

Bihar Board Class 11 English Book Solutions Chapter 5

The Scientific Point of View

Bihar Board Class 11 English The Scientific Point of View Textual Questions and Answers

A. Work in small groups and discuss these questions :

Question 1.

The people of older generation or the rural people cover their head with a towel when they have to walk in the scorching sun. Why ?

Answer:

The people of older generation or the rural people cover their head with a towel when they have to walk in the scorching sun because they find some relief. They feel some cold on their head even in scorching sun. It is because evaporation takes place very fast in scorching sun through head. Water as well as minerals from the body passes out in the process of evaporation through head. If people cover their head with towel the process of evaporation is minimised and they do not lose their energy very fast.

Question 2.

What do you understand by science ? What are the basic tools of Science.

Answer:

Science is an arranged and systematic knowledge of a specific subject. If one knows systematically about everything of a subject, he may be able to bring something new in that particular science. If he is an expert in natural science, he may invent something new. The basic tools of science are

1. one's own growing mind
2. hobby to experiment by combining one thing with another
3. hobby to search new thing
4. reading the books on the subject by eminent authors and scientists
5. the critical and scientific mind.

Question 3.

What is scientific point of view ? Is science different from scientific point of view ?

Answer:

Scientific point of view means the ideas which are critical and experimented. They are

applied to the events of daily life. They are supported by reasoning. They are not mere hypothesis or prediction. They are based on the methods of science which lead to the success, development and easy going life for the human being.

The difference between science and scientific point of view is that science gives us inventions, discovery for the easy going life. It creates miracles with its inventions like computer, television, mobile phone, aeroplane etc. The scientific point of view is just an idea based on experimental truth and critical mind. A man having scientific point of view may not invent anything in his life. But his ideas are clearcut and reasonable. But a scientist can be recognised only with his inventions, discovery or scientific theories.

B. 1.1. Complete the following sentences :

Answer:

1. Driving in a motor ca- is the example of the benefits by The application of science.
2. An example of the impact of science on our opinion is inculcation of scepticism.
3. The object of the author in this essay is to make man take things from scientific point of view.
4. The best utilisation of science is to apply it to the events of daily life.
5. The two charges against science are being deaf to moral consideration and for interfering in ethical problem which do not concern them.

B. 1.2. Answer the following questions briefly :

Question 1.

Name two ways in which science affects average man and woman ?

Answer:

Science affects the average man and woman in two ways, in the first instance it allows them to use its inventions and discoveries; secondly it influences their opinion. Man now uses a car instead of horse-drawn carriage. He approaches a physician or a surgeon in case of illness and not a witch doctor. And he believes that the earth is round, the heavens are empty and that monkeys are the ancestors of men.

Question 2.

What do you understand by scientific point of view ? Can it help us in our daily life ?

Answer:

Scientific point of view is far bigger for the human mind than substitution of one set of beliefs for another or implanting disbelief regarding accepted opinions. Scientific point of view can help us if we are to control our own and one .’mother’s actions, in the same way as we are learning to control nature. The scientific point of view will help us. It will be applied to the events of life.

Question 3.

What does 'impartiality' mean in connection with scientific stand Points ?

Answer:

The characteristics of scientific stand point to make efforts to be truthful. It is but natural that due to its truthfulness it must be impartial. We can understand it through the following example by comparing this with the impartiality maintained in legal matter. A good judge will try to be impartial between Mr. John Smith and Mr. Chang Sing i.e. to both the parties in the case, whereas a good scientist will be impartial between Mr. Smith, a tape worm and the solar system. It means he will treat all of them, impartially.

Question 4.

How impartiality in scientific point of view different from point of view

Answer:

The impartiality shown in scientific point of view is different from legal point of view. Both have got their own characteristics and qualities.

Haldane has very deeply studied the outcome of both the impartialities. As regards impartiality his statement is worth quoting : "a good judge will try be impartial between Mr. John Smith and Mr. Chang Singh. A good scientist will be impartial between Mr. Smith, a tape worm and the Solar System. "The implication is clear. A good judge will not allow his specific nationality to interfere with in the legal examination of a person who belongs to his country and of another person who is a foreigner. He will eschew his sympathy and pass a judgement strictly in accordance with law.

But a scientist surpasses the impartiality of judge. He makes no distinction between a tape worm and the solar system. The former is almost a worthless insect, the latter is the most awful system of the universe making even a scientist. Look small and significant. But the scientist studies both of them with equal attention and care. The scientific view is therefore impartial.

