Question Paper Code : 27298

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Second Semester

Civil Engineering

HS 6251 — TECHNICAL ENGLISH – II

(Common to all Branches except Marine Engineering)

(Regulations 2013)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Rewrite the following as numerical expressions: $(4 \times \frac{1}{2} = 2)$

    (a) warranty for three years   (b) a strike for two days

    (c) a book with 250 pages   (d) a course which lasts for six weeks

.2. Use the following homonyms and frame two sentences to show the difference in the meanings : $(2 \times 1 = 2)$

    (a) row

    (b) bark

3. Complete the following conditionals with correct forms of the verbs : $(4 \times \frac{1}{2} = 2)$

    (a) They ————————(help) you if they could.

    (b) If I ———————— (go) away, I would have met you at the party.

    (c) If you arrive early, you ———————— (have) to wait as I need to finish my packing.

    (d) She would have come if you ———————— (invite) her.

4.   Rewrite the following in their passive form :   (2)

A college student found a suspicious suitcase near a bus station. He handed it over to the police officer.

5.   Fill in the blanks with suitable modal verbs: $(4 \times \frac{1}{2} = 2)$

(need, can, ought, have to be, may, should)

A: Hi, Mr. Kumar. I hope you don't mind me calling but I'd like to ask a few questions about the job.

B: Okay, fire away.

A: Right, the advert asks for computer skills. Do I ——————— an expert?

B: Well, you don't have to be a programmer, but you ——————— know the basics.

A: Oh, that's great. Now the advert also says that you ——————— someone with good language skills. I speak English of course, my Tamil is good and I ——————— speak some Hindi. Is that adequate?

B: That is very useful. Please do apply for the job at the earliest.

6.   Make sentences using any TWO of the following phrasal verbs : $(2 \times 1 = 2)$

(a)   look into

(b)   get together

(c)   turn up

(d)   put off

7. Combine the given two sentences into one sentence using appropriate words.

(2 × 1 = 2)

(a) He was sitting in the auditorium. It was very crowded.

(b) The doctor treated the patient. She was very serious.

8. Choose the right option to complete the given idiomatic sentences. (4 × $\frac{1}{2}$ = 2)

(a) I've been in Aakash's good books ever since I

(i) crashed his car   (ii) fixed his computer

(iii) lost his mobile phone   (iv) misplaced his lab record notebook

(b) Suraj thinks he got a raw deal from his company, so he's writing a letter.

(i) to thank them   (ii) to complain to them

(iii) to congratulate them   (iv) to apologise to them

(c) Our school's basketball team is going great guns in the tournament. They have

(i) lost every game

(ii) won two out of four games

(iii) won every game

(iv) won the first game in this tournament

(d) You can see that Nisha has got a soft spot for dogs. Whenever she sees one, she

(i) kicks it   (ii) pats it on the head

(iii) keeps away from it   (iv) is scared

9. Fill in the blanks with right options to complete the collocations. $(4 \times \frac{1}{2} = 2)$

(a) He tried to —————— her some advice but she wouldn't listen.

    (i) give   (ii) suggest

    (iii) recommend   (iv) take

(b) She's slowly getting —————— after the accident.

    (i) better   (ii) ok

    (iii) well   (iv) healthy

(c) Castles are a —————— sight in Spain.

    (i) frequent   (ii) common

    (iii) usual   (iv) typical

(d) Cutting out sugar from his diet is —————— on his list.

    (i) top   (ii) big

    (iii) up   (iv) high

10. Choose any ONE word from the following and write two sentences using the same word, one in the noun form and the other in verb form. (2)

(a) coach   (b) light

(c) show

PART B — (5 × 16 = 80 marks)

11. Answer both (a) and (b) for Question No. 11 :

   (a)   Read the following passage and answer the questions given below:

   Reading is becoming more and more important in the new knowledge economy and remains the most effective human activity for transforming information into knowledge.

   If top readers read at speeds of above 1000 words per minute (wpm) with near 85% comprehension, they only represent 1% of readers. Average readers are the majority and only reach around 200 wpm with a typical comprehension of 60%. This seems surprising since most readers, actively reading work documents, newspapers, magazines, books or the contents of a computer display are practicing daily for at least one hour. With such an intense training everyone should be close to top performances.

