K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April/May 2019
SUB: BASIC ELECTRICAL ENGINEERING (Common to CE & ME)
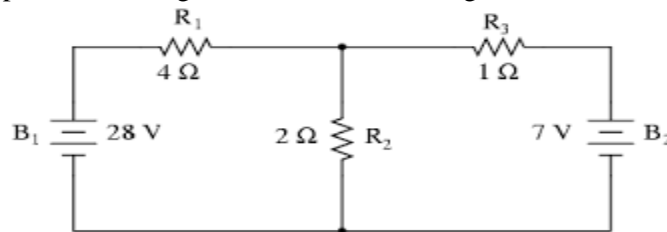
Time : 3 Hours　　　　　　　　　　　　　　　　　　　　　　　Max. Marks: 70

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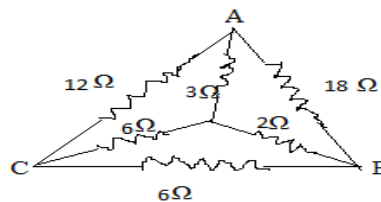**All questions carry Equal Marks.**

UNIT – I

1. (a) Explain various types of network sources. 　　7M
   (b) Determine the loop currents in a given circuit shown in fig. 　　7M
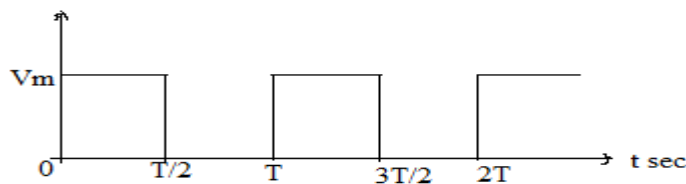

(OR)

2. (a) Explain the transformation of star to delta connection. 　　7M
   (b) For the network shown in fig. Calculate the equivalent resistance between nodes A and B. 　　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) Distinguish between i)instantaneous power ii)real power iii) reactive power and iv) apparent power 　　7M
   (b) A circuit consists of resistance of 100 ohms in parallel with a pure capacitance of 50 μF is connected to a 230 V, 50 Hz supply. Calculate branch currents and supply currents. 　　7M

UNIT – III

5. (a) Derive the expression for EMF induced in a DC generator. 　　7M
   (b) A 4 pole lap wound machine has 200 conductors and runs at 1500 rpm. The flux per pole is 0.015wb. Find induced EMF? 　　7M

(OR)

6. (a) Describe the principle of operation of a DC motor with the help of neat sketch. 　　7M
   (b) Derive the torque equation in DC motor. 　　7M

UNIT – IV

7. (a) Derive the maximum efficiency condition in single phase transformer. 7M
   (b) Define regulation and efficiency in single phase transformer. 7M

(OR)

8. (a) Explain the working principle 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 the Miniature Circuit Breaker (MCB) with neat sketch 14M

(OR)

10. Explain about various types of earthling systems. 14M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April/May 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)   Explain the dependent and independent sources.   6M
     (b)   State the voltage, current and power relationships for   8M

       i) Resistance   ii) Inductance   iii) capacitance

(OR)

2.   (a)   Explain the concept of Voltage and current division principles.   7M
     (b)   Using Source transformation, find the Power delivered by the 50v voltage source   7M
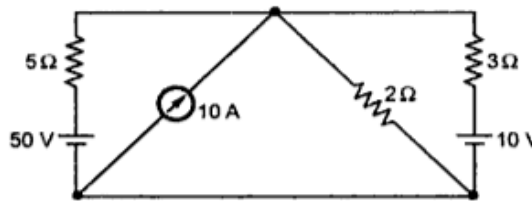
UNIT – II

3.   (a)   State and explain the Maximum power transfer with an example   6M
     (b)   By applying super position theorem ,determine the current in 23 Ω Resistor   8M
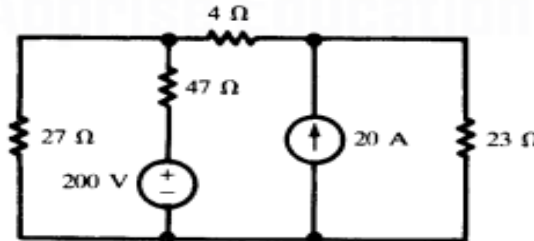
(OR)