Thus the scientific point of view "impartiality is different from legal point of view impartiality. Scientist studies both of the'm with equal attention.

Question 5.

What leads the scientists to pride and humanity ?

Answer:

Being engaged in search that few people are capable of conducting a scientist develops pride in his knowledge and distinction. This knowledge grows from year to year and in one are at least a scientist surpasses every other. Researches in areas that are vast such as space and solar system also give a scientist a sense of self-importance.

Question 6.

What makes it difficult to the scientist to understand his mind ?

Answer:

Scientist's carefully studying of the things as a statue or a symphony and his awe for the solar system, which led his predecessors either to worship its constituent or at least regard them as inscrutable servants of the almighty too exalted for human comprehension. Such an attitude leads the scientist to a curious mixture of pride and humility. The system turns out to be a group of bodies rather small in comparison with many of their neighbours, and executing their movements according to simple and easily intelligible laws. But he himself is a rather aberrant member of the same order as the monkey, while his mind is at the mercy of a member of chemical processes in body, which he can understand but little and control hardly at all. So this makes it difficult to the scientists to understand his mind.

Question 7.

What do you understand by "God's eye-view" ? When or how may scientific point of view be called "God's eye-view" ?

Answer:

To a scientist all phenomena is of the same emotional level. Therefore whether any thing is individually small or big it is the same to scientist. For instance, to a scientist a tape worm is not contemptible nor is solar system aweinspiring. In one case he has to overcome his contempt and in another he has to transcend his fears. And in both cases there is a check of one's feeling.

So far God's love and compassion is concerned it is fairly distributed on the universe. To God a beggar is as much important as a king though they belong to two different social strata. Thus in this respect the scientific point of view is comparable to God's eye-view.

Question 8.

Can science determine what is right or wrong ?

Answer:

Science cannot determine what is right and wrong. It is not possible for it to do so. It can work out the consequences of various actions, but it cannot pass judgement on them. The bacteriologist can simply express his view regarding the ill effects of pollution of public water supply. He may compare the deaths caused by water-pollution with letting of a bomb in the public street. But he is no better equipped than any one else in of the knowledge he has gained, to determine whether these two acts are equally wrong. Hence science cannot determine what is right or wrong.

B. 2.1. Complete the following sentences :

Answer:

- (a) The average man dwells on the emotional and ethical side of a case rather than on facts.
- (b) The scientists are interested in finding out the truthful and impartial facts of objects/nature.
- (c) Negroes are not inferior to Americans because they are very laborious and enjoy the equal rights.
- (d) The death-rate of the Negroes exceeds the birth rate in southern towns, and all through the north.
- (e) The Negroes' original home is the west Coast of Africa.
- (f) The birth-rate of the Negroes exceeds the death-rate in the country districts of the southern states.
- (g) The Negroes live healthy and breed rapidly in southern states cotton fields.
- (h) We do not care whether our beliefs are rational when we are emotional about a subject.
- (i) According to the pre-Christian attitude, a case of disease is a punishment for a sin.
- (j) According to the scientists, a case of disease is a manifestation of a natural law.
- (k) The first step in return to nature would be to discard clothes and to invite pneumonia.
- (l) In comparison to the savage men, the life expectancy of the uncivilized men is shorter.

B. 2.2. Answer the following questions briefly :

Question 1.

How is the tendency of the average man different from that of the scientists ?

Answer:

An average man is influenced by emotions and has a moral notion in every case. This leads him to ignore plain facts about things. For example, since the white American dislikes Negroes, he pushes them southwards. And in case of diseases man cares more for his whims and moods than scientific understanding. Formerly people believed that diseases were punishment inflicted by angry Gods.

A scientist attaches importance to the value of systematic study of facts. He tends to be impartial. Whether he works in a laboratory or outside, he subjects a chemical process or a particular object to a strict examination. In the records of the results he is always factual. He is always impartial and truthful in his acts and behaviour. In short the scientific approach places value on systematic study of facts and tends to be impartial. On the other hand the tendency of an average man is controlled by emotions, personal prejudice and normal notions. This is why the tendency of the average man is different from that of the scientist.

Question 2.

Does environment affect the death rate ? Give examples from tin as well as from your surroundings ?

