

Question Paper Code : 37002

B.E./B.Tech. DEGREE EXAMINATION, JANUARY 2014.

First Semester

Civil Engineering

HS 6151 — TECHNICAL ENGLISH — I

(Common to all Branches)

(Regulation 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL the questions.

PART A — (10 × 2 = 20 marks)

1. Choose the most suitable option of the four given alternatives, to fill in the blanks in the following sentences: (4 × $\frac{1}{2}$ = 2)
- (a) The robot cannot be used as a _____ for the live teacher in the classroom.
- (i) Substitution
 - (ii) Surrogate
 - (iii) Replacement
 - (iv) Alternate.
- (b) The enormous _____ for power and the shortage of fossil fuels has driven us to look for alternatives.
- (i) demand
 - (ii) request
 - (iii) query
 - (iv) requisition.
- (c) There had been major changes observed in the _____ taken by the seismic monitoring machine in the few hours before the earthquake
- (i) measures
 - (ii) measurements
 - (iii) metrics
 - (iv) metres

(d) The astronauts made extensive notes of their _____ on their planetary mission.

- (i) considerations
- (ii) remarks
- (iii) references
- (iv) observations

2. Fill in the blanks with the appropriate forms of the words given: $(8 \times \frac{1}{4} = 2)$

Verb	Noun	Adjective
Extend		
	Alteration	
		Mechanical
Symbolise		

3. Fill in the blanks with suitable compound nouns forming them from the expanded forms given in brackets: $(4 \times \frac{1}{2} = 2)$

Sir Ronald Ross is remembered for his work on _____ (parasites which cause Malaria). He made his _____ (discovery that proved to be a landmark) while dissecting the _____ (tissue from the stomach) of an anopheline mosquito. He was able to prove his theory about the _____ (transmission of the disease) through this experiment.

4. Define any TWO of the following terms: $(2 \times 1 = 2)$

- (a) turbine
- (b) microscope
- (c) satellite
- (d) vaccine.

5. Fill in the blanks in the passage below with suitable imperative verbs choosing from the list given. $(4 \times \frac{1}{2} = 2)$

Tear, place, poke, fill, drop.

_____ a bowl with water. _____ a piece of tissue paper about half the size of a rupee note. Gently drop the tissue flat onto the surface of the water. Gently _____ a dry paper clip on the tissue, without touching the water or the tissue. Now _____ the tissue (not the paper clip) using the blunt end of a pencil till the tissue sinks leaving the paper clip floating!

6. Rewrite the following paragraph changing the tense of the underlined verbs from the past tense to the future. $(4 \times \frac{1}{2} = 2)$

Vincy was going to Rio, for the Olympics. She was competing in the marathon, which was just over 26 miles long. She did her best to achieve her goal of winning the gold medal.

7. The following sentences give step by step instructions to send an email attachment but they are not in order. With the help of the sequencing words rearrange them in the correct order: $(4 \times \frac{1}{2} = 2)$

- (a) You should then look for an icon in your email toolbar which looks like a paper clip and click on it.
- (b) A "Browse" window will open on clicking on this icon. Now you can locate and select the file you would like to attach and click on it. The file will then be attached to the email.
- (c) Finally you can click on "send" to send the email.
- (d) First you should create a new email message and enter the details of the recipient's address, subject and the message you would like to send.

8. Rewrite the following short conversation in the form of a reported speech: $(4 \times \frac{1}{2} = 2)$

Prakash: Sir, it's a remarkable plan. How do you plan to make your's a zero carbon city?

Minister: Our city will soon run entirely on renewable energy. Since we have a hot climate for almost nine months, we have solar panels to trap the sun's heat.

9. Complete the given cause effect statements from the information given in the following box: $(2 \times 1 = 2)$

Swamy was in his backyard climbing a tree. He climbed to the middle part of the tree and accidentally hit a beehive. Before he knew what had happened, bees were swarming all around and over him. Swamy let out a scream.

- (a) The bees stung Swamy since _____
- (b) Swamy screamed because _____

10. Complete with the correct question words: $(4 \times \frac{1}{2} = 2)$

- (a) How much does the project budget come up to? Over Rs.2 lakhs.
- (b) _____ is the library? Right across the road.
- (c) The entire college looks festive, _____ is coming as the chief guest? The Prime Minister himself.
- (d) _____ does this word mean? Sorry, I've never heard of it.

PART B — (5 × 16 = 80 marks)

11. Answer both the subdivisions (i) and (ii).

(i) Read the passage and answer the questions given below:

Throughout history, there have been instances in which people have been unwilling to accept new theories, despite startling evidence. This was certainly the case when Copernicus published his theory - that the earth was not the centre of the universe.

