APPENDIX 3

B.E./B.Tech. DEGREE EXAMINATION,
MAY 2000.

Second Semester

SH 002 — ENGLISH — II
(Common to all branches)

Time: Three hours
Maximum: 50 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Write the stressed syllables in the following words:
   (a) proposition
   (b) impediment
   (c) statutory
   (d) information.

2. (a) Give the American spelling for the following words:
   (i) pretence
   (ii) plough.
(b) Give the American equivalent of the following words:

(i) public house

(ii) luggage.

3. Match the following words in Col. A with their meanings in Col. B:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) replenish</td>
<td>(i) classification of things</td>
</tr>
<tr>
<td>(b) regimen</td>
<td>(ii) native</td>
</tr>
<tr>
<td>(c) taxonomy</td>
<td>(iii) to fill again</td>
</tr>
<tr>
<td>(d) indigenous</td>
<td>(iv) a systematic course of action</td>
</tr>
</tbody>
</table>

4. Certain words can act both as a past tense form in one sense and as a present tense form in another sense of meaning:

Example: fell — He fell from the tree yesterday. (past)

She doesn't want to fell the tree (present)
Write two sentences for each of the following words to bring out the differences in meaning as illustrated above.

(a) found (b) lay.

5. Supply the correct forms of the verbs given in brackets:

The man (stop) the car and (come) to me. He (say) that he (not see) me because he (been) lost in admiration of the scenery. He (take) out his brief case and (give) me some money. He said that the dog was dead and there (be) nothing we (can) do about it.

6. Complete the following sentences:

(a) If television had not been invented ........

(b) If we were always to tell the exact truth ..........

7. Fill in the gaps with suitable prepositions:

People tend —— depend —— newspapers and more —— electronic media —— international and foreign news and —— look —— newspapers more —— local coverage. However, people could get only capsule-bits —— information.
8. Correct the mistakes in the following passage:

Agravation of currant constraints would spel disaster for the inviting prospectus now looming large in the horyzen. A possitive approach is called for to revurse the negative trund.

9. Convert the following words into verbs by adding suffixes and making consequent changes:

(a) hyphen (b) real (c) random (d) example.

10. Re-write the following in reported speech.

Paterson got out of the car and said to the man, ‘I’m very sorry. It was my mistake. I didn’t see you, as I was lost in the beauty of the place.

PART B — (5 x 6 = 30 marks)

11. Read the text given and answer the questions that follow:

OPTIMUM CONVERSION

Unlike the scientist, the engineer is not free to select the problem which interests him; he must solve the problems as they arise, and his solutions must satisfy conflicting requirements. Efficiency costs money, safety adds complexity, performance increases weight. The engineering solution is the optimum solution, the most desirable end result taking into account many factors. It may be the cheapest for a given performance, the most reliable for a given weight, the simplest for a given safety, or the most efficient for a given cost. Engineering is optimizing.
To the engineer, efficiency means output divided by input. His job is to secure a maximum output for a given input or to secure a given output with a minimum input. The ratio may be expressed in terms of energy, materials, money, time, or men. Most commonly the denominator is money; in fact, most engineering problems are answered ultimately in dollars and cents. Efficient conversion is accomplished by using efficient methods, devices, and personnel organizations.

The emphasis on efficiency leads to the large, complex operations which are characteristic of engineering. The processing of the new antibiotics and vaccines in the test-tube stage belongs in the field of biochemistry, but when great quantities must be produced at low cost, it becomes an engineering problem. It is the desire for efficiency and economy that differentiates ceramic engineering from the work of the potter, textile engineering from weaving, and agricultural engineering from farming.

Since output equals input minus losses, the engineer must keep losses and waste to a minimum. One way is to develop uses for products which otherwise would be waste. The work of the chemical engineer in utilizing successively greater fractions of raw materials such as crude oil is well known. Losses due to friction occur in every machine and in every organization. Efficient functioning depends on good design, careful attention to operating difficulties and lubrication of rough spots, whether they be mechanical or personal.
The raw materials with which engineers work seldom are found in useful forms. Engineering of the highest type is required to conceive, design, and achieve the conversion of the energy of a turbulent mountain stream into the powerful torque of an electric motor a hundred miles away. Similarly many engineering operations are required to change the sands of the seashore into the precise lenses which permit us to observe the microscopic amoeba in a drop of water and study the giant nebula in outer space. In a certain sense, the successful engineer is a malcontent always trying to change things for the better.

