Q.P. Code: 1802205 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. II Sem. (R18) Supple. Examinations of November 2019

SUB: BASIC ELECTRICAL ENGINEERING (Common to CE & ME)

Time : 3 Hours | Max. Marks: 70

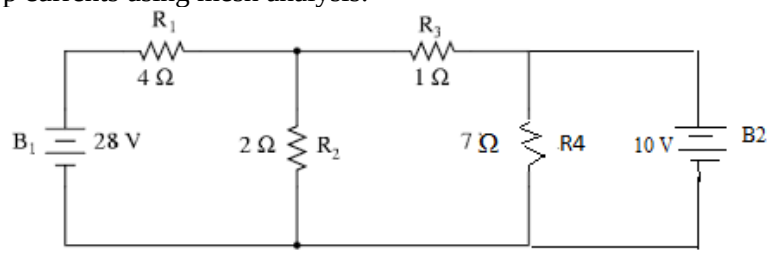
Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT – I

1. (a) State and explain Kirchhoff's laws. 7M
   (b) The capacitance values of three capacitors are 20 μF,40 μF and 60 μF. If these are placed in parallel across a 230 V source, find equivalent capacitance and total charge residing on the capacitors. 7M

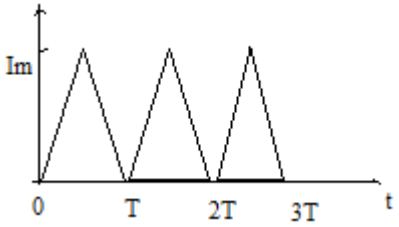
(OR)

2. (a) Explain nodal analysis of a simple system. 7M
   (b) Determine loop currents using mesh analysis. 7M



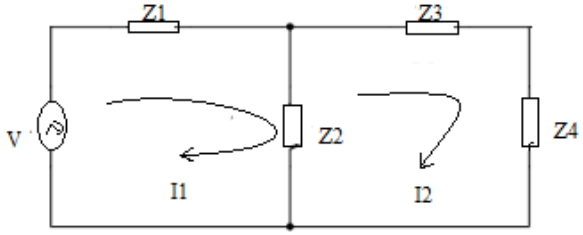
UNIT – II

3. (a) Define the following i)Form factor ii) Average value iii) Peak factor iv) RMS value 7M
   (b) Determine the average value of wave shape shown in fig. 7M



(OR)

4. A 230 V,50 Hz supply is given to the circuit shown in fig. in which the branch impedances are Z1=2+j4 Ω, Z2=2-j4 Ω, Z3=1+j4 Ω and Z4=2+j2 Ω. Determine current flowing through each branch. 14M



UNIT – III

5. (a) Explain the construction of DC Generator. 7M
   (b) A 6 pole wave wound machine has 200 conductors and runs at 1500 rpm. The flux per pole is 0.015wb. Find induced EMF. 7M

(OR)

6. (a) Explain the types of DC Motor. 7M
   (b) Derive the Torque equation in DC Motor. 7M

UNIT – IV

7.	(a)	Explain the basic principle and operation of single phase Transformer.	7M
	(b)	Derive the maximum efficiency condition in single phase transformer.	7M
		(OR)	
8.	(a)	Explain the basic principle and operation of three phase Induction motor.	7M
	(b)	A three phase induction motor is wound for four poles and supplied from a 50 Hz supply. Calculate a) the synchronous speed and b) the speed of the rotor when the slip is 3%.	7M

UNIT-V

9.		Explain about switch fuse unit (SFU) with neat diagram.	14M
		(OR)	
10.		Explain about power converters with neat diagram.	14M

