

**D 4521**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Annual Pattern — First Year

(Regulation 2004)

Civil Engineering

HS 1X01 — TECHNICAL ENGLISH

(Common to All Branches)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

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

A

B

- |               |                 |
|---------------|-----------------|
| (a) objective | (i) unstable    |
| (b) volatile  | (ii) dangerous  |
| (c) abundant  | (iii) extensive |
| (d) hazardous | (iv) aim        |
|               | (v) plentiful   |

2. Change the following into impersonal passive :

- (a) Avoid cell phone while driving
- (b) Save enough money for future.
- (c) Place the beaker on the desk.
- (d) Apply science to solve human problems.

3. Fill in the blanks with suitable tense forms of the verbs given in brackets :

Thinking ahead ——— (be) the privilege given to man alone. Man ———  
(learn) from the past experience, ——— (analyze) the present and ——— (plan)  
for the future.

4. Form nouns from the following words using suitable suffixes:

- (a) amend
- (b) specific
- (c) inactive
- (d) generalize.

5. Expand the following compound nouns :

- (a) information technology
- (b) energy source
- (c) video screen
- (d) recruitment procedure

6. Use TWO of the following expressions, showing cause and effect relationship in sentences of your own :

- (a) On account of,
- (b) Because of,
- (c) As a result of

7. Edit the following :

Today a small piece of plastic enables you to make a telephone calls from anywhere in the world to anyone in the world. A mobile phone no biggest than a playing card would electronically transmit words to a computer screen, send a fax and receive replys on its tiny screen. Technology that was once science fiction is now with you.

8. Combine the following to indicate purpose:

- (a) He went to Harvard University. He got his M.S. Degree.
- (b) The scientist observed the sky. He discovered a new star.

9. Fill in the blanks with suitable prepositions :

The ozone layer filters sunlight and prevents adverse ultraviolet radiation \_\_\_\_\_ reaching the earth's surface. The UV-B radiation is a harmful form \_\_\_\_\_ ultraviolet radiation \_\_\_\_\_ a wavelength \_\_\_\_\_ 280 and 320 nanometers.

10. Rewrite the infinitives as gerunds :
- (a) To train young graduates is easy.
  - (b) To visit China will open new avenues of business.
  - (c) To make mistakes is human.
  - (d) It is tiresome to stand in long queues.

PART B — (5 × 16 = 80 marks)

11. Read the following passage carefully and answer the questions given at the end of it: (1 × 16 = 16)

Professor Gavraud is an engineer who almost gave up his post at an institute in Marseilles because he always fell ill at work. He decided against leaving when he discovered that the recurrent attacks of nausea only worried him when he was in his office at the top of the building. Thinking that there must be something in the room that disturbed him, he tried to track it down with devices sensitive to various chemicals, and even with a Geiger counter, but he found nothing until one day, just as he was about to give up, he leaned back against the wall. The whole room was vibrating at a low frequency. The source of this energy turned out to be an air-conditioning plant on the roof of the building across the way, and his office was the right shape and the right distance from the machine to resonate in sympathy with it. It was this rhythm, at seven cycles per second, that made him sick.

Fascinated by the phenomenon, Gavraud decided to build machines to produce infrasound so that he could investigate it further. In casting around for likely designs, he discovered that the whistle with a pea in it issued to all French gendarmes produced a whole range of low-frequency sounds. So he built a police-whistle six feet long and powered it with compressed air. The technician who gave the giant whistle its first trial fell down dead on the spot. A post-mortem revealed that all his internal organs had been mashed into a jelly by the vibrations.

Gavraud went ahead with his work more carefully and did the next test out of doors, with all observers screened from the machine in a concrete shelter. When all was ready, they turned the air on slowly — and broke the windows of every building within a half mile of the test site. Later they learnt to control the strength of the infrasound generator more effectively and designed a series of smaller machines for experimental work. One of the most interesting discoveries to date is that waves of low-frequency can be aimed and that two generators focused on a particular point even five miles away produce a resonance that can knock a building down as effectively as a major earthquake. These frequency -7 machines can be built very cheaply.

(a) Choose the correct answer :

(4 × 1 = 4)

(i) Professor Gavraud fell ill because

- (1) there were chemicals in his room
- (2) his office was too high up
- (3) he was affected by vibrations
- (4) he was a very sensitive man.

(ii) He constructed a very large copy of a police whistle because he wanted to

- (1) produce low-frequency sounds
- (2) improve its design
- (3) compare it with an organ
- (4) see the effect it had on people.

