

**B.E. / B.TECH. DEGREE EXAMINATIONS, DECEMBER 2008**

First Semester

Common to all Branches

**U07HS101 – ENGLISH I**

Time : Three hours

Maximum Marks: 100

Answer ALL questions

PART – A (20 x 1 = 20 marks)

1. Choose the right option that matches the words in column A with Column B.

| A                                      | B  |
|--|--|
| 1. Flamboyant                          | - a). Activity or movement that has suddenly become fashionable or popular |
| 2. Bandwagon                           | - b). Shout of applause  |
| 3. Sweltering                          | - c). A showman, an attractive personality                                 |
| 4. Acclaim                             | - d). Uncomfortably hot  |
| a). CADB                      b). CABD | c). BCDA                      d). DBCA                                     |

Choose the correct form of the verbs in the following sentences.

2. If you had left early, you \_\_\_\_\_ home by now.  
a. will reach    b. would be reaching    c. reach    d. would have reached
3. If I were rich, I \_\_\_\_\_.  
a. help    b. would help    c. would have helped    d. will be helping
4. Substitute the following with one word.  
Using other people's work as yours,  
a. represent    b. reference    c. plagiarism    d. copy
5. Replace the verb in the following sentence with simple present tense  
Water will boil at 100 degrees temperature.  
a. is boiling    b. boils    c. will be boiling    d. boiled
6. Verb form of 'false' is  
a. falsehood    b. make false    c. falsing    d. falsify
7. To make someone 'bitter'  
a. embitter    b. bittering    c. bitterest    d. Make bitter
8. Choose the word which comes closest in meaning to the given word.

**Peer review**

- a. reviewed by close friends  
b. reviewed by distinguished people in the related area  
c. reviewed by superiors  
d. reviewed by public

**Identify the errors of preposition in the following sentences and choose the right answer**

9. The nurse will assist the doctor to do the operation  
a. doing      b. for doing      c. in doing      d. for
10. Please comment to this as far as possible.  
a. of      b. after      c. before      d. on

**Identify the mistakes in the following sentences and choose the right option**

11. The new innovations was startling.  
a. The new innovations were startling.  
b. The new innovation was startling.  
c. The new innovations are startling.  
d. The innovation was startling.
12. The furnitures in the room need polishing.  
a. Furnitures in the room need polishing.  
b. The furnitures in the room needs polishing.  
c. Furniture in the room need polishing.  
d. The furniture in the room needs polishing.

**Choose the right answer.**

13. A citation, along with a cash award \_\_\_\_\_ given.  
a. was      b. were      c. are      d. are to be
14. Measles \_\_\_\_\_ an infectious disease.  
a. are      b. is      c. has      d. were

**Choose the right interrogative statement for the statements given below.**

15. She is learning music.  
a. Does she be learning music?      b. Does she learn music?  
c. She is learning music?      d. Is she learning music?
16. My son studies well.  
a. How is your son studying?  
b. How is my son studying?  
c. Does your son study well?  
d. How does your son study?

**Choose the right term for the definition given.**

17. \_\_\_\_\_ is an instrument that is used to vary the current flowing in an electrical circuit.  
a. A meter      b. A rheostat      c. A thermostat      d. An electrical circuit

Choose the correct impersonal passive voice statement for the following active voice statements.

18. We can cast this type of metal into complicated shapes.
- This type of metal is cast into complicated shapes.
  - This type of metal can be casted into complicated shapes.
  - This type of metal is casted into complicated shapes.
  - This type of metal can be cast into complicated shapes.
19. Antonym of 'forestation' is
- afforestation
  - deforestation
  - nontorestation
  - inforestation
20. Choose the other form of imperative.
- Seal the gas cylinder properly.
- The gas cylinder should be properly sealed.
  - You should seal the gas cylinder properly.
  - The gas cylinder must be properly sealed.
  - Close the gas cylinder properly.

**PART – B ( 5X 16 = 80 marks)**

- 21.a) Write a letter to the editor of a newspaper about the leather company situated in your locality letting its effluents and burning the waste on the road. In your letter, highlight any four problems faced by the residents and suggest suitable measures.

