideas and ideals that entered the classical doctrine of democracy'.

21. According to the Marxist view, the bourgeoisie
- (A) was a transitional social stratum.
- (B) was the class that could flourish only in a democratic society.
- (C) survived because of inflows of foreign capital.
- (D) had always dominated the intermediate social strata.

22. The class of bourgeoisie after twentieth century
- (A) is made of business houses that have massive capital at their disposal to be used for production.
- (B) is no longer as distinct as it was during the eighteenth century.
- (C) does not seem to have the freedom of operation it enjoyed at one point of time.
- (D) is characterised by all the above features.

23. Hegel's philosophy, regarding civil society,
- (A) recognised capitalism as an efficient mode of production.
- (B) partly formed the basis of Marx's concept of bourgeoisie.
- (C) was applicable only to developed countries.
- (D) bestowed legitimate status on the fulfilment of one's economic interests and goals.

24. From the work of J.A.Schumpeter, we can understand that
- (A) entrepreneurship is the backbone of any society.
- (B) the more the capitalist type of production, the more democratic a society can become.
- (C) the basic tenets of socialism could be derived from bourgeois ideology.
- (D) the rational aspects of capitalism find place in democracy.

25. The rapid growth of the new middle class in the 20th century
- (A) has in no way affected the power and independence of the capitalists.
- (B) has often reduced the severity of class conflict.
- (C) has negated Marx's conception of social structure.
- (D) has created more problems than it has helped solve.

Exercise – 2

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

The last few years have seen a debate on the toxic nature of lead-acid batteries, because of the possible harm lead can cause to the environment. However, responsible battery manufacturing companies in conjunction with the Indian government are determined to combat the indiscriminate disposal of batteries, to safely smelt and recycle them and minimize their harmful effects on environment and health. Indian law demands, that spent batteries be recycled and reach authorized smelters. It is alarming to note that nearly 50 per cent of the Indian battery market is catered to by re-builders that reclaim lead through unsafe processes, and source their lead illegally. This could mean that about four million batteries in India are still disposed in an unsafe manner, putting our environment and our lives at great risk.

Is lead really that bad? Lead is one of the most pervasive and toxic of all environmental contaminants. Both acute and chronic exposure to the metal have been shown to cause metabolic, neurological and neuro-psychological disorders. The physiological effects of lead are many, lead interferes with haemoglobin production, resulting in anaemia. Children are at a greater risk of lead poisoning than adults, because they absorb about 50 per cent of lead compared to 10 per cent in adults.

Potential complications in proper development include decreased intelligence, impaired neurobehavioral development, and growth as well as impaired ability to maintain a steady posture. Higher levels of lead in blood can damage the central nervous system, kidneys and haematopoietic system in children. Children with blood levels of lead greater than 80 ug/ml, can fall into a coma, experience convulsions or even die. High blood levels during pregnancy are correlated with still birth, miscarriage, and central nervous system damage of the foetus.

If lead is so bad, why use it at all? Lead is 100 per cent recyclable and is a by-product of Zinc production. The automotive battery industry is the largest consumer of lead. The lead-acid couple is time tested and has numerous technological and financial advantages. Safe disposal of batteries is the key of safe living and a healthy environment. How can one do one's bit to prevent pollution from lead?

First and foremost, buy batteries made only by manufacturers of repute. Apart from a good product and higher warranty, it will also fetch peace of mind. All manufacturers have battery collection centres. Always ensure the used car battery is properly recycled. So what happens once the battery goes back to the authorized centre? These centres take adequate care in handling the used batteries. The returned batteries are transported to the nearest government of India authorized smelting unit. These authorized smelters are equipped to reclaim lead from these scrap batteries in the most environmentally friendly manner. Lack of consumer awareness about the requirement of proper disposal and compliance of all the stakeholders is the bottleneck in the system.

1. Which of the following statements cannot be inferred from this passage?
(A) Children are more prone to lead poisoning than adults.
(B) Lead poisoning can prove fatal.
(C) Automotive industry is the worst culprit causing lead pollution.
(D) The law to check unsafe disposal of batteries in our country seems to be a paper tiger.

2. Which of the following attitudes does the author reveal while discussing the problem?
(A) Concern (B) Surprise
(C) Conciliation (D) Distress

3. What is the cause for concern regarding lead batteries in India?
(A) The spent batteries are recycled through smelting.
(B) Most batteries are disposed in an unsafe manner thereby endangering people and environment.
(C) Battery manufacturers do not take back the old batteries.
(D) Lead from batteries is reclaimed for purposes other than for use in batteries.

4. Exposure to lead causes:
I. Neuro disorder
II. Growth disorder
III. Psychological disorder
IV. Nephro-disorder
(A) I and III
(B) I, III and IV
(C) I, II and III
(D) All of the above

5. The passage focuses on
(A) the danger of using lead in batteries.
(B) the health hazards due to lead poisoning.
(C) indiscriminate use of lead by battery makers.
(D) improper disposal of batteries leading to lead poisoning.

6. Which of the following has not been cited in this passage as a reason for using lead in batteries?
(A) It is cost-effective.
(B) It is durable.
(C) It is completely recyclable.
(D) It is technologically expedient.

7. In this passage, the author makes a case for
(A) greater consumer awareness in handling batteries.
(B) more stringent laws to punish manufacturers who compromise on quality.
(C) a ban on use of lead in manufacturing batteries.
(D) making it mandatory for battery units to set up effluent treatment plants.

PASSAGE – II

Seventeen years after the first successful transplantation of stem cells harvested from the umbilical cord, the use of cord blood as a viable alternative to bone marrow as a source of stem cells is gaining importance. The cord blood that remains in the placenta after birth is routinely discarded as waste even though it has enough stem cells capable of curing diseases. Although precise data are not available, it is thought that 5,000 to 6,000 cord blood transplantations have been performed worldwide. With the number of births in India running into several millions a year, the potential to fight disease and save lives is immense even if the cord blood from a small fraction of new-borns can be collected and preserved. There are compelling reasons for saving cord blood – the avoidance of the need for a perfect tissue match required in bone marrow transplants, the low rate of viral contamination and ready availability. The scope for using the cord blood later in the event of the child suffering from certain diseases is also a major attraction.

It is this unique feature that has prompted some private companies in India, as in the developed countries, to set up facilities to collect and store cord blood, for a huge fee of course. Like their counterparts in the West, most of them resort to emotional marketing to sell the concept of cord blood serving as a biological insurance for use by the same child or another family member later. How wise or relevant is it to save the new-born's cord blood in private bank is not clear as no reliable estimates of the demand for stored cord blood are available. Empirical data on such contingencies are also scarce. According to the American Academy of Paediatrics, the chances of a child needing his or her own cord blood to treat a disease vary from 1 in 1000 to 1 in 200,000. While medicine as it is currently practised does not allow use of a child's cord blood in the treatment of his or her genetic disease or leukaemia, it does have its uses in treating other diseases. Private cord blood banking is much more relevant where a member of the family may have a current or potential need for stem cell transplantation.

There is no disputing, the scientific fact that cord blood is a potential weapon to treat many diseases; and the number of diseases so treatable is likely to increase in future. A good strategy might be to have several publicly funded cord blood banks co-existing with private banks. Modelled along the lines of blood banks, the public cord blood banks can draw on altruism to get voluntary donations; and since cord blood is far more expensive to process than blood, it can be made available to suitable recipients on payment of a reasonable collection, processing, and storage charge. At least one private cord blood bank relying on voluntary donations is in place. Priority must be given to the training of doctors and staff in the proper collection techniques. This is of paramount importance as the time of clamping the umbilical cord to collect cord blood is critical. Clamping the cord too early will increase the volume of cord blood collected but leave the new-born with a reduced blood volume and an increased risk of anaemia in later life. To prevent exploitation of poor and vulnerable people, getting the written consent of parents for cord blood collection as well as the institution of in-house ethics committees must be made mandatory, and the legal requirement strictly enforced.

8. Private companies indulge in emotional marketing
(A) to sell cord blood.
(B) to buy cord blood.
(C) to set up cord blood banks.
(D) to sell insurance packages.

9. From this passage we can infer that
(A) cord blood transplant will soon replace bone marrow transplants.
(B) cord blood is an alternative to stem-cells.
(C) cord blood can be used in treating blood cancer.
(D) cord blood is a source of stem cells.

10. Which of the following has not been cited as a reason to promote the use of cord blood?
(A) There is no need for tissue matching.
(B) It has scope for use in future.
(C) There is no dearth of cord blood.
(D) There is no scope for viral infection.

11. The author is in favour of setting up cord blood banks
(A) as a private enterprise.
(B) in the public sector.
(C) aided by public support.
(D) (A) and (C).

12. Cord blood banks can draw on altruism to get voluntary donations means:
(A) they can appeal to the well-disposed in society.
(B) they can approach the well to do.
(C) they can bank on the well-equipped.
(D) they can tap on well-organised sources.

13. Which of the following is/are a consequence/s of early clamping of the umbilical cord?
(a) Less blood for the new-born
(b) Less blood collection
(c) Greater risks of infection
(d) Low haemoglobin level at a later stage
(A) Only a (B) a and d
(C) a and c (D) All of the above

14. Which of the following is the most effective to promote cord blood saving in India?
(A) Ready availability because of growing selling point population.
(B) It is better than bone marrow transplant.
(C) Family members can use it when the need arises.
(D) Its potential to fight many diseases.

15. Which of the following measures does the author suggest in setting up and operating cord blood banks?
(a) Collection of cord blood should be done with parental consent.
(b) A nominal fee can be collected from those donating cord-blood.
(c) Staff must be trained on collection techniques.
(d) Recipient should be made to bear the processing, storage and overhead costs.
(A) a and b
(B) a and c
(C) a, c and d
(D) All of the above.

PASSAGE – III

Truthfulness is inherently life-enhancing. Not only does it simplify our interactions with one another, it also is dignifying and even ennobling. For in sharing the truth with another person, we affirm that person's intrinsic worthiness. Above all, through truthfulness, we participate in truth itself.

We can readily observe the chaotic effect of untruthfulness in daily life, especially among our leaders. Politics has become almost synonymous with lying and cheating. Big business is another area where lying is considered expedient, lest the truth should require better business standards or an ecological conscience and hence cut into the all-pervasive profit margin.

But lying may go even deeper than that. Two and a half millennia ago, the Greek philosopher Plato wondered in his Republic whether one could contrive a "noble lie" that would carry enough conviction for a whole community. In fact, such a core lie is operative in our society. That lie is the belief, spawned by scientific materialism, that life is one-dimensional and that all talk about a higher Reality is mere fantasy.

From this central lie, springs an entire outlook on life that deprives us of our participation in the higher dimensions of existence and thus of our human dignity. For as long as we think and reinforce in each other the belief that we are only meat bodies destined to vanish into nothingness at the hour of death, we are living a lie that diminishes us incisively.

Little wonder that truthfulness has traditionally been celebrated as the highest moral virtue, and the foundation of all other virtues. Thus, in the Mahânirvâna-Tantra, composed nearly one thousand years ago, we find the following declaration:

Without truthfulness, worship is futile. Without truthfulness, recitation is useless. Without truthfulness, asceticism is as unfruitful as seed in barren soil . . . . Truly, truthfulness is the best asceticism. All actions should be rooted in truthfulness. Nothing is more excellent than truthfulness.

This expresses a sentiment that once was global but that, today, is generally little more than a pretty saying. However, the spiritual traditions of the world, notably Yoga, contain many poignant considerations of the nature of truth and truthfulness, which have lost none of their relevance.

For the traditional yogi, truthfulness is a manifestation of Truth, otherwise referred to as "the ultimate Reality" or "the Divine." By being truthful in our words, actions, and even our thoughts, we are automatically true to our own higher nature, which is the ultimate Truth.

According to Yoga, everything is a manifestation of the ultimate Reality anyway, but this fact is not obvious to us so long as we are under the spell of spiritual ignorance. Therefore, while we are subject to this spell, we automatically live inauthentic lives. To put it bluntly, we live a lie. The lie consists of the illusion that we are a limited body-mind that needs to fear death and that is separate from all other equally limited and fearful body-minds. Thus, even when we attempt to be truthful, our truthfulness is circumstantial rather than radical, because we fail to know our own true nature. Only when we are in touch with Reality can we be completely truthful in any situation.

Truthfulness in words, actions, and thoughts is the moral foundation upon which Yoga practitioners must build their temple of spiritual discipline and conscious living. Through steady practise of this virtue, they gradually let go of the big lie at the core of ordinary (unenlightened) human existence and discover who they truly are.

These thoughts seem almost outlandish to our modern mind, which is so used to a wide variety of deceptions. It is no exaggeration to say that we are surrounded by pretense and lies – from advertising to politics to interpersonal relationships. For many of us truth is what is expedient in the moment.

16. The author vociferously preaches
(A) truthfulness. (B) the tenets of Yoga.
(C) asceticism. (D) conscious living.

17. One of the following is a core lie as understood from the passage:
(A) one that can convince an entire community.
(B) it is a noble lie which is believed by people to be beneficial.
(C) the impossibility of one's participation on spiritual materialism.
(D) the belief that life is all about materialism only.

18. The most important task to be done as we start on our spiritual journey is to
(A) try being true to our own higher nature.
(B) be true to oneself.
(C) lead an authentic life.
(D) realise that we are not meat bodies only.

19. According to Mahanirvana Tantra
(A) Yoga has aspects of nature of truth and truthfulness integrated into it.
(B) an ascetic needs to have genuine intentions.
(C) truthfulness is the highest moral virtue.
(D) truthfulness is not being recognised globally as a powerful tool to be used in one's salvation.

20. The author accuses
(A) politicians of lying and cheating.
(B) business sector of justifying untruths as a way of making profits.
(C) our tendency towards materialism as taking us away from the spiritual path.
(D) All of the above.

PASSAGE – IV

The writings of the classical philosophers of the seventeenth and eighteenth centuries in Europe form a continuous and coherent chapter in the history of philosophy. Despite the many differences of doctrine between them, the major philosophers between the time of Descartes and the time of Kant address a broadly similar agenda by broadly similar methods. When Descartes wrote, the Aristotelian tradition had come to the end of the productive development of the Middle Ages; after Kant's death, European philosophy began to fragment into schools which barely communicated with each other. But in the period between Descartes and Kant, the differences between 'empiricist' philosophers in Britain and 'rationalist' philosophers on the Continent were minor in comparison to their shared presuppositions and goals.

On the surface, however, the philosophy of the seventeenth and eighteenth centuries was less homogeneous than the philosophy of the Middle Ages had been. In Western Europe, medieval philosophers wrote entirely in Latin: now, though a number of classic works, such as Descartes's 'Meditations' and Spinoza's 'Ethics', appeared first in Latin, philosophers began to produce major works in the national languages of their own country. A scholar who wishes to read the great works of this period in the original must know English, French and German as well as Latin.

There are other contrasts between medieval philosophy and this early modern philosophy. Medieval philosophy, like medieval architecture, had been the work of a tradition. Individual scholars built on the work of previous generations and presented even their most original ideas in the form of commentary on the writings of their predecessors. In the modern period, the history of philosophy, like the history of architecture, becomes a procession of outstanding individuals, each with a personal style, each proud of marking an epoch. All the major philosophers of the High Middle Ages were firmly based in educational institutions, such as monasteries or universities; but the best-known philosophy texts in the two centuries before Kant were the work of authors who were not university teachers.

Medieval philosophers were professionals who produced their voluminous works for other professionals; they employed technical language and wrote in structured formats. The great philosophers of the early modern period could write brief and polished treatises to catch the attention of the general reader, female as well as male. The printing press had made it possible for a thinker to communicate with a public much larger than the colleagues and pupils of a lecturer in a medieval school. Only with Kant shall we encounter a front-rank philosopher whose whole life was lived in a university, and whose favoured output was the academic lecture. Medieval philosophers were, without exception, bishops, priests, monks, or friars: henceforth almost all the major philosophers are laymen.

As a result of the Reformation and the wars of religion, there was a new relationship between philosophy and theology. Not that philosophers ceased to believe in God: of the major figures of the period, only Hume was an atheist, and the concept of God plays a fundamental role in the philosophies of Descartes, Spinoza, and Berkeley. What had changed was the attitude to ecclesiastical hierarchy. No longer was the teaching authority of the Catholic Church regarded as supreme. Britain and northern Europe had rejected it in favour of various forms of Protestantism. The effect of the split in Christian Europe was to permit philosophical speculation to enjoy greater liberty from the theological constraint. They were thus constantly made aware of the limits of religious consensus.

It was not that individual Christian denominations necessarily became more tolerant of dissent. On the contrary, the thought control exercised by the Counter-Reformation in the seventeenth century was more thorough and rigid than anything in force in medieval Christendom. In Protestant countries too philosophers had to be on guard against charges of heresy, as Descartes and Spinoza were to experience; and, as late as 1793, Kant was forbidden by his king to write on religious topics. What was important was that philosophers on different sides of the religious divisions could read each other's works and could communicate with each other. The authority of scripture, though almost universally acknowledged, was weakened by the variety of interpretations imposed by different authorities. Those who studied the Bible most seriously approached it from a literary or mystical standpoint rather than treating it as a source of illumination on philosophical topics. The dangers of doing otherwise were shown in the case of Galileo.

21. Which of the following is true when the language and the writing styles of the philosophers of the medieval and the early modern period are compared?
- (A) The philosophers of the former group catered to an educated milieu.
- (B) The works in the latter period were written mostly with the aim of appealing to all readers irrespective of their gender.
- (C) The theological nature of this early modern philosophy hurt the religious sentiments of the Protestants.
- (D) As the former works were written in informal language, they were written mostly to be delivered as lectures in educational institutions.

22. The author, through the passage,
- (A) highlights the literary works of various European philosophers of a particular time frame.
- (B) compares and contrasts the medieval philosophy and the early modern philosophy.
- (C) shows how the writings of various philosophers share a common fundamental concept.
- (D) elucidates the reasons behind the isolation of European schools of philosophy from their British counterparts.

23. The background of the philosophers of the early modern period can best be described as
- (A) secular.
- (B) eclectic.
- (C) religious.
- (D) catholic.

24. The case of Galileo highlights one of the following.
(A) The use of the Bible for purposes other than those generally accepted would be met with stiff resistance.
(B) Though ideologically distinct, Catholic Church and Protestant Church condemned the use of the Bible for sacrilegious purposes.
(C) The apparent misuse of the greater liberty brought about by the wars of religion, beyond a certain limit, would be dealt with severely.
(D) The Christian authorities were not as liberal as they were painted to be.

25. Identify the statement that is NOT true as per the passage.
(A) The philosophical writers of early modern period questioned the teachings of Church.
(B) From the group of Descartes, Spinoza, Berkeley and Hume, Hume stands out on account of his views on God.
(C) Descartes and Spinoza belonged to Protestant countries.
(D) The empiricists of Britain and the rationalists of Europe had no assumptions and goals in common.

