

B.E/B.Tech DEGREE EXAMINATION, Jan 2009
First Semester
HS2111 – TECHNICAL ENGLISH - I
(Regulation 2009)

Time : 3 hours

Maximam Marks:100

PART A (10 x 2 = 20 MARKS)

1.Match the words in column A with their meanings in column B

- | A | B |
|---------------------|--|
| a) Permeability | i) not belonging to the earth |
| b) Core | ii) abnormal accumulation of people, traffic |
| c) Extraterrestrial | iii) passing through |
| d) Congestion | iv) an additional thing |

2. Using suitable prefixes like “micro-: and “under-“ get the correct word:

- a) A living creature which is too small to be seen is _____
- b) A building with too many floors is _____
- c) A persons who does not have enough nourishment is _____
- d) A person who does not have enough work is _____

3. Change the following into active voice

- a) Alternative sources of energy have to be used by us to tide over the energy crisis.
- b) The prices of essential commodities must be brought down by the authorities.

4. Define TWO of the following in a single sentence each:

- a) Solar cell (b) mobile phone (c) lunar eclipse.

5. Fill in the blanks with suitable prepositions:

A snowflake originates _____ countless water molecules that initially come together _____ small groups as a result _____ a weak force _____ oxygen and hydrogen atoms.

6.Expand the following compound nouns:

- a)Software engineer.
- b)Pocket calculator
- c)Computer education
- d)Flight information.

7.Fill in the blanks with the appropriate forms of words:

- | Verb | Noun | Adjective |
|----------|---------------|-----------|
| Consider | Consideration | _____ |

_____	Protection	protective
Describe	description	_____
Imagine	Imagination	_____

8. Use TWO of the following phrase in separate sentences of your own:

a) generated by:

b) derived from

c) get rid of

9. Complete the following:

a) If the economic downtrend continues _____

b) _____, global warming would have been reduced.

10. Fill in the blanks with suitable tense form of the verbs given in brackets:

Weather is created by the heat of the sun. When the sun ___(shine) on the earth, the air close to the surface _____(heat up). The higher it _____(go), the cooler it _____*become).

PART B (5 x 16 = 80 MARKS)

11. Read the following passage carefully and answer the questions given at the end of it.

The study of control processes in electronic, mechanical, and biological systems is known as cybernetics. The word was coined in 1948 by the American mathematician Norbert Wiener from the Greek word meaning pilot or steersman. Cybernetics is concerned with the analysis of the flow of information in both living organisms and machines, but it is particularly concerned with systems that are capable of regulating their own operations without human control.

Automatic regulation is accomplished by using information about the state of the end product that is fed back to the regulating device, causing it to modify or correct production procedures if necessary. The concept of feedback is at the very heart of cybernetics and is what makes a system automatic and self-regulating machine is a thermostat, which reacts to continual feedback about the outside temperature and responds accordingly to achieve the temperature that has been programmed into it.

The applications of cybernetics are wide reaching, appearing in science, engineering, technology, sociology, economics, education and medicine. Computers can keep a patient alive during a surgical operation making instantaneous modifications based on a constant flow of information. In education, teaching machines use cybernetic principles to instruct students on an individual basis. In the home, automation is present in such everyday products as refrigerators,

coffeemakers, and dishwashers. In industry, automation is increasing its applications, although it is currently applied primarily to the large-scale production of single units. In industries in which a break in the flow of production can ruin the product, automatic controls are invaluable. Chemical and petroleum plants are now almost completely automatic, as are industries involved in the production of chemicals and atomic energy. Automation has become the answer when human safety is the number one priority.

a) Choose the correct answer:

i) Cybernetics is the study of control processes in all of the systems except

1) ecological 2) biological 3) mechanical 4) electronic

ii) The word cybernetics was coined from the Greek word meaning

1. information 2) automatic 3) pilot 4) regulator.

iii) Automatic regulation is accomplished by

1. modifying and correcting production procedures
2. feeding information to the regulatory device
3. Analyzing the flow of information to the organism.
4. Modifying cybernetic principles.

iv) Cybernetics is primarily concerned with systems that

1. are controlled by humans
2. analyze flaws of information
3. are self-regulating
4. have wide reaching applications.

v) What makes a system automatic and self-regulating?

1) Technology 2) Engineering 3) philosophy 4) education.

b) Mention whether the following statements are True or False

- 1) Cybernetics is the study of all systems
- 2) Free flow of information is the key to self-regulation
- 3) Teaching machines can replace teachers.
- 4) Automation is useful to housewives also.
- 5) Human safety in industries cannot be ensured without automation.
- 6) Automation in industries is primarily used in producing small

Amounts of many different products.

c) Choose the appropriate definition for the given words or phrases as they are used in the text:

i) Continual

a) with pause b) without pause c) new again d) renewal

ii) Reaching

a) arriving b) striking out c) stretching out d) making

iii) Instantaneous a) simultaneous b) delayed c) immediate d) mediate.

iv) Ruin

a) destroy b) disable c) disadvantage d) decipher.

12. a) Write a set of eight instructions that could be followed by students in the College library.

OR

b) Write a set of eight instruction that could be followed by students in the examination hall.

13. a) Describe the uses of iron in two paragraphs, each in about 100 words.

OR

b) Describe a communication tower, preferable that of the cell phone, in two paragraphs each in about in 100 words.

a) Write a letter to the editor of a newspaper in your region about the ragging Menace in educational institutions and suggest ways to prevent them.

OR

b) Write a letter to the District Collector in your area requesting him to inaugurate the NSS Camp in a village adopted by your college for the purpose of rural development.

15. Given below are two passages in jumbled order. Rearrange ONE of them into a coherent paragraph.

a) (i) On the slopes great swaths of trees were blown away from the mountain and tossed in heaps.

b) However, beneath the tranquil sylvan paradise, molten magma was slowly rising to the surface of the earth, eventually forming a mushroom-shaped lava dome that exploded with the force of 10 million tons of TNT at 8.30 a.m., throwing nature into upheaval.

c) Fires burned everywhere.

- d) A century of volcanic inactivity has made Washingtonians complacent.
- e) in the aftermath, what had been pristine beauty only hours before lay in total devastation.
- f) Billowing hot molten rock avalanches swept down the flanks of the mountain, mowing down every thing in their paths.
- g) A hot plume of ash and debris rose 65,000 feet into the sky, turning day into night.
- i) Spirit Lake boiled, and rivers turned black.

OR

- b) i) When completely satisfied with its new mobile home, the hermit crab will emerge one last time, turn the shell over and make a final entrance.
- ii) Once the shell's opening has been located, the crab uses its claws to remove an foreign material before preparing to enter.
- iii) The hermit crab may encounter empty shells in the course of their daily activity, but the vacant shell is usually spotted by sight.
- iv) It rises the opening, flexes its abdomen, and enters the shell backward.
- v) Its visual response increases with the size of an object and its contrast against the background.
- vi) If the size is right, the crab investigates its shape and texture by rolling it over between its walking legs and running its claws over the surface.
- vii) The shell interior is monitored by the abdomen and enters the shell backward.
- viii) It then sizes the shell with its walking legs and climbs on it. Monitoring its size.