Q.P. Code: 1802206 | **SET - 2**

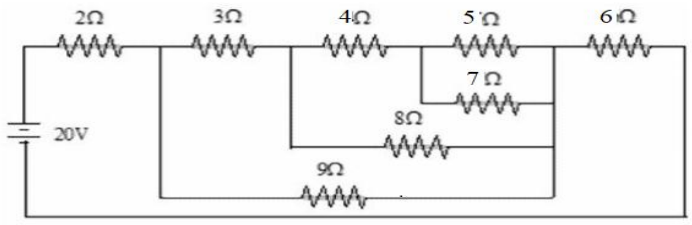
K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Supple. Examinations of November 2019
SUB: BASIC ELECTRICAL ENGINEERING (EEE)

Time : 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT – I

1. (a) For the circuit shown simplify the network using network reduction technique to find the current supplied by the battery. 4M

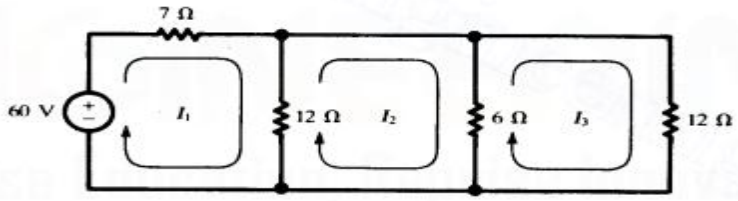


(b) State Kirchhoff's Voltage and Current Laws with an example. 10M

(OR)

2. (a) Explain the procedure of evaluating the electrical circuit with the help of Nodal analysis 7M

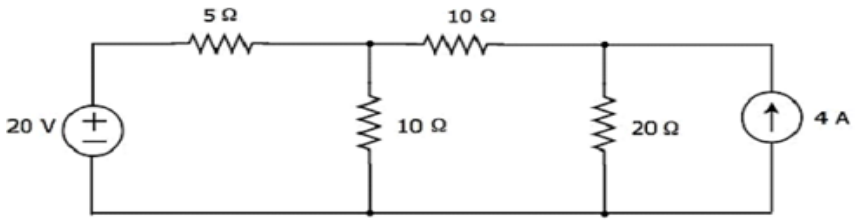
(b) By Applying Mesh analysis determine the mesh currents in the circuit. 7M



UNIT – II

3. (a) State and explain Superposition theorem 7M

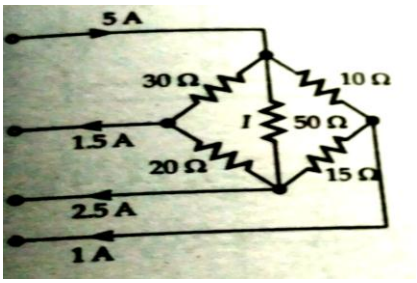
(b) Find the current flowing through 20 Ω resistor of the following circuit using superposition theorem. 7M



(OR)

4. (a) State and explain Thevenin's theorem 6M

(b) Find the value of current I flowing through the 50 ohm resistor in the bridge network using Thevenin's theorem 8M



UNIT – III

5. Define and determine the Average, RMS and form factor values of a sinusoidal voltage. 14M

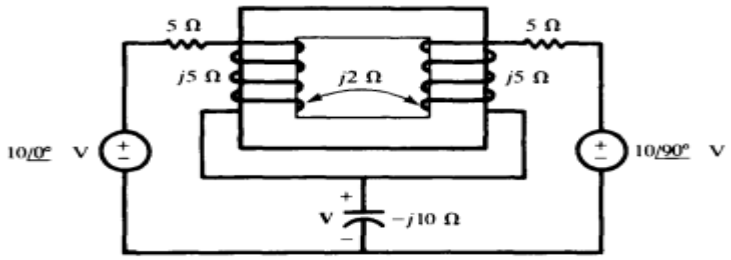
(OR)

6. (a) Explain the following terms 7M
i)Active Power, ii) Reactive Power, iii)Power Factor

(b) A series circuit having a resistance and a capacitance draws a current of 2.4A from a 100V, 50Hz, single phase ac supply. The power consumed in the circuit is 80W. Determine the values of resistor and capacitor. 7M