   Unfortunately, this is far from the real situation. The average reader is five times slower than the good reader. Things are even worse if we consider reading efficiency as well as speed. Reading efficiency is reading speed weighted by comprehension rate and it amounts to 200 × 60% or 120 efficient words per minute (wpm) for the average reader and to 1000 × 85% or 850 ewpm for top readers. Thus, an efficiency ratio of seven divides these two categories.

   Compare the results of the average reader to other areas. We may imagine a sprinter practicing every day for several years on the running track and then just calmly walking for a race. We can also picture a racing driver never exceeding 30 mph or a pianist playing every day of the week for 20 years and only able to play music like a beginner. Unfortunately, since the age of 12, most readers do not substantially improve their efficiency and never reach their full capacity.

Every computer-user who is also a slow typist is aware of the benefits he could obtain with a typing course, but nearly no one suspects the much higher profits he could reach by improving his reading comprehension and speed. The rapid improvement of voice recognition may gradually make typing virtuosity obsolete since a good typist performs well under the speed of speech. On the other hand, human or computer speaking, with an average speed of 150 wpm, will always remain many times slower than a good reader, without any consideration of the skimming and skipping possibilities.

There are three possible ways to improve reading. The fastest is probably a speed reading seminar based upon good materials and animated by a dynamic instructor. It is quite usual for a slow reader to double and even triple his reading efficiency during a two-day class offering a positive atmosphere, carefully selected texts and comprehension tests. However, as this rapid and encouraging improvement is not sufficiently anchored, it often fades with time.

A book about speed reading is the second possibility. Such a book usually provides speed and comprehension tests as well as techniques to improve reading. It often includes more general information about concentration, interest stimulation, skimming techniques and ways to approach a text. Some methods may include audio or videocassettes. A book-based method requires a good deal of time as well as a strong commitment from the reader.

Finally, a speed reading computer program is probably the most efficient way to achieve top reading levels. Computers offer unique exercises to boost reading efficiency through interactivity, text animation and pacing. Higher reading skills obtained with a computer screen are totally transferable to reading from paper. Unfortunately the inverse way does not work so well. Speed reading software delivers enjoyable and fast paced training, thus giving the consistent practice necessary to break lifelong slow reading habits. This is the task that seminars and speed reading books usually leave up to the reader.

Answer the following questions: (6 × 1 = 6)

(i)   Compared to average reader, the accomplished reader reads with

       (1)   Higher speed and worse reading comprehension

       (2)   Higher speed and better reading comprehension

       (3)   Higher speed and same reading comprehension

       (4)   Higher speed and low reading comprehension

(ii)   Readers reading above 1000 wpm

       (1)   are average readers

       (2)   are the majority of readers

       (3)   are the 1% minority

       (4)   are slow readers

(iii) The average speaking speed of a race driver is around

       (1)   120 mph   (2)   150 wpm

       (3)   100 wpm   (4)   200 wpm

(iv) What will lessen the importance of fast typing?

   (1) More ergonomic keyboards

   (2) Good keyboards

   (3) Progress in voice recognition

   (4) Spelling-checkers

(v) A speed reading seminar or book lacks

   (1) Rapid results   (2) Consistent practice

   (3) Deep explanations (4) Expert advice

(vi) What is probably the best way to reach top level reading efficiency?

   (1) a speed reading software

   (2) a speed reading book

   (3) a speed reading workshop

   (4) a speed reading seminar

(vii) Prepare a checklist of 4 items to test whether a person is able to read efficiently and with adequate speed.   (4)

(b) Look at the following table about the profits of Oil Companies. Analyse the given data and give a short review of the performance of these companies in a short paragraph of not more than 120 words.   (6)

OIL COMPANY PROFITS

The following table shows the net income of Oil Companies from the year 2008 to 2012. This income is total revenue minus all costs of operation, interest on debt, and taxes. Net income is the amount available to management to use for providing a return to shareholders. Net incomes of five major oil companies generally follow the behaviour of oil prices. There were losses due to oil spill or war in these years.

Table: Net Income of the Five Major Oil Companies

	2008	2009	2010	2011	2012
ExonMobil	40,610	45,220	19,280	30,460	41,060
Chevron	18,688	23,931	10,483	19,024	26,895
BP Oil	17,287	25,593	16,578	−3,719	25,700
Royal Dutch Shell	27,564	26,277	12,518	20,127	28,625
ConoPhilips	11,891	−16,998	4,858	11,358	12,436
Total	1,16,040	1,04,023	63,717	77,250	1,32,916

Source: Oil Daily, Oil Business Magazine, Oil Gazette

12. (a) Read the following passage and answer the questions given below :

Hybrid Vehicles

A hybrid vehicle is a vehicle which uses two or more kinds of propulsion. Most hybrid vehicles use a conventional gasoline engine as well as an electric motor to provide power to the vehicle. These are usually called hybrid-electric-vehicles, or HEVs. Hybrids use two types of propulsion in order to use gasoline more efficiently than conventional vehicles do. Most hybrid vehicles use the gasoline engine as a generator which sends power to the electric motor. The electric motor then powers the car. In conventional vehicles, the gasoline engine powers the vehicle directly.