**(OR)**

- b) Imagine that you are a second year student of Electronics and Communications Engineering. You are interested to go for in-plant training for 2 weeks in Airvoice Telecommunications Ltd. Write a letter to Human Resources Department seeking permission for practical training.

- 22.a) Write two paragraphs each not exceeding 100 words highlighting the advantages and disadvantages in doing higher studies through their mother tongue.

**(OR)**

- b) Highlight the problem of power cut and provide solutions discussing the causes, effects and energy efficiency measures.

- 23.a) Write eight safety instructions that are to be followed in the machine workshop by the students while doing their lab practicals.

**(OR)**

- b) Write a set of eight recommendations that are to be followed to save petrol.

- 24.a) Using the information provided in the given text, draw a flow chart describing the different stages involved in the making of coins. Give appropriate title to the chart.

Coins are manufactured in a factory known as a mint. There are three mints in India, in Mumbai, Kolkata and Hyderabad. Production of coins at the mints is a complete process. It starts with the buying of unmixed metals and their testing by the Assay Department. Then the metals are alloyed in oil-fired or electric arc furnaces, and cast into ingots 40 cm wide, 15 cm thick and 6m long. These ingots are reheated until the temperature is hot enough for hot rolling. During this stage, the ingots pass through a series of rollers until they form long, thin sheets which are the thickness of a coin. From these thin strips, blank discs are punched. These are the basic raw materials for the manufacture of coins. The blanks are heated to soften them, and they are rolled so that the rim is raised. Finally, they are stamped with the design of the coin. At every stage, defective pieces are carefully sorted out, and (with the frequent checking and returning points) strict quality control is maintained. Rejects are returned to the alloying stage, together with the waste from the alloy strip.

(OR)

- b). **Draw a flow chart describing the Process of Making Cement using the information given below.**

Cement is an adhesive substance used for constructing buildings. Being an important building material, let us learn the process of making cement. The raw materials needed for the preparation of cement are limestone and clay. Before beginning the process, the required quantity of limestone and clay are made easy. Initially, the lime stone is taken and it is crushed. Now, the crushed pieces are sized so that they are similar in size. Then, it is dried to remove the water content (moisture) from it and it is kept aside. Secondly, the clay is taken and it is also crushed in to pieces. After crushing, the clay is sized and then dried. Thirdly, the lime stone and clay which are processed, are mixed in the definite proportions. Now the mixed substance is fired and then, it is sent to a chamber where the clinker, the ashes of the fired raw materials, is made ready for the next process. Finally, the substance already prepared is mixed with gypsum which is a substance that controls the setting of cement and it is mixed well. The properly mixed clinker and gypsum is now powdered well and made ready for storing or sales. Thus, the cement is manufactured.

- 25.a) **Read the given passage and answer the questions that follow:**

Almost all the energy that living things make use of comes from the sun. the chief exception is the gravitational pull of the earth itself, and of the moon upon the waters of the earth. The sun gives our enormous quantities of energy in the form of radiation.

The energy given out by the sun is created by the process known as nuclear fusion. Fusion means "joining together". The opposite process is nuclear fission, meaning, 'splitting apart' or 'dividing'. If either fission or fusion takes place quickly, the result is a great and sudden release of energy -- an explosion, in fact. Both kinds of nuclear events can be created on earth but so far the only one that can be slowed down and controlled is fission.

Nuclear fission is the splitting of the nucleus of an atom. Only a few elements are suitable for use in this way, the most important ones being Uranium-235, Uranium-233 and Uranium-239. When a nucleus of one of these elements is struck by a free neutron it breaks down into two lighter nuclei which fly apart at high speed, colliding with surrounding atoms. Their kinetic energy is converted

into heat energy. At the same time, two or three free neutrons are released and one of them enters the nucleus of a neighbouring atom, causing fission to occur again ; and so on. The reaction spreads very quickly, with more and more heat energy released and this is called a 'chain' reaction because the splitting of each nucleus is linked to another, and another and another.