4.   (a)   State and Explain Norton's theorem.   7M
     (b)   For the given Circuit determine the current in 2 ohm's using Norton's theorem   7M
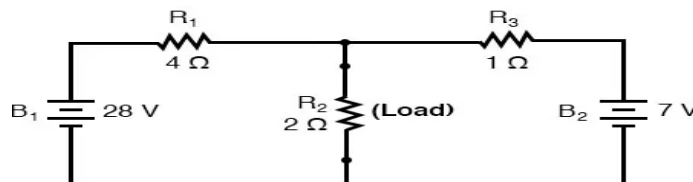
UNIT – III

5.   (a)   Explain the following terms   10M
       i) average power,   ii) peak power ,   iii) Rms values ,   iv)Form factor
     (b)   A series circuit consisting of a resistor of 10 ohms and an inductance of 100mH is connected across a 200V, 50Hz, single phase ac supply. Determine the current drawn, real power and reactive power   4M

(OR)

6.   A voltage wave is represented by v=200sin314t.Find   14M

     (i) Maximum Value,   (ii) Rms Value,   (iii) Average Value

     (iv) Frequency,   (v) Time Period,   (vi)Instantaneous value after 0.04 seconds

UNIT – IV

7. (a) For the coupled Circuit ,determine the ratio of v2/v1 ,which results $I_1=0$ 7M
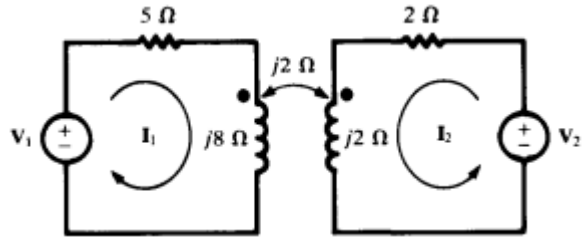
(b) Two identical coils with L = 0.02 H have a coupling coefficient K = 0.8. Find M and the two equivalent inductances with the coils connected in series aiding and series opposing.   7M

(OR)

8. (a) Explain about dot convention in coupled coils.   8M

(b) Three inductances L1 = 2H, L2 = 1.8H and L3 = 2.6H are connected in series as shown in fig 5. Determine the equivalent inductance.   6M
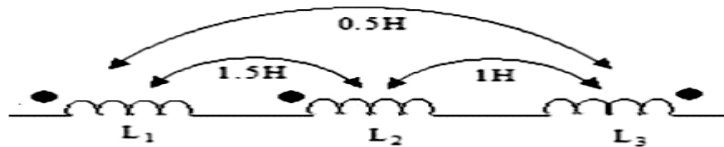
UNIT-V

9. What is complete incidence matrix? How is reduced incidence matrix obtained from it? Explain with suitable example   14M

(OR)

10. Obtain the fundamental tie-set matrix and write the necessary equilibrium equation for the graph given below. Select 1,2,4 as tree branches.   14M
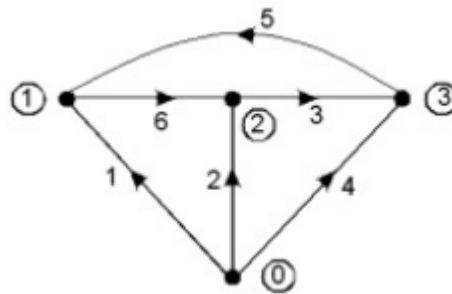
K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April/May 2019
SUB: PROGRAMMING FOR PROBLEM SOLVING (Common to ECE & CSE)

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) Define constant? Explain about various types of constants supported by C language? 　7M
   (b) What is a Flowchart? Draw the flowchart to find the maximum and minimum of given numbers. 　7M

(OR)

2. (a) Explain the structure of a C program with a suitable example. 　7M
   (b) What is an algorithm? Write the various criteria used for judging an algorithm. 　7M