Complete the sentences by choosing the most suitable response from the options given

(a) The main idea of the opening paragraph is that

(i) the scientist is superior to the engineer in terms of the nature of their work

(ii) the work of the engineer involves complexity, high cost, and increased work-load in order to secure efficiency

(iii) The task of the engineer is to secure a given output with a given input.
(iv) the engineer adopts cost effective methods.

(b) 'efficient conversion' means,

(i) the rapid conversion of inputs into output.

(ii) efficiency in engineering operations

(iii) the efficient change of methods, devices and personnel

(iv) optimization of energy input.

(c) Textile engineering and ceramic engineering are differentiated from weaving and pottery because

(ii) weaving and pottery are cottage industries

(ii) the former are efficient while the latter are economical

(iii) the former involve complex machines while the latter use simple tools

(iv) these two groups differ in terms of their sheer output.
(d) a successful engineering operation involves

(i) production of waste materials for re-use

(ii) optimum use of the raw materials

(iii) development of uses for products which otherwise would be waste

(iv) avoidance of friction in every machine.

(e) State whether the following statements are true or false:

(i) it is always true that efficiency costs money, safety adds complexity and performance increases weight.

(ii) more engineering problems ultimately cost more money

(iii) optimum conversion depends on efficient engineering

(iv) engineering of the highest type is required to achieve conversion of energy.
(f) Match the following underlined words in Col. A with their meanings in Col. B.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>conflicting requirement</td>
<td>maximum degree</td>
</tr>
<tr>
<td>optimum solution</td>
<td>to the last part</td>
</tr>
<tr>
<td>greater fraction</td>
<td>required further</td>
</tr>
<tr>
<td>malcontent</td>
<td>diametrically different</td>
</tr>
</tbody>
</table>

12. Write a paragraph in not more than 150 words, on any ONE of the following:

(a) The importance of the invention of printing.

Or

(b) The influence and effect of 'information technology' on human life.

13. (a) Write a letter to the editor of 'The Hindu' about the problems of atmospheric pollution in Chennai city and recommendations for tackling the problems.

Or
(b) Write a letter to the editor of the local newspaper, complaining of the decline in the reading habit of children to-day because of the influence of television.

14. (a) You are a company executive. You are proceeding on a business trip abroad. Prepare a checklist of at least six important items to ensure the smooth functioning of the company in your absence.

Or

(b) You are the works Manager of a manufacturing company, manufacturing glass items. Write a set of at least six instructions to the workers as a safety measure.

15. (a) Two sets of jumbled sentences are given below. Reorder any ONE set and write it down as a coherent paragraph.

(i) This was a vast improvement over the conventional communication lines and equipment like the telephone, telex or the fax.

(ii) Initially computers were used as machines for data storage and retrieval in terms of their volume and speed; technological innovations such as the 'Modems' have ushered them into the communication arena.
(iii) The advent of computers has added a new dimension to areas both of office automation and communication.

(iv) Their main function is to convert computer data (binary signals) to speech signals so that they could be transmitted through a telephone line and reconvert them to computer data to be received by a computer at the other end.

(v) These media agents inherited a certain inherent disadvantages such as disturbances caused during transmission, clashing of signals on the line, above all long delays in finding access to these lines.

(vi) Modems serve the basic purpose of permitting two or more computers to communicate with one another and were earlier called 'acoustic couplers'.

Or

(b) (i) Brackish water is salty, but does not have as much salt, as the sea; for instance, it will be found some way up a river estuary where sea and river water are mixed.

(ii) The most direct way to do this is to distil it—turn it into steam, and then condense the steam.
(iii) A third method is to make the separation by freezing, the ice being almost pure; while a fourth method, which relies on high pressure, is called reverse osmosis.

(iv) Sea water can be used for a supply of potable (or drinking) water if it can be separated from the salt dissolved in it.

(v) Another method of getting rid of salt is by electrodialysis – an electrical method which is most promising when the water is brackish.

(vi) In the past, distillation has always been too expensive; but a great deal of success in cheapening the process has been achieved in the last few years.