Since the main purpose of using a hybrid system is to efficiently use resources, most hybrid vehicles also use other efficient systems. Most hybrid vehicles have regenerative braking systems. In conventional vehicles, the gasoline engine powers the brakes, and the energy used in braking is lost. In regenerative braking systems, the energy lost in braking is sent back into the electrical battery for use in powering the vehicle. Some hybrid vehicles use periodic engine shut-off as a gas-saving feature. When the vehicle is in idle, the engine temporarily turns off. When the vehicle is put back in gear, the engine comes back on. Some hybrids use tires made of a stiff material which rolls easily and prevents dragon the vehicle.

Hybrid vehicles save up to 30% of the fuel used in conventional vehicles. Since hybrid vehicles use less gasoline, the cost of operating them is less than the cost of operating conventional vehicles. Therefore, hybrid vehicles are gaining in popularity. According to a recent study, over the five years it typically takes for a person to pay for a car, a typical hybrid car driver would save over $6,000 in gasoline costs. Almost all the world's major automakers are planning and producing safe and comfortable hybrid vehicles to meet the demand for these increasingly popular vehicles.

Although hybrid vehicles do represent a marked improvement in environmentally conscious engineering, there still remains one significant potential drawback: battery disposal. Batteries are difficult to dispose of in an environmentally safe manner. To properly dispose of the battery in a hybrid car requires substantial effort. If the battery is not disposed of properly, the environmental impact of a hybrid car can be equal, if not greater than, that of a regular gas only car.

Since hybrid vehicles use less gasoline than conventional vehicles, they put fewer emissions into the atmosphere than conventional vehicles do. As hybrids become more popular, conventional vehicles are being used less, and the level of emissions being put into the air is decreasing. Hybrid vehicles are an example of an energy-efficient technology that is good for both consumers and the environment.

(i) Write a short summary of the above given passage in not more than 80 words. (6)

(ii) Complete the following sentences with NO MORE THAN THREE WORDS (4)

    (1) HEVs use two type of propulsion mainly in order to _____.

    (2) Hybrid vehicles are more socially responsible vehicles to operate because _____.

    (3) In regenerative braking system, the energy lost _____.

    (4) One of the drawbacks of hybrid vehicles is _____.

(iii) Answer the following questions in two sentences : (3 × 2 = 6)

    (1) How is a hybrid vehicle different from conventional vehicle?

    (2) Why are hybrid vehicles gaining popularity nowadays?

    (3) What are the major benefits in using hybrid vehicles?

Or

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(b) Read the following passage and answer the questions given below :

Canary Islands Earthquake Could Trigger Monster Tsunami

The eruption of a volcano in the Canary Islands could trigger a "mega-tsunami' that would devastate Atlantic coastlines with waves as high as 330 feet, scientists said on Wednesday. They said an eruption of the Cumbre Vieja volcano on La Palma, part of the Spanish island chain off West Africa, was likely to cause a massive chunk of rock to break off, crashing into the sea and kicking up huge walls of water higher than any other in recorded history.

The tsunami would be capable of traveling huge distances at up to 500 miles an hour, the scientists said in a research paper to be published in September's Geophysical Research Letters. Simon Day, of the Benfield Greig Hazard Research Centre at the University College of London, said that as the volcano was not erupting at present, the short-term and medium-term risks were "negligible". But Cumbre Vieja should be monitored closely for any signs of activity so that emergency services could plan an effective response, he said.

"Eruptions of Cumbre Vieja occur at intervals of decades to a century or so and there may be a number of eruptions before its collapse", said Day, who collaborated on the research with Steven Ward of the University of California. "Although the year-to-year probability of a collapse is therefore low, the resulting tsunami would be a major disaster with indirect effects around the world".