(iii) The first experiment with the machine

- (1) caused a major earthquake
- (2) broke all the windows in nearby buildings
- (3) made a noise like an organ
- (4) killed the man who switched it on.

(iv) Which of the following precautions was not taken by Professor Gavraud in his second experiment?

- (1) The observers were protected by a concrete shelter.
- (2) The experiment was done outside.
- (3) The compressed air was turned on slowly.
- (4) A smaller machine was used.

(b) Mention whether the following statements are True or False: (6 × 1 = 6)

- (i) Professor Gavraud left his job because he felt sick.
- (ii) The cause of the sickness was not in his room.
- (iii) The air-conditioning plant had nothing to do with his sickness.
- (iv) The result of the first trial was worrying.
- (v) He did his second test indoors.
- (vi) Later on he designed even bigger generators.

(4 × 1 = 4)

because he

by Professor

r.

(6 × 1 = 6)

sickness.

(c) Choose the appropriate definition for the given words or phrases as they are used in the text: (6 × 1 = 6)

- (i) infrasound
  - (1) high frequency sound
  - (2) low frequency sound
  - (3) medium frequency sound
  - (4) heavy frequency sound.

- (ii) to track down
  - (1) to smell
  - (2) to detect
  - (3) to examine
  - (4) to remove.

- (iii) to give up
  - (1) to go on
  - (2) to stop
  - (3) to collapse
  - (4) to find out.

- (iv) turned out to be
  - (1) was shown to be
  - (2) was intended to be
  - (3) was thought to be
  - (4) was known to be.

- (v) casting around
  - (1) looking for
  - (2) hoping for
  - (3) asking for
  - (4) sending for.

- (vi) went ahead
  - (1) delayed
  - (2) proceeded
  - (3) hurried
  - (4) changed.

12. (a) Assume that you bought a laptop from a reputed company in your town. Within a week of its purchase, you find that it gives you trouble. Write a letter of complaint to the company asking for replacement of the laptop. (1 × 16 = 16)

Or

- (b) Imagine that you have paid your semester fees to your college. To your surprise you find that your name has been omitted from the roll. Write a letter to your principal explaining the problem and giving the details of your payment to the college. (1 × 16 = 16)
13. (a) Write a letter to the HRD Manager of Karur Vysya Bank, Anna Salai, Chennai – 600 017, applying for the post of System Manager. Add a separate résumé to your covering letter. (1 × 16 = 16)

Or

- (b) Write a letter to the editor of a leading English newspaper about the sufferings of office goers and school children who use the public transport. (1 × 16 = 16)
14. (a) Write a list of eight recommendations for improving health services in Government hospitals. (1 × 16 = 16)

Or

- (b) Write a list of eight instructions for maintaining houses in good condition. (1 × 16 = 16)
15. Given below are two sets of jumbled sentences. Rearrange ONE of them into a coherent paragraph : (1 × 16 = 16)

- (a) (i) There are a lot of churches, and one or two really large interesting buildings, such as the Ashmolean Museum, the 'round' library, the Bodleian and the Radcliffe Camera, with its domed roof.
- (ii) There is, in fact, quite a lot of industry in Oxford.
- (iii) As you leave the centre and go towards the outskirts of Oxford you can see industrial estates and a car factory in one direction, and in another, attractive suburbs.
- (iv) Like all English towns, there are parks, and 'The Parks' is the leafy home of university cricket in the summer months.
- (v) Oxford is an exceptionally old university town, on the River Thames, about 60 miles from London.
- (vi) In the centre you can also find interesting old stores and paved passages.

(vii) All around the crossroads at the very heart of Oxford, Carfax, there are grey stone Colleges and other university buildings.

(viii) Unlike modern university towns, where you usually find the university on the edge of the town, or on its own campus, Oxford's centre is the university.

Or

(b) (i) Near these, tucked into a corner, there is a children's playground with swings, seesaws and model vehicles.

(ii) One of the pleasant features of the park is the fact it is surrounded by trees.

(iii) On the other side of the park from the river there are more sports facilities; three tennis courts and a bowling lawn.

(iv) And there are flowerbeds with interesting shrubs and flowers.

(v) An attractive path runs beside the river.

(vi) On one side of the park, however, there is a patch of trees through which a river winds.

(vii) As parks go, Mappin Park is large.

(viii) Most of the flat ground is taken up by three football pitches and two rugby pitches.

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