Answer:

Environment plays a dominant role to effect the death rate. It is not necessary that the environment of a particular place will be suitable to that of different places. It depends on

their nature and the way they As an example the environment in southern states is more suitable to Negroes than the northern states. As such their birth rate in the southern s in comparatively higher than northern states. Their Haldane narrates that high death rates are due to the fact, in an environment suitable to a white man, they (Negroes) die of consumption and other diseases. Likewise the white man dies on the west coast of Africa, the Negro's original home.

Question 3.

What does the author mean by “reservoir of diseases germs” ?

Answer:

Negroes lives most unhygienically. They also have a dirty surrounding. They have not followed the methods of modern science. As such they have suffered from a number of diseases. The author throws light over the infection of diseases. He also explains that certain diseases are prevalent in Negroes. He has further added that these diseases may be transferred to one another by raw emotions of the unreasonable belief than scientific thought

Question 4.

How did the American civil war affect the Negroes ?

Answer:

The American civil war was aimed at to raise the Negroes' death rate and lower their birth rate. The purpose was to check their population. Between 1910 and 1920 the number of Negroes in the United States increased as much as it had done in the decade before the civil war. The number of Negroes killed in the civil war far greater than the casualty list of the civil war. It shows the ill-effect of American civil war caused to Negroes.

Question 5.

Jesus Christ's attitude to disease is close to the attitude of the scientists. How can you say this ?

Answer:

Before Christ people believed that a disease was a punishment from a deity for a sin committed either by that person or any member of the person's family. Christ did not accept this view. When a blind person was brought before him and people asked “Who is the sinner ? Is it this person or his father or his mother ? Jesus replied. “No body has sinned neither this man nor his parents.

His blindness is simply a manifestation of God's power. This was a radical view that enabled people to take care of the patient. So long as sickness was considered a result of sin the patient was neglected attempt was made to please the deity by sacrifice and other rituals. In the modern age the clonical view comes closer to the view of Christ. The present day doctor do not say that disease is manifestation of God's power, but' they believe that is manifestation of a natural law.

Question 6.

How will the discarding of cloth affect mankind ?

Answer:

Many people believe that diseases could be prevented by a return to nature. But the author thinks that the first step in a return to nature would be the discarding of clothes, which would at once increase the mortality from pneumonia about a hundred fold. According to the author the phrase "Live according to nature" is quite meaningless. Civilized and savage man, health and sickness are equally parts of nature, some features of civilization are bad for health, but for all that, such statistics as are available show that civilized men live longer than uncivilized.

B. 3. Answer the following questions briefly :

Question 1.

Name the important causes which help civilized men to live longer than the uncivilized ?

Answer:

There are several reasons that help civilized men to live longer than the uncivilized. Research in medicine has developed many vaccines and drugs that can keep a man healthy and free from illness. But because of their casual approach large number of people, mostly uncivilized, fail to improve their conditions; Most of those people are still careless. They neither try to obtain complete medical information the disease they suffer from nor are they regular in taking medicine and proper diet. Individual attention is therefore very important in matters of diseases. A civilized man of a scientific outlook will keep away his personal likes and dislikes and strictly follow medical advice. An uncivilized man cannot determine. What is right and wrong though he can conclude how bacteria causes a disease.

Among such diseases are diphtheria, small pox, measles and airborn disease. They require a control over environment which only the government can manage and a civilized man becomes benefitted by following it and seeking assistance of the government.

Thus civilized men live longer than the uncivilized due to their awareness, and following the modern research as well as advice.

Question 2.

Why does the author compare a human body to a system ?

Answer:

Human body is a system obeying quite definite laws, J.B.S. Haldane had a very keen observation of human nature. He was a leading scientist. He has come to a very right conclusion that human body is just like a system. This can be seen in diabetics. Few diabetics are regular in use of insulin that can alone keep them fit. The author advises diabetics to understand that their physical system can work only when they regularly take injections of

insulin. If they are casual in their approach they invite only more troubles. The worst sufferers from diabetes can regain full health and keep themselves indefinitely all right if they follow this direction.

Question 3.

Why has the discovery of insulin not made any appreciable difference to the morality in England ?

Answer:

Haldane had disclosed the reality that the discovery of insulin did not make any appreciable difference to the mortality in England. He revealed this fact through a typical example of two diabetic patients. One of them did not bother to replace her broken syringe and the other neglected her insulin injection because she thought that she would be hospitalised soon, in which case nurses would take care of diabetes as well. What is the use of discovery of insulin as the preventive of diabetes for such people. The author observed that most of the people are still careless.