UNIT – IV

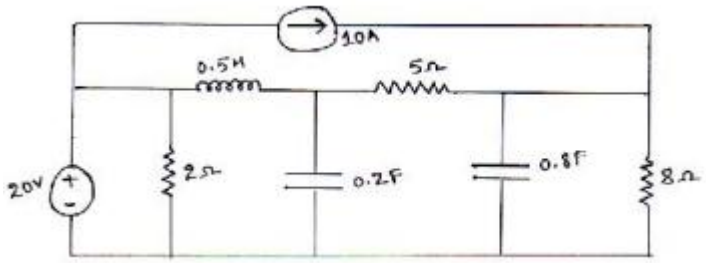
7. (a) Obtained the electrical equivalent circuit for the given coupled circuit and determine the voltage across the 10 ohms capacitive reactance 7M



(b) State and explain the principle of duality and explain the graphical method to draw dual network? 7M

(OR)

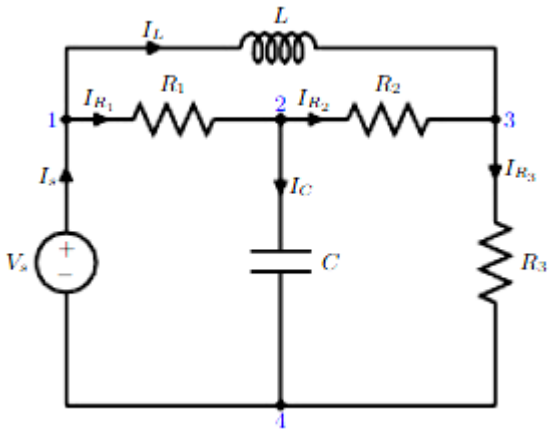
8. (a) Determine the dual of the network shown 7M



(b) Deduce the equation for the coefficient of coupling when two coils are magnetically coupled. 7M

UNIT-V

9. For the given electrical network obtain its 14M
i) tree , ii) Co-tree, iii) incidence Matrix, iv) tie-set



(OR)

10. Define cut-set. Explain the procedure of obtaining the cut-set matrix ,with an example 14M

Q.P. Code: 1805204 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Supple. Examinations of November 2019
SUB: PROGRAMMING FOR PROBLEM SOLVING (Common to ECE & CSE)

Time: 3 Hours Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Name the various kinds of data types are supported by C and explain about their memory requirements in detail.	7M
	(b)	Write an algorithm to find the roots of given quadratic equation.	7M
		(OR)	
2.	(a)	Draw a flow chart to display the sum of first 'n' natural numbers.	7M
	(b)	What are the rules to follow to give a name to an identifier in C language?	7M

UNIT – II

3.	(a)	What are the various logical operators used in C and illustrate with examples.	7M
	(b)	State the rules that applied while evaluating expression in automatic type conversion.	7M
		(OR)	
4.	(a)	Explain different unary operators in C with suitable examples.	7M
	(b)	Explain about the working procedure of nested if - else statement with suitable example C program.	7M

UNIT – III

5.	(a)	How can we declare and initialize a two-dimensional array? Explain with suitable example.	6M
	(b)	Explain about the following string handling functions along with their syntax: i) strcpy( ) ii) strcmp( ) iii) strcat( ) iv) strlen( )	8M
		(OR)	
6.	(a)	What are the advantages of using Array? Give the syntax for declaration, accessing and printing of one dimensional array.	7M
	(b)	Write a C Program to read the values into array from user and separately stores the even and odd values into two different arrays.	7M

UNIT – IV

7.	(a)	Explain about Call-by-Value and Call-by-reference mechanisms with suitable examples.	7M
	(b)	Explain about the different storage classes used in C language with suitable examples.	7M
		(OR)	
8.	(a)	Explain about pointer arithmetic operations with suitable example program.	7M
	(b)	What is Recursion? Write a C program to find GCD of the given two numbers using recursive function.	7M