Exercise – 3

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

There is a pleasure in philosophy, and a lure even in the mirages of metaphysics, which every student feels until the coarse necessities of physical existence drag him from the heights of thought into the mart of economic strife and gain. Most of us have known some golden days in the June of life when philosophy was in fact what Plato calls it, "that dear delight". "Life has meaning," we feel with Browning – "to find its meaning is my meat and drink." So much of our lives is meaningless, a self-cancelling vacillation and futility; we strive with the chaos about us and within; but we would believe all the while that there is something vital and significant in us, could we but decipher our own souls. We want to know that the little things are little, and the big things big, before it is too late; we want to see things now as they will seem forever – "in the light of eternity." We want to learn to laugh in the face of the inevitable, to smile even at the looming of death. We want to be whole, to coordinate our energies by criticizing and harmonizing our desires.

"To be a philosopher," said Thoreau, "is not merely to have subtle thoughts, nor even to found a school, but so to love wisdom as to live, according to its dictates, a life of simplicity, independence, and trust". We may be sure that if we can but find wisdom, all things else will be added unto us. "Seek ye first the good things of the mind," Bacon admonishes us, "and the rest will either be supplied or its loss will not be felt." Truth will not make us rich, but it will make us free.

Some ungentle reader will check us here by informing us that philosophy is as useless as chess, as obscure as ignorance, and as stagnant as content. "There is nothing so absurd," said Cicero, "but that it may be found in the books of the philosophers." Doubtless some philosophers have had all sorts of wisdom except common sense; and many a philosophic flight has been due to the elevating power of thin air. Let us resolve, on this voyage of ours, to put in only at the ports of light, to keep out of the muddy streams of metaphysics and the "many sounding seas" of theological dispute. But is philosophy stagnant? Science seems always to advance, while philosophy seems always to lose ground. Yet this is only because philosophy accepts the hard and hazardous task of dealing with problems not yet open to the methods of science – problems like good and evil, beauty and ugliness, order and freedom, life and death; so soon as a field of inquiry yields knowledge susceptible of exact formulation it is called science. Every science begins as philosophy and ends as art; it arises in hypothesis and flows into achievement. Philosophy is a hypothetical interpretation of the unknown or of the inexactly known ; it is the front trench in the siege of truth. Science is the captured territory; and behind it are those secure regions in which knowledge and art build our imperfect and marvellous world. Philosophy seems to standstill, perplexed,; but only because she leaves the fruits of victory to her daughters the sciences, and herself passes on, divinely discontent, to the uncertain and unexplored.

Science is analytical description philosophy is synthetic interpretation. Science wishes to resolve the whole into parts, the organism into organs, the obscure into the known. It does not inquire into the values and ideal possibilities of things, nor into their total and final significance; it is content to show their present actuality and operation, it narrows its gaze resolutely to the nature and process of things as they are. The scientist is impartial , he is as interested in the leg of a flea as in the creative throes of a genius. But the philosopher is not content to describe the fact; he wishes to ascertain its relation to experience in general, and thereby to get at its meaning and its worth; he combines things in interpretive synthesis; he tries to put together, better than before, that great universe-watch the inquisitive scientist has analytically taken apart. Science tells us how to heal and how to kill; it reduces the death rate in retail and then kills us wholesale in war; but only wisdom – desire coordinated in the light of all experience – can tell us when to heal and when to kill. To observe processes and to construct means is science; to criticize and coordinate ends is philosophy. Science gives us knowledge, but only philosophy can give us wisdom.

1. Philosophy appears to be stagnant because
(A) it is not exact or clear.
(B) it is neither science nor arts.
(C) it is hypothetical and deals with the unknown.
(D) what is formulated exactly becomes science.

2. According to Thoreau, the most important attribute of a philosopher is
(A) having subtle thoughts.
(B) a love of wisdom.
(C) to found a school.
(D) to follow the dicta.

3. The antithesis between science and philosophy, as given in the passage, includes:
(a) science analyses, philosophy synthesizes.
(b) science gives knowledge whereas philosophy gives wisdom.
(c) one describes reality, the other enquires its meaning and worth.
(d) the former constructs means and the latter criticizes and coordinates ends.
(A) Only a (B) a and b
(C) a, b and c (D) a, b, c and d

4. The phrase 'be meat and drink' means
(A) be a source of pleasure.
(B) be absolutely essential.
(C) be contented and happy.
(D) be dissatisfied and critical.

5. We can 'laugh in the face of the inevitable' when we
(A) have become cynics.
(B) are tired of life.
(C) see things in the light of eternity.
(D) are religious.

6. Which of the following statements is not true?
(a) A philosopher is more interested in getting answers to his questions than in material things.
(b) Some philosophers have lacked common sense.
(c) Philosophy deals with problems not yet open to the methods of science.
(d) Philosophy is the front-runner in seeking truth.

(A) a and b (B) c and d
(C) All the above (D) None of the above

7. Match the people and their views.

1. Cicero	(a) Seek the good things of the mind
2. Browning	(b) Life has meaning
3. Bacon	(c) Philosophy is absurd
4. Thoreau	(d) Philosophers are magnanimous and trust worthy

(A)

1	a
2	b
3	c
4	d

(B)

1	c
2	b
3	a
4	d

(C)

1	d
2	c
3	b
4	a

(D)

1	b
2	a
3	d
4	c

PASSAGE – II

The willingness of Palestinians to serve as human bombs is a powerful social phenomenon, but none of the 56 suicide bombings of the past 20 months were solo operations. All were the products of armed Palestinian organisations, working in secret and with varying degrees of killing capacity.

Much of the popular support for suicide bombings comes from the idea of paradise - the just reward for someone who dies for God and for country. During the first wave of suicide bombings against Israel, the bombers were carefully selected. Operatives from Hamas and Islamic Jihad would keep an eye on the young men spending time at local mosques and investigate them. Once contact was made, the recruit would be slowly drawn into the organisation's military network, but the preparation for the actual attack was long and arduous.

In the old days the bombers disappeared from their homes for up to a month before the attack for indoctrination sessions, watching videos of previous bombings. At times they were taken to cemeteries and told to lie in a grave for several hours to overcome their fear of death.

Such vetting continues, to guard against infiltration by informers for Israel's security services, and also to make sure the bomber suffers no change of heart. The handlers also investigated the family of the bomber. They would not recruit only sons, and sought out young people whose attacks would inspire others.

The recruiters are scrupulous in turning away those whose motives would "taint" a mission, such as people in debt, or with a history of mental instability - those seeking a glorious exit to an ignominious life. But many of the other requirements from the old days have disappeared, and religious indoctrination is no longer central to the preparation of the bombers.

There are other compulsions. The suicide bomber is glorified long past his death, with the dead bombers staring out of posters plastered across the West Bank and Gaza, and their deeds extolled in graffiti emblazoned across their houses. There is also a supremely practical element; the families of the bombers receive $25,000 from a Palestinian party allegedly aligned with and funded by Iraq.

The planners of the suicide attacks work in distinct cells, operating autonomously from towns and refugee camps in the West Bank. The fragmented structure is a necessity: to guard against penetration by informers and because Israel's siege of Palestinian towns has forced militants to become self-reliant. The binding element of each cell is trust, says a militant from the Al-Aqsa Martyrs' Brigades.

But while the organisations responsible for the bombings are fluid, one fact remains fixed: it takes a support team of several militants to plan and execute a suicide attack. Typically, each cell for a suicide bombing includes a strategist who is linked to the higher tiers of leadership and who controls finances, an explosives technician who makes the bomb,

a procurer for the belt or vest that will carry it, a driver to deliver it, and other support staff. The bomber is reduced to a delivery system.

Israel's recent invasion and reoccupation of the West Bank, and its almost daily short-lived incursions into Palestinian towns since then, has badly damaged the bombers' networks. The hardened Palestinian commanders are in jail or dead. But the iron fist of Israeli leaders has only increased the determination of those who would embrace martyrdom.

8. One of the following is NOT true regarding the selections of suicide bombers:
(A) Venerable young men are influenced to join the military network.
(B) People with doubtful or dark past are avoided.
(C) Careful and critical examination of the short-listed people is adopted in order to eliminate moles.
(D) Religious indoctrination continues to be the central part of a bomber's priming.

9. The planners work in distinctly separate units
(a) in order to avoid informers.
(b) as the Israeli siege of the Palestinian towns forced the militants to work independently.
(c) since their plans originate in refugee camps.
(A) only a
(B) only b
(C) a and c
(D) a and b

10. Which of the following does not agree with the contents of passage?
(A) Palestinians are the suicide bombers.
(B) Financial aid is the strongest motivating factor for the bombers.
(C) Suicide bombing requires a lot of preparation and a support team.
(D) People agree to become suicide bombers as they believe it takes them to heaven.

PASSAGE – III

Many organisations are experiencing the pleasant task and tension of a two-fold increase in the demand for their products and services. Consequently, the emphasis has shifted to the ultimate and inevitable goal of productivity improvement. All along, the term "productivity improvement" was linked with workmen or blue collar productivity. Whenever there was a backlog, more often than not, workmen were blamed for their negative and inflexible attitude to improving their productivity. In other words, blue collar productivity was believed to be the single critical variable in the business process. While it is true to some extent, one cannot underestimate the potential of management and executive productivity. There is enormous scope to improve business results through appropriate strategic interventions which can be done only by executives and managers.

First and foremost is in the area of quality. The rejection level in even well-run organisations is in the region of 15-20 per cent whereas Japanese organisations claim a rejection of a few parts per million. When one analyses the causes for this high level of rejection, it is found to be in the manufacturing process. In many organisations in an effort to increase production, somehow or other, to meet market demand, the rejection level goes up. In many cases, such high level of rejection cannot be attributed solely to the negligence of workmen. Managerial and executive productivity lies in reducing the rejection level to zero defect. The type of activities that have to be initiated to achieve this can be performed only by executives and managers. This is possible only if quality systems are properly installed.

Another important area which offers enormous scope for executive productivity is the reduction of cycle time. If our organisations are to compete in the global markets, their response time should match the world standards. This can be done only by executives and managers and not by workmen.

Creative and lateral thinking is yet another area offering scope for improving executive productivity. When one compares the number of suggestions per employee and the number of quality circles in our organisations with that in Japanese organisations, the picture is not encouraging. A supervisor's production should be measured not by the production figures alone but by the number of creative suggestions from his workmen and the number of quality circles formed, in his section.

Another important area to measure executive productivity is the new product introduction lead time. Under the emerging competitive environment, customers look for new and improved products which offer value for money. If an organisation sticks to its old set standards of new product introduction time, it will be left behind. One should admire when Sony says, "We will make our products obsolete before our customers do so!"

There is yet another area where the productivity of executives and managers can be measured. This is the area of change management. Lot of changes are taking place outside in the environment compelling an organisation to introduce relevant changes inside the company. Instead of blaming workmen for not accepting the change, there has to be an introspection as to whether proper methods are used to change the mind set of workmen. In the changing environment, the critical role of a manager is to become a catalyst for change.

11. Which of the following can come into the category of what the author has described as being a "pleasant task" but filled with "tensions?"
(A) A company increasing productivity and venturing into export market for the first time.
(B) A company undertaking production of new or allied products.
(C) A company investing in technology to cut down its employee strength.
(D) All the above three categories.

12. Regarding the roles of managers and workmen in the productivity of a firm, the author says that
(A) it is only the former that needs to take full responsibility for the efficiency of their firm.
(B) both are important with the balance tilting slightly towards the manager.
(C) the latter is to be blamed for any dips in the production levels.
(D) managers play a critical role in helping workers, and thereby their firm, to reach higher levels of productivity.

13. The author cites the example of Sony in order to emphasise the fact that
(A) it is possible for managers and executives to encourage their workmen to put forth innovative and creative ideas.
(B) greater customer satisfaction through new products is a mark of higher executive productivity.
(C) offering a wide range of feasible, new and allied products in quick succession for enthusiastic customers is one of the sure signs of higher efficiency on the part of managers too.
(D) customers' concept of 'value for money' can get satisfied if managers help their blue-collared workers help introduce new products at short intervals.

14. Japanese organisations have been cited as examples of places where
(A) rejection of products on the basis of quality is negligible.
(B) creative suggestions from employees are innumerable.
(C) executive productivity is the highest in the world.
(D) both (A) and (B) are observed.

PASSAGE – IV

Languages are normally the object not just of scrutiny but of sentences: "I speak English": "Europe has forgotten its Latin". The central metaphor, or conceit, or daring insight of Nicholas Ostler's study is that languages deserve to be treated as subjects, agents in their own right. Arabic, he declares, "has exploited the confessional associations mercilessly, not simply to survive but to expand". Since 1992, Russian "has shown how few friends it made in all those centuries of stable advance". This is a history book where the narrative energy comes not from human beings but from powerful, long-lived, disembodied characters whose only life has been puffs of air, ink blots on pages or incisions on clay.

Knowing Ostler to be the chairman and driving force of the Foundation for Endangered Languages – and the editor of its invaluable newsletters, 'Ogmios' – I was initially surprised to find him concentrating in this book on big, successful languages. He has much to say about Chinese, very little about Tibetan, and absolutely nothing about Horpa or Kang. But, of course, no history of the world's languages could mention more than a small minority of the 60,000 that survive and the untold thousands that have already died out.

The sheer sweep of analysis is breathtaking. One of Ostler's key gifts is a readiness to ask large and awkward questions that are often passed over in silence. If Germanic invaders of the collapsing Roman Empire failed to implant their languages in what are now France, Spain and Italy, why did the Saxons and Frisians succeed so dramatically in England? Why, for that matter, do so few inscriptions survive in "British", or Brythonic, when the Celtic language known as Gaulish was being written down in much of continental Europe? And so on. Ostler may not have all the right answers – but his intellectual courage in posing such questions and venturing solutions is admirable.

He also has a habit of relegating some of his best observations to his footnotes. Most writers, on discovering that Attila means "Dad" in Gothic, or that Judas Maccabaeus should really be remembered as "Juda the Hammer", would want to highlight the news. Not Ostler. The fish he means to fry are far bigger. Yet sometimes his erudite notes bury statements that have extraordinary implications. Two footnotes declare that at least 20 Asian alphabets, including Tibetan, Balinese, Thai and Khmer, are derived from Indian originals, and that the most important of those originals, the Brahmi script, is in turn derived from Aramaic writing. That sort of information surely belonged to the main text.

A book such as this could have been written only by someone with considerable audacity as well as erudition. The difficulty, on occasion, is that the author comes across as presumptuous. He tells us that in eastern India, "a popular local hymn, 'vande utkala janani', 'I salute, O mother Orissa', is in fact expressed in Sanskrit although those who sing it barely notice". But how can Ostler know what the singers notice? Sometimes, too, he lets intriguing comparisons run away with him. His warning that "The writing may already be on the wall for the language now spoken by one fifth of mankind" is based entirely on an extending analogy that does not hold up to detailed scrutiny. Nor is Ostler a natural writer.

Moreover, his final chapter on the future leads him into dangerous territory. The broad patterns that Ostler discerns in language history may not hold true in the coming decades because so much is now changing so fast not just in the realm of languages. Ostler's prediction that the people of the closely related Turkic languages "will begin to consider themselves a unit" makes good linguistic sense but is politically far-fetched. How many residents of Ankara or Instanbul want to be linked more intimately to Kyrgyzstan than to Germany? But it is far more important to emphasize that 'Empires of the Word' sparkles with arcane knowledge, shrewd perceptions and fresh ideas. All this, and a thousand other points, large and small, is a cause for gratitude – and more than a little awe.

15. Which of the following is in keeping with Ostler's attitude to language?
(A) Languages are suitable objects of study.
(B) Languages are subjects in their own right.
(C) Languages are only means of communication.
(D) Languages are like puffs of air having only transitory existence.

16. The reviewer calls Ostler 'presumptuous' because
(A) Ostler makes observations that he could not have known.
(B) Ostler makes predictions that may or may not come true.
(C) He observes patterns in languages that may not be right.
(D) Both (A) and (B)

17. According to the reviewer the foot notes made by Ostler,
(a) contain uncomfortable truths that he would like to ignore.
(b) incorporate remarkable observations that others would want to highlight.
(c) embody facts that have enormous implications.
(d) comprise information that rightly belong to the text.

(A) a and c (B) a, b and c
(C) b, c and d (D) All the above

18. Which of the following does not reflect the reviewer's opinion of Nicholas Ostler?
(A) Ostler is a born writer who writes with great felicity.
(B) Ostler's analysis cover a wide spectrum of languages.
(C) Ostler asks questions that are seldom raised.
(D) Ostler is intrepid and learned.

19. Based on the passage we can say that Nicholas Ostler was or is
(A) an author.
(B) an editor of a newsletter.
(C) chairman of the Foundation for Endangered Language.
(D) All the above

20. The reviewer feels Ostler has ventured into 'dangerous territory' in the last chapter of his book because
(A) changes in means of communication have not been factored in.
(B) his predictions based on languages may be belied by changes in other fields.
(C) his passion for languages is not bounded by practical issues.
(D) the patterns he discusses belong to the past not the future.

21. Overall, the reviewer
(A) admires Ostler's knowledge, perception and originality.
(B) is critical of Ostler's lapses.
(C) is surprised by the sweeping statements made by one so knowledgeable.
(D) is sorry about the omission of lesser known languages.

PASSAGE – V

By its very nature, the market for art reflects the relationship between art and society. Markets, as demand driven entities, have existed and been created by societies, for societies, since the early ages. Studying the art market over the last four hundred years reveals no exceptions. The art market has evolved with the changing relationship between art and society. An integral part of this relationship is, in turn, the relationship between artist and society.

During the Renaissance and Baroque periods, the artist was regarded as a craftsman. Patronage from a single patron or church was common and subject matter was restricted. Art served more of a defined purpose - either strictly religious or plainly decorative. Therefore, the artist regarded himself as inclined to the side of trade and commerce, with realistic and more simplistic goals - that of earning a decent living. The artist ran his workshop in much the same way a proprietor or sole-trader would run his business. In this sense, the artist's consideration of art marketing was integral to its creation, as were sensible business practices and efficient production to facilitate demand.

It is for these reasons that the artists of the Renaissance and Baroque were able to consider and conduct marketing and business practices transparently. This transparency can be traced to the relationship between art and society at the time. Artwork in itself was not perceived to be enlightening or empowering. Although it often carried religious connotations, art was not the object of significance, but a way of seeing. As a result, those who created it were not regarded as genius and consequently not iconised by society. Rather, artists earned respect and money for their skills as craftsmen. It is also interesting to note that around this period, the notion of artist as icon begins to emerge as growing workshops, the professional dealer and art fairs gain importance.

The change in the role of artist from craftsman to icon was influenced by several factors - the first art fairs, exhibitions, auctions and markets, the emergence of professional dealers and the increase in collectors. These factors helped lead to the gradual commodification of art.