Question 4.

Name the infection which can effectively be dealt with by public control of water supply.

Answer:

There are certain diseases which are caused by water pollution. Haldane had rightly disclosed the fact that typhoid infection can only be dealt with adequately by public control of the water supply, which involves no effort by individual citizen. Individual attention is very important in this matter. In a country where typhoid fever is common, it is hard always to drink beer or wine or personally to see that one's water is boiled and annual vaccination involves a day mild illness.

Question 5.

Name any three airborne diseases.

Answer:

Diphtheria, small pox and measles are the three main airborne diseases. They are most dreadful and a curse to human life. It is fatal too.

Individual efforts are not enough to fight with these diseases. They require a control over environment which the government can manage.

Question 6.

Why does the author demand the general adoption of the scientific points of view ?

Answer:

J.B.S. Haldane, in this essay expresses the need to adopt the scientific point of view in our

life. According to the author all phenomena is of the same emotional level to a scientist. Hence whether anything is individually small or big, it is the same to the scientist. For instance, a tape worm is not contemptible nor is solar system awe-inspiring for a scientist.

Mr. Haldane emphasises on the general adoption of the scientific point of view because in its absence human efforts is so largely devoted to conflicts with fellow men, in which one, if not both, of the disputants must inevitably suffer.

Question 7.

Explain the phrase “The rulers of the darkness of this world”.

Answer:

J.B.S. Haldane has used the phrase “the rulers of the darkness of the world” in his essay. The rulers of the darkness of this world is a typical phrase which means the invisible creature, “The Demon”. They are supposed to be the ruler of the darkness. St. Paul has called the demon as the power of the darkness.

C. 1. Long Answer Types Questions :

Question 1.

“Science cannot determine what is right or wrong, and should not try to”. Why does the author say so ? Give reasons.

Answer:

Science can work out the consequences of various actions, but it cannot pass judgement on them. The bacteriologist can simply express his view regarding the ill-effect of pollution of the water supply. He may compare the deaths caused by water pollution with letting of a bomb in the public street. But he is not better equipped than any one else in possession of the knowledge, he has gained to determine whether these two acts are equally wrong.

To a scientist all phenomena is of the same emotional level. Therefore, whether anything is individually small or big it is the same to scientist. For instance, to a scientist a tape worm is not contemptible nor, is solar system awespring. In one case he has to overcome his contempt and in another help has to transcend his fears. And in both cases there is a check of one’s feeling.

Question 2.

Do you agree with the author’s view that science should not try to determine what is right or wrong ?

Answer:

A scientist’s view and action is to find out the facts. He is curious to work out the consequence of various actions, but at the same time he does not pass on Judgement on them.

Haldane has expressed his opinion on the basis of a close study of the methodology adopted by a scientist, that he cannot and does not determine, "What is right or wrong. He further adds that the scientists should not, even indulge themselves in such activities. They need not bother to know the outcome of what happens with their scientific research. The scientific approach places value on systematic study of facts and tends to be impartial. To a scientist all phenomena is of the same emotional value. Whether anything is individually. Small or big it is the same to the scientist. For instance, a tape worm is not contemptible nor is solar system awe-inspiring, to a scientist.

In one case he has to overcome his contempt and in another he has to transcend his fears. In both cases there is a check of one's feeling. The bacteriologist can simply express his views regarding the ill effects of pollution of the water supply. He may compare the death caused by water pollution with letting of a bomb in the public streets. But he is no better equipped than anyone else in possession of the knowledge, he has gained to determine whether these two acts are equally wrong.

In view of the facts the author comes to the conclusion that science should not try to determine what is right or wrong ?

Question 3.

What do you mean by "ethically neutral" ? Who is ethically natural ? Can science be ethically neutral ?

Answer:

Mr. J.B.S. Haldane in his spirited essay, underlines the real characteristics of a scientist. He narrates on the basis of a close study of the methodology adopted by a scientist by disclosing that a scientist can not determine what is right or wrong. Thus the author has come up with frank statements regarding the nature of science by telling that "Science cannot determine what is right or wrong, that is science is ethically neutral. It occurs immediately after the scientist has compared scientific point of view with that of God's eye view. Lets people should confuse the scientific point of view with the religious point of view. The learned author adds further that a scientist is perfectly neutral.