UNIT-V

9.	(a)	How can you declare an array of structure variables? Illustrate with a suitable example.	7M
	(b)	Explain about nested structures in C language with suitable example program.	7M
		(OR)	
10.	(a)	Define Structure. How can you declare structure variables? Illustrate with a suitable example program.	7M
	(b)	Write a C program using structure to create a library catalogue with the following fields: Access number, Author's name, Title of book, Year of publication, Publisher's name, Price.	7M

Q.P. Code: 1821201 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. II Sem. (R18) Supple. Examinations of November 2019

SUB: MATHEMATICS-II (Common to all Branches)

Time : 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1. (a) Solve $2xy\,dy-(x^2+y^2+1)\,dx=0$ — 7 M

   (b) Solve $(1+y^2)dx=(\tan^{-1}-x)dy$ — 7 M

(OR)

2. (a) Find the orthogonal trajectory of the family of the curve $y=ax$ — 4 M

   (b) Bacteria in a culture grows exponentially so that the initial number has doubled in three hours. How many times the initial number will be present after 9 hours — 10 M

UNIT – II

3. (a) Solve $(D^4-2D^3-3D^2+4D+4)y=0$ — 4 M

   (b) Solve $(D^3-3D^2+4D-2)y=e^x+\cos x+x+e^{-x}\sin x$ — 10 M

(OR)

4. (a) Solve $(D^2+2D+1)y=x\cos x$ — 6 M

   (b) Solve $(D^2+1)y=\cos x$ by the method of variation of parameters — 8 M

UNIT – III

5. (a) Find $L\left[e^{-3t}(2\cos 5t-3\sin 5t)\right]$ — 6 M

   (b) Evaluate $L\left(\frac{1-e^t}{t}\right)$ — 8 M

(OR)

6. (a) Using Convolution theorem find $L^{-1}\left(\frac{1}{(s+a)(s+b)}\right)$ — 6 M

   (b) Solve $\frac{d^2x}{dt^2}+9x=\cos 2t, if\ x(0)=1, x\left(\frac{\pi}{2}\right)=-1$ using Laplace Transforms method — 8 M

UNIT – IV

7. (a) Evaluate $\int_0^5\int_0^{x^2} x(x^2+y^2)dx\,dy$ — 6 M

   (b) Evaluate $\int_0^1\int_{x^2}^{2-x} xy\,dx\,dy$ by change the order of integration — 8 M

(OR)

8. Evaluate $\int_1^e\int_1^{\log y}\int_1^{e^x}\log z\,dz\,dx\,dy$ — 14 M

UNIT-V

9. (a) If $\phi=2x^3y^2z^4$ then show that $div(grad\phi)=12xy^2z^4+4x^3z^4+24x^3y^2z^2$ — 7 M

   (b) Show that $div(grad\ r^m)=m(m+1)r^{m-2}$ — 7 M

(OR)

10. Verify Gauss divergence theorem for $\bar{F}=x^3\bar{i}+y^3\bar{j}+z^3\bar{k}$ taken over the cube bounded by x = 0, x = a, y = 0, y = a, z = 0, z = a — 14 M

Q.P. Code: 1822202 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Supple. Examinations of November 2019
SUB: ENGINEERING PHYSICS (CE)

Time : 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1. (a) Explain the interference in the thin film by reflection? 9M
   (b) A parallel beam of light of 6000 A^0 is incident on a thin glass plate of refractive index 1.5 such that the angle of refraction into the plate is 50^0. Find the least thickness of the glass plate which will appear dark by reflection? 5M

(OR)

2. (a) Describe the fraunhofer diffraction due to grating 9M
   (b) A plane grating having 10000 lines per cm is illuminated with light having a wavelength of 5×10^{-5} cm at normal incidence. How many orders are visible in the grating spectra? 5M

UNIT – II

3. (a) Explain the characteristics of laser light? 6M
   (b) Explain the various excitation mechanisms? 8M

(OR)

4. (a) Explain the construction of He-Ne laser? 10M
   (b) Mention the applications of laser? 4M

