

ENGLISH**(Common to CE, CSE, IT Branches)****Time: 3 Hours****Max Marks: 60**

Answer ONE Question from each Unit.

All Questions Carry Equal Marks.

All parts of the Question must be answered at one place.

UNIT-I

1. a) Why does Swami decide to handover the letter only in the evening? **6M**
b) Write synonyms for the following words. **6x1=6M**
i. Accept ii. Cruel iii. Mighty iv. Diffuse v. Feeble vi. Faith
(OR)
2. a) Swami speaks about different modes of punishment at school. Do you think Samuel punishes boys like that? State reasons to justify your answer. **6M**
b) Write one-word substitutes for the following expressions. **6x1=6M**
i. A Storehouse for threshed grain
ii. Government by the populace
iii. Fear for women
iv. One who lives in solitude
v. Killing of one's sister
vi. Lasting for a very short time

UNIT-II

3. a) What made Kalam to move away and study in Schwartz High School? **6M**
b) Fill in the blanks with appropriate verb forms. **6x1=6M**
i. Many rehearsals _____(conduct) by the manager so far.
ii. People generally do not _____(believe) weather forecast.
iii. In response to the query, the nurse _____(show) all the records.
iv. I _____(live) at Delhi from 1992 to 2002.
v. Vijaya _____(watch) T V all the day.
vi. Rajesh _____(write) the exam by next Saturday by this time.
(OR)
4. a) How did Hindus and Muslims maintain the relation in Rameswaram? **6M**
b) Rewrite / Convert the following as directed. **6x1=6M**
i. Ram said, "Teacher, my pencil is stolen". (into Indirect speech)
ii. The Moon is smaller than the Earth. (into positive)
iii. Despite the warning the soldier ran into the firing zone. (with although ... Yet)
iv. He can come. His brother can also come. (use Either ... Or)
v. Rakesh told that his sister would get married on the week after. (into Direct speech)
vi. Ramesh is taller than any other boy in the class. (into superlative)

UNIT-III

5. a) What are the two characteristics of modern usage of language according to George Orwell and why does he not like it? **6M**
b) Correct the following sentences in connection with subject-verb agreement / noun- pronoun agreement / misplaced modifiers / articles / redundancies. **6x1=6M**
i. I saw an young man cleaning the sewage canals.
ii. If I was you, I would not do this.
iii. The blue is my favourite colour.
iv. Everyone should plan for his safety.
v. The baby is crying since morning.
vi. One of the boys are very undisciplined and broke the black board.
(OR)

6. a) What do you think about the rules George Orwell has given to make usage of English better? Does it help in making language simpler and easier to understand? **6M**
b) Fill in the blanks of the below passage with appropriate prepositions. **6x1=6M**
The test (i) a great book is whether we want (ii) read it only once or more than once. Any really great book we want to read the second time even more than we wanted to read it the first time; and every additional time we read it we find new meanings and new beauties (iii) it. Many people start reading books (iv) backwards. It is a strange habit. Book reading (v) with review writing is quite rewarding. (vi) many it is also a source of income.

UNIT-IV

7. a) What are the themes of the play *Sacrifice* by Rabindranath Tagore? **6M**
b) Write a letter to the Manager, LG Motors, Visakhapatnam complaining about the malfunctioning of a water motor pump which you have purchased from them a month ago. **6M**
(OR)
8. a) Describe the stage set by Tagore for the play *Sacrifice*. **6M**
b) Write an E-mail to your Professor requesting to reschedule your Internal lab exam stating a valid reason. **6M**

UNIT-V

9. a) What does the line “And miles to go before I sleep” mean? **6M**
b) Read the following passage carefully and answer the questions: **6x1=6M**
Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women.
Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university, where she earned her master's degree and doctorate in physics.
Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress.

Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world.

- i. What was the first challenge faced by Marie when she wanted to continue her education?
- ii. How did she face the tragedy of her husband's death?
- iii. What was her great achievement?
- iv. Why did she suffer from ill health?
- v. What was her contribution to the world of science?
- vi. Which word in the passage means "carefree and casual"?