WEST SAHARA TO BEAR BRUNT

The effects would spread north, west and south of the Canaries, with the west Sahara bearing the worst of the wave's energy. The energy released by the collapse would be equal to the electricity consumption of the entire United States in half a year. Immediately after the landslide, a dome of water 93,000 feet high and tens of miles wide would form, only to collapse and rebound.

As the landslide rubble moved deeper under water, a tsunami would develop. Within 10 minutes, the tsunami would have moved a distance of almost 155 miles. On the west Saharan shore, waves would probably reach heights of 330 feet.

Florida and the Caribbean, the final north Atlantic destinations to be affected by the tsunami, would have to brace themselves for 165 foot waves some eight to nine hours after the landslide.

Wave heights toward Europe would be smaller, but substantial waves would hit the coasts of Britain, Spain, Portugal and France. The research paper estimated water would penetrate several miles inland and that the devastation would cause trillions of dollars in damage.

(i)   Write a short summary of the above given passage in not more than 80 words.   (6)

(ii)   Complete the following sentences with NO MORE THAN THREE WORDS   (4)

    (1)   When Cumbre Vieja volcano erupts ——————.

    (2)   The energy released during the eruption would be ——————.

    (3)   —————— would bear the worst if the Cumbre Vieja volcano erupts.

    (4)   The time taken for the tsunami to move nearly 150 miles are ——————.

(iii) Answer the following questions in 2 sentences :   (3 × 2 = 6)

    (1)   How would a volcano in Canary islands create a tsunami?

    (2)   What does the research conclude about the impact of Cumbre Vieja volcano eruption?

    (3)   Describe the tsunami caused by the Cumbre Vieja volcano eruption.

13. (a)   You have been called for an interview for a post of Management Trainee in one of the multinational companies which had come to your college for placement. Write the dialogue that would happen in the interview between you and the HR Executive. Assume that you have already cleared the written test and you are ready to work in any city. The first two dialogues are given for your reference.   (16)

HR Executive: Why are you taking up a job instead of doing your higher studies?

You: I would like to work for a few years and get some industry experience before going for higher studies.

You should have minimum of eight interactions (16 sentences) between you and HR Executive.

Or

(b)   You have recently become the Secretary of Robotics club in your college. You find the club using outdated documentation procedure. As a new Secretary of the Club, try to convince your Staff Co-ordinator to use advanced technology. This can make the job easier and faster in all Club activities. The first interaction is given for your reference.   (16)

Staff: When our traditional way of documentation has been effective so long, why should we go in for new methods?

You: Sir, our traditional methods were effective when we had a few students. But today we have hundreds of students joining our club.

You should have minimum of eight interactions (16 sentences) between you and the Staff Co-ordinator.

14. (a) Respond to the following advertisement with a job application letter and a resume. (16)

ENGINEERS REQUIRED

A well reputed Construction Company based at Mumbai requires the following personnel to be posted all over India.

Project Manager	1	B.E. CSE/IT 3-5 years experience in Programming
Production Manager	1	B.E. Mechanical 3 years experience in Production
Materials Manager	1	B.E. Mechanical/Material Science Freshers can apply
Quantity Surveyor	3	B.E. Civil 2 years experience in construction

Candidates should also possess a strong drive for achievement, meet goals on time, able to work in teams and focus on long term.

If you think you have all that what we are looking for, mail your CVs to Mr. Rishab Patel, HR Manager, IBMsoft, Pritvi Avenue, Gandhi Marg, Mumbai 400 009 within 7 days after the publication of this advertisement. Only shortlisted candidates will be called for interview.

The Hindu
April 15, 2014.

Or

(b) You have been working as a Software Engineer in a company called 'MacText Services' in Chennai for last three years. You come to know there is going to be a vacancy for Programming Head post in Bangalore branch. Write a letter of application to your Managing Director based in Mumbai evincing your interest for the post. List your achievements in your resume and outline what would you do if you were given the post. In your letter persuade your MD to consider you for the post. (16)

15. (a) You are working as Project Head in a company called PKR Communications. Your company is planning to start a sale and service outlet for mobile phones in your hometown. You have been asked to study the area, potential customers and give your opinion on the possibility of this venture in the form of a feasibility report. Your report should include suitability of the area, customer needs, competitors in this area and your suggestions. (16)

Or

(b) As part of Community Welfare Scheme, your college has started a Computer Awareness Programme among youth in nearby villages. As a member of this project you have been asked to give a detailed report on the status of your project to your college Dean. Your report should include the aim of the project, initiatives taken, goals achieved, and future plans and any other relevant issues. (16)

———————