UNIT – III

5. (a) Derive the formal solution of kinematical equations? 8M
   (b) Explain velocity and acceleration in polar coordinates? 6M

(OR)

6. (a) What are the Newton's laws? Deduce conservation laws from Newtonian mechanics? 7M
   (b) Explain the conservative and non-conservative forces? 7M

UNIT – IV

7. (a) Derive the kinematics in a co-ordinate system rotating and translating in the plane? 8M
   (b) Explain angular momentum about a point of a rigid body in planar motion? 6M

(OR)

8. (a) Explain the Euler's laws of motion? 7M
   (b) Explain the necessity in describing rigid body motion? 7M

UNIT-V

9. (a) Discuss the formation of allowed and forbidden energy bands on the basis of Kroning-Penny model? 10M
   (b) Write drawbacks of classical free electron theory? 4M

(OR)

10. (a) Derive the expression for intrinsic carrier concentration and Fermi level for intrinsic semiconductor? 8M
    (b) Describe the direct and indirect band gap semiconductors? 6M

Q.P. Code: 1822203 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Supple. Examinations of November 2019
SUB: ENGINEERING PHYSICS (EEE)

Time: 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1. (a) What is the principle of superposition of waves? Find the resultant of two plane simple harmonic waves of the same period travelling in the same direction but differing in phase and amplitude. 10M
   (b) A body executes simple harmonic motion such that its velocity at the mean position is 1m/s and acceleration at one of the extremity is 1.57 m/s^2. Calculate the time period of vibration. 4M

(OR)

2. (a) What is meant by resonance? State the conditions for resonance. How the damping and sharpness of the resonance is related. 8M
   (b) Derive an expression for kinetic energy and potential energy of a body exhibiting simple harmonic motion. 6M

UNIT – II

3. (a) Discuss the Fraunhofer diffraction at a single slit. Derive the expressions for principle maximum and minimum. 10M
   (b) Monochromatic light of wavelength 6560×10^{-8} m falls normally on a grating 2 cm wide. The first order spectrum is produced at an angle 18°14' from the normal. What is the total number of lines on the grating? 4M

(OR)

4. (a) Give the theory of Newton's rings and describe a method of producing the rings. Explain how this phenomenon can be used to determine the radius of curvature of a plano-convex lens. 10M
   (b) In Newton's rings experiment, the diameter of the 2^{nd} and 10^{th} rings are 0.400 cm and 0.700 cm respectively. Find the diameter of the 20^{th} ring. 4M

UNIT – III

5. (a) Differentiate Spontaneous emission and stimulated emission with neat sketch using energy level diagram. Derive the relation between Einstein's "A" and "B" coefficients 8M
   (b) Classify the lasers based on different excitation mechanisms. Mention any ten applications of lasers in medical field. 6M

(OR)

6. (a) Discuss the construction and working of He-Ne laser with neat sketch of energy level diagram. 10M
   (b) Find the ratio of population of two states in a He-Ne laser that produces light of wavelength 6328 Å at 27°C. 4M

UNIT – IV

7. (a) State Heisenberg Uncertainty principle and mention the relation between position and momentum of the particle. 4M
   (b) State time independent Schrodinger equation. Find out the wave function associated with the electron and discuss the relation between energy and wave vector in case of free electrons. 10M

(OR)

8. (a) Show that the solution of Schrodinger's equation for a particle in an infinite potential well leads to the concept of quantization of energy. 10M
   (b) An electron is trapped inside in a one-dimensional box of length 0.1 nm. Calculate the energy required to excite the electron from its ground state to the forth excited state. 4M

UNIT-V

9. (a) Explain the Drude-Lorentz theory of conductivity in metals. Hence derive an expression for electrical conductivity of metals in terms of mean collision time and drift velocity. 10M
   (b) Find the drift velocity of free electrons in a copper wire of cross sectional area 10 mm^3 when the wire carriers a current of 100 A. Assume that each copper atom contributes one electron to the free electron gas. Density of copper is 8969 kg/m^3 and its atomic weight is 63.54. 4M