The 'popularisation' of art was led by many changes that plot the emergence of artist as icon. The proliferation of fairs and markets exposed art to the common people more than any single dealer could. Art began to merge with popular culture and the work of individual artists began to be recognised. Dealers were instrumental in introducing art to the upper middle classes before art fairs and markets appeared. Dealers helped change the relationship between artist and buyer from artist-patron to artist-client. Although the first dealers were not much more than enterprising shop-keepers – history speaks of their sly, exploitative demeanour; they were to become pivotal in changing the role of the artist. The emergence

of these markets and the professional dealer were signs that art had entered the public domain and that individual artists had captured the interest of the public.

Artist as icon created a new breed of collectors. As individual artists like Rembrandt, Cezanne, Van Gogh and Picasso grew famous, collecting art became as fashionable as the artists themselves. The collectors gave artists their iconic status, and in return artists gave collectors self-indulgence, security, ownership and identity. Artist as icon served the market as much as it served the artist. As collectors' tastes changed in a fashion cultured by dealers and critics, artists were left alone and no longer in control of their work. The artist as icon today is plagued by the public perception of genius - that the artist must pursue art for moral and enlightening purposes; that the artist is genius only by suffering, self-realisation or torture. The artist as icon today cannot consider profit, money or even making a living. Wishing for a nice house, even studio is seen as 'not pursuant to the cause' or immoral. Artist as icon has made it increasingly difficult for the artist to even consider marketing and business practices today.

22. By speculating that in earlier times the notion of art as business and marketing was more transparent than it is today, we are inherently
(A) looking at a systematic and efficient operation of selling works of art.
(B) addressing the change in the role of the artist from artist as craftsman to artist as icon.
(C) categorising the works of artistes into distinct classes.
(D) studying the purchasing trends of people.

23. As artists like Rembrandt, Van Gogh, etc., gained fame and name, they
(A) were venerated for their masterpieces.
(B) catered only to the wealthy.
(C) could not market their paintings abroad.
(D) were forced to paint according to the market preferences.

24. One of the following perceptions of the society affected the role of an artist as craftsman:
(A) He has to pursue art for art's sake - not as a commercial activity.
(B) A true artist can never paint for the sake of money alone.
(C) He has to suffer in order to create masterpieces.
(D) Masterpieces are produced only by the play of artist-client relationship.

25. The passage tries to trace
(A) the origin of Abstract Expressionist Art.
(B) the relationship between various art forms and the role of an artist.
(C) the effect of society's attitude on the commodification of art.
(D) the change in the relationship between artist and society that affected an artist's consideration and conduct of marketing and business practices.

Exercise – 4

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

Early mammals conjure up images of rat or shrew-size creatures that skulked in the shadows of dinosaurs, trying to avoid being ripped limb from limb by the terrible lizards. Now it seems that the hunted sometimes became the hunter. New-found fossils reveal a baby dinosaur inside a mammal's gut – the first direct evidence of such predation.

An international team based its conclusions on a species called Repenomamus robustus, a mammal about as big as a Virginia opossum that lived during the Mesozoic, 130 million or so years ago. Within the rib cage of R. robustus was the skeleton of a young dinosaur whose serrated teeth, limbs and toes mark it as Psittacosaurus, a hornless relative of triceratops that reached cow proportions in adulthood. Whereas the mammal's bones are preserved in their anatomical position, the dinosaur's are mostly fragmented and packed together where the stomach lies in living mammals. "The most likely explanation is that it was eaten", concludes Jin Meng, a paleontologist at the American Museum of Natural History in New York City. Fossils with stomach contents are rare. Dinosaurs with mammal's jaws in their guts had been discovered earlier. "This is the opposite case." Meng says of R. robustus.

Other members of Repenomamus also seemed capable of dining on dinosaurs. Among the other dog-size, shrew-like species dug up by local farmers in the Yixian formation of northeast China, where caches of fossilised feathered dinosaurs are common, researchers discovered R. giganticus. About as big as a Tasmanian devil, the creature was the biggest of its genus, reaching 12 to 14 kilograms in weight and growing to more than a metre in length. Its skull was 16 centimeters long, 50 per cent larger than that of R. robustus, the next largest species. "Big implies many things. They need more food and a larger home range to walk around in, and they have the capability to eat larger prey and resist predation from carnivorous dinosaurs". Meng explains.

The new fossils were found buried in sandstone flecked with volcanic ash. Fossils discovered in layers above the mammal's bones were squashed, which suggests that they dropped into a lake and were gradually covered by mud, which compressed them flat. In contrast, the Repenomamus mammals were preserved three-dimensionally articulated, suggesting that they died quickly en masse by a volcanic eruption.

Although Meng's team, which includes colleagues from the Chinese Academy of Sciences in Beijing, cannot exclude the possibility that the Repenoma family was a clan of scavengers, Meng argues that its large pointed teeth and jaws were

good for catching, holding and rending other animals – abilities more indicative of a predator than a scavenger. Some of the dinosaur's long bones were still articulated, "meaning they were swallowed in large chunks", Meng reasons. In addition, the dinosaur's skull was roughly a third the length of the mammal's, "not just a snack" but a meal challenging enough to discourage a casual diner, he adds. Scavengers are also relatively rare among mammals: among extant carnivorous mammals, only two hyena species are habitual scavengers.

Palaeontologists Zhe-Xi Luo of the Carnegie Museum of Natural History called the findings the first unambiguous proof that early mammals were more than insect eaters. Palaeontologists Spencer Lucas of the New Mexico Museum of Natural History agrees: "Dinosaurs are often thought of as dominating the Mesozoic, but this shows mammals weren't above having a Dinosaur Mc Nugget".

1. Which of the following does not describe the Repenomamus giganticus?
(A) One meter long
(B) Tasmanian devil-like
(C) Heavier than R. robustus
(D) Shrew-size

2. Which of the following observations led Meng to conclude that the mammal had eaten the dinosaur?
(A) The presence of the dinosaur in the gut of the mammal.
(B) The clear variation between the size of the dinosaur's skeleton and the rib cage of the mammal.
(C) Pieces of the dinosaur's bones packed in the mammal's intestinal region.
(D) The mammal's features, which indicated that it could fight baby dinosaurs.

3. The words, 'Sometimes the hunted became the hunter', in the passage implies that
(A) mammals, which were preys, became predators.
(B) mammals broke convention and became predators.
(C) mammals, which were predators, became hunters.
(D) dinosaurs and mammals ate each other.

4. To counter the claim that the Repenoma family was a clan of scavengers, Meng gave all but one of the following reasons. Which one?
(A) Pointed teeth and limbs were like a predator's.
(B) The fairly large size of the dinosaur's skull.
(C) Mammals were not insect eaters.
(D) Very few mammals were scavengers.

5. Fossils of the Repenomamus mammals suggest that
(A) a volcano caused their death.
(B) they fell into a lake and died.
(C) their bones were smashed beyond recognition.
(D) None of the above.

6. It can be inferred from the passage that Meng and his team were engaged in the study of
(A) dinosaurs of the Mesozoic age.
(B) fossils of the Mesozoic age.
(C) food habits of mammals and dinosaurs.
(D) diet of mammals in the Mesozoic age.

7. The image of the mammals as projected by the author in the first and last para of the passage is
(A) complementary. (B) contradictory.
(C) contrasting. (D) awesome.

8. Which of the following hypothetical situations would prove Meng wrong?
(A) The dinosaur which was found in the mammal's stomach grew up to the size of a horse.
(B) Discovery of fossils with rarer stomach content.
(C) Repenomamus robustus is a herbivore.
(D) Evidence that the Repenoma family of mammals existed before the Mesozoic age.

PASSAGE – II

As a bird that is synonymous with death in the popular imagination, the vulture, is an improbable candidate for a widely supported conservation campaign. That a committed effort is underway in India to raise the population of three species of the Gyps vulture is a welcome sign of the growing awareness of ecological issues. Indian ornithologist, Salim Ali, and his collaborator, Dillon Ripley, recorded nine resident species of vultures in the subcontinent. Of these, three species Gyps benagalensis (oriental white-backed vulture), G. Indicus (Indian or long-billed vulture) and G. tenuirostris (slender-billed vulture) – are listed as critically endangered by Birdlife International, a global alliance of conservation organisations. The Ministry of Environment and Forests has set up a conservation fund for these vulture species. They are reported to have suffered an alarming decline in numbers over the past decade. The precipitous fall in Gyps vulture populations in South Asia has presented an ornithological mystery to scientists, and the Bombay Natural History Society, the Salim Ali Center for Ornithology and Natural History and other organisations have been studying the phenomenon.

The most recent and widely publicised explanation for the disappearance of the birds, based on a report in the journal, 'Nature', is that they have been decimated by the painkiller drug, diclofenac, administered to cattle. The diclofenac link, originating from a study in Pakistan and later extrapolated to the rest of the subcontinent, is attributed to the finding that many of the dead vultures had suffered renal failure, with drug residues turning up in their tissues; they had apparently consumed the flesh of animals treated with the drug, which was used widely in veterinary medicine. Yet some scientists think the mystery is far from being solved. More evidence may be necessary to establish diclofenac poisoning as the dominant factor responsible for vulture deaths everywhere, and parallel explanations for a fall in Gyps populations may be equally valid. The most common vultures, travelling from far-flung sites including national parks, flocked to consume meat waste that was disposed of in the open outside cities and towns. The resulting unsustainable populations heightened the risk of bird strikes for the aviation industry and the defence establishment, leading to unpublicised extermination programmes that involved shooting the birds down and poisoning the carcasses kept as bait.

There is a realisation today that vultures must be saved from extinction for their own sake and for the ecological niche they occupy – disposing of carcasses naturally and maintaining a biological control of species that may proliferate in their absence. The authors of a study on declining populations of birds worldwide, reported recently in the Proceedings of the National Academy of Sciences , contend that the loss of normal vulture numbers in India led to an explosion of rabid feral dogs and rats; over 30,000 people died of rabies in the country in 1997, representing half the global mortality from rabies. It is commendable that the central government has set up a rehabilitation fund for these birds. No time can be lost in commissioning new studies that will cover all issues facing the Gyps vultures in their natural habitat and in urban environments. Aircraft operation is a major area of conflict and scientifically sound ways of managing vultures need to be explored. Parallel efforts to maintain the health of these largely unloved but wondrous and irreplaceable birds in protected areas and to breed them in captivity will enrich science.

9. The aviation industry responded to the threat from the vulture population
(A) by shifting their area of operation.
(B) by getting rid of them quietly.
(C) by administering diclofenac to cattle.
(D) by offering carcasses as bait.

10. Which of the following statements is not true?
(A) There are nine species of vultures residing in the sub-continent.
(B) A conservation fund has been set up to protect the endangered vulture population.
(C) Nature has listed three species of the vulture as facing extinction.
(D) Salim Ali Centre is one of the agencies trying to unravel the mystery of the missing birds.

11. In this passage, the author mainly
(A) highlights the plight of vultures and criticises the aviation industry.
(B) calls for government intervention in 'save the vulture campaign'.
(C) welcomes the measures initiated to protect the vulture population.
(D) warns of the likely ecological imbalance due to dwindling bird population.

12. The first sentence in the passage has a tinge of
(A) satire. (B) paradox.
(C) pathos. (D) irony.

13. Vultures need to be saved from extinction because
I. They help in natural disposal of carcasses.
II. They maintain ecological balance and check the population of some species.
III. They are not a threat to the aviation industry.
IV. They assist in checking the spread of rabies.

(A) I and II (B) I, II and IV
(C) I and IV (D) All of the above.

14. All but one of the following statements can be inferred with reference to the diclofenac link mentioned in the passage. Identify that one.
(A) Birds which consumed the flesh of animals treated with diclofenac suffered a renal failure.
(B) The diclofenac link to explain the decrease in vulture population has gained ground.
(C) Diclofenac given to birds with renal failure proved fatal.
(D) Some scientists doubt the credibility of this study.

15. What has been referred to as the "ornithological mystery" in this passage?
(A) The dwindling population of the Gyps vultures.
(B) The diclofenac poisoning in birds.
(C) Vultures being associated with death.
(D) Why vultures are unloved despite their wondrous nature.

PASSAGE – III

If you take as a given that companies must build strong brands to be competitive, then you are faced with a simple yet staggering challenge: How? In the United States, mass-media advertising has long been the cornerstone of most brand-building efforts. But that norm is threatening to become obsolete. Fragmentation and rising costs are already inhibiting marketing through traditional mass media like television. And new communication channels – which, in some cases, allow individuals to bypass advertising as they peruse entertainment options, obtain information, or shop – are already in use. Perhaps the new media scene will take more time to develop than the two or three years that the pundits have predicted. Perhaps it will not affect everyone: some people may not want to pay to access ad-free media. It is not hard to imagine, however, that the media landscape as a whole will be very different in only a few years.

To build strong brands in this uncertain environment, US-based companies would do well to study their counterparts in Europe. Because they were forced to, companies in Europe have long operated in a context that seems to mirror some of the harsher realities of the post mass media era. Media options for branded manufacturers in Europe historically have been limited and relatively ineffective. Europeans have had access to fewer commercial television stations, many of which bundle advertisements to avoid program interruptions. It is still rare to see media spanning several countries, despite the hype. What's more, because of the limited media availability, costs have been high. Even as new cable and satellite television channels were gradually added in European countries, costs did not decline. And powerful retailers in many nations usurp much of the available media capacity to engage in corporate advertising and to strengthen their private-label efforts.

In short, managers of brands in Europe have found that communication through traditional mass media has been ineffective, inefficient, and costly. As a result, many European-based companies have long relied on alternative communication channels to create product awareness, convey brand associations, and develop loyal customer bases. Their brand-building approaches may point the way for others to succeed in the new media age. The successful European

companies share one critical characteristic in addition to their reliance on alternative media: senior managers drive the brand building. They actively make brand building a part of their strategic plans and, as a result, integrate their alternative approaches to brand building into their overall concept of the brand.

Many US companies delegate the development of brand strategy to someone who lacks the clout and incentives to think strategically. Or they pass the task to an advertising agency. Relying on an agency leads to two problems. First, in most cases, it creates a distance between senior managers and their key asset, the brand – the driver of future growth opportunities. That distance can make the coordination of communication efforts difficult – a situation that can result in confusion for customers, loss of synergy, and, ultimately, performance that falls short of potential. Second, most agencies' talents, incentives, and inclinations still lead them to rely on mass-media advertising as their primary brand-building device. Agencies rarely suggest that a client lead brand building with alternative media. Although some agencies recently have made strides in expanding their ability to develop alternative media options, most are still oriented toward advertising campaigns, despite pronouncements to the contrary. Certainly, agencies have much to contribute strategically and tactically. However, the key to engaging in a broad, coordinated brand-building effort that accesses alternative media is to develop and control brand strategy inside the organization.

The identity of the brand – the brand concept from the brand owner's perspective – is the foundation of any good brand-building programme. Unfortunately, many US companies do not have a single, shared vision of their brand's identity. Instead, the brand is allowed to drift, driven by the often-changing tactical communication objectives of product or market managers. A clear and effective brand identity, one for which there is understanding and buy-in throughout the organization, should be linked to the business's vision and its organizational culture and values.

16. The author thinks Europe is
(A) totally different from the US and hence not valid for comparison.
(B) an enigma and not amenable to study.
(C) the very antithesis of the US in most aspects.
(D) a precursor that shows the way to succeed in the new media age.

17. The chief factor for a brand to be successful is
(A) close involvement of senior managers in brand building.
(B) visibility in the media.
(C) direct communication with customers.
(D) giving a novel experience of the product.

18. Pick out the statement that is not true.
(A) A strong brand will create growth opportunities in future.
(B) Lack of clear and strong identity makes the brand like a ship without a rudder.
(C) The author expects the media scene to change totally in a year's time.
(D) The US had traditionally depended on advertising to build a brand.

19. Why have mass media like T.V become unsuitable for brand building?
(A) Breakup of the audience
(B) Increasing cost
(C) Ability to by-pass advertisement
(D) All the above.

20. The author does not recommend entrusting an ad agency with brand building because
(A) it leads to misunderstanding and misrepresentation.
(B) it distances senior managers from their brand.
(C) they can work only through mass media
(D) they can make no strategic contribution.

21. Businessmen in Europe have found traditional mass media ineffective and inefficient because
(a) the number of commercial channels have been few.
(b) the T.V channels had only localized audience.
(c) ads have not been allowed to interrupt programmes.
(d) costs have been high.
(A) Only a (B) a and b
(C) a, b and c (D) a, b, c and d

PASSAGE – IV

The generation that is quickly occupying the majority of business leadership roles is one that's grown up playing video games, spends the most time shopping online, and uses social media more habitually than any other generation.

If you were thinking it's millennials, that's probably because they've dominated the media's focus for the past decade. But it's actually Generation X, which covers those born between 1965 and 1981 by our definition.

As Pew Research unflatteringly referred to them in a 2014 report, Gen X is "America's neglected 'middle child,'" and we don't hear much about the group. It seems that all eyes are on the slowly retiring baby boomers or the ascending millennials, now the world's majority generation. But our recent study revealed that Gen X is playing a critical — and underappreciated — role in leadership as organizations grapple with digital transformation.

In our Global Leadership Forecast 2018, we took a look at more than 25,000 leaders spanning 54 countries and 26 major industry sectors. We found that Gen X now accounts for 51 percent of leadership roles globally. Our research revealed that, although they aren't typically considered digital natives to the extent that millennials are, Gen X leaders are just as likely to be comfortable leveraging technology in the workplace. That finding is backed up by research by Nielsen, which revealed that Gen X is the most connected generation. Nielsen found that Gen Xers use social media 40 minutes more each week than millennials. They were also more likely than millennials to stay on their phones at the dinner table and spend more time on every type of device — phone, computer, or tablet.

While Gen X may be equally capable at digital tasks as millennials, they also show a mastery of conventional leadership skills more on par with leaders of the baby boomer generation. That includes identifying and developing new talent at their organizations and driving the execution of business strategies to bring new ideas to reality.

Despite their growing influence and responsibilities at work, Gen Xers are most overlooked for promotion and have been the slowest to advance. We found Gen X leaders on average had only 1.2 promotions in the past 5 years, significantly lower than their younger millennial counterparts (1.6 promotions) and more senior baby boomers (1.4 promotions) during the same period of time.

While Gen X leaders are often under-recognized for the critical role they play in leadership, they are typically expected to take on heavy workloads. On average, Gen X leaders have 7 direct reports, compared to only 5 direct reports for millennials. While their advancement rate is slower and their teams larger, Gen X remain loyal employees. Only 37 percent contemplate leaving to advance their careers — five percentage points lower than millennials.

22. The central idea of this passage is that:
- (A) though Gen X is often side-lined in public perception, they increasingly hold influential leadership positions in the workplace.
- (B) Gen Xers play a more significant role than millennials in the workplace.
- (C) technology has played a crucial role in the rise of the Gen X leader.
- (D) millennials have an unfair advantage over Gen Xers in America.