(OR)

10. a) What kind of understanding is there between the horse and the speaker in the poem "Stopping by the Woods on a Snowy Evening"? **6M**
- b) Justify the slogan "Say no to Drugs" and write an essay on the ill effects of consumption of narcotics. **6M**

3 of 3

**BASIC ELECTRICAL ENGINEERING
(Common to EEE, ME, ECE Branches)****Time: 3 Hours****Max Marks: 60**

Answer ONE Question from each Unit

All Questions Carry Equal Marks

All parts of the Question must be answered at one place

UNIT-I

1.a) State Kirchhoff's voltage law and Kirchhoff's Current law?

b) Find the current in each resistor of Figure.1?

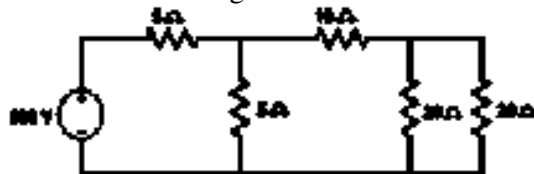
[6M+6M]

Figure.1

OR

2.a) Explain derivation of star-delta conversion equations?

b) Find the equivalent resistance for the following circuit in Figure.2 ?

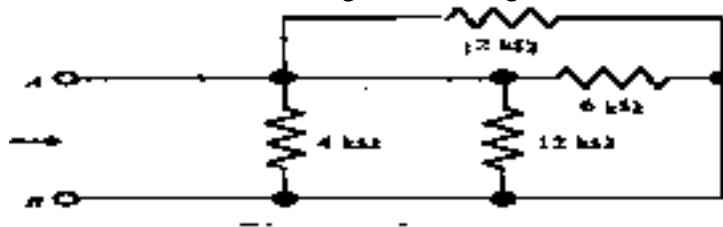
[8M+4M]

Figure.2

UNIT-II

3.a) Write equations for RMS value, average value Form factor & Peak factor.?

b) Determine the average and RMS values of saw-tooth waveform as shown in below Figure.3

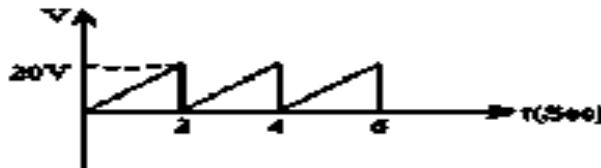
[4M+8M]

Figure.3

OR

AR18

CODE: 18EST101

SET-1

- 4.a) Explain behavior of RL Series circuit?
b) A circuit consists of a resistance of 15ohm, inductor of 0.05H all in series. If supply of 230V, 50Hz is applied to the ends of circuit. Calculate
i) Current in the coil, ii) Potential difference across each element? [5M+7M]

UNIT-III

- 5.a) Derive the torque equation of DC motor?
b) Explain the constructional details of DC motor. [6M+6M]
OR
6. Explain the Principle & Operation of Dc Generator with help of diagram and derive the EMF equation? [12M]

UNIT-IV

- 7.a) Explain the principle of operation of transformer on NO Load & ON Load?
b) Derive the EMF of a transformer [6M+6M]
OR
8 Explain the OC & SC test of a single phase transformer? 12M]

UNIT-V

9. Explain the principle and operation of a 3 phase induction motor, and determine the synchronous speed and slip of a 6 pole, 3-phase, 50Hz induction motor runs at 920rpm? [12M]
OR
10. Draw and explain the Speed-Torque Characteristics of 3 Phase Induction Motor [12M]

AR16

CODE: 16HS1001

SET-1

**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)**

I B.Tech I Semester Supplementary Examinations, February-2020

ENGLISH

(Common to CE, EEE, ME, ECE, CSE & IT Branches)

Time: 3 Hours

Max Marks: 70

Answer ONE Question from each Unit.

All Questions Carry Equal Marks.

All parts of the Question must be answered at one place.

UNIT-I

1. a) Discuss the importance of English language Communication in the Professional World in not less than 300 words. 8M
- b) Complete the following sentences with appropriate articles. 6M
 - i. I read an interesting story inBible.
 - ii. India of Jawaharlal Nehru progressed very fast.
 - iii. It is a pleasure to know that your father has been elected asM.P.
 - iv. Whatnuisance! Our train is late at least hour.
 - v. Last Sunday I went toSchool to seeold friend of mine.
 - vi. She is an artist married toEuropean engineer.