(OR)

10. (a) Differentiate drift and diffusion mechanisms in semiconductors. Derive an expression for drift and diffusion currents in semiconductors. 7M
    (b) How junction is formed in a p-n junction diode. Discuss the operation of p-n junction diode. 7M

Q.P. Code: 1822204 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Supple. Examinations of November 2019
SUB: ENGINEERING PHYSICS (ME)

Time : 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Explain the wave theory of light using Young's double slit experiment. Determine the conditions for maxima and minima and discuss the intensity distribution curve of the interference pattern.	10M
	(b)	In a Newton's rings experiment, the diameter of the 5^{th} ring was 0.336 cm and the diameter of the 15^{th} ring was 0.590cm. find the radius of curvature of the plano-convex lens if the wavelength of light is 5890 Å.	4M
		(OR)	
2.	(a)	Discuss the Fraunhofer diffraction due to single slit. Obtain the condition for minima and maxima. Write the expression for intensity distribution.	10M
	(b)	Calculate the possible order of the spectra with a plane transmission grating having 18000 lines per inch when light of wavelength 4500 Å is used.	4M

UNIT – II

3.	(a)	Explain the construction and working of semiconductor diode laser with neat sketch of energy level diagram	8M
	(b)	Differentiate spontaneous emission and stimulated emission with energy level diagrams. Calculate the wavelength of emitted radiation from GaAs which has a bandgap of 1.44 eV.	6M
		(OR)	
4.	(a)	Specify the importance of population inversion in laser systems. Explain the procedure of amplification of light in laser.	4M
	(b)	Discuss the construction and working of He-Ne laser with a neat sketch of energy level diagram. Mention different applications of lasers in the medical field	10M

UNIT – III

5.	(a)	Determine the impedance of a mechanical circuit having mass, stiffness and resistance	6M
	(b)	Explain the forced electrical oscillator with an example. Determine the phase difference, current and impedance of the oscillator using ohm's law.	8M
		(OR)	
6.	(a)	Define quality factor in damped harmonic oscillator. The Q value of the spring loaded with 0.3 Kg is 60. It vibrates with a frequency of 2 Hz. Calculate the force constant.	6M
	(b)	Explain the damped harmonic oscillations with a simple example. Discuss the concept of critical damping in damped harmonic oscillator.	8M

UNIT – IV

7.	(a)	Describe theoretically the formation of stationary waves and give their properties. Derive an equation for the energy of stationary waves.	10M
	(b)	Derive the wave equation for the longitudinal waves.	4M
		(OR)	
8.	(a)	Discuss the importance of impedance matching in transmission of waves. Draw the conclusions regarding the boundary behavior of the waves. Determine transmission and Reflection coefficient of amplitudes in the case of reflection and transmission of waves on a string at a boundary.	10M
	(b)	How transverse waves are produced. Explain with some examples.	4M

UNIT-V

9.	(a)	What are the basic assumptions of classical free electron theory? Based on the Drude-Lorentz theory, derive an expression for electrical conductivity of metals.	10M
	(b)	Find the drift velocity of free electrons in a copper wire of cross sectional area $10mm^3$ when the wire carries a current of 100A. Assume that each copper atom contributes one electron to the free electron gas. Density of copper is 8969 Kg/m^3 and its atomic weight is 63.54.	4M
		(OR)	
10.	(a)	Mention the significance of Fermi level in semiconductors. In a solid consider the energy level lying 0.01 eV above Fermi level. What is the probability of this level being occupied by an electron at 300K.	6M
	(b)	Discuss the formation of depletion layer in a p-n junction diode. Explain the I-V Characteristics of a p-n junction diode with a neat sketch.	8M

Q.P. Code: 1823202 | **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. II Sem. (R18) Supple. Examinations of November 2019

SUB: ENGINEERING CHEMISTRY (ECE & CSE)