He cited two examples to illustrate this. The first example is that of a bacteriologist who, after making a study of the bacteria present in water can say precisely that it will cause the same number of deaths as can be caused by a bomb. But he can never say which is right or wrong or whether both the methods of killing are equally wrong. The other example is more complex based on the practice of racial discrimination. A white man can drink that he is superior to a Negro, but a scientist can only point out the biological difference between the two. He can also say clearly that in certain climates a Negro's family is boosted and in the same climatic pattern a white may find it difficult to survive. Nevertheless the scientist will never share the political views of either. He will restrict himself to pronouncing merely on the basis of biological evidence and nothing else.

Question 4.

Why does the author feel that the discovery of drugs does not protect the people very much ?

Answer:

Haldane feels that the discovery of drugs is not much helpful to protect human life. It may be a preventive measure but not a permanent cure of the diseases. There must be some substantial measures based on scientific reasoning. The cause of typhoid infection is water pollution. As such to deal with public control of water properly would be helpful in this direction. Diphtheria, measles and smallpox and some other diseases are airborne -diseases and could be stamped out by a public effort.

Such an effort would involve the individual assistance and self-sacrifice of sick persons and their relatives as well as international co-operation. It is impossible until people realize its importance in this direction. The environmental pollution must be dealt with strong will and co-operation. Then only we may be able to fight with diseases. The use of drugs (Drug medicine) alone can not be much helpful to protect human life from diseases.

Question 5.

What are the findings of the biologists on the Negro problems in America ?

Answer:

Mr. Haldane in his essay has come up with the issue of the findings of the biologists on the Negro problem. The author has wisely explained this issue. The white Americans hold that the American Negro is definitely inferior to the white man and should as far as separated from him. Some of them feel that he should enjoy the same right. But the biologists can not decide it. He can point out that the Negro's skull is more ape-like than the white's but his hairless skinless so, and so forth. The biologists also find that the birthrate of the Negro population exceeds the death rate in the country districts of southern states, whereas in the southern towns and all through the north their death is higher to birth rate. Their high death rates are due to the facts that in an environment suitable to white many they (Negro) die of consumption and other diseases. The white man dies on the west coast of Africa in the same way. This place is Negro's original home.

Question 6.

Who are the real enemies of man and how are they to be conquered ?

Answer:

Man has formed a wrong idea about such misunderstanding. One of his colleagues translated a French paper on chemotherapy, sometimes back. He quoted a phrase "tue par l'ennemi" in reference to a deceased pharmacologist. According to the author he has interpreted it that the deceased pharmacologist died of an accidental infection. The author found his version not exactly true, and he corrected it stating German national as the enemy. The idea of pharmacologist's death due to the action of germ's seems to be untrue and the real cause might be the action of Germans. It is presumed that scientists take care through their

training. Like St. Paul the scientists of today believe that the worst enemies of man are demons, “the power of darkness”, invisible creatures. The difference, however, is that for St. Paul they were devils, whereas as to the scientists today they are microbes.

Question 7.

Will a return to nature help overcome diseases ?

Answer:

Many persons believe that diseases could be prevented and controlled by a return to nature. It may be correct to some extent but in the age of modern research and invention this theory has lost its importance. The learned author of the essay “The Scientific Point of View” J.B.S. Haldane does not agree to this view. According to him this idea to return to nature is force and far from reality. He further adds that return to nature means to reject putting on cloths which led to unnatural and immatured death from Pneumonia in large number. As such the phrase “Live according to nature” is quite meaningless. Civilized and uncivilized (wild) man, health and sickness, are equally parts of nature. It reflects in this expression as if the author has placed civilized person as a symbol of health and the uncivilized that of sickness. He also realises, that some features of civilization are bad for health. But for all that such statistics as are available, show that civilized men live longer than uncivilized.

Question 8.

“Live according to nature” is quite meaningless. Do you agree with this opinion ? Give reasons.

Answer:

Even in the modern age there are many who believe that man was better when he was not civilized. Therefore they want a reversal of the total process of civilization. They want men to live according to nature. However, Haldane has a serious objection to this slogan. According to him the first step towards adopting this principle would be to give up the wearing of clothes. But this will immediately inflict a person with pneumonia.

Haldane concedes that there are many things in the modern civilization that are injurious to health. But considering the overall situation, people are better off in matters of health than ever. Therefore “Live according to nature” is a meaningless phrase.

