Roll No. Total No. of Pages: 03

Total No. of Questions: 05

B.Tech (Sem-1,2) COMMUNICATIVE ENGLISH Subject Code: BTHU-101 (2011 Batch) Paper ID: [A1103]

Time: 3 Hrs. Max. Marks: 60

INSTRUCTION TO CANDIDATES:

- 1. All questions are compulsory.
- 1. Read the following passage and answer the questions given at the end.

With the increased threat of exhausting the resources of coal and oil, scientists were desperate to find a renewable sustainable source of energy. As an alternative, nuclear reaction from a tiny amount of uranium is capable of producing energy that is sufficient for long term energy requirement. Atomic Energy is, therefore, very cheap source of energy. A ton of uranium can produce as much energy as million tons of fossil fuel. During the procedure of nuclear reaction no byproducts like carbon dioxide or monoxide are formed. On the contrary, large amount of byproducts in the form of waste are produced during the harnessing of coal or oil. Traditional sources of energy are the big reasons of environment pollution. A secure power plant is environment friendly and does not produce any contaminants to the outer environment. Mostly water that is produced as a byproduct is found around the plant and gives a fresh look to the surrounding.

However, not everybody agrees. Atomic bombs made from nuclear reactions are so dangerous. There are around half a million of weapons present in only Russia and America. This explosive nature of atomic energy presents future threats as in case of negligence or inadequate safety measures it can turn highly destructive. The names of Hiroshima and Nagasaki instantly come to mind. Nuclear reactions also produce a large amount of radiation, which is highly dangerous for environment and human beings in the long run. Even the nuclear waste emits radiation and is so dangerous that even a touch can kill a person. In recent times, Chernobyl Nuclear Plant accidently started emitting radiation that caused a lot of people to die on the spot and many more from cancer as an after effect. Even the forests nearly were devastated.

Nuclear power plants are therefore fabricated in a special way to restrict radiation and protect the outer environment. Necessary precautions to secure it from disasters are built into their designs and to save it from meltdown in case of a crash natural or man-made.

- i. In what ways can nuclear energy be harmful to human life? (2)
- ii. Why is nuclear energy preferable to traditional sources of energy? (2)
- iii. What is the impact of nuclear waste on the environment? (2)
- iv. According to the passage, name the two effects of radiation. (2)
 - a. It pollutes our water resources.
 - b. It can kill many lives.
 - c. It produces a lot of carbon monoxide
 - d. It helps us make atomic bombs.
 - e. It can destroy vegetation.
- v. Which of the following two are the important features of a safe nuclear plant? (2)
 - a. It does not emit any radiation in the outside world
 - b. It leaves no waste
 - c. It does not allow the making of atom bombs
 - d. It keeps water free from pollutants
 - e. It is protected against any possible meltdown.
- 2. i. Use the following words in meaningful sentences. (5)

Attachment; migrate; inappropriate; subsequently; category

- ii. Complete the sentences as directed. (5)
- a. Harvard University is in USA. It is one of the best in the world. (rewrite as one sentence using 'which')
- b. If the stars were near the earth, we.....(see) them during the day too. (fill the blank with suitable modal)
- c. Industrial waste is a threat to the environment (rewrite using 'environmental')
- d. We have to be really careful......- how we use water, (fill a preposition)
- e. Power generation capacity of China is more than that of India (rewrite the sentence starting with 'compared to')

- 3. Some people think that newspapers and magazine are as good a source of education as books. Compare the relative merits of each and suggest which one of them is better for developing communication skills. You may give examples to strengthen your point of view. Your write-up should be between 250-300 words. (10)
- 4. You have recently been to a science exhibition and found a number of things interesting to the young people. Write a letter to your science teacher giving him/her description of some of the models and the benefits they can have for understanding science. Also request him/her to place orders for them for your college laboratories. (15)
- 5. Given below are figures for the CAT examination for the year 2011. On the basis of these numbers prepare a report for your college students to give them a profile of this test and encourage them to take it for a bright future. Your report should be about 250 words. (15)

CAT: Common Admission Test

Online Test dates: Oct. 22 - Nov. 18, 2011

Total Number of seats: 23000 approximately

Institutes: Indian Institute of Management-13; Other Business Schools-155 Types of Test Items: Quantitative ability; data interpretation; verbal ability; logical reasoning.

Number of applicants: 205345

Female candidates: 27%

Candidates from Engineering background: 64% (56% in 2010)

Candidates from Commerce background: 24.5%

Candidates from Medical background: 556 (440 in 2010)

Candidates in differently abled category: 640

Candidates with 6 months or more work experience: 32% (27% in 2010)

General category candidates: 80.5%

Highest number from a city: 25% Delhi (next 9% Mumbai)

Success rate of Engineering students (out of admitted candidates): 38%

Success rate of Commerce students (out of admitted candidates): 19%