Time : 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT – I

1.	(a)	Derive an equation for particle in one dimensional box and write its application	7 M
	(b)	What is doping? Explain the n-type and p-type doping with examples	7 M
		(OR)	
2.	(a)	Write the postulates of LCAO	7 M
	(b)	Explain the crystal field splitting of energy levels in octahedral complexes	7 M

UNIT – II

3.	(a)	How the following properties varies in a group/period in periodic table. (i) Atomic size, (ii) electronegativity and (iii) electron affinity	6 M
	(b)	Define ionization potential. Write the factors affecting ionization potential.	8 M
		(OR)	
4.	(a)	Discuss about hard and soft acids and bases	7 M
	(b)	Write short notes on co-ordination number and electronic configuration	7 M

UNIT – III

5.	(a)	Explain in detail about dry corrosion	7 M
	(b)	Derive Nernst equation and write its the applications	7 M
		(OR)	
6.	(a)	Explain the types of water. Write a note on (i) priming and foaming , (ii) scales and sludges	7 M
	(b)	Describe the various factors influencing corrosion based on nature of the metal	7 M

UNIT – IV

7.	(a)	Explain the Franck-Condon Principle	7 M
	(b)	Illustrate the various electronic excitations in electronic spectroscopy	7 M
		(OR)	
8.	(a)	Describe the phenomenon of fluorescence and write its applications	7 M
	(b)	Define spectroscopy. Explain the principles of spectroscopy.	7 M

UNIT-V

9.	(a)	Illustrate the structural isomers by giving suitable examples	7 M
	(b)	Write in detail about absolute configuration	7 M
		(OR)	
10.	(a)	Explain the mechanism of SN^2 substitution reaction with suitable examples	7 M
	(b)	Write the addition reactions involving C=O by Grignard reagent	7 M

Q.P. Code: 1824203 **SET - 2**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B.Tech. II Sem (R18) Supple. Examinations of November 2019

SUB: ENGLISH (Common to ECE & CSE)

Time: 3hrs **Max Marks: 70**

Note: Answer any **FIVE** questions. **All** questions carry equal marks

1. Correct any FOURTEEN of the following sentences if necessary 14x1=14
   a) One of the boy hurt his arm.
   b) Neither of his friends are Indian.
   c) They or He are certain to be invited.
   d) Neither his parents nor his brother have attended the function.
   e) He feels badly about his son's injury.
   f) I prefer coffee than tea.
   g) He returned back from his native place.
   h) I wish I was as tall as my brother.
   i) Everyday I am going for walk.
   j) I met an European in the exhibition.
   k) He attends to college regularly
   l) I have ridden a tricycle two years ago.
   m) Everybody accept responsibilities.
   n) Prof. Raju repeated the advice again.
   o) They are studying since three hours.
   p) I am understanding the lesson now.
   q) One should take care of his health.

2. A) Why do we need to study word formation? Explain importance of word formation. 1x7=7
   B) 1. Give antonyms of the following 3x1=3
   i) military ii) ancient iii) fertile
   2. Give synonyms of the following 4x1=4
   i) counsel ii) antagonist iii) condense iv) drowsy

3. A) Write appropriate dialogues on the situation given below: 1x7=7
   " Manohar persuades his friend to visit an exhibition of Indian art".
   B) Give the meaning of the idioms and phrases and use them in sentences of your own.7x1=7
   (i) set out (ii) make up (iii) drew up (iv) To see eye to eye
   (v) a bird's eye view (vi) to enjoy lion's share (vii) to come off with flying colours.