23. Gen X is referred to as "America's neglected 'middle child'" because:
- (A) their role in leadership is significant, but largely unappreciated.
- (B) they have not been able to catch up with the digital transformation.
- (C) they are sandwiched between the baby boomers and the millennial, both of whom get more attention than Gen X.
- (D) Gen X leaders get the least recognition in organizations.

24. According to the passage, all of the following are true EXCEPT:
- (A) Generation X is more inclined to use social media than the millennials.
- (B) The current global population has more representatives from Generation X than from any other generation.
- (C) Leaders from the millennial generation are more likely to switch jobs than those from Gen X.
- (D) Leaders from Generation X are as good at human resource development as their baby boomer counterparts.

25. Which of the following can be inferred from the passage?
- (A) The baby boomer generation is less comfortable with digital technology than Generation X.
- (B) Technology is an integral part of the GenXer's daily life, both at work and at home.
- (C) The rise of the Generation X leader is an American phenomenon.
- (D) Millennials are the generation that is most recognized for their achievements at the workplace.

Exercise – 5

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

Worldwide the drug industry is clearly ailing. Three major drug companies – Pfizer, Astra Zeneca and Eli Lilly have all disclosed serious problems with important medicines in the recent past, throwing a spotlight on the fact that the $500 billion drug industry is failing in its core business of finding new medicines. The decline in drug research and development has been an open secret among analysts and scientists for years. But drug company executives have insisted that their industry is fundamentally healthy and their expensive research efforts will pay off. Meanwhile, they have tried to offset their weakness in creating profitable new drugs with aggressive marketing campaigns to doctors and patients for existing drugs, big price increases, and efforts to extend patents on existing medicines. Those tactics have protected their profits but irritated consumers and governments that pay for drugs, causing a political backlash in the US and Europe.

Pfizer said that it had found increased risk of heart problems for people taking Celebrax, a painkiller that is one of the world's bestselling medicines. Astra Zeneca reported that a trial of Iressa, a lung cancer drug approved in the US last year, showed that the drug did not prolong lives. And Eli Lilly warned doctors that Strattera, its drug to treat attention-deficit disorder, usually affecting children, had caused serious liver injury in at least two cases. The number of new drugs approved by the Food and Drug Administration has declined sharply since the mid-1990s, falling from 53 in 1996 to 21 in 2003, even as the industry has nearly doubled its annual spending on drug development, to about $33 billion. Further complicating the process, many drugs already in the market do a reasonably good job, so the bar that new therapies must cross is high, especially because most are so expensive.

If companies cannot reverse the trend, investors will almost certainly demand that they cut their research spending. Meanwhile, governments, faced with growing drug costs for publicly funded programmes like Medicare and Medi-aid, may well alter regulations on drug marketing or force the companies to cut prices, an analyst said. The result in the

long-run may be an industry that is less able to produce new drugs for patients. Still, experts on drug development note that progress comes in fits and starts, and the flood of newly discovered biomedical information could lead to many new drugs in the years to come. But traditional drug companies have not yet had much luck on the biotechnology front, though they have licensed some drugs from biotechnology companies.

While they struggle with new technologies, the companies are facing a steady stream of patent expirations on their most profitable drugs. To combat that dynamic, Pfizer and some other companies have used mergers or acquisitions to grow. But those deals do nothing to increase the industry's overall ability to produce new medicines, critics say, and may even hurt it as merging companies struggle to integrate their laboratories. On the surface, the pharmaceutical industry seems relatively healthy. The industry's sales are rising strongly both in the United States and world-wide, with revenues up about 9 per cent in 2003, to more than $490 billion, according to IMS Health, which tracks drug sales. And the companies are very profitable. Excluding one-time charges, Pfizer, the word's largest drug company, is expected to earn more than $14 billion this year on sales of $51 billion, a profit margin that is among the highest of any big company.

Recently, Pfizer did get a small piece of good news. Federal regulators approved Macugen, a drug developed by Eyetech Pharmaceuticals Inc. and Pfizer to treat macular degeneration, a leading cause of blindness in the elderly. The major drug companies have steadily increased research spending, investing in genetic database that they hope will give them new insight into the way diseases progress, as well as technologies that increase the number of chemical compounds they screen for medical value. Pfizer alone now spends $7 billion a year on research, according to its financial filings. During the 1990s, the companies were able to bring several new categories of drugs to market, including medicines to prevent heart disease, treat depression and HIV and alleviate schizophrenia. But in this decade companies have had few major breakthroughs aside from a handful of cancer and diabetes treatments.

1. Which of the following could account for the pharma industry's inability to come up with many new drugs?
(A) Reduced spending on research and development as the focus is on short term profits.
(B) It is difficult for pharma companies to adhere to the stringent requirements of Food and Drug Administration.
(C) The heavy investment on research and development makes it difficult to come up with inexpensive medicines.
(D) The efficacy of existing drugs makes the invention of a better treatment more difficult.

2. Based on the passage, which of the following statement/s on Pfizer are true?
(a) Pfizer spends more than $5 billion annually on drug research.
(b) Pfizer joined hands with Eye-tech pharmaceuticals and developed a drug called Celebrax.
(c) Pfizer doubled its expenditure on drug research last year.
(d) Pfizer is the world's largest drug company.

(A) a and d
(B) a and c
(C) a and b
(D) Only d

3. Which of the following measures have drug manufacturers not adopted to offset their failure in inventing new drugs?
(A) Aggressive marketing
(B) Price hikes
(C) Offering insurance
(D) Extending patents on medicines

4. When the author says that the global drug industry is ailing, he implies that
(A) the drug industry is going through a financial crisis.
(B) its performance in the area of R and D leaves much to be desired.
(C) MNCs have not allowed the small and medium drug units to thrive, resulting in lop-sided growth.
(D) it has been growing in fits and starts.

5. To compensate for their inability to produce innovative new remedies, drug companies
(A) have reduced the price of well established old medicines.
(B) agreed to share rights on patented medicines to bring down costs.
(C) lobbied with politicians to safeguard their companies.
(D) sought to protect their bottom lines rather than serve patients.

6. What makes the pharma companies appear to be in good health?
(A) Increase in sales and profit
(B) The significant investment in R and D
(C) Spread to new geographical markets
(D) The increasing number of products and processes seeking patients

7. Choose the option which is correctly matched

1. Celebrex	(a) Cancer
2. Macugen	(b) Liver injury
3. Straterra	(c) Pain-killer
4. Iressa	(d) Blindness

(A)

1	c
2	a
3	d
4	b

(B)

1	c
2	d
3	b
4	a

(C)

1	c
2	b
3	a
4	d

(D)

1	c
2	d
3	a
4	b

8. Which of the following statements with regard to bio-technology is not true according to this passage?
(A) It has opened the doors for entry of new drugs in the market.
(B) Some drugs produced by bio-tech companies have got the industry's approval.
(C) Drug companies find bio-technology based medicines very expensive.
(D) It has not yet proved valuable to traditional drug firms.

9. A comparison of the performance of drug companies in the last two decades reveals that
(A) the standards set by the Food and Drug administration have become more demanding.
(B) no significant changes have been recorded.
(C) profits have gone up and so has expenditure on research.
(D) more funds for R and D programmes have translated into newer drugs.

PASSAGE – II

Urbanism has preoccupied sociology since the turn of the century. Max Weber pointed out the obvious fact that people in cities cannot know all their neighbours as intimately as it was possible for them to do in small communities. George Simmel carried this idea one step further when he declared that if the urban individual reacted emotionally to each and every person with whom he came into contact, or cluttered his mind with information about them, he would be "completely atomized internally and would fall into an unthinkable mental condition." Louis Wirth, in turn noted the fragmented nature of urban relationships. "Characteristically, urbanities meet one another in highly segmental roles…" he wrote. "Their dependence upon others is confined to activity." Rather than becoming deeply involved with the total personality of every individual we meet, he explained, we necessarily maintain superficial and partial contact with some.

What this means is that we form limited involvement relationships with most of the people around us. Consciously or not, we define our relationships with most people in functional terms. So long as we do not become involved with the shoe salesman's problems at home, or his more general hopes, dreams and frustrations, he is, for us, fully interchangeable with any other salesman of equal competence. In effect, we have applied the modular principle to human relationships. We have created the disposable person: Modular Man. Rather than entangling ourselves with the whole man, we plug into a module of his personality. Our relationship is safely limited. There is limited liability on both sides. The relationship entails certain accepted forms of behaviour and communication. Both sides understand, consciously or otherwise, the limitations and laws.

Today a vast sociological and psychological literature is devoted to the alienation presumed to flow from this fragmentation of relationships. Much of the rhetoric of existentialism and the student revolt decries this fragmentation. It is said that we are not sufficiently "involved" with our fellow men. Before leaping to the popular conclusion that modularization is all bad, however, it might be well to look more closely at the matter. Theologian Harvey Cox, echoing Simmel, has pointed out that in an urban environment the attempt to "involve" oneself fully with everyone can lead only to self-destruction and emotional emptiness. Urban man, he writes, "must have more or less impersonal relationships with most of the people with whom he comes in contact precisely in order to choose certain friendships to nourish and cultivate… His life represents a point touched by dozens of systems and hundreds of people. His capacity to know some of them better necessitates his minimizing the depth of his relationship to many others. Listening to the postman gossip becomes for the urban man an act of sheer graciousness, since he probably has no interest in the people the postman wants to talk about."

Moreover, before lamenting modularization, it is necessary to ask ourselves whether we really would prefer to return to the traditional condition of man in which each individual presumably related to the whole personality of a few people rather than to the personality modules of many. Traditional man has been so sentimentalised, so cloyingly romanticised, that we frequently overlook the consequences of such a return. The very same writers who lament fragmentation also demand freedom – yet overlook the unfreedom of people bound together in totalistic relationships. For any relationship implies mutual demands and expectations. In a modular relationship, the demands are strictly bounded. So long as the shoe salesman performs his rather limited service for us, thereby fulfilling our rather limited expectation, we do not insist that he believe in our God or share our political values, or enjoy the same kind of food or music that we do, as he leaves us free to be atheist or Jew, John Bircher or Communist. This is not true of the total relationship and cannot be. To a certain point, fragmentation and freedom go together.

All of us seem to need some totalistic relationships in our lives. But to decry the fact we cannot have only such relationships is nonsense. And to prefer a society in which the individual has holistic relationships with a few, rather than modular retionships with many is to wish for a return to the imprisonment of the past – a past when individuals may have been more tightly bound to one another but when they were also more tightly regimented by social conventions, sexual mores, political and religious restrictions.

10. When the author says 'our relationship is safely limited', he means that
(A) we maintain relationship with only few people.
(B) our relationships are all superficial.
(C) we have personal relationship with only those we consider safe.
(D) our obligations and expectations are limited.

11. The urban man differs from his rural counterpart in
(a) that he does not react emotionally.
(b) that he does not require close relationship with anybody.
(c) the number of people he comes into contact with.
(d) his lack of interest in the affairs of other people.
(A) a and b
(B) c and d
(C) a and c
(D) b and d

12. Sociologists and psychologists are of the view that
(A) estrangement results from our refusal to get deeply involved with other people.
(B) modularization is not all bad.
(C) loneliness is the result of modularisation.
(D) fragmentation of relationship leads to a fragmented personality.

13. Which of the following is not a feature of the modular man?
(A) He does not care to gossip with the milk man or dhobi.
(B) He minimizes the depth of his relationship with most people.
(C) He has greater freedom than in the past.
(D) None of the above

14. The views of the author, as surmised from the passage, is/are
(a) modular relationship with many is better than holistic relationship with few.
(b) Intimate relationships limit our freedom.
(c) Modular relationship is the best.
(d) Duration determines the nature of relationship.
(A) a, b and d (B) Only d
(C) a and b (D) c and d

15. The modular principle, as deduced from the passage, is
(A) dealing with things in parts, taking one aspect at a time.
(B) dividing work into several parts.
(C) using standardized parts to construct the whole.
(D) breaking a complex task into simpler units.

16. Pick the option that has the people and their views correctly matched.

1.	Louis Wirth	(a)	You can't know all your neighbours in cities.
2.	Harvey Cox	(b)	Getting involved with everyone leads to self destruction and emotional emptiness.
3.	George Simmel	(c)	We maintain partial contact with the people we meet.
4.	Max Weber	(d)	If we react emotionally to all the people we meet, we'll become mentally deranged.

(A)

1	a
2	b
3	c
4	d

(B)

1	c
2	b
3	d
4	a

(C)

1	d
2	c
3	b
4	a

(D)

1	b
2	d
3	a
4	c

PASSAGE – III

It's natural to want to beat the competition, but too often we make this an obsession, thinking that the end game is one in which the winner takes all. In most economic arenas, there are usually multiple winners. Whether the players are shopkeepers, racing car drivers or even entire countries, they know that it is vital to compete along certain dimensions but cooperate on others. In business, its typically never war or peace; its generally both at the same time.

In India's price-sensitive markets, shopkeepers can be fiercely competitive when it comes to offering the best deals to customers. However, you may have noticed that the same shopkeepers tend to locate themselves near their competitors. For example, on some streets, there are a slew of companies all selling hardware. Shops on other streets sell only musical instruments or furniture. By locating themselves near each other, these shops are able to create a vibrant market – one which attracts customers who know they'll get the best deal and a wide set of choices. Co-location is a way for them to cooperate in attracting customers.

One way that competitors can benefit from cooperating is to form sub-groups that essentially gang up on those outside the group. Pairs of racing cars, for example, bunch up to increase their speed. The lead car benefits from a drop in resistance when the slight vaccum at its rear is filled, and the car in drafting position benefits as it is partially shielded from the wind. Similarly, companies that form an industry association, often the biggest or most professional, sometimes lobby the government to pass laws that benefits themselves at the expense of non-members. They may pressure the government to discourage new entrants from coming into the market.

Even entire economies can compete and cooperate. India and China are in a race to become the leading economies in the world. Like two fast sprinters rounding the first bend in the tract, each cab trip the other, or they can collide and both knock each other out of the race. In fact, China could use India's help in terms of manpower: thanks to the success of the one child policy, the number of people in their labour force will decline over the next 15 years. The Chinese labour market is already tightening – Shenzhen just raised its minimum wage to $83 per month from $74. At the same time, China also competes with India. Its need to protect energy supply lines and to contain India go hand in hand. For example, Chinese sports facilities in Pakistan, Myanmar, Bangladesh and Cambodia are part of an effort to create a 'string of pearls' presence around the Indian Ocean both to protect oil routes and to encircle India. A pipeline from the port of Gwadar in Pakistan could give China an alternative energy channel, plus a base to control shipping lanes in the Arabian Sea.

The above examples suggest that a player's success is often dependent on the cooperation of its competitors. Since we cannot choose our competition, luck plays a role in the kind of competition we have and, therefore, our chance of success. It's unfortunate when a player finds himself in competition with a hyper-competitor, one who hurts both himself and other players in a reckless bid to dominate a market. If one of the players engages in all out competition – by poaching employees and customers or pursuing market share at the expense of profits – the entire industry's profits can be wiped out, as has happened in the US airline industry. The only winners in this situation are customers, who benefit from unbelievable prices and service. For a player to win in the game of business, the others do not have to lose. In fact, we have seen that competitors often compete and cooperate. They cooperate to increase the size of the market, and they compete to divide up the market. They form teams within the industry, but then gang up on non-members. Friends in one arena are enemies in another. It's just business.

17. Which of the following has NOT been used in the passage as an analogy to illustrate that you can cooperate even as you compete?
(A) Economics (B) Markets
(C) Sprinters (D) Airlines

18. Which of the following phrases from the passage does NOT reflect the author's views?
(A) . . . . . the end game is one in which the winner takes all.
(B) In . . . . . price sensitive market the sellers are fiercely competitive.
(C) . . . . a player's success is often dependent on the cooperation of its competitors.
(D) For a player to win in the game of business, the others do not have to lose.

19. 'The only winners in this situation are customers . . . . ' The situation referred to is
(A) where business cooperate to increase the size of the market.
(B) where business cooperate to divide up the market.
(C) where business gang up on non-members.
(D) where businesses compete to their own detriment.

20. As per the passage, a person's success in business is dependent upon
(A) the presence of hyper competitors.
(B) the support he gets from others in the field.
(C) offering the best deal to customers.
(D) the creation of a vibrant market.

21. The examples used in the passage to bring home the importance of cooperation is/are
(A) shops selling the same type of material/goods located at one place.
(B) forming subgroups to oust an outsider.
(C) lobbying with the government to get favourable laws passed.
(D) All the above

PASSAGE – IV

The record levels of crude prices in recent times have once again underscored the need to tap non-conventional and renewable energy sources. More so in developing countries like India where the issue of village energy security can be addressed by harnessing these energy forms. In India, the potential of renewable energy sources was first recognised in the early 1970s. The Ministry of Non-Conventional Energy Sources came into existence in 1992. India has checked out almost all forms of renewable energy – solar , wind, small hydro projects, tidal energy as well as biogas and biomass and urban waste, besides other emerging technologies such as hydrogen. Indian expertise has been drawn upon for energising clusters of islands in South Pacific under a United Nations project.

The developed countries have made good progress in harnessing renewable energy, producing grid-quality power. However, India still has a very long way to go with renewable energy having a mere three per cent share in the country's total installed power generation capacity. According to the 1991 Census, 30 per cent of India's population was covered by electricity. By 2001, this increased to 43 per cent. At this rate, it would take decades to cover the rest. Moreover, access levels vary across states with a swathe of remote villages in Uttar Pradesh, Bihar, West Bengal, Jharkhand, and Orissa remaining in darkness. These are areas known as off-grid, where it would be unviable for the conventional power generators to supply power. Even in rural areas of Maharashtra or Gujarat, the quality of electricity is poor with availability restricted to a few hours. The Government and the agencies involved should focus on providing access to electricity through standalone and decentralised power generation and distribution. The biggest advantage is flexibility in providing power where it is needed and when it is needed.

The Electricity Act 2003 too addresses this need, laying down that the appropriate government shall endeavour to supply electricity to all areas including villages and hamlets. The Act envisaged the formulation of two policies: a National Electricity Policy permitting standalone systems and a National Policy for Rural Electrification for purchase of bulk power and its local distribution in rural areas.

The forms of non-conventional power that find particular use in remote areas are solar energy, energy from woody biomass as well as biogas. The option of woody biomass, necessitating large-scale captive plantations should be part of a village energy security initiative. It provides fuel for biomass projects at site, eliminating investments in power transmission in a rural area Besides, it can be modelled on a stakeholders' participation basis where employment is generated while raising and nurturing the plantation. Micro-hydel power stations have already proved to be a useful source for lighting up villages in remote, mountainous terrain in Jammu and Kashmir, Himachal Pradesh, Uttaranchal, West Bengal, and Andhra Pradesh, Hybrid models – wind and diesel, or solar and diesel have great utility.