Until the early 16th century, western thinkers believed the theory put forward by Ptolemy, an Egyptian living in Alexandria in about 150 AD. His theory, which was formulated by gathering and organizing the thoughts of the earlier thinkers, proposed that the universe was a closed space bounded by a spherical envelope beyond which there was nothing. The earth, according to Ptolemy, was a fixed and immobile mass, located at the centre of the universe. The sun and the stars, revolved around it.

The theory appealed to human nature. Someone making casual observations as they looked into the sky might come to a similar conclusion. It also fed the human ego. Humans could believe that they were at the centre of God's universe, and the sun and stars were created for their benefit.

Ptolemy's theory was, of course, incorrect, but at the time nobody contested it. European astronomers were more inclined to save face. Instead of proposing new ideas, they attempted to patch up and refine Ptolemy's flawed model. Students were taught using a book called The Sphere which had been written two hundred years previously. In short, astronomy failed to advance.

In 1530, however, Mikolaj Kopernik, more commonly known as Copernicus, made an assertion which shook the world. He proposed that the earth turned on its axis once per day, and travelled around the sun once per year. Even when he made his discovery, he was reluctant to make it public, knowing how much his shocking revelations would disturb the church. However, George Rheticus, a German Mathematics professor who had become Copernicus's student, convinced Copernicus to publish his ideas, even though Copernicus, a perfectionist, was never satisfied that his observations were complete.

Copernicus's ideas went against all the political and religious beliefs of the time. Humans, it was believed, were made in God's image, and were superior to all creatures. The natural world had been created for humans to exploit. Copernicus's theories contradicted the ideas of all the powerful churchmen of the time. Even the famous playwright William Shakespeare feared the new theory, pronouncing that it would destroy social order and bring chaos to the world. However, Copernicus never had to suffer at the hands of those who disagreed with his theories. He died just after the work was published in 1543.

However, the scientists who followed in Copernicus's footsteps bore the brunt of the church's anger. Two other Italian scientists of the time, Galileo and Bruno, agreed wholeheartedly with the Copernican theory. Bruno even dared to say that space was endless and contained many other suns, each with its own planets. For this, Bruno was sentenced to death by burning in 1600. Galileo, famous for his construction of the telescope was forced to deny his belief in the Copernican theories. He escaped capital punishment, but was imprisoned for the rest of his life.

In time however, Copernicus's work became more accepted. Subsequent scientists and mathematicians such as Brahe, Kepler and Newton took Copernicus's work as a starting point and used it to glean further truths about the laws of celestial mechanics.

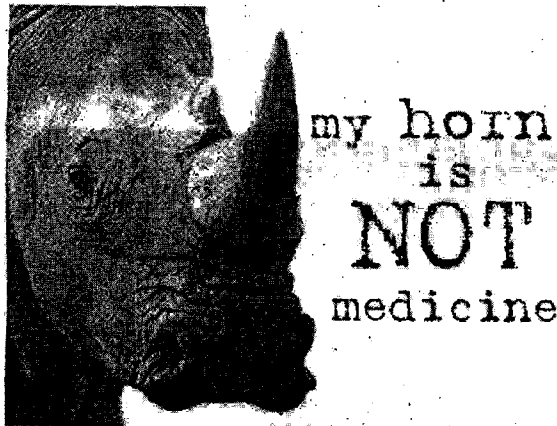
The most important aspect of Copernicus' work is that it forever changed the place of man in the cosmos. With Copernicus' work, man could no longer take that premier position which the theologians had immodestly assigned him. This was the first, but certainly not the last time in which man would have to accept his position as a mere part of the universe, not at the centre of it.

Select the correct response for the following questions based on the passage: (8 × 1 = 8).

- (1) Ptolemy's model of the universe was based on
- (a) casual observations of the night sky and the celestial bodies
 - (b) religious and political beliefs of the time
 - (c) ideas of earlier thinkers
 - (d) laws of celestial mechanics
- (2) Ptolemy's theory "fed human ego". This means
- (a) People felt proud to play God
 - (b) People felt proud to be the centre of the universe and superior to all creatures
 - (c) People felt proud of their astronomical achievements
 - (d) People felt proud of the social order
- c, d, d, a
c, d, d, a