(OR)

2. a) Narrate your real life experience to elaborate the importance of one of the life Skills. 6M
- b) Give one-word substitutes for the following. 8M
 - i. A person who doesn't wish to share his feelings
 - ii. Rule by a single person
 - iii. A person who treats skin ailments
 - iv. A speech given without preparation
 - v. A person who loves reading books
 - vi. Study of human development
 - vii. A person who speaks several languages
 - viii. Fear of confined places

UNIT-II

3. a) 'Health is a complete state of harmony of the body, mind and spirit.' Justify the statement in not less than 300 words. 6M
- b) Write synonyms of the words given below. 4M
 - i. Settled ii. Suitable iii. Destiny iv. Emphasis
- c) Write antonyms of the words given below. 4M
 - i. Accurate ii. Gloomy iii. Intentional iv. Transparent

(OR)

4. a) Elaborate on the need for proper hygiene to eradicate diseases like dengue. Present your ideas in not less than 300 words. 7M
- b) Fill in the blanks with appropriate forms of verbs. 7M
 - i. We(live) in this city for 20 years.
 - ii. It is not worth....(pay) so much money for this programme.
 - iii. I(write) a new book. I(hope) to complete it by the end of this month.
 - iv. Basheer.....(work) in a fast food center before he.....(go) to college.
 - v. There was a power cut when we(watch) the film last night.
 - vi. The team.....(not win) the game so far.
 - vii. I hope I..(have) a better job this time next year.

UNIT-III

5. a) Imagine a conversation with your role model and frame dialogues. 6M
b) Fill in the blanks with appropriate auxiliary verbs. 8M
- I will go to Canada after I (finish) my work here.
 -you ever been to Kashmir?
 - She asked where I going. (is, was, were)
 - I always feed the dogs before I breakfast. (has, have, is)
 - the teacher explain this concept properly? (Did, have, was)
 - If youtold me, I would have never found out. (will, had, is)
 - I... leave now. It is too late. (was, will, were).
 - You (get) that cough checked if you don't want to end up in the hospital.

(OR)

6. a) Provide a detailed description of a family tour you took in your life, in not less than 300 words. 6M
b) Correct the spelling errors in the following sentences. 8M
- The college provides residential accomodation to students.
 - Unfortunately Raj paniked and crashed the car.
 - I keep forgetting where I've kept my keys.
 - The police are patrolling this area more and more.
 - We are studing the fall of Roman empire at the moment.
 - It is doutful whether they will go beyond the semi-finals.
 - I remember we stayed in a lovely guesthouse near the center of the town.
 - Santhosh's appearence does not suit the occasion.

UNIT-IV

7. a) Write a letter to your Principal seeking permission to organize a blood donation camp in your Department. 7M
b) Fill in the blanks with appropriate prepositions. 7M
- We have decided to switch electricitySolar power in an attempt to be more eco-friendly.
 - All the new models have been fitted.... a safety lock.
 - The over use of fertilizers is one of the greatest threats wildlife today.
 - The school ran financial trouble when 80% of staff went on a strike.
 - The sudden movement of train threw me balance and I fell down.
 - Ram took early retirement as he was losing grip...his job.
 - It is impossible to attend ...to... a task properly if you are worrying about something else.

(OR)

8. a) Write an e-mail to Amazon Solutions to complain about the wrong product delivered to you. 6M
b) Make a sentence each with the following Phrasal verbs. 8M
- fall into
 - passed out
 - bring out
 - cut off
 - put out the
 - look through
 - cut down
 - work out

UNIT-V

9. a) Write an essay on ‘ Influence of Internet on kids’. 6M
b) Correct the following sentences. 8M
- i. A bouquet of flowers lend colour and fragrance to the room.
 - ii. She married to her boss.
 - iii. Please give it to John or myself.
 - iv. When lily walks into a room , everyone stare.
 - v. They left their luggages at the railway station.
 - vi. She sang very well. Isn’t it?
 - vii. Either my sisters or my grandpa are going to the Park.
 - viii. In future, there will be less coins in circulation.
- (OR)**
10. a) Write an essay on role of women in politics. 6M
b) Rewrite the sentences as directed. 8M
- i. Do they solve the problem? (use ‘ possible’ and frame a sentence)
 - ii. People speak English all over the World. (Start the sentence with English..)
 - iii. You should guide us. (Use ought to)
 - iv. Radha said that she was very busy then. (Change it into direct speech)
 - v. He was so weak that he couldn’t walk. (Make the change with ‘too’)
 - vi. Tea is the most popular beverage in the world. (Change it into Comparative degree)
 - vii. I showed him my finger. (Rewrite with ‘used to’)
 - viii. There are some glimmers of hope.(Add a question tag).