However, wind power is not a viable option as a standalone system for addressing needs of remote non-electrified villages, although the private sector is involved in a big way in tapping its business potential. The main reason is the unpredictability of wind speed especially in winter. Another issue that would need addressing is that of reducing costs of renewable energy systems. Solution could come from either technology breakthroughs or through an expansion of the market, which then gets demand-driven. While off-grid initiatives are necessary for electrifying the remote villages, the task of rural electrification can only be addressed by creating a synchronous solution whereby on-grid power is sent to areas which are feasible and off-grid to areas which are not so.

Rural electrification has been the election plank of successive governments but for the hundreds of homes and hospitals that are lighted up in off-grid areas like the Sundarbans in West Bengal or Leh in Kashmir, there are thousands of others whose days remain dark and damp. Yet, in the absence of policy directions, the potential of non-conventional energy resources remains untapped.

22. In India, the potential of non-conventional energy sources is not being fully exploited as
(A) there is insufficient demand for this type of electricity in rural areas.
(B) there seem to be no clear directives in the form of a concrete policy.
(C) all types of non-conventional energy sources are amenable to commercial exploitation.
(D) the technology that can produce grid-compatible power is out of our bounds.

23. Which of the following is central to the idea expressed in the passage?
(A) A national policy for rural electrification
(B) A national policy on non-renewable resources
(C) A national electricity policy
(D) A policy that synchronises the utilisation of on-grid and off-grid types of power

24. According to the passage, woody biomass, as a source of non-conventional power in villages, is preferable because
(A) it tends not to burden a state's exchequer.
(B) it can be a source of employment.
(C) it is not plagued by seasonal changes as observed in the case of wind-based systems.
(D) of all the above reasons.

25. The factor which appears to have added to the importance of non-conventional sources of energy is
(A) concern about the environment.
(B) the Census report of 2001.
(C) the success of the UN-funded project.
(D) economic considerations.

Exercise – 6

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

The use of ginkgo leaf (Ginkgo biloba) extracts can be traced back to centuries in traditional Chinese medicine. Today Ginkgo biloba is the most widely used herbal treatment aimed at augmenting cognitive functions. Ginkgo is especially popular in Europe. In the U.S, the National Institute on Aging is currently supporting a clinical trial to evaluate the efficacy of ginkgo in treating the symptoms of Alzheimer's disease.

But is there any evidence that Ginkgo biloba can really improve cognitive functions? Information on most dietary supplements is based far more on folklore than on experimental findings. Because the U.S. Food and Drug Administration does not regulate herbal treatments, the manufacturers are not required to test the effectiveness or safety of their products. More attention to supplements such as Ginkgo biloba is clearly warranted; even if the products do not cause medical problems, they can be costly and may prevent patients from seeking more pragmatic treatments. In an attempt to close the gap in our knowledge, we have reviewed the experimental evidence both for and against the usefulness of Ginkgo biloba in enhancing brain functions.

The typical daily dose of Ginkgo biloba is 120 milligrams of dried extract in two or three oral doses. The extract contains several flavonoids, a large group of natural plant products that are characterized by a specific chemical structure containing a series of carbon rings. Ginkgo extract also contains some biflavonoids, a related group of compounds, and two different types of terpenes, a class of naturally occurring chemicals that includes the active ingredients in catnip and marijuana.

The great majority of studies have involved subjects with mild to moderate mental impairment, usually a diagnosis of early Alzheimer's. Most of the experiments that show evidence of cognitive enhancement in Alzheimer's patients have used a standardised ginkgo extract known as EGb 761. The ginkgo researchers have usually employed tests of learning and memory; less attention has been paid to other mental functions such as attention, motivation and anxiety.

Because the studies have varied so greatly in the numbers of subjects and the control over experimental conditions, it is useful to focus on only the most rigorous investigations. In 1998, Barry S.Oken of Oregon Health Sciences University and his colleagues considered more than 50 studies involving subjects with mental impairment and selected four that met a conservative set of criteria, including sufficient characterisation of the Alzheimer's diagnosis, use of a standardised ginkgo extract, and a placebo-controlled, double-blind design. Each of these studies showed that the Alzheimer's patients who received ginkgo performed better on various cognitive tests than did patients who received a placebo. Improvements were evident in standardized tests measuring attention, short-term memory and reaction time; the average extent of improvement resulting from ginkgo treatment was 10 to 20 percent.

Oken and his colleagues reported that ginkgo's effect was comparable to that of the drug donepezil, which is currently the treatment of choice for Alzheimer's. Donepezil enhances brain activity by inhibiting the breakdown of acetylcholine, a brain chemical that transmits signals between certain neurons. Despite these apparently encouraging findings, though, another recent, large and well-controlled trial of EGb 761 involving patients with a mild or moderate stage of dementia reported no "systematic and clinically meaningful effect of ginkgo" on any of the cognitive tests employed.

A critical question concerns whether the ginkgo treatment in studies showing positive effects actually improved cognitive abilities in Alzheimer's patients or merely slowed their deterioration. Two different answers to this key question have come from an investigation led by Pierre L.Le Bars of the New York Institute for Medical Research. In this study, which was one

of the four analyzed by Oken, the results varied according to the cognitive test that was employed. Measured by the Alzheimer's Disease Assessment Scale Cognitive Subscale, the performance of the patients treated with the placebo slowly deteriorated over a year, whereas the performance of patients treated with ginkgo remained stable.

Furthermore, at least one study has reported positive effects on mentally impaired subjects after just a single treatment of ginkgo. Herve Allain of the University of Haute Bretagne in France, gave one fairly high dose of ginkgo to a small group of elderly people with mild, age-related memory impairment. An hour after the treatment, Allain tested the subjects' memory by rapidly presenting short lists of words or drawings and then asking the patients to recall the lists immediately afterwards. Their ability to recall the rapidly presented material increased significantly after ingestion of ginkgo. This finding raises the possibility that short-term, rather than long-term, biological actions provide the basis for ginkgo's reported effects on cognition.

1. All of the following statements are true EXCEPT:
(A) Mild mental impairment is not a symptom of the initial stages of Alzheimer's disease.
(B) Ginkgo extracts contain some of the ingredients found in catnip.
(C) According to a certain study, the performance of placebo-treated Alzheimer patients deteriorated gradually.
(D) According to Allain's study, the ingestion of Ginkgo biloba enhanced the cognitive abilities in normal people.

2. As per the passage,
(A) biflavonoids belong to the group terpenes.
(B) the breakdown of acetylcholine reduces only the perceptive activities performed by human brain.
(C) according to a certain study, the ingestion of Ginkgo biloba showed positive effects on patients of dementia.
(D) the ingestion of ginkgo extract seems to enhance the cognitive abilities of Alzheimer's patients, at least for a short period.

3. What is the danger, as per the passage, of using herbal treatments?
(A) They may prevent the patient taking a more practical treatment.
(B) They are not regulated by the US Food and Drug Administration.
(C) They are based on superstitions and folklore.
(D) They may have dangerous side effects or cause other problems.

4. Pick up the most appropriate choice:
(A) Acetylecholine carries messages from one neuron to another.
(B) According to Oken's study, a significant improvement was found in the long-term memory of Alzheimer's patients.
(C) Since the use of ginkgo comes under herbal treatments, its manufacturers are not legally required to test its effectiveness or safety in the US.
(D) The extract of Ginkgo biloba contains more than one of terpenes.

(A) A – False
B – True
C – False
D – False

(B) A – False
B – False
C – True
D – True

(C) A – True
B – True
C – False
D – True

(D) A – False
B – False
C – True
D – False

5. Which of the following can result from the prolonged administration of Ginkgo biloba on Alzheimer's patients?
(A) Increased retention capacities.
(B) Increased level of enthusiasm.
(C) Impairment of perceptive functions.
(D) Cannot be inferred from the passage.

PASSAGE – II

The Vedas are supposed to be the earliest records we possess of Indian culture. The usual date accepted by most scholars to-day for the hymns of the Rig Veda is 1500BC. but there is a tendency, ever since the Mohenjo-daro excavations, to date further back these early Indian scriptures. This literature represents some of the earliest documents of the human mind that we possess.

How are we to consider the scripture of various religions, much of it believed by its votaries to be revealed scripture? To analyze it and criticize it and look upon it as a human document is often to offend the true believers. Yet there is no other way to consider it. I have always hesitated to read books of religion. The totalitarian claims made on their behalf did not appeal to me.

The outward evidences of the practice of religion that I saw did not encourage me to go to the original sources. Yet I had to drift to these books, for ignorance of them was not a virtue and was often a severe drawback. I knew that some of them had powerfully influenced humanity and anything that could have done so must have some inherent power and virtue in it, some vital source of energy. There was a compelling reality about them, a performance which time and space could not touch. So I felt sometimes when I read about Socrates or the Chinese philosophers, and also when I read the Upanishads and the Bhagavad Gita. I could not approach these books, or any book, as Holy Writ which must be accepted in their totality without challenge or demur. Indeed, this approach of Holy Writ usually resulted in my mind being closed to what they contained. I was much more friendly and open to them when I could consider them as having been written by human beings, very wise and far- seeing, but nevertheless ordinary mortals, and not incarnations or mouthpieces of a divinity, about whom I had no knowledge or surety whatever.

Mythology affected me in much the same way. If people believed in the factual content of these stories, the whole thing was absurd and ridiculous. But as soon as one ceased believing in them, they appeared in a new light, a new beauty, a wonderful flowering of a richly endowed imagination, full of human lessons. I have often wondered what manner of men and women they were who gave shape to these bright dreams lovely fancies, and out of what gold mine of thought and imagination they dug them.

Looking at scripture then as a product of the human mind, we have to remember the age in which it was written, the environment and mental climate in which it grew, the vast distance in time and thought and experience that separates it from us. We have to forget the trappings of ritual and religious usage in which it is wrapped, and remember the social background in which it expanded. Many of the problems of human life have a permanence and a touch of eternity about them, and hence the abiding interest in these ancient books. But they dealt with other problems also, limited to their particular age.

Many Hindus look upon the Vedas as revealed scripture. This seems to me to be peculiarly unfortunate, for thus we miss their real significance – the unfolding of the human mind in the earliest stages of thought. And what a wonderful mind it was! The Vedas were simply meant to be a collection of existing knowledge of the day; they are a jumble of many things. There is no idolatry in them; no temples for the gods. The vitality and affirmation of life pervading them are extraordinary. The early Vedic Aryans were so full of zest for life that they paid little attention to the soul. In a vague way they believed in some kind of existences after death. The Rig Veda, the first of the Vedas, is probably the earliest book that humanity possesses. In it we can find the first outpourings of the human mind, the glow of poetry, the rapture of nature's loveliness and mystery. And in these early hymns there are, as Dr. Macnicol says, the beginnings of "the brave adventures made so long ago and recorded here, of those who seek to discover the significance of our world and of man's life within it…. India here set out on a quest which she has never ceased to follow."

6. Regarding scriptures as works of man
(A) robs them of their uniqueness.
(B) belittles them to mundane level.
(C) rouses awe at the mental and spiritual height to which man could rise.
(D) prevents their misuse by the pseudo religious.

7. Ancient books have enduring value because
(A) they tell us of problems specific to the period.
(B) the problems of human life then and now are the same.
(C) they depict the mental climate of their age.
(D) we get to know the environment in which they came into being.

8. Mythologies
(A) are not to be taken literally or factually.
(B) make us wonder at the thought and imagination of their creators.
(C) are absurd and ridiculous.
(D) both (A) and (B).

9. What is the author's attitude to scriptures?
(A) They are unique and hence cannot be analyzed rationally.
(B) They are revelations to man by the divine.
(C) They are products of the human mind.
(D) They are as good or as bad as any other creations of man.

10. Which of the following are not true regarding the Vedas?
(a) They are philosophical as they deal with the soul.
(b) They are a collection of the knowledge of their time.
(c) They are full of enthusiasm for the world and man's life.
(d) They reveal a strong belief in life after death.
(A) b and c
(B) a and d
(C) a, b and c
(D) b, c and d

PASSAGE – III

Every society has its own characteristic attitude toward past, present and future. This time-bias, formed in response to the rate of change, is one of the least noticed, yet most powerful determinants of social behaviour, and it is clearly reflected in the way the society prepares its young for adulthood. In stagnant societies, the past crept forward into the present and repeated itself in the future. In such a society, the most sensible way to prepare a child was to arm him with the skills of the past – for these were precisely the same skills he would need in the future. "With the ancient is wisdom," the Bible admonished. Thus, knowledge was transmitted not by specialists concentrated in schools, but through the family, religious institutions, and apprenticeships. Learner and teacher were dispersed throughout the entire community. The key to the system, however, was its absolute devotion to yesterday. The curriculum of the past was the past.

The mechanical age smashed all this, for industrialism required a new kind of man. It demanded skills that neither family nor church could provide. It forced an upheaval in the value system. Above all, it required that man develop a new sense of time. Mass education was the ingenious machine constructed by industrialism to produce the kind of adults it needed. The problem was inordinately complex. How to pre-adapt children for a new world - a world in which time was to be regulated not by the cycle of sun and moon, but by the factory whistle and the clock.

The solution was an educational system that, in its very structure, simulated this new world. This system did not emerge instantly. Even today it retains throw-back elements from pre-industrial society. Yet the whole idea of assembling masses of students (raw material) to be processed by teachers (workers) in a centrally located school (factory) was a stroke of industrial genius. The whole administrative hierarchy of education followed the model of industrial bureaucracy. The very

organization of knowledge into permanent disciplines was grounded on industrial assumptions. Children marched from place to place and sat in assigned stations. Bells rang to announce changes of time. The inner life of the school thus became an anticipatory mirror, a perfect introduction to industrial society. The most criticized features of education to-day – the regimentation, lack of individualization, the rigid systems of seating, grouping, grading and marking, the authoritarian role of the teacher – are precisely those that made mass public education so effective an instrument of adaptation for its place and time.

Young people passing through this educational machine emerged into an adult society whose structure of jobs, roles and institutions resembled that of the school itself. The school child did not simply learn facts that he could use later on; he lived, as well as learned, a way of life modelled after the one he would lead in the future. The schools, for example, subtly instilled the new time-bias made necessary by industrialism. Faced with conditions that had never before existed, men had to devote increasing energy to understanding the present. Thus, the focus of education itself began to shift, ever so slowly, away from the past and toward the present. The historic struggle waged by John Dewey and his followers to introduce "progressive" measures into American education was a desperate effort to alter the old time-bias. Dewey battled against the past-orientation of traditional education, trying to refocus education on the here-and-now. "The way out of scholastic systems that make the past an end in itself," he declared, "is to make acquaintance with the past a means of understanding the present."

Nevertheless, decades later traditionalists like Jacques Martian and neo-Aristotelians like Robert Hutchins still lashed out against anyone who attempted to shift the balance in favour of the present. Hutchins, now head of the Centre for the Study of Democratic Institutions, accused educators who wanted their students to learn about modern society of being members of "cult of immediacy." The progressives were accused of a dastardly crime: "presentism." Echoes of this conflict over the time-bias persist even now, in the writings, for example, of Jacques Barzun, who insists that "It is.. absurd to try educating…. 'for' a present day that defies definition." Thus our education systems had not yet fully adapted themselves to the industrial age when the need for a new revolution – the super-industrial revolution – burst upon them. And just as the progressives of yesterday were accused of "presentism," it is likely that the education reformers of tomorrow will be accused of "futurism." For we shall find that a truly super-industrial education is only possible if we once more shift our time-bias forward.

11. How did the new educational system 'simulate' the new world?
(A) Children lived and learnt a way of life that replicated the one they would lead in future.
(B) The curriculum was changed to suit the industrialized world.
(C) Teachers were specialists – not parents any more.
(D) It was based on the ideals cherished in society.

12. According to John Dewey,
(A) studying the past is an end in itself.
(B) knowing the past is a way of understanding the present.
(C) the past has nothing to do with the present or the future.
(D) learning about the present is called 'presentism'.

13. The Biblical quotation is suited to the education of
(A) the future. (B) the present.
(C) the past. (D) all times.

14. What is the new 'time bias necessitated by industrialism?
(A) To become time conscious and punctual
(B) To realise the value of time and not fritter it away
(C) To be governed by bells and sirens rather than by sunrise and sunset
(D) The shift in focus from past to present

15. What, according to the author, is 'a stroke of industrial genius'?
(A) Breaking away from the stranglehold of the past.
(B) The way the school mimicked the industry.
(C) The recognition of the need for a new curriculum.
(D) The ability of the industry to create the school it needed.

16. What does the author mean by saying; 'the curriculum of the past was the past.'
(A) In the bygone days school education consisted of what had been learnt and taught by our forefathers.
(B) What had been taught hitherto is outdated.
(C) History was the dominant subject in school education.
(D) There was no fixed curriculum in education.

17. Which of the following is not a feature that makes school 'an anticipatory mirror'?
(A) Inflexibility in form and content
(B) Monotony and strict control
(C) Encouragement of creativity
(D) Despotic role of the teacher

PASSAGE – IV

What do industry and consumers look for in a dye? Permanence: the colour should be unaffected when exposed to light, washing, chlorine or ozone. This is why dye chemistry produces dyes that last forever. The result of their success: outstanding permanence, but resistance to treatment or removal in wastewater treatment systems. Most experts agree it is extremely difficult to remove colour from wastewater. There is no universally applicable technique for all conditions. Research and development, therefore, focuses on sector-specific methods and technologies to remove colour and similar contaminants from different kinds of waste streams.

Adsorption, the attachment of the molecules of a liquid or gaseous substance to the surface of a solid, is commonly used to remove colour. Most wastewater treatment systems use activated carbon, a crude form of graphite commonly made from wood, coal, lignite and coconut shell, as an adsorbent. Activated carbon is highly porous; this imperfection differentiates it from light graphite, but also provides it a very large surface area: 5 grammes of activated carbon is equivalent to the surface area of a football field. So, it can adsorb a wide range of components. Its physical adsorption forces are the strongest. Its adsorbing porosity is the best known to humankind.

In simple terms, a crossflow filtration system separates an influent stream into two effluent streams: the permeate and the concentrate. The former is what has passed through the semi-permeable membrane. The concentrate stream contains constituents the membrane rejects. Nanofiltration is a proven method for colour removal because it can operate at much lower pressures.

Research shows that electrolytic treatment can remove colour from wastewater, achieved by passing polluted water between two or more electrodes; colour imparting material is absorbed, producing decolorisation. Due to its strong oxidative nature, ozone (combined with other physical, chemical or biological process) can treat complex industrial wastes: colour molecules break down quickly. Industry and municipal bodies use this process extensively to remove colour from wastewater. Coagulation and Flocculation are crucial to water and wastewater treatment, and are commonly used to remove suspended matter or colour. The commonly used coagulants are ferric chloride, ferric sulphate and alum.

