

Reg. No. :

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

Second Semester

Civil Engineering

HS 2161/HS 21/080020003 – TECHNICAL ENGLISH – II

(Common to all branches)

(Regulations 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Fill in the blanks with suitable prepositions : (4 × ½ = 2)
Scientists began to try making synthetic diamonds a. _____ the end of the eighteenth century. It was b. _____ this time that a key scientific fact was discovered: diamonds are a form c. _____ carbon, which is a very common element. Graphite, the black mineral that is used d. _____ the 'lead' in your pencil, is made of it, too.

2. In the following questions, look at the underlined word and pick out the most appropriate synonym or definition from the list. Pay attention to context as you choose your answer. (4 × ½ = 2)
 - (a) The project was shelved because it was not feasible.
 - (i) reasonable
 - (ii) viable
 - (iii) liable
 - (iv) likable

 - (b) The stringent rules in the library discouraged many students from entering it.
 - (i) severe
 - (ii) strange
 - (iii) strained
 - (iv) serious

(c) The new recruits understood their subordinate status.

- (i) conquered
- (ii) underwater
- (iii) lower
- (iv) less

(d) Tom saw the inanimate object through his binoculars.

- (i) lively
- (ii) lifeless
- (iii) large
- (iv) non-mammalian.

3. Make sentences expressing purpose using the hints given below. One example is done for you. (2 × 1 = 2)

Example : Syringe : Inject medicine into patient's body

Ans : A syringe is used to inject / for injecting medicine into a patient's body. (Or) The purpose of a syringe is to inject medicine into a patient's body.

- (a) SMS : To pass a message to someone
- (b) Photocopier : To obtain multiple copies of a document

4. Match the causes in column 'A' with the effects in column 'B' using cause and effect expressions like 'because', 'due to' 'owing to' etc. (4 × ½ = 2)

A	B
Failure of rains	Decrease in rainfall
Population explosion	Drying up of crops
Cutting down of trees	Hearing problems
Noise pollution	Shortage of resources

5. Rewrite the following numerical expressions using them as adjectives : (4 × ½ = 2)

- (a) A book with 500 pages
- (b) An interview panel with three members
- (c) A bulb with a power of 60 watts
- (d) Two periods of 50 minutes each.

6. Choose any ONE of the following words and make two sentences each using them as verbs and nouns. (2 × 1 = 2)

- (a) Subject
- (b) Project
- (c) Sequence.

7. Replace the underlined phrase with an adverb : (4 × ½ = 2)
- (a) He knocked at the door with violence.
 - (b) The speaker spoke about the problem in brief.
 - (c) She looked at her mother in silence.
 - (d) They waited with patience in the Minister's office for two hours.
8. Fill in the blanks with appropriate forms of the verbs given in brackets. (4 × ½ = 2)
- (a) When he _____ (enter) the tennis court it was twenty minutes past nine. The match _____ (already begin).
 - (b) Ever since the dawn of civilization man _____ (try) to conquer nature but _____ (never succeed).
9. Write a definition of two of the following : (2 × 1 = 2)
- (a) Printing Press
 - (b) Satellite
 - (c) Wi-Fi
10. Fill in the blanks with a, an, or the : (4 × ½ = 2)
- Devendra became _____ MLA after he won _____ Assembly election as _____ independent candidate. _____ newcomer to politics, Devendra surprised one and all with his victory.

PART B — (5 × 16 = 80 marks)

11. Read the following passage and answer the questions that follow it.

Intelligence tests have been constructed of three kinds. Verbal paper-and-pencil tests, nonverbal paper-and-pencil tests, where the tasks are presented by means of pictures and diagrams, and performance tests which require the manipulation of objects. Some, such as the Binet test and the performance tests, are given to subjects separately; most verbal and non-verbal tests can be done by a group of subjects writing at the same time.

The subjects are told to do their tasks within a certain time, their results are marked, and the result of each is compared with a scale indicating what may be expected of children of the same age, i.e. what marks are expected of the relatively few bright ones, what marks are expected of the few dull ones, and what marks are expected of the bulk of the population with whom the comparison is being made. This 'calibration' of the test has been made beforehand and we are not concerned with the methods employed. One thing, however, we have to notice, and that is that the assessment of the intelligence of any subject is essentially a comparative affair.

The results of assessment are expressed in various ways, the most familiar being in terms of what is called the Intelligence Quotient. For our purposes we need not consider how this has been devised, it is enough to say that an I.Q. round about 100 is 'average', while more than 105 or less than 95 are above or below the average respectively.

Now since the assessment of intelligence is a comparative matter we must be sure that the scale with which we are comparing our subjects provides a 'valid' or 'fair' comparison. It is here that some of the difficulties, which interest us, begin. Any test performed involves at least three factors: the intention to do one's best, the knowledge required for understanding what you have to do, and the intellectual ability to do it. The first two must be held equal for all who are being compared, if any comparison in terms of intelligence is to be made. In school populations in our culture these assumptions can be made with fair plausibility, and the value of intelligence testing has been proved up to the hilt. Its value lies, of course, in its providing a satisfactory basis for prediction. No one is in the least interested in the marks little Basil gets on his test, what we are interested in is whether we can infer from his mark on the test that Basil will do better or worse than other children of his age at other tasks which we think require 'general intelligence'. On the whole such inference can be made with a certain degree of confidence, but only if Basil can be assumed to have had the same attitude towards the test as the others with whom he is being compared, and only if he was not penalized by lack of relevant information which they possessed.