If this reaction takes place in an atomic bomb, where nothing is done to slow it down, the result is a violent explosion that can destroy a town in a few seconds. Fission can also, however, take place within a construction called a nuclear reactor, or atomic pile. Here the highly fissile material (U-235, U-233, Pu-239) is surrounded by a substance that is non-fissile, for instance graphite. This material is called a moderator. The neutrons lose some of their energy and speed through colliding with the atoms of the moderator. Energy -- heat energy -- is still created on an enormous scale, but no expansion takes place. The moderator has another function : by slowing down the speed of the free neutrons, it makes it more likely that one of them will collide with the nucleus of a neighbouring atom to continue the chain reaction.

The chief advantage of nuclear energy is that it does not depend on any local factors. A nuclear reactor, unlike an oil-well or a coalmine does not have to be sited on top of a fossil-fuel source ; unlike the solar energy unit, it does not have to go out of production when the sun is not shining; unlike hydro-electric power, it does not depend on a large flow of water which may be reduced during some seasons of the year. With an atomic power station, the only limiting factor is that of safety.

In the opposite process, nuclear fusion, two nuclei come together to form a new nucleus of a different kind and this process also releases energy on an enormous scale. Fusion can only occur under conditions of very great heat -- at least 50,000,000 degree Celsius. A fusion reaction on earth has already been created -- the hydrogen bomb. This is an uncontrolled reaction. It is not yet possible to produce a controlled fusion reaction that can be used for the production of useful energy.

**1. Match the headings with the relevant paragraphs.**

| A  | B             |
|--|---------------|
| (a) Uncontrolled and moderate nuclear reaction | Paragraph I   |
| (b) The advantages of nuclear energy           | Paragraph II  |
| (c) Fission and fusion                         | Paragraph III |
| (d) The nuclear fission chain reaction         | Paragraph IV  |
| (e) Energy from the sun                        | Paragraph V   |

**2. Complete the following sentences by selecting the most suitable one from the options listed:**

- (a) The aim of a nuclear reactor is
- (i) to establish a controlled chain reaction
  - (ii) to absorb neutrons traveling at a particular speed
  - (iii) to cause a rapid chain reaction in order to release the greatest amount of energy.
- (b) Destructive weapons can be obtained from
- (i) nuclear fusion
  - (ii) nuclear fission
  - (iii) both nuclear fission and nuclear fusion

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1. These deaths need have occurred.
2. In 1984 alone, about half a million children were saved by these revolutionary techniques.
3. ORT, simply a drink of water, sugar and salt, costs practically nothing.
4. Over the next five years, ORT could spread to half the world's families, saving the lives of some two million children each year.
5. Each year, more than four million young children die from diarrheal dehydration.
6. Today, 38 nations have begun large scale production of oral rehydration salts.
7. A low cost technique called Oral Rehydration Therapy (ORT) could probably have saved their lives.
8. It is simple enough for any parent to prepare.

25.b) Rearrange the jumbled up sentences into a coherent, logical paragraph.

(OR)

3. Read the following statements and state whether they are "True" or "False"
- (a) The hydrogen bomb is a good example of nuclear fission
  - (b) A few elements alone are suitable for use as nuclear fuels
  - (c) Nuclear energy depends upon the supply of fossil fuels
  - (d) An atomic power supply can supply the same quantity of energy throughout the year.
  - (e) A hydro-electric power station can be built anywhere.
  - (f) The sun's energy is released by the process of nuclear fusion.
- (c) One of the functions of a moderator is
    - (i) to speed up the nuclear reaction
    - (ii) to slow down the speed of free neutrons
    - (iii) to slow down the splitting of an atom
  - (d) A violent nuclear explosion can destroy a whole town
    - (i) within a few hours
    - (ii) within a few minutes
    - (iii) within a few seconds
  - (e) Nuclear fission gets repeated
    - (i) when a group of neutrons enter the nucleus of the adjoining atom
    - (ii) when one of the neutrons enters the nucleus of the adjoining atoms
    - (iii) when two or three neutrons go away from the adjoining atoms.