Typical biological treatment includes biological activated sludge oxidation and post coagulation, followed by chemical oxidation of the final effluent by sodium hypochlorite (Naocl). But the most important strategy is to minimize pollution. Simple steps exist: maximizing dye use in the dyebath (thereby reducing usage of dyes) and minimizing wash off. These reduce dye consumption by as much as 10 to 20 per cent. Dyes without metals should be used wherever possible. If a shade cannot be matched with a metal-free colour (say, with bright green, royal blue direct and fibre-reactive colours), reducing metal-bearing dye content is often possible by substituting part of the dye.

In sum, a question remains: how many factories actually use them? More than 70 per cent of dye manufacturing units are in the small-scale industries (SSI) sector, producing more than half of the total dye and dyestuff in the country. The SSI sector pays no heed to environmental regulations: effluents are discharged sans treatment. The same occurs in the unregulated textile dyeing sector. Pollution problems in towns like Panipat, Pali, Tirupur and Ludhiana testify to this fact.

The colour problem will only increase in future. Polluting industries in the West, facing stiffer environmental regulations, continue to shut shop and shift to countries like India, helped by weak enforcement and monitoring. Competition from countries like China will drive manufacturers to look for cheaper options. In this, the casualties will be health and the environment: sub-standard and cheaper inputs mean highly polluting, conventional materials and technologies will remain in use with no incentives for switching to better, less polluting technologies.

Regulatory authorities will have to look for newer solutions. The situation is unique; the solution, too, must be so. To start with, a major improvement in enforcement and monitoring is the need of the day. Authorities will have to encourage research and development to look for solutions that work in our conditions. Consumers will have to be better informed about the dangers the products they use, can cause. As it has been in the past, a demand for change – and from the consumers – is a much better trigger to improve things than any threats from the government.

Colours will continue to be an integral part of our lives. But so will be the problems associated with them. Colours cannot, and should not, be wished away. But dealing with the problems they pose is also not easy. So, the next time you see that colourful fabric or notice that beautiful paint on the wall, just remember what went behind colouring it.

18. The conclusion, 'Colours cannot and should not be wished away' implies that
(A) colours are essential to make our world beautiful.
(B) whether we like it or not, we have to use colours.
(C) it is not easy to solve the problems created by colours.
(D) removal of colours is a lengthy process.

19. Which of the following would minimize the damage to environment posed by colours?
(A) Ensure that as much as possible of the dye from the bath is absorbed.
(B) Reduce the consumption of dyes.
(C) Use as little metal dyes as possible.
(D) All the above

20. What are the contrasting demands made on dyes?
(A) We want it to be inexpensive but of good quality.
(B) We want the colour to be bright but amenable to physical treatment.
(C) We expect it to be permanent as well as easy to remove.
(D) We want it to be attractive but non-polluting.

21. The problem posed by colours can be solved by
(a) shifting the place of operation.
(b) using conventional, time tested methods.
(c) an emphasis on R and D to come up with new solutions to the problem.
(d) educating the consumer so that he is involved in the movement for change.
(A) a and b (B) c and d
(C) a and c (D) b and d

22. Which of the following is not used for removing dyes from waste water?
(A) Ferric chloride
(B) Ferric sulphate
(C) Sodium hypochlorite
(D) Alum

23. For India, the problem of colour pollution is likely to worsen in the future because
(a) polluting industries are likely to be shifted to developing countries.
(b) companies are unlikely to spend much on R and D.
(c) competition will lead to adoption of cheaper alternatives.
(d) Government will be lax about monitoring and enforcing environmental laws.

(A) Only a
(B) a and b
(C) a, b and c
(D) a, b, c and d

24. The consequence of most of the dye, manufacturing units being in the small scale sector is
(A) high cost of production.
(B) poor quality of products.
(C) no investment in R and D.
(D) a lackadaisical attitude to environment pollution.

25. Identify the option which correctly matches the agent with the process.

1. Activated carbon	a. breakdown of colour molecules
2. Nanofilter	(b) coagulation of suspended matters
3. Ozone	(c) attachment of the molecules to the surface of the agent
4. Ferric chloride	(d) separating the permeate and the concentrate

(A)

1	a
2	b
3	c
4	d

(B)

1	c
2	d
3	a
4	b

(C)

1	d
2	c
3	b
4	a

(D)

1	b
2	a
3	d
4	c

Exercise – 7

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

Any new job brings challenges: but none quite like those facing Ban Ki-moon, the quiet Korean who has become the UN's new secretary-general. Rising nuclear demons in Iran and North Korea, a haemorrhaging wound in Darfur, unending violence in the Middle East, looming environmental disaster, escalating international terrorism, the proliferation of weapons of mass destruction, the spread of HIV/AIDS. And then there are more parochial concerns, such as the largely unfinished business of the most sweeping attempt at reform in the UN's history. That effort was started by Kofi Annan, and Mr Ban now picks up the baton. The UN's first Asian secretary-general in 35 years described himself as "a man on a mission", keen to restore trust between member states and the secretariat, between rich and poor countries, and in the discredited organisation itself. He hoped that this would not prove a "Mission Impossible". The world will hope so, too.

Mr Ban says he wants to concentrate on the goals already set for the UN, rather than find "new frontiers to conquer". That is wise, but frustrating, because the UN's biggest problem is also its most intractable. It lies in the all-powerful Security Council or, more precisely, with its five permanent members. The UN's failure has stemmed largely from the inability of the so-called P5 to agree on what should be done. If Mr Ban could simply conjure away the P5's extraordinary powers and privileges, which allow any one of them to paralyse the will of the rest of the world, everything, it seems, could be much easier.

When the UN was created in 1945, its founder-nations – the four main victors of the second world war, America, Britain, China and Russia, plus France – allocated to themselves the only five permanent seats, with veto powers, on what was then an 11-seat Security Council. The other members, all elected by the General Assembly, held two-year non-renewable seats without a veto. Since then, the number of the UN's member states has almost quadrupled from 51 to 192, two-thirds of them in the developing world. Yet apart from the addition of four more non-permanent seats in 1965, membership of the Security Council, the only UN body whose decisions are binding, has remained unchanged. The system is not only undemocratic, anachronistic and unfair, but also – as Paul Kennedy, professor of history at Yale, suggests in his new book, "The Parliament of Man" – outrageous. Yet, it cannot be changed without inviting a veto from one of the very nations whose powers might be diminished.

Change might well be unwise, too. As Mr Kennedy notes, powerful nations will always be tempted to go their own way. The League of Nations, set up between the two world wars, failed precisely because it was too democratic, too liberal, and toothless. The United States was never a member. Germany and Japan pulled out in 1933, Italy four years later. A different system had to be devised if the potentially isolationist great powers of the post-1945 world were to be kept inside a new world body. The veto, which America and Russia insisted on as the quid pro quo for their membership of the UN, allows any one of the P5 to block any action brought before the Security Council that it deems contrary to its – or its friends' – interests, without needing to resort to force. If, on the other hand, a country finds itself blocked by a veto (or threatened veto), it can still decide to go it alone, as America did over the invasion of Iraq. Far from being a failure of

the UN system, Mr Kennedy argues, this should be seen as the successful operation of a safety valve. Much better to have an obstructionist America on board than a furious one walking out. Without American involvement the UN would not amount to much, as successive secretary-generals have recognised. Before taking up his new post, Mr Ban made it clear that one of his first tasks would be to forge closer relations with the United States.

The low point came when Washington, ever suspicious of the UN's desire to restrain it, reacted furiously to Mr Annan's purported failure to deliver UN backing for the Iraq war – not in fact his own doing, but the result of divisions on the Security Council. There followed the $64 billion oil-for-food scandal, and reports of UN peacekeepers sexually abusing the people they had been sent to protect. Congress and the American press had a field day, vying with one another to see how much blame they could dump at Mr Annan's door. The arrival of John Bolton as America's ambassador to the UN in August 2005 did not help matters the two men never got on.

Mr Annan was never in any doubt about the importance of strong American leadership, without which, he said, he saw "no hope of a peaceful and stable future for humanity in this century". At the same time, he insisted, no nation, however powerful, could hope to tackle today's increasingly global threats and challenges alone. Nor – as he declared pointedly in one of many valedictory speeches last month – could a nation "make itself secure by seeking supremacy over all others". Historically, America had been in the vanguard of the global human-rights movement, Mr Annan noted; but that lead could be maintained only if America remained "true to its principles in the struggle against terror".

Mr Ban was asked what he thought of such undiplomatic sideswipes at the Bush administration. He replied firmly that they represented Mr Annan's "personal assessment and insight". South Koreans are used to that sort of thing from Mr Ban back home, the former diplomat's tendency to duck awkward questions won him the nickname "the slippery eel". But he is in an awkward spot. He owes his election as much to the backing of America and China as to his own superbly organised campaign, and cannot offend either of them. At the same time, Mr Ban knows that he cannot be seen to be too cosy with the American superpower. Mr Ban could do the same – especially if, as he claims, he wants to win the trust of the increasingly assertive and obstreperous group of developing countries known as the G77.

For many years after it was set up, in 1964, to represent the interests on trade and development for 77 poor countries, this group was regarded as a fairly negligible force, unable to agree on anything other than more aid and plumper trade concessions. It is now much bigger – 131 countries plus China – and bolder, heartened by the growing oil wealth of some of its members and by deepening divisions, on matters ranging from Kyoto to Iraq, between America and its European partners. The abrasive Mr Bolton, in his 16-month stint at the UN, probably did more than any other single factor to encourage the G77 to get its act together and resist the United States.

Some see the gulf between rich and poor countries as the single most important issue confronting the UN. It is paralysing vital proliferation talks and blocking badly needed reforms. The G77 now sees everything through the distorting lens of the North-South divide. UN management reform? An attempt by rich white countries to gain even more influence over a secretariat already dominated by the North. Greater powers for the secretary-general? A bid to reduce his accountability to the General Assembly, one of the few UN bodies where the developing countries have a controlling voice. The replacement of the assembly's principle of "one country, one vote" by a system of weighted voting based on the size of a country's contributions to the UN? Another attempt at a power-grab by the North. The newly adopted "responsibility to protect" victims of genocide and other atrocities? Hypocritical northerners claiming the right to meddle in the domestic affairs of the South. Even proposals to expand Security Council membership to include more developing countries, which might have been expected to attract G77 support, are opposed on the ground that these would simply strengthen a body that, whatever happens, will remain dominated by four white veto-wielding northerners, plus China.

1. Which of the following views cannot be attributed to Mr. Kennedy?
   (A) Any attempt for change in the UN is neutralised by the P5.
   (B) The veto power helps in keeping the major powers as members of the UN.
   (C) The power distribution in the Security Council is shocking.
   (D) There is an urgent need to restrain the P5.

2. The author, in this passage, primarily
   (A) examines the prospect for the UN under its new leader.
   (B) blames the P5 for the problems faced by the world body.
   (C) questions the relevance of the UN in the present international set up.
   (D) sets forth guidelines that would help the UN to come out of its present morass.

3. When Mr. Ban hopes "that this would not prove a 'Mission impossible", he is referring to
   (A) what had appeared to be impossible for his predecessor.
   (B) the goals he has set for himself.
   (C) preventing confrontations between the rich and the poor nations.
   (D) making the organization more useful.

4. According to Mr. Kofi Annan, all the following about America are true EXCEPT:
   (A) It has always been at the forefront of human rights movement.
   (B) A strong American leadership is essential for a peaceful and stable future in the world.
   (C) It is foolish for any country to think that global challenges can be tackled alone.
   (D) America has faltered in its principles in the on-going struggle against terror.

5. The P5 countries were given veto power as
   (A) they were the victors in the II world war.
   (B) they were the founder-nations.
   (C) the two major world powers made it a sine qua non for their membership.
   (D) they had the money power.

6. The distorting lens of the North-South divide
(a) makes the G77 suspicious of any move for change in the UN.
(b) is the consequence of Mr. Bolton's 16 month stint at the UN.
(c) is the result of the gap between the rich and the poor countries.
(d) has led to the G77 acting against their own interests.

(A) Only a is supported by the passage.
(B) Only a and c are valid.
(C) c and d are false.
(D) a and b are true.

7. The lack of support from the UN for the Iraq war was the result of
(A) the refusal of the Security Council to oblige the U.S.
(B) Mr. Annan's fallout with the US.
(C) the scandals in which the UN was embroiled.
(D) the differences between John Bolton and Kofi Annan.

8. It has not been possible to increase the strength of the Security Council because
(A) the UN constitution cannot be changed without undermining the body.
(B) the G77 countries are not in favour of a change.
(C) any change could have a rippling effect.
(D) the P5 are in a position to thwart any attempt to change.

9. Mr. Ban's dilemma lies in
(A) having a cordial relationship with the developed and developing countries.
(B) not offending any of the member nations.
(C) maintaining a balance in his relationship with America.
(D) preventing a soreness from creeping into the UN's attitude to the US.

PASSAGE – II

Imagine buying a brand new car. The salesperson offers you a choice of 15 models. When you ask what is the difference between the models, he responds, "Well, just the name. And of course, the price." A similar dilemma faces applicants to business programmes in India. There are literally dozens of different styles of graduate business degrees with names as confusing as: Master of International Business Administration, versus: Masters of International Business. It would be wonderful if all of these programmes met specific market needs. The unfortunate truth is that most of the programmes are similar in content, only varying in name. So, why have such a complex system? The answer is sad yet simple: It's the result of poor regulation.

A few years ago, California experienced a series of power outages. These were caused when the energy sector was incompletely privatized. The retail price was fixed, while the fuel price was allowed to float. This left the power companies in a position where at times supplying power cost more than it returned. If you lose money on every sale, the smart thing to do is stop selling hence the power outages. In the case of Indian business programmes, AICTE – the body that oversees technical education, including management, in India – has good intentions but has restricted the output without sorting out the input. Fees are regulated as well as MBA programme intake, whilst inputs such as rent and staff costs are subject only to market forces.

To get round these restrictions, many clever schools, looking especially at the intake size restriction, have decided to offer MBAs under different names. Hence there are schools offering an MBA, the Master of Business Administration and an MIBA – a Master of International Business Administration. The programmes will often be identical in content and faculty. This would be fine if the true values of the qualifications were recognised. Sadly, most of these degree titles, whilst appearing to be identical to those of the top-most institutions, are not recognised internationally and their equivalence to an MBA will be seriously doubted. What makes the situation even more confusing is that there actually are internationally recognised specialist degrees. For example, London Business School offers an excellent financial programme called a Masters in Finance. The Masters in Finance is a great degree for a finance position. It does not, however, prepare the candidate for a general management position like an MBA.

So how should a hiring manager rate your 'Masters in Personnel Management'? Are you the perfect candidate for a human resources job? Are you a suitable candidate for general management? We cannot really fault the schools here – they are just trying to get by. You have to be careful though. If you want a Masters in Finance then you have to make sure your school is actually offering the programme in practice and not simply in name? The next question is: Should one specialize? Does a specialised degree better prepare you for a specialist role than someone with a general MBA? After all, most managers in India believe that the difference between one type of degree and another is actually meaningless.

Recruitment managers all over the world say that applicants with specialist degrees stand out only because they show dedication to a particular discipline. That is fine for a first job, but what does it mean in the long run? Five years from now, will your Master of Arts (Human Resources Management) keep you pigeonholed in a human resources job? More strikingly, for most roles the applicant was not considered more prepared due to their so-called, 'specialist degree'. In top western B-schools, students generally graduate with MBA degrees, pure and simple. How then, do they distinguish themselves? In the west, an MBA degree is actually meant for someone with work experience. An MSc is for freshers and is not highly regarded. Since an MBA graduate has work experience, they already have some specialized knowledge and there is really no comparison between someone with real-world experience and someone with only theoretical knowledge. Take the smartest person in the world that does not know how to swim. Give him a series of lectures about swimming

and throw him in the water. He will probably not do so well – he may even drown. Instead, if you take someone who knows how to swim and give them instruction on proper technique, they will swim better – even if they have a mediocre score in a management entrance examination.

The other ways by which schools distinguish themselves is through working a concept into every course of a curriculum. Institute de Empresa (IE) in Madrid is regarded as the top entrepreneurship school in Europe. IE introduces the concept of entrepreneurship early during the programme and touches upon entrepreneurship in every course. Students graduate with a great specialist understanding but with general MBA degrees. Schools with strong reputations in particular fields typically get them from hard work and dedication to a particular field. The best faculty are drawn to the top schools in their fields and reputations often become self-fulfilling. Other examples of this would include Imperial College (venturing and venture capital); Warwick Business School (marketing management); and Manchester Business School (legal). So, what are you to do? First, search around and ask questions. And ask yourself if you really want – or need – a specialist programme and whether that degree will help you in the long-run. Also, ask people in your desired field. Most managers are willing to answer your questions if they are concise. If you do opt for a specialist programme, make sure that the course really is specialised and, more importantly, that the school actually worked with industry to develop the programme. Before you enrol for your Masters in Bollywood Stardom, make sure it will help you get a job as a star.

10. The main problem with having management programmes with different names is that
(A) students are confused.
(B) the value of the qualification is not recognised.
(C) they cannot compete with internationally recognised specialist degrees.
(D) it limits the choice of the young men and women in the job market.

11. Which of the following is not a comparison made in the passage?
(A) Car brands and course names
(B) Fuel prices and fee regulation
(C) Ability to swim and work experience
(D) Finding a job and becoming a star

12. The analogy of swimming implies all the following EXCEPT that
(A) a person with work experience does well in entrance tests.
(B) work experience is essential for MBA students.
(C) work experience will help you to derive greater benefit from an MBA programme.
(D) theoretical knowledge is no match for practical experience.

13. According to the passage, the most important thing regarding an MBA, from the student's perspective, is
(A) choosing the programme that is in vogue.
(B) obtaining placement at the end of the course.
(C) picking the programme that suits their interest.
(D) finding an institute that does not take them for a ride.

14. Which of the following is NOT true regarding specialised programmes in India?
(A) There is hardly any difference between a specialised and general MBA.
(B) In their first placement students of specialised programmes are perceived as being committed.
(C) Work experience is essential for specialised programmes.
(D) The specialist degree does not make an applicant more suitable for a job.

15. Mention of power outage in California is made to bring home
(A) the irony of limiting fees and intake without regulating inputs.
(B) the need to enforce strict regulation.
(C) the importance of market forces.
(D) the commercial nature of the educational scenario.

16. The passage seeks to
(A) answer the questions troubling MBA graduates.
(B) clear the misconceptions regarding MBA.
(C) thrash out the relevance of management studies.
(D) guide students in selecting an MBA programme.