4. A) 1) Make five meaningful sentences on the following pattern. 5x1=5

Subject +	Verb +	Object +	To infinitive
The teacher	allowed	them	To write the exam

   2) Punctuate the following 2M
   some people work best in the mornings others do better in the evenings
   B) List out the principles of paragraph writing. 7M

5. A) Rewrite the following sentences as directed. 7x1=7

(i) They play cricket regularly. (frame a sentence using 'play' as a noun)

(ii) She has received invitation. (frame a sentence using 'invitation' as a verb)

(iii) Close the door. (change into passive voice)

(iv) A letter is being typed by the lady. (change into active voice)

(v) Someone has picked my pocket. (change into passive voice)

(vi) He said to the servant, "Get out of the room". (change into indirect speech)

(vii) The principal said, "There will be a holiday tomorrow". (change into indirect speech)

B) Rewrite the following sentences as directed 7x1=7

(i) No one is as strong as Mohan in the class. (change into comparative degree)

(ii) Madras is one of the biggest cities in the world. (change into positive degree)

(iii) The Japanese are more courteous than any other people in the world. (change into superlative degree)

(iv) His silence proves his guilt. (change into complex sentence)

(v) You may go wherever you like. (change into simple sentence)

(vi) I am certain that she has told a lie. (change into compound sentence)

(vii) You must work as hard as you can. (change into simple sentence)

6. A) 1) Fill in the blanks with suitable articles. 3x1=3

i. I have given him ---------- one rupee note.

ii. I met ---------- MLA in the marriage.

iii. He is studying in ---------- university.

2) Fill in the blanks with suitable prepositions. 4x1=4

i. He is angry --------- me.

ii. You should listen -------- what I say.

iii. My request was not complied ----------

iv. The robber has robbed me -------- my property.

B) 1) Fill in the blanks with the right verb forms from the verbs given in brackets. 5x1=5

a) She ---------- (dance) twice so far.

b) At present he ---------- (work) in a private company.

c) The earth ---------- (revolve) round the Sun.

d) She ---------- (wait) for me since morning.

e) His wife ---------- (beat) Tom everyday.

2) Fill in the blanks with suitable conjunctions. 2x1=2

a) He is not---------- tall --------- his father.

b) Gayathri ---------- Sushma are sisters.

7. A) Read the following passage and answer the questions. 7x1=7

Luke was never an ice hockey fan. May be because his sports-minded dad had died when he was only three years old, and he was raised by a single mother who knew absolutely nothing about the game. His older brother, Jay, a diehard arts student, was interested in exposing Luke to the world of art galleries and movies than to the rough-and-tumble sport of hockey. But in spite of the influences around him, Luke evolved, and one day woke up and had discovered hockey. It was 2002, and he was hooked.

"Mom. I want to join a hockey league," he announced.

It was a reasonable request from a young boy, but since Luke could not even skate, it was with a heavy heart that I started looking for a team. As a matter of fact, at almost twelve years of age, Luke had never skated a day in his life. I asked a league if it was possible for a nonskater to join. He got the nod and was drafted into house league.

Questions

a) What could be the reasons for Luke not being a hockey fan?
b) How many members are there in Luke's family?
c) What are Jay's interests?
d) "But in spite of the influence around him, Luke evolved…" What were the influences around him?
e) Why was Luke's mother worried when he said he wanted to join a hockey league?
f) Write the meaning of the word 'evolved'.
g) Write antonym for 'diehard'.

B) Write a précis of the following passage reducing it to one third of its length. 1x7=7

A keen sense of humor is the hall mark of culture. When a person can crack a joke on himself, he raises himself at one in the estimation of his friends. There are people who can throw jokes at others, but never take one thrown against themselves. This one way traffic is not really a high sense of good humor. It is the essence of hamper that there should be give and takes in the process good humor is often the test of tolerance. A fanatic is incapable of good humor. He is tearing others to pieces fearing of getting himself torn all the time. Good humor defeats itself. If there is malice in it, or is indulged in to hurt others. A joke should never hurt otherwise it is no joke at all. A joke should make the person who makes it and the person who has to take it, laugh together. That is why tolerance and culture are the sources of every good joke.

8. A) Write an essay on the following in about 250 words.

1) What can be done to assist teenagers in maintaining a healthy weight?

B) Expand the following into a paragraph. 1x7=7

1) Knowledge is power