Question 9.

” The study of medicine apart from its scientific basis creates neurotics rather than scientists”. What does the author mean by this ?

Answer:

The author is talking about the effects and result caused by the study of medicine without adopting scientific method. Haldane does not seem to be satisfied with its outcome. He expresses his views that people realize that the germs of diseases are foreigners and much more likely to kill one. Nothing tangible will be achieved unless we should stop thinking in

this direction. He narrates that typhoid infection is the result of water pollution and it can be dealt with adequately by public control of the water. Diphtheria, small pox, measles and some other diseases are airborne diseases and could be stamped out (eradicated) by public efforts. Individual assistance as well as self sacrifice of sick persons and their relatives would be helpful in solving this problem. International assistance is highly essential too.

Therefore, keeping in view the above facts, the study of medicine without the assistance of scientific method will be of no use. To adopt scientific method in the study of medicine would be an idea of a sound mind otherwise it will create nervous illness and the very objective of its usefulness would not be materialised.

C. 2. Group Discussion :

Discuss the following in groups or pairs:

Question a.

Should science be given the privilege to decide what is right or wrong ? Give your own opinions.

Answer:

Science should not be given the privilege to decide what is right or wrong. Science deals with natural phenomena. It thinks human mind works as a result of chemical processes. It does not believe in soul. The whole universe came into being as a big bang. Life on earth evolved through chemical reactions. It was not created by God, because there is no God. But man is not a robot. Science cannot decide what makes human beings happy. Human behaviour does not follow a set pattern. Science cannot decide what is right or what is wrong. It cannot decide what kind of clothes we should wear. It cannot decide whether going to temple is right or wrong. It cannot decide whether helping a man in need is right or wrong. In short science cannot decide what is right or what is wrong.

(b) Is science deaf to moral consideration ? How ? Give examples in favour of your arguments.

Answer:

In theory science is totally deaf to moral consideration. It invents things. It discovers facts. But it is not concerned to what use her discoveries are put to. For example science has discovered how kidneys can be transplanted. But it is deaf to its applications. A man's kidney may be removed by fraud. Science is not concerned. Science discovered fission of atoms. It was not concerned if nuclear weapons of mass destruction are made. Now science has found a way to clone humans. Now they are happy at their discovery. But they are blind to the consequences this discovery can lead to. They leave this to society and governments to decide. But, since science is not an abstract idea, it is practised by humans. So they do show their concern about moral consideration.

C. 3. Composition :

Write a paragraph in about 100 words on the following:

Question a.

Science and morality

Answer:

Scientists have always tried to avoid getting involved into moral issues. They have been trying to understand the ways of nature and how to control them. The discoveries in old time did not have as far reaching consequences as they do now. Now the world is like a small village. The application of science affects the whole humanity. Now the scientist must keep moral questions in mind. He cannot be amoral. And now we see that scientists do raise moral questions. They raise their voice against use of animals for research. They want that their discoveries should do good to humanity, and are not used immorally.

Question b.

Racial discrimination or apartheid and human rights.

Answer:

God has created all human beings alike. Human dignity demands that they should enjoy equal human rights. But powerful people wherever they are, have created division between man and man. In India it has been practised by powerful upper castes against dalits. In America the African- Americans have been sold and bought as slaves. Though Abraham Lincoln set the Negroes free, still many white Americans look down upon them. They are not allowed to go in many restaurants. In South Africa apartheid was strictly enforced by the government till through the sacrifices and struggle by men like Nelson Mandela it was done away with. Racial discrimination or apartheid is a gross violation of human rights.

Question c.

How far the scientific point of view has been adopted in India ?

Answer:

India has entered the 21st century but we have adopted scientific point of view only to a small extent. Even today people believe in stars and astrology. Marriages are fixed after the horoscopes of the boys and girls have | been matched. Astrologers are consulted for most favourable time for auspicious functions. Even Prime Ministers have taken oaths of their offices | in consultations with astrologers and gurus, pillions of people still consult ' witch doctors to treat ailments. No aspect of our life is untouched by unfounded beliefs and unscientific attitude. Even some TV channels have begiun to invite astrologers to foretell future and answer the questions of the viewers.