- (3) Copernicus published his observations only because
- (a) His student persuaded him to publish them
 - (b) He wanted to shock and disturb the Church
 - (c) He was sure that his observations were complete and accurate
 - (d) He wished to shake the world
- (4) According to the passage, which of the following scientists lost his life for his beliefs?
- (a) Rheticus
 - (b) Copernicus
 - (c) Galileo
 - (d) Bruno
- (5) Who among the following feared Copernicus' theory?
- (a) Bruno
 - (b) Brahe
 - (c) Shakespeare
 - (d) Newton
- (6) What does the phrase "bore the brunt" mean?
- (a) Suffer burns
 - (b) Suffer from pangs of guilt
 - (c) Suffer capital punishment
 - (d) Suffer most due to the impact
- (7) What do you infer from the first paragraph of the passage?
- (a) That human beings are reluctant to accept new ideas
 - (b) That human beings are adventurous in nature
 - (c) That human beings are scientific in their approach to the truth
 - (d) That human beings are difficult to convince
- (8) What according to the passage is Copernicus' most important contribution to knowledge?
- (a) The sun is the centre around which the planets revolve
 - (b) The human race is only a tiny part of the universe
 - (c) The earth rotates around its own axis
 - (d) The universe was created only for man's convenience

- (ii) Study the following poster and answer the questions given below in one or two sentences: (4 × 2 = 8)



Fact: Rhino horn is NOT a remedy for fever, pain, arthritis. Convulsions, or any other medical condition. Rhino horn does not cure devil possession-and it is not an aphrodisiac.

Yet these superstitions are behind a thriving illegal market in rhino horn-and have made rhinos one of the world's most endangered species.

Please share the truth about rhino horn and help stop the illegal slaughter of rhinosbefore it's too late.

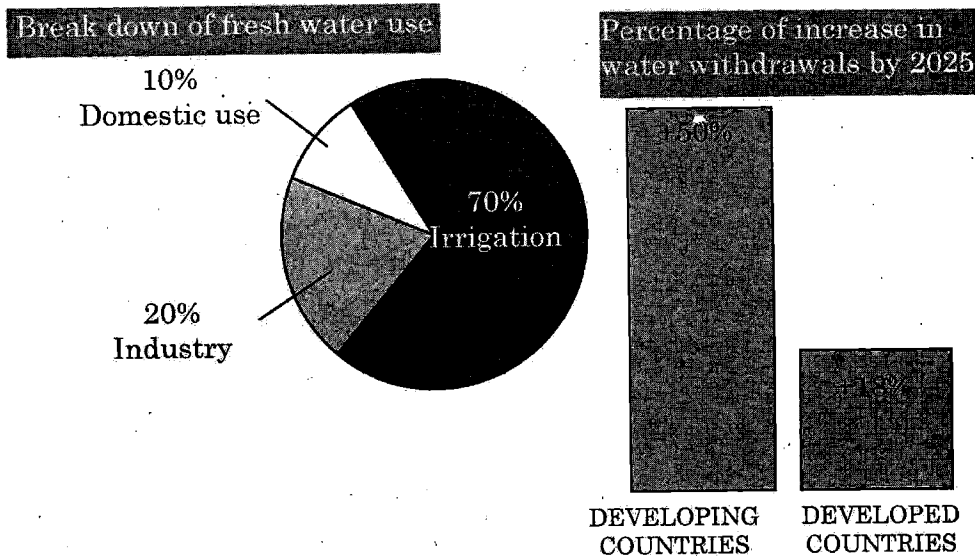
Learn more at saving.rhinos.org



- (1) What is the objective of this poster?
 - (2) What according to the poster are the reasons for rhino becoming an endangered species?
 - (3) What does the phrase "before it's too late" mean?
 - (4) What other measures do you think can be taken to save the animals like the rhino?
12. (a) Your younger brother/sister wants to open an account in facebook. Write a set of eight instructions to avoid the problems and dangers of facebook and to use it effectively. (16)

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- The mosquito menace has increased nowadays and diseases like dengue and malaria are spreading. Write a set of eight recommendations to fight these problems. (16)

13. (a) The following chart and graph show the global usage of freshwater in the year 2012 and the projected increase of freshwater usage in the next decade. Write a paragraph based on the details found in the charts: (16)



Or

- (b) The table given below shows the trend of motor vehicles in Chennai city. Write a paragraph interpreting the details found in the table: (16)

Growth trend of motor vehicles in Chennai

Year	Total registered vehicles
1981	1,20,000
1986	2,28,000
1991	5,44,000
1996	8,12,000
1998	9,75,000
2012	3,760,000

14. (a) You were chosen to represent your college in a national sports event in Delhi. Write a letter to your friend about your experience of travelling to Delhi with your team, your stay there, your participation and performance in the sports event, etc. (16)

Or

- (b) You recently watched a film in a regional language (not in English). Write a letter to your friend who is interested in movies but who does not know that language, about the film, the story, the actors etc. In your letter, discuss both the strengths and weaknesses of that film. (16)
15. (a) Communication skills are a must in the competitive world we live in. Write an essay not exceeding 300 words discussing the importance of communication skills in the present day world and the ways to improve these skills. (16)

Or

- (b) Of late road accidents have been increasing in urban areas and more and more people are finding the roads difficult to use. Write an essay not exceeding 300 words on road safety in big cities. (16)