PASSAGE – III

Painstaking observations of a kind of subatomic dance suggest that the universe may contain a shadowy form of matter that has never been seen directly and is unexplained by standard physics theories, a team of scientists working at Brookhaven National Laboratory on Long Island announced. The studies appear to confirm similar findings the scientists reported last year. The research involves muons, rare subatomic particles similar to electrons but 207 times as heavy. The work has been controversial, though for reasons that have little to do with the experiment itself. Theorists who are not involved in the research, but whose computational results must be used to interpret it, have recently uncovered errors and uncertainties in their own work. For that reason, the Brookhaven experimenters say they are not ready to claim they have proved that a new form of matter exists. In a weird reflection of the boundless complexity of modern physics, top theorists from around the world were still sending conflicting calculations to the Brookhaven team hours before the new findings were disclosed at the laboratory. Frustration with the theorists boiled over at the lab, where scientists have been hoping that more than a year of new work would determine whether they had stumbled upon what would be a history-making discovery. The frustration stems from the seeming inability of the theorists to reach a solid conclusion.

The researchers found that muons wobbled like microscopic tops, or perhaps frenetic dancers, about 229,074 times a second, when they were placed in a powerful magnetic field in a vacuum chamber. Physicists have long known that such vacuums are not really empty but are filled with a sea of "virtual" particles that flit briefly into existence and back into nothingness again. Like dance partners, the virtual particles change the rate at which the muons wobble. Theoretical

physicists have long laboured to calculate how much the rate of wobble, changes as a result of all the known particles in the virtual sea. Using those calculations, the Brookhaven researchers found last year – and confirmed with the newer studies, involving observations of four billion muons – that the actual wobble is about 0.6 times a second faster than predicted. The difference, called an anomaly by physicists, means the universe must contain previously undiscovered particles. "If that sea contains some particles we didn't know about before, that will modify the anomaly," said Dr. James Miller, a professor of physics at Boston University – one of 11 institutions in the United States, Russia, Japan and Germany involved in the experiment – who presented the results. "And the rate of wobble is just directly proportional to that anomaly."

Such a finding would delight many physicists who have been suggesting for years that the accepted theory, called the Standard Model, contains deep conceptual faults that can only be remedied with a more abstruse theory called supersymmetry. That theory predicts that every known particle has a difficult-to-detect partner that has yet to be discovered – perhaps the extra particles in the virtual sea that the Brookhaven experiment may be detecting. The initial Brookhaven finding was announced in February. But a group of theorists in Marseille, France, announced in October that they had found a computational error in work led by another highly respected theorist, Dr. Toichiro Kinoshita of Cornell University, which was used to produce the Standard Model's prediction for the wobble. Dr. Kinoshita, acknowledged that a bug in his computer software had produced the error, said Dr. Sally Dawson, leader of the high-energy theory group at Brookhaven. A revised calculation found that the difference from the Standard Model's prediction, and therefore the evidence that a new particle had been discovered, was "much smaller than before," Dr. Dawson said.

That set off a worldwide scramble to refine the calculations further. So as the announcement approached, Dr. Lee Roberts, a physics professor at Boston University who is a spokesman for the Brookhaven experiment, was still sorting e-mail messages about new, conflicting calculations by theorists from Japan, Russia, Switzerland, England and France. But all the new calculations showed at least some deviation from the Standard Model, he said. A few even suggested huge deviations, he added with a nervous chuckle. Meanwhile, the experimenters have a more immediate worry: the government has decided to end their financing after this year.

17. The anomaly mentioned in the passage is
- (A) the difference between the theories of supersymmetry and Standard Model.
- (B) the absence of unknown particles.
- (C) the difference between the rates of wobbling of muons in the presence/absence of unknown particles.
- (D) the discovery of any unacknowledged particle that will contribute to the difference in rates of wobble of subatomic particles.

18. The Brookhaven scientists say that standard physics theories are not able to account for
- (A) properties exhibited by muons.
- (B) the existence of 'virtual' particles.
- (C) the frenzied movement of subatomic particles like muons.
- (D) the difference in the rates of movement of muons in a virtual vacuum.

19. A sword of Damocles that seems to hang heavily over the experiment that is being talked about in the passage is
- (A) the decision made by the government.
- (B) the erroneous computational results.
- (C) the unexplained anomaly.
- (D) the rectification of the computational errors detected by Dr. Kinoshita.

20. The theory of supersymmetry
- (A) tries to disprove the theory of Standard Model.
- (B) helps in rectifying the postulates of the Standard Model.
- (C) puts forth new data that will pave way for valid assumptions about muons.
- (D) acknowledges the existence of undetected shadowy form of matter.

PASSAGE – IV

The biological approach to psychology, as its name implies, views man as a biological organism. What we do, and even what we think, is seen as having its basis in our physiological structure. The approach has developed out of interest in two major concerns: the relationship between mind and body, and the influence of heredity on behaviour. Each is a reflection of our biological nature, and the study of them often leads to overlaps, but the two aspects have separate histories. As one might guess, biological researchers tend to view behaviour as being purely physical. In the seventeenth century, most people believed the body was controlled by an intangible soul. Among those who believed in the soul was Rene Descartes. A keen observer, but also deeply religious, Descartes tried to reconcile the apparent physical nature of the body with the intangible nature of the soul. The human body, he felt, was constructed like that of an animal – both were basically machines. However, he also believed that people (unlike animals) had a soul, which interacted with the physical body through a small gland in the brain called the pineal gland. Since in French the same word (l'ame) can be used for both 'mind' and 'soul', Descartes' idea became interpreted as referring to the relation between the mind and body; his view that mind and body are distinct, but can interact, became known as dualism.

The primary alternative to dualism is called monism, the belief that mind and body are a single entity. In most respects this is equivalent to materialism, which assumes all behaviour has a physiological basis. At one level, Descartes was actually a materialist, seeing the body's functioning in machine-like terms. However, his interactionist view (physical body interacting with intangible soul) was also a compromise. By viewing the body as a machine, dualism was a step forward, but it also created a split which has been the subject of much subsequent controversy. In any event, it was left to others to take the final step to materialism in its modern form.

As often happens, the crucial insight came about almost by accident. In 1745 (about one hundred years after Descartes), a French priest-turned-physician named Julien de La Mettrie contracted a fever, and noticed that this physical condition affected this mental state as well as his physical state. Reflecting on this after his recovery, he wrote a book called L'histoire naturalle de l'ame (The Natural History of the Soul). In the book, he argued that the body is but a machine, and that the soul is no different than the mind. Further, he said the mind was part of the body. This assertion, which clearly went beyond Descartes' positions caused a tremendous outcry but he held fast to his views. Ultimately, the opposition from religious and political authorities forced him to leave France for his personal safety.

By the time of the French Revolution (less than fifty years after La Mettrie), a physician named Cabanis was able to argue that guillotine victims were not conscious after beheading, because consciousness was the function of the brain just as digestion was the function of the stomach. Still, no-one had shown a specific connection between physiological structures and behaviour. Then, in 1861, a doctor at the insane asylum at Bicetre, Paul Broca, encountered a case in which a man lost the ability to speak coherently after a head injury. Later, Broca was able to demonstrate, by post-mortem autopsy, that the cause of the man's deficit lay in damage to a specific point in the brain. The proof of this localization of function was the final step in the progression of ideas. The acceptance of this finding completed the gradual change in attitude, from seeing behaviour as governed by an intangible soul, to the modern view of behaviour as having a physiological basis.

The other main aspect of the biological approach, the role of heredity in behaviour, also had a gradual development. In the eighteenth century, people believed that each species of plant and animal had been independently created: as the Bible says, 'every living creature after his kind'. Still, there were indications that this might not be literally true. The great biologist Linnaean had published a catalogue of over 4000 plant and animal species in 1735, and his orderly categories suggested connection among species. Then, in 1809, a French naturalist named Lamarck presented the first widely known theory of species development, or evolution. Lamarck believed that variations developed through inheritance of acquired characteristics. For instance, giraffes acquired long necks because each generation strained a little further to get food, slightly stretching their necks, and passed this difference on to their offspring. Today, Lamarckian theory is generally discredited, but it was a significant step forward in suggestion that characteristics have a hereditary basis.

The real revolution in thought came with the work of Charles Darwin. Darwin's theory published in The Origin of Species (1859), was that variations among individuals of a species would occur by chance, but could in turn be passed on. His doctrine of 'survival of the fittest' meant that only those variations which helped the individuals survive long enough to breed would be passed on. Darwin was not only advocating the inheritance of characteristics, but also an evolutionary link between humans and all other species. In 1872, he made this even clearer by writing 'The Expression of the Emotion in Man and Animals'. Actually, Darwin proposed the concept of inheritance, but specified no biological mechanism for its operation; it remained for the re-discovery of the work of an Austrian monk, Gregor Mendel, for a specific mechanism for heredity to be suggested.

Like La Mettrie, Darwin came into conflict with religious doctrine, this time with the view that man was created 'in God's image'. In part, the controversy concerned how literally one should interpret the biblical concept. The controversy raged for many years, and is still not completely ended, but in time the evolutionary viewpoint expressed by Darwin became dominant. Despite not specifying precisely how heredity operated, Darwin's theory laid the basis for the study of hereditary influences on behaviour.

Today, these two concepts – materialism and heredity - are the foundation of the biological approach to psychology. The assumptions involved (that mind has a physiological basis, and that behaviour can be inherited), influence both the questions asked and the type of data collected. Compared with other approaches, the biological approach emphasizes 'getting inside the black box' – that is, looking at the internal structure of the organism. Broca showed that a specific defect in the brain could destroy speech in an otherwise normal person. Darwin showed that what we are is at least partly due to what our parents are.

21. Descartes can be considered as a materialist because
- (A) he treated the mind and body as a single entity.
- (B) he suggested that the body related with an intangible soul.
- (C) he believed that the human body was mechanical.
- (D) he said that human beings and animals shared many traits.

22. In this passage, the author mainly
- (A) explains the relationship between mind and body.
- (B) discusses several approaches to the study of psychology.
- (C) traces the history of the study of biology based on psychology.
- (D) attempts a historical account of the biological approach to the study of psychology.

23. The physician who provided conclusive evidence of human behaviour having a physiological basis was
- (A) Descates.
- (B) Paul Broca.
- (C) La Mettrie.
- (D) Gregor Mendel.

24. The black box in the last para refers to
- (A) organic structure.
- (B) soul.
- (C) the human mind.
- (D) the brain.

25. Which of these is not an example of the analogy given in the passage?
- (A) Consciousness : Brain
- (B) Body : Machine
- (C) Perception : Eye
- (D) Digestion : Stomach

Exercise – 8

Directions for questions 1 to 25: Read the given passages carefully and choose the best answer for the questions that follow each passage.

PASSAGE – I

Konrad Lorenz and Niko Tinbergen are commonly regarded as the founders of modern ethology, the biological approach to the study of behaviour. For their pioneering achievements, they shared the Nobel prize with Karl von Frisch in 1973. Lorenz and Tinbergen treated behaviour in the same way as any other aspect of an animal in the sense that behaviour patterns often have a regularity and consistency that relates to obvious needs of the animal. Moreover, the behaviour of one species often differs markedly from that of another.

The interest in biological function has led to many excellent studies of animals in natural conditions. Studies in unconstrained conditions of animals, and increasingly of humans, have been an important feature of ethology and played a major role in developing the distinctive and powerful methods for observing and measuring behaviour. Even so, it would be a mistake to represent ethologists as non-experimental and merely concerned with description. Tinbergen was a master of elegant field experiments and the fine tradition he established has continued to the present day. Moreover, a great many ethologists have devoted much of their professional lives to laboratory studies of the control and development of behaviour. Indeed, some of the most striking ethological discoveries such as imprinting in birds, have been made in artificial conditions and have markedly influenced how behaviour has been interpreted. When observed in hand-reared birds, the elaborate sequence involved in building a nest is not easily explained in terms of a series of learned actions each triggered by a particular stimulus from the environment. Nonetheless, the readiness to consider what a particular behaviour pattern might be for in the natural environment has been distinctive of the subject. When this approach was coupled with comparisons between animals, the easy assumption that all animals solve the same problem in the same way was quickly shown to be false. The comparative approach continues to be an important characteristic of broad ethology.

Tinbergen pointed to four broad but separate problems raised by the biological study of behaviour. The issue of how a behaviour pattern is controlled, deals with the internal and external factors that regulate its occurrence and the way in which the underlying processes work. Study of the development of behaviour is concerned with the genetic and environmental influences on the assembly of a behaviour pattern in the lifetime of the individual and with how the developmental processes work. The problem of behavioural function is about the way a behaviour pattern helps to keep the animal alive and propagate its genes into the next generation. Finally, evolutionary studies of behaviour are concerned with the ancestral history and with the ways in which a behaviour pattern evolved. These four areas of research are distinct. However, the ethological stance is that they should not be too strongly divorced from each other. By placing a particular question in a broader conceptual context, greater understanding is achieved whatever the central question may have been.

Certain key concepts and theories were associated with ethology at one time. They no longer form such a central part of ethological thought, although they were important in its development. Two basic concepts were the 'sign stimulus' and the 'fixed action pattern'. The notion of the sign stimulus, such as the red breast of a robin when fighting an attack from an opponent, was productive in leading to the analysis of stimulus characters that selectively elicit particular bits of behaviour. Fixed action patterns provided useful units for description and comparison between species. Behavioural characters were used in taxonomy and the zoological concern with evolution led to attempts to formulate principles for the derivation and ritualization of signal movements.

Both the concept of sign stimulus and that of the fixed action pattern played important roles in the early ethological attempts to develop systems models of behaviour. Lorenz's lavatory cistern model was a flow diagram in more than one sense and provided a generation of ethologists with a way of integrating their thinking about the multiple causation of behaviour, both from within and without. However, the model was seriously misleading and in some systems of behaviour notably aggression, performance of behaviour make repetition more likely, not less as the model predicts. Another systems model has stood the test of time rather better. It was developed by Tinbergen and was concerned with the hierarchical organization of behaviour. Here again, though, its major role lay not so much in its predictive power but in helping ethologists to bring together evidence that would otherwise have seemed unrelated.

A classical ethological concern was with the inborn character of such behaviour and the subject was strongly associated with the development of a theory of instinct. However, even the founders of the subject did not deny the importance of learning. On the contrary, they gave great prominence to developmental processes like imprinting, which specifies what an animal treats as its mother or its mate, and song learning that specifies the way a male bird sings a different dialect from another male of its own species. Even so, Lorenz saw adult behaviour as involving the intercalation of separate and recognizable 'learned' and 'instinctive' elements. Few people share this view any longer and the work by the developmentally minded ethologists has been important in illustrating how the processes of development involve an interplay between internal and external factors. After the early abortive attempts to classify behaviour in terms of instincts, attention has increasingly focused on faculties or properties of behaviour that bridge the conventional functional categories such as feeding, courtship, caring for young and so forth. Consequently, more and more emphasis is being

placed on shared mechanisms of perception, storage of information and control of output. As this happens, the interests of many ethologists are coinciding to a greater and greater extent with the traditional concerns of psychology. Modern work has also eroded another belief of the classical ethologists that all members of the same species of the same age and sex will behave in the same way. The variations in behaviour within a species may, of course, reflect the pervasiveness of the learning process. However, some alternative modes of behaviour are probably triggered rather than instructed by prevailing environmental conditions.

Modern ethology abuts so many different disciplines that it defies simple definition in terms of a common problem or a shared literature. It overlaps extensively with the fields known as behavioural ecology and socio-biology. Moreover, those who call themselves ethologists are now to be found working alongside neurobiologists, social and developmental psychologists, anthropologists and psychiatrists, among many others.

1. According to a classical ethological concern, instinct in an animal
(A) is innate.
(B) represents a fixed pattern of behaviour.
(C) is triggered into action as a response to certain stimuli.
(D) shows all the above aspects.

2. The statement, 'Even so it would be a mistake . . . . . merely concerned with description' makes the point that
(A) ethologists can design field experiments in order to prove their hypotheses.
(B) mainstream ethology involves a great deal more than passive observation.
(C) the conclusions arrived at under controlled conditions hold good even under natural conditions.
(D) the hypotheses of ethology are amenable to experimentation under certain restricted conditions.

3. Which of the following is/are relevant to both the key ethological concepts – sign stimulus and fixed action pattern?
(A) Based on these concepts, systems models were designed with a view to studying an animal's pattern of behaviour unique to a certain set of stimuli.
(B) These concepts helped ethologists identify stimulus characters as also behaviour pattern that would help in the classification of animals.
(C) These concepts helped the earlier ethologists to list behavioural patterns in the order of importance.
(D) All the above are relevant.

4. The nature of the role that can be played by ethology in the attempts to understand behavioural patterns – their significance, evolution, development etc. is one of
(A) segregation.
(B) factorisation.
(C) integration.
(D) derivation.

PASSAGE – II

From Delhi's famously overcrowded buses and the legendary Paris metro to the waves of commuter trains rolling into Manhattan each morning, transit systems are as different as the cities they serve. Most, though, share one unfortunate characteristic: chronic operating deficits. According to a recent McKinsey benchmarking study of 48 public transit operators around the world, the average transit agency covers less than 70 per cent of its operating expenses with passenger revenues. Operating deficits in transit systems stem from two essential sources. The first, intrinsic to the task of safely transporting millions of passengers every day, is the need to make trade-offs between the system's public service mission and its operational efficiency. These trade-offs involve complex and at times contentious policy issues such as fare structures, service levels, and route design that are often beyond the short term control of typical transit agencies. The second, however, involves factors that they can address without sacrificing safety or service: fleet maintenance, labour management, and fare collection.

As agencies scramble for their share of increasingly scarce public resources, not to mention additional funding for security, some of them might need to consider politically controversial changes such as increasing fares, altering routes, and reducing the frequency of service, particularly during off-peak hours. Others will have to get creative with alternative revenue streams, including advertising and retail kiosks in stations. But while transit agencies wrestle with these long-term questions, the benchmarking study finds plenty of room for short-term improvements in the three largest cost categories of transit systems. If some of the less efficient agencies learned from global best practice in these areas, operating costs could fall by as much as 15 to 20 per cent, and service levels would improve.

"Operating benchmarks that make it possible to compare transit agencies across geographies and modes (commuter rail, metro, and bus) should differentiate between factors that agencies can control directly and those beyond their reach. Take driver labour: it is no surprise that, even at purchasing power parity, wage rates in places such as Rio de Janeiro and New York vary by as much as 240 per cent. But the wide range in the efficiency with which drivers are utilized was unexpected. The most productive bus systems have drivers at the steering wheel for up to 95 per cent of their working hours". Meanwhile, many subway and commuter rail operators struggle to deploy drivers for more than half of the time they are at work. Driver utilization rates can fall dramatically if routes and round trips keep drivers idle during significant parts of the workday or don't take account of the time required for mandatory breaks or of the fact that drivers must check their vehicles at the start of each shift. In many cases, it is utilization, rather than wages, that represents the greater improvement opportunity.