D. Word Study :

D. 1. Dictionary Use

Ex. 1. Correct the spellings of the following words:

beleif **ancestary** **sceintific** **skepticism**
equiped **coleague** **statstics**

Answer:

belief **ancestry** **scientific** **scepticism**
equipped **colleague** **statistics**

Ex. 2. Look at the following examples:

It is foolish to think that the outlook (Para-2)

which has already banished under-feeding as a cause of ill-health (Para-II)

You see that in the first example the word outlook is made of two words out and look. In the second example, the word under-feeding is made of under and feeding and ill-health of ill and health. These are called compound words. The less frequently used compound words have hyphen between the words which compound together whereas the more frequently used can be used without any hyphen.

Pick up the compound words from the lesson and look up a dictionary to find out their meanings.

Answer:

omnibus – bus

horse-drawn – pulled by a horse

automatic pistol – One that continues to fire

standpoint – an opinion

truthful – saying only what is true

careful – with care

truthful – saying only what is true

carefully – with care

God's eye-view – the attitude of being completely unbiased and neutral

bacteriologist – an expert on bacteria or germs

death-rate – the number of death per year per thousand

birth-rate – the number of birth per year per thousand

water-borne – born in water

under-feeding – having little food to eat

ill-health – poor health

public effort – the effort made by the people

self-sacrifice – self-negligence

co-operation – to work mutually
human effort – effort made by mankind
scepticism – disbelief

D. 2. Word-formation :

Look at the following examples:

Preventive medicine could be made into the moral equivalent of war. A colleague of mine was recently translating a French paper

You see that in the first example, adjective preventive is derived from the verb prevent in the second example, Present Participle translating is derived from the verb translate. In fact, a number of words can be derived from a verb as illustrated below.

apply (v) : applied (adj) application (n) appliance (n) applicable (adj.) applicability

Ex. Write as many words derived from the following verbs as possible as illustrated above.

drive	begin	constitute	advertise	study
accept	comprehend	prevent		

Answer:

drive (v)	: driving (n), driveable (adj.)
begin (v)	: beginning (n)
constitute (v)	: constitution (n), constitutional (adj.), constitutive (adj.), constitutively (adv.)
advertise (v)	: advertisement (n), advertising (n)
study (v)	: studiousness (n), studious (adj), studiously (adv.)
accept (v)	: acceptance (n), acceptation (n), acceptable (adj.), acceptably (adv.), acceptability (n)
comprehend (v)	: comprehending, comprehension (n)
comprehensive (v)	: comprehensiveness (n), comprehensively (adv.)
prevent (v)	: prevention (n), preventing (n), preventable (adj.), preventive (adj.), preventative (adj)

D. 3. Word-meaning :

Ex. 1. Match the words give in Column-A with their meanings given in Column-B.

Column-A	Column-B
God's eye-view	well-informed
bacteriologist	sharp pain
exponents	room or building used for scientific experiments
lynch	unreasonable belief
dogma	a person practising sorcery
sting	an expert on bacteria or germs
enlightened	being completely unbiased and neutral
pneumonia	beat up and kill
diabetes	vaccination
inoculation	treatment or prevention of infection by chemicals
chemotherapy	a disease caused by insulin deficiency
bacteria	a microscopic unicellular plants lacking chlorophyll
witch	a disease of the respiratory tract
laboratory	persons who put some views forward with explanation

Answer:

Column-A	Column-B
God's eye-view	— being completely unbiased and neutral
bacteriologist	— an expert on bacteria or germs
exponents	— persons who put some views forward with explanation
lynch	— beat up and kill
dogma	— unreasonable belief
sting	— sharp pain
enlightened	— well-informed
pneumonia	— a disease of the respiratory tract
diabetes	— a disease caused by insulin deficiency
inoculation	— vaccination
chemotherapy	— treatment or prevention of infection by chemicals
bacteria	— a microscopic unicellular plants lacking chlorophyll
witch	— a person practising sorcery
laboratory	— room or building used for scientific experiments

Ex. 2. Read the lesson carefully and find out the sentences in which the following words have been used. Then make sentences using them first as nouns and then as adverbs:

benefit
abuse

place
skin

view
interest

pass

bomb

Answer:

He or she benefits by its application, (Para-2)
..... or a shell in place of a danger or a battle-axe. (Para-1)
..... the point of view that prevails among research workers, (Para-2)
..... but it cannot pass judgement on them. (Para-5)
..... as many deaths as letting of a bomb in the public street. (Para-5)
The enemies of science alternately abuse its exponents (Para-5)
..... which interest the scientist. (Para-6)
..... but his hairless skin less so, (Para-6)