It is precisely here that the trouble begins when we use our tests for people from different cultures. If, as happens among the Dakota Indians, it is indelicate to ask a question if you think there is someone present who does not know the answer already, this means that a Dakota child's test result is not comparable with the results of children brought up in a less sensitive environment. Porteous found difficulty among the Australian aborigines. They were brought up to believe that all problems had to be discussed in the group, and they thought it very eccentric to be expected to solve one by oneself.

Supposing, however, a satisfactory attitude towards the test can be assumed, what about equality in relevant knowledge? In a society where children play with bricks, performance tests involving the manipulation of little cubes present an easier problem than they would in a society where such toys were unknown. Bartlett reports that a group of East African natives were unable to arrange coloured pegs in an alternating series, but they planted trees according to the same plan in everyday life.

Then there is the story of the little boy in Kentucky who was asked a test question: 'If you went to a store and bought six cents worth of candy and gave the clerk ten cents what change would you receive?' The boy replied: 'I never had ten cents and if I had I wouldn't spend it on candy and anyway candy is what mother makes.' The tester reformulated the question: 'If you had taken ten cows to pasture for your father and six of them strayed away, how many would you have left to drive home?' The boy replied: 'We don't have ten cows, but if we did and I lost six I wouldn't dare go home.' Undeterred the tester pressed his question: 'If there were ten children in your school and six of them were sick with the measles how many would there be in school?' The answer came: 'None, because the rest would be afraid of catching it too.'

Thus all intercultural comparisons of intelligence are vitiated by the lack of true comparability, and any generalization about 'racial' differences in intellectual competence which do not take account of this are worthless. So are many comparisons which have been made between children of different social classes.

- (a) Choose the option that best represents the meaning of the following words as they are used in the text. (5 × 1 = 5)
- (i) manipulation
 - (1) manifesting
 - (2) handling
 - (3) treatment
 - (4) influence
 - (ii) calibration
 - (1) over all percentage of marks
 - (2) evaluating marks
 - (3) conducting tests
 - (4) marking units of measurement
 - (iii) vitiated
 - (1) verified
 - (2) created
 - (3) invalidated
 - (4) arranged
 - (iv) undeterred
 - (1) persistent
 - (2) unsuccessful
 - (3) adamant
 - (4) indecisive
 - (v) penalize
 - (1) punish
 - (2) reward
 - (3) ensemble
 - (4) annotate
- (b) State whether the following statements are true or false. (5 × 1 = 5)
- (i) The trouble in I.Q testing begins when we use tests to compare persons from different cultures .
 - (ii) Intelligence tests have proved that there are racial differences in levels of intelligence.
 - (iii) The assessment of a person's intelligence is absolute.
 - (iv) Australian aborigines believe that all problems can be solved only in groups.
 - (v) The subjects of an IQ tests have to be of the same age, culture and society.

- (c) Choose the response which best reflects the meaning of the text : (6 × 1 = 6)
- (i) Which of the following is an intelligence test? -
- (1) Binet test
 - (2) Diagnostic test
 - (3) Grammar test
 - (4) Porteous test
- (ii) Why are Intelligence tests conducted?
- (1) To consider how an Intelligence test is devised
 - (2) To prove the value of intelligence
 - (3) To show that intelligence can be measured
 - (4) To provide a basis for prediction of the subject's ability to perform certain tasks
- (iii) Which of the following is not a factor that should be considered in an Intelligence test?
- (1) the intention to do well in the test
 - (2) the intellectual ability to do it
 - (3) the performance of the test in a group
 - (4) the knowledge required for understanding what you have to do in the test
- (iv) Bartlett's report on East African natives proves that the intelligence test is valid only if
- (1) the subjects have the right attitude towards the test.
 - (2) he subjects have prior knowledge of the subject on which they are tested.
 - (3) the subjects are familiar with toys in their society.
 - (4) the subjects should be familiar with tree planting.
- (v) The test on the boy from Kentucky was invalid because
- (1) the boy did not have the relevant knowledge.
 - (2) the boy had poor attitude.
 - (3) the tester was not very intelligent.
 - (4) the test did not take into account cultural differences among the subjects.
- (vi) Which of the following can an intelligence test safely do?
- (1) Make intercultural comparisons of intelligence.
 - (2) Make interracial comparisons of intelligence.
 - (3) Make comparisons between subjects of the same age and background.
 - (4) Make comparisons between subjects from different social classes.

12. (a) Read the following advertisement published in 'The Hindu' and write a letter of application with CV in response to it. (16)

India Chemicals Pvt. Ltd, requires Manager, Quality Control for its Chennai branch. Requirements: B.E./B.Tech Chemical Engineering and 3 years experience in quality management. Apply to HR Manager, India Chemicals Pvt. Ltd., Ramalingam Road, Kodambakkam, Chennai - 24.

Or

- (b) BILT Chemicals, Mumbai is looking for a Chemical Engineer. Prepare an application with resume and send it to hr@bilt.co.in. (16)

13. (a) You are the Manager of a Chemical Factory. There has been a fire accident in your factory. Write a report on the accident, the damages, the probable causes and recommendations to prevent such accidents in future. (16)

Or

- (b) You are on the committee set up to study water pollution in the village of Alayampatti. A tannery has set up its factory in the village. The effluents from the factory are polluting the village lakes and wells. Write a report to the Chairman of the Committee on the extent of pollution, the effects and your recommendations to solve the problem. (16)

14. (a) You are going to attend a scholarship interview. Prepare a checklist of items that you should check before going for the interview. (16)

Or

- (b) Write a set of eight instructions that are to be followed by students before they begin their chemistry practical examination. (16)

15. Write an essay in 300 words on ONE of the following topics. (16)

- (a) Technology has made the modern man lazier, more materialistic and more technology dependent than ever before!

Or

- (b) Communication skills are a must in the competitive world we live in.