Moreover, although local market conditions and union contracts often make it hard to address the issue of wages, public transit agencies have many ways of improving the utilization of their drivers. Doing so isn't easy, since under the traditional eight hours staffing model the supply of drivers doesn't comport very well with public transit's notorious fluctuations in demand – the result of causes ranging from predictable rush-hour peaks to unpredictable weather. But best-practice operators have increased utilization levels through measures such as better overtime management and dynamic staffing (deploying drivers in full and part-time shifts according to real- time analysis of passenger demand). Other transit agencies have improved utilization levels by taking simpler steps, such as splitting shifts into two four-hour periods to cover the rush hours, with an unpaid break during the day, and cross-training maintenance and clerical workers so that they can drive train and buses during unexpected spikes in demand.

There are also better ways to manage what is usually an operator's biggest asset: its fleet of vehicles. High levels of utilization must be balanced against the need to serve the travelling public effectively. While less frequent service theoretically might increase the number of passengers on each bus or train, in practice, it can lead to a vicious cycle : lower ridership increases the agency's cost per passenger, thus necessitating fare hikes that often drive away still more passengers. By contrast, more frequent service often attracts riders to a system, thereby raising the number of riders per vehicle and cutting costs per passenger. These decisions about passenger service and fleet operations are obvious drivers of total maintenance costs. So too are fleet purchasing choices, which should take into account a vehicle's total cost of ownership, not just its purchase price.

In maintenance, the challenge is three fold: to improve labour productivity, to define the right maintenance schedule, and to prevent every transit operator's nightmare – breakdowns. To avoid the disruptions they cause, many operators keep extra vehicles and staff standing by, an expensive insurance policy. One North American bus operator with a poor maintenance strategy is so plagued by frequent breakdowns that it keeps nearly 500 extra buses, worth a total of $125 million, either in the shop being serviced or sitting in depots waiting to replace the next break-down. In Europe, one rail operator keeps 20 per cent more maintenance workers on duty than do its peers to provide rapid service when breakdowns occur.

Best-practice agencies reduce breakdown rates and maintenance costs and improve service by taking an integrated approach to operations and maintenance. These agencies understand that decisions about a vehicle's operations – which routes it runs, how often, and when – must be coordinated with, and should help to define, the maintenance schedule. They also mine operational and maintenance data to predict replacement cycles for specific components (such as brakes and doors) and schedule maintenance during off peak times at night or on weekends to minimise conflicts with passenger service. One European rail operator has mined these data so successfully that it has reduced its spare ratio (the number of vehicles kept on standby) virtually to zero during peak hours by improving the reliability of its vehicles. If the most poorly maintained fleets reached average levels, the operators should be able to increase their fleet utilization levels and cut their maintenance costs by more than half.

Finally, while there is no easy or inexpensive way to collect fares, operators should understand the service and economic trade-offs involved in the various collection technologies. Paper tickets and monthly passes are relatively inexpensive to issue but require significant station and on-board labour, which for some operators can represent more than $1 a ride. Systems that control access to platforms (by using turnstiles or other barriers to collect fares through tokens, cash or magnetic cards) must have capital for ticket-vending machines and barriers but require little or no on-board labour. Those using self-validation (or "honor") systems, in which passengers carry proof of payment throughout the journey, can use fewer conductors onboard but need the legal authority to impose stiff fines during spot checks.

Some agencies have deployed new smart-card technologies that can improve service significantly. Hong Kong's Octopus card allows passengers to change modes seamlessly (from bus to rail to subway to ferry), makes it possible to collect passenger data that can be used to improve customer service and to plan routes as well as to develop customer-relationship-management opportunities such as targeted discounts and automatic debit services to replenish fares. Where smart cards are not feasible in the short term, self-validation systems offer a reasonable alternative: they reduce on-board labour costs by 30 to 40 per cent and, in Europe at least, have surprisingly resulted in less revenue leakage than many operations initially feared.

5. The passage lists all but one of the following as factors which transit agencies can address without compromising on safety or service. Which one?
(A) Fleet maintenance
(B) Labour management
(C) Fare collection
(D) Route design

6. Zero spare-ratio during peak hours in a transit agency is a reflection of
(a) poor fleet utilization.
(b) effective fleet utilization.
(c) better maintenance of vehicles.
(d) cutting costs on purchase of spares.
(A) a, c and d (B) b and c
(C) Only d (D) Only b

7. Why, according to the passage should transit agencies get creative?
(A) To widen their customer base.
(B) To encourage worker's innovative skills.
(C) To meet operating expenses.
(D) To cut operating costs.

8. Tag the pairs:

1. Octopus	(a) High penalty
2. Honor	(b) Multi-mode
3. Paper	(c) Barrier
4. Turnstile	(d) Labour-intensive.

(A)

1	d
2	c
3	a
4	b

(B)

1	b
2	c
3	a
4	d

(C)

1	b
2	a
3	c
4	d

(D)

1	b
2	a
3	d
4	c

9. What has been referred to as a transport operator's nightmare in the passage?
(A) Fare structure
(B) Wage demand of drivers
(C) Vehicle breakdown
(D) Political interference

10. As suggested in the passage, in order to reduce costs and increase efficiency, agencies must
(a) increase fares to make them more realistic.
(b) maintain their fleets in good condition.
(c) reduce wages to make the organisation financially viable.
(d) utilize the drivers' working hours as much as possible.
(A) b and d (B) a and c
(C) a and b (D) c and d

11. If transit agencies follow the suggestion in the passage and get creative,
(A) they would train their staff in publicity exercises.
(B) they would be selling space.
(C) they would buy space to set up retail kiosks.
(D) they would be advertising in magazines and newspapers.

12. The suggestion that 'transit agencies need to make trade offs' implies
(A) they need to decide when to work to earn maximum profits.
(B) they have to make attractive discount offers.
(C) they become selective in their approach.
(D) they must hone their balancing skills.

PASSAGE – III

Marijuana is a drug with a mixed history. Mention it to one person, and it will conjure images of potheads lost in a spaced-out stupor. To another, it may represent relaxation, a slowing down of modern madness. To yet another, marijuana means hope for cancer patients suffering from the debilitating nausea of chemotherapy, or it is the promise of relief from chronic pain. The drug is all these things and more, for its history is a long one, spanning millennia and continents. It is also something everyone is familiar with, whether they know it or not. Everyone grows a form of the drug, regardless of their political leanings or recreational proclivities. That is because the brain makes its own marijuana, natural compounds called endocannabinoids. The study of endocannabinoids in recent years has led to exciting discoveries. By examining these substances, researchers have exposed an entirely new signalling system in the brain: a way that nerve cells communicate that no one anticipated even 15 years ago. Fully understanding this signalling system could have far-reaching implications. The details appear to hold a key to devising treatments for anxiety, pain, nausea, obesity, brain injury and many other medical problems. Ultimately such treatments could be tailored precisely so that they would not initiate the unwanted side effects produced by marijuana itself.

Marijuana and its various alter egos, such as bhang and hashish, are among the most widely used psychoactive drugs in the world. How the plant has been used varies by culture. The ancient Chinese knew of marijuana's pain relieving and mind-altering effects, yet it was not widely employed for its psychoactive properties; instead it was cultivated as hemp for the manufacture of rope and fabric. Likewise, the ancient Greeks and Romans used hemp to make rope and sails. In some other places, however, marijuana's intoxicating properties became important. In India, for example, the plant was incorporated into religious rituals. During the Middle Ages, its use was common in Arab lands; in 15th century Iraq it was used to treat epilepsy; in Egypt it was primarily consumed as an inebriant. After Napoleon's occupation of Egypt, Europeans began using the drug as an intoxicant. During the trade when it was transported from Africa to Mexico, the Caribbean and South Africa.

Marijuana gained a following in the US only relatively recently. During the second half of the 19th century and the beginning of the 20th century, cannabis was freely available without prescription for a wide range of ailments, including migraine and ulcers. Immigrants from Mexico introduced it as a recreational drug to New Orleans and other large cities where it became popular among jazz musicians. By the 1930s it had fallen into disrepute, and intense lobbying campaign dubbed it "reefer madness". In 1937 the US Congress, against the advice of the American Medical Association, passed the Marijuana Tax Act, effectively banning use of the drug and making it expensive and difficult to obtain. Millions of people smoke or ingest marijuana for its intoxicating effects, which are subjective and often described as resembling an alcoholic "high". Large doses cause hallucinations in some individuals but simply trigger sleep in others. The weed impairs short-term memory and cognition and adversely affects motor coordination, although these setbacks seem to be reversible once the drug has been purged from the body. Smoking marijuana also poses health risks that resemble those of smoking tobacco. On the other hand, the drug has clear medicinal benefits. Marijuana alleviates pain and anxiety. It can prevent death of injured neurons. It suppresses vomiting and enhances appetite – useful features for patients suffering the severe weight loss that can result from chemotherapy.

Figuring out how the drug exerts these myriad effects has taken a long time. In 1964, after nearly a century of work by many individuals, Raphael Machoulam of the Hebrew University in Jerusalem identified delta-9-tetrahydrocannabinoal (THC) as the compound that accounts for virtually all the pharmacological activity of marijuana. The next step was to

identify the receptor or receptors to which THC was binding. Receptors are small proteins embedded in the membranes of all cells, including neurons, and when specific molecules bind to them – fitting like one puzzle piece into another – changes in the cell occur. Some receptors have water-filled pores or channels that permit chemical ions to pass into or out of the cell. These kinds of receptors work by changing the relative voltage inside and outside the cell. Other receptors are not channels but are coupled to specialized proteins called G-proteins. These G-protein-coupled receptors represent a large family that set in motion a variety of biochemical signalling cascades within cells, often resulting in changes in ions channels.

In 1988 Allyn C. Howlett and her colleagues at St. Louis University attached a radioactive tag to a chemical derivative of THC and watched where the compound went in rats' brains. They discovered that it attached itself to what came to be called cannabinoid receptor also known as CB1. Based on this finding scientists cloned the CB1 receptor. The importance of CB1 in the action of THC was proved when two researchers working independently bred mice that lacked this receptor. Both investigators found that THC had virtually no effect when administered to such a mouse: the compound had nowhere to bind and hence could not trigger any activity. As researchers continued to study CB1, they learned that it was one of the most abundant G-protein coupled receptors in the brain. It has its highest densities in the cerebral cortex, hippocampus, hypothalamus, cerebellum, basal ganglia, brain stem, spinal cord and amygdala. This distribution explains marijuana's diverse effects. Its psychoactive power comes from its action in the cerebral cortex. Memory impairment is rooted in the hippocampus, a structure essential for memory formation. The drug causes motor dysfunction by acting on movement control centres of the brain. In the brain stem and spinal cord, it brings about the reduction of pain; the brain stem also controls the vomiting reflex. The hypothalamus is involved in appetite, the amygdala in emotional responses. Marijuana clearly does so much because it acts everywhere.

13. The multiple effects of marijuana are scientifically explained by
(A) the action of the drug on cerebral cortex.
(B) the wide distribution of receptors for THC in the brain.
(C) the changes in the cell caused by G-proteins.
(D) the natural presence of marijuana in the brain.

14. Which of the following is definitely true about the Cannabinoid receptors?
(a) They are water filled pores that allow the movement of chemical ions through cell walls.
(b) They are essential for THC compounds to make their presence felt.
(c) They are produced by the brain.
(d) They bind themselves to G-proteins to produce intoxicating effect.
(A) Only a (B) Only c (C) b and c (D) b and d

15. The people whose familiarity with marijuana is not several centuries old are
(A) Europeans and Americans.
(B) Indian and Chinese.
(C) Greek and Roman.
(D) Arabs and Africans.

16. Understanding nerve communication in the brain could have profound consequences because it would help
(a) customize treatment for a number of ailments.
(b) in determining the appropriate dosage.
(c) in deciding when and to whom it is safe.
(d) to do away with undesirable side effects of marijuana.
(A) Only a (B) Only c
(C) b and c (D) a and d

17. We can surmise from the passage that marijuana would have no effect if
(A) the cerebellum in the brain is shielded from the drug.
(B) an antidote is administered shortly after its consumption.
(C) a person did not have cannabinoid receptors in his brain.
(D) a person is mentally strong and determined to fight it.

18. Many people have experienced marijuana, consciously or unconsciously because
(A) it has been around for a long, long time.
(B) the brain produces its own dope.
(C) it has been known in several continents.
(D) it is often taken for recreation.

19. The word 'alter ego', as used in the passage refers to
(A) substances having medicinal properties.
(B) substances used as pain relievers.
(C) variants of marijuana.
(D) other intoxicants.

20. The American Medical Association was against the Marijuana Tax Act because
(a) the drug has medicinal value.
(b) it would make the drug expensive and difficult to obtain.
(c) it is only as intoxicating as alcohol.
(d) the setbacks caused by the drug are reversible.
(A) a and b (B) a and c
(C) b and c (D) b and d

PASSAGE – IV

As far as Ken and Janet Storey are concerned, the most interesting frog is one that doesn't move or breathe and has no heartbeat or brain activity. In the Storey's biochemistry lab at Carleton University in Ottawa, the typical study subject is thrown into an industrial freeze. They call them frogsicles, though they're partially liquid inside. 'Basically, the body turns into a syrupy mass," Ken Storey says. As far as the frog is concerned, this is nothing out of the ordinary. Like a handful of other creatures, the common wood frog, Rana sylvatica, is a biological conundrum. It spends its winters interned in subzero sleep, its tissues steel-rigid, and revives in the spring raring to go. It's the Rip Van Winkle of the animal world. The Storeys have spent more than 20 years identifying the genetic switches and biochemical processes that make this reanimation possible. Their work has been avidly followed by biologists in the field of organ transplantation : if a donor's heart or kidney could be frozen and stored without damage, physicians could dramatically increase the number of

transplants they perform. The fact that a wood frog can nearly come back from the dead has also fanned the futuristic fantasies peddled by commercial cryonics labs, where human corpses are kept on ice in the vain hope that medical science might one day restore them to life.

Warm-blooded animals are designed to stay at a near-constant temperature – 98.6 degrees Fahrenheit in the case of humans. When they start to get cold, their metabolism revs up, generating internal heat. Once this system breaks down and the animals freeze solid, the ice tears up their insides: The water in their cells expands as it freezes, shredding membranes and dislodging organelles. Wood frogs and a few other animals such as box turtles do exactly the opposite. When temperatures drop below freezing, the frog's metabolism eases to a near halt, so its cells can survive on negligible amount of oxygen and energy. Meanwhile, the liver begins to pump out glucose, raising concentrations in the bloodstream to more than 50 times those found in a human diabetic. Ice crystallizing in the frog's body cavities draw some of the water from the cells in the flesh and organs. This further concentrates glucose inside the cells, turning it into an antifreeze that keeps the remaining water from solidifying. (commercial antifreeze is made of a sugar alcohol similar to glucose, called ethylene glycol.) With the antifreeze in its cells, a frog can remain in a torpid state until spring, when its metabolism whirs back to life." It goes brain dead for a few months, then has little froggy thoughts again," Ken says.

When the Storeys compared the livers of frozen wood frogs to those of control frogs in a normal state, they also found unusually high levels of messenger RNA molecules that code for fibrinogen, a clot-enhancing protein. Once activated by an enzyme in the bloodstream, fragments of fibrinogen bind together into a sturdy lattice, sealing any leaks that have formed in blood vessels walls due to the stress of freeze-thaw cycle. Boris Rubinsky, an engineer at the University of California at Berkeley, has worked with a number of scientists to apply the Storey's finding to other animals, including humans. In 1999 Rubinsky and his colleagues used a computer-controlled pump to infuse rat livers with a cocktail of cryoprotective chemicals. He froze the livers at 29.3F for about two hours after receiving the donor organs, and one survived for five days, suggesting that the livers were at least partially functioning. Since that landmark trial, Rubinsky and researchers at the Sheba Medical Center in Telhashomer, Israel, have applied similar freezing techniques to frozen rat hearts. In a 2003 experiment, the hearts remained viable and pumping for more than an hour after being thawed and transplanted.

Cryopreserving organs could one day revolutionize transplantation, but some scientists have their eyes on an even larger prize; freezing entire human bodies. Alcor's goal, trumpeted on its website, is to keep deceased customers "in a state that will be regarded as viable and treatable by future medicine." Most cryobiologists deride this as a pie-in-the-sky enterprise. "They're trying to take a thousand steps at once," Ken Storey says. "The temperatures they're dealing with are lower than anything in nature, so there's extensive tissue damage and cell dehydration." Yet Alcor has never guaranteed that its patients will receive a return on their $150,000 investment. "This is an experiment – it's speculative science at best," the company's CEO, Joe Waynick, says.

Alcor is banking on the proposition, Waynick adds, that "survival of structure, means survival of the person." The company's scientists are trying to figure out how to cool corpses to temperatures that cause total metabollic arrest – around 321°F – with minimal tissue damage, so the bodies can remain perfectly intact for thousands of years. To that end, they infuse clients with a proprietary mixture of carbohydrates-based antifreezes similar to those naturally produced by the frogs in the Storey's lab. The tissues are pumped so full of cryoprotectant that they never completely solidify. Significant obstacles remain, however, including the toxic effects of antifreeze on tissue and its imperfect dispersal throughout the body. "Different organs absorb the cryoprotectant at varying rates, and some don't do as well as others," Waynick says.

To the Storeys, there isn't that much difference between institutions like Alcor and most organized religion. "The promise of eternal life is something that's appealing to just about everybody," Ken Storey says. Still, they don't entirely dismiss cryobiology's grander goals. 'Its possible in decades that we might be able to freeze astronauts for long missions and things like that," Janet Storey says. "But our focus is not how to apply these techniques to humans down the line. We want to figure out how the biological systems work. Other people can take it from there."

21. What makes the Rana Sylvatica a 'biological conundrum'?
- (A) Its ability to carry on metabolic activity at freezing temperatures.
- (B) Reanimation after a period without heartbeat and brain activity.
- (C) Its ability to survive on negligible oxygen and energy.
- (D) The ability to suspend vital metabolic activity at will.

22. Rip Van Winkle is probably someone who
- (A) died in sleep.
- (B) can sleep for as long as he likes.
- (C) woke up after a long sleep.
- (D) outsmarts adverse conditions.

23. Alcor, as inferred from the passage,
- (A) is trying to take a logical proposition to illogical limits.
- (B) is an unscrupulous company that makes money through dubious means.
- (C) is a company into scientific research without commercial interests.
- (D) is a company that seeks to give eternal life to its clients.

24. We can infer that 'Cryoprotectant chemicals' are those that
- (A) bring about low internal temperature.
- (B) keep the fluids inside the organism in liquid state.
- (C) can withstand low temperature without undergoing any change.
- (D) are protein-based antifreeze mixtures.

25. The phrase 'pie-in-the-sky' as used in para 4 means
- (A) being far ahead of your contemporaries.
- (B) something that seems very unlikely to happen.
- (C) a project that is full of risks.
- (D) taking chances at the cost of others.

Key

Exercise – 1

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

Exercise – 2

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

Exercise – 3

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

Exercise – 4

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

Exercise – 5

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

Exercise – 6

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

Exercise – 7

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

Exercise – 8

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