Sentences:

benefits (n) — It will be to your benefit to arrive early.
(adv.) — You should spend the money on something that will benefit much everyone.
place (n) — You cannot be in two places at once.
(adv.) — The parking areas in the town are few, but strategically placed.
view (n) — We take the view that it would be wrong to interfere.
(adv.) — The design of the house was viewed as highly original.
pass (n) — The pass mark is 50 per cent.
(adv.) — He speaks passably good English.
bomb (n) — Hundreds of bombs were dropped on the city.
(adv.) — They were bombing down the road at about 80 miles an hour.
abuse (n) — He was suspended on charges of corruption and abuse of power.
(adv.) — Taking wine he behaved abusively.
interest (n) — I read with interest.
(adv.) — Interestingly, there are very few recorded cases of such attacks.
skin (n) — The snake sheds its skin once a year.
(adv.) — The dead animals are skinned off quickly.

D. 4. Phrases :

Ex. 1. Read the lessons carefully and find out the sentences in which the following phrases have been used. Then use them in sentences of your own :

instead of	in place of	rather than	as a whole
so far as	to pass judgement	point of view	to let off
inferior to	for all that	in possession of	in practice
in any case	that is all	every bit	

Above mentioned phrases are used in the lesson in the following lines :

..... driving in a motor-car or omnibus instead of a horse-drawn vehicle.

..... being treated for disease by a doctor or surgeon rather than a witch

..... a shell in place of a dagger or a battle-axe.

..... and the heavens nearly empty, instead of solid.

It can gradually spread among humanity as a whole he point of view that prevails among research workers,

..... the scientific point of view must come out of the laboratory

In so far as it places all phenomena on the same emotional level

..... but it cannot pass judgement on them.

The bacteriologist can merely point out that pollution of public water supply is likely to cause as many deaths as letting off a bomb in the public street.

But he is no better equipped than anyone else in possession of Roman knowledge he has gained

..... the Negro is definitely inferior to the white man,

..... the political dogma rather than scientific thought.

..... but for all that, such statistics as are available show that civilized men live longer than uncivilized.

..... but it is becoming harder and harder to apply its results in practice.

..... because she was coming to hospital in any case for another complaint.

It has saved a few intelligent people, but that is all.

It is impossible until people realise that microbes are every bit as real as foreigners, and much more likely to kill one.

instead of — He wasted his time instead of working hard,

in place of — He was doing his duty in place of wasting time,

rather than — It is better to do something rather than waiting for major work.

as a whole — A terrorist affects the community as a whole.

so far as — So far as my opinion about education is concerned, it must be job-oriented.

to pass judgement — To pass a judgement raitionality is a foremost requirement.

point of view — Racial discrimination is bad from scientific point of view.

to let off — Terrorists create havoc letting off bombs at public places.

inferior to — Blacks are not inferior to whites.

for all that — Racial differences are continuing even today, but for all that, our political parties are not less responsible.

in possession of — We should not try to transfer everything in possession of our own kith and kin.

in practice — The community of caste and community should not be in practice.

in any case — We should not be partial in any case.

that is all — That is all the news at night.

every bit — Our every bit should be devoted to national development.

Grammar :

Ex. 1. Put the verbs in brackets into Simple Past or Past Perfect.

- (a) Kavita (want) to know what her husband (do) last week.
- (b) Mahesh (is) unable to tell his teacher where he (get) the money.
- (c) My friends (ask) me what countries I (visit).
- (d) The doctor (tell) me that he (go) to Goa for a holiday.
- (e) My father (lose) his new shoes shortly after he (buy) them.

Answer:

- (a) Kavita wanted to know what her husband did last week.
- (b) Mahesh was unable to tell his teacher where he got the money.
- (c) My friends asked me what countries I visited.
- (d) The doctor told me that he gone to Goa for a holiday.
- (e) My father lost his new shoes shortly after he bought them.

Ex. 2. Complete the following sentences:

- (a) If the weather is fine, Naghaz
- (b) If it rains in the evening the match
- (c) If you eat too much, you
- (d) If Ajeet helps me, I
- (e) If you don't hurry, you

Answer:

- (a) will come
- (b) will be postponed
- (c) will min your health
- (d) will get the job
- (e) will succeed.