UNIT – II

3. (a) Explain the following operators and illustrate it with an example each. 　8M
   (i) Increment and decrement operator,　(ii) Conditional operator
   (iii) Bitwise operator,　　　　　　　　(iv) Assignment operator
   (b) What is the purpose of break statement? Illustrate with suitable example. 　6M

(OR)

4. (a) What is meant by operator precedence? What is the relative Precedence of the arithmetic operators? 　6M
   (b) Explain the syntax of switch statement with the help of a suitable example. 　8M

UNIT – III

5. (a) What is an Array? What are the different types of an array? Explain in detail. 　7M
   (b) Write a C program to copy the contents of one array to another array. 　7M

(OR)

6. (a) In what way array is different from an ordinary variable? What conditions must be satisfied by the entire elements of any given Array? 　7M
   (b) Write a C Program to sort given strings in an ascending order. 　7M

UNIT – IV

7. (a) What are the advantages of using functions in C? Write a C program to explain about built-in functions with an example. 　7M
   (b) Write a 'C' program to illustrate the use of indication operator '*' to access the value pointed by a pointer. 　7M

(OR)

8. (a) Write a C program to demonstrate passing an array argument to a function. Consider the problem of finding the largest of N numbers defined in an array. 　7M
   (b) Explain about the pointer to pointer variables with suitable example program. 　7M

UNIT-V

9. (a) What are the differences between a structure and union? Illustrate with the help of a suitable example. 　4M
   (b) Explain about the different ways of passing an entire structure as an argument to a function with suitable example programs. 　10M

(OR)

10. (a) Define a structure that represent a complex number (contains two floating-point members, called real and imaginary). Write a C program to add, subtract and multiply two complex numbers. 　7M
    (b) Write a program to create an array of student structure objects and to find the highest marks scorer. The fields in the student structure are: name, age and marks. 　7M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April/May 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 $(x^2 y - 2xy^2)dx - (x^3 - 3x^2 y)dy = 0$ 7 M

    (b) Solve $\dfrac{dy}{dx} + x \sin 2y = x^3 \cos^2 y$ 7 M

(OR)

2. If the air is maintained at 20^0 C and the temperature of the body cools from 100^0 C to 80^0 C in 10 minutes, find the temperature of the body after 20 minutes and when the temperature will be 40^0 C.   14 M

UNIT – II

3. (a) Solve the differential equation $\left(D^3 - 1\right) y = e^x + \sin x + 2$ 7 M

    (b) Solve the differential equation $\left(D^2 + 2D - 3\right) y = x^2 e^{-3x}$ 7 M

(OR)

4. Solve $y'' - 2y' + y = e^x \log x$ by the method of variation of parameter   14 M

UNIT – III

5. (a) Find $L\left(\dfrac{\cos 4t \sin 2t}{t}\right)$ 7 M

    (b) Find the inverse Laplace Transform of $L^{-1}\left(\dfrac{1}{s^2(s^2+1)(s^2+4)}\right)$ 7 M

(OR)

6. Solve the differential equation $\dfrac{d^2 x}{dt^2} + 9x = \sin t$ using Laplace Transform given that   14 M

    (i) $x(0) = 1, x\left(\dfrac{\pi}{2}\right) = 1$ (ii) $x(0) = 1, x'(0) = 0$

UNIT – IV

7. (a) Find $\iint\limits_R (x+y)^2 dxdy$ over the region bounded by the ellipse $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} = 1$ 10 M

    (b) Evaluate $\int\limits_0^\pi \int\limits_0^{a\sin\theta} r\, dr\, d\theta$ 4 M

(OR)

8. Evaluate $\int\limits_0^1 \int\limits_0^{1-z} \int\limits_0^{1-y-z} xyz\, dx\, dy\, dz$ 14 M

UNIT-V

9. (a) Find the directional derivative of $\phi = x\, y\, z$ along the direction of the normal to the surface $x^2 z + y^2 x + yz^2 = 3$ at the point (1,1,1)   7 M

    (b) Show that the vector $(x^2 - yz)\bar{i} + (y^2 - zx)\bar{j} + (z^2 - xy)\bar{k}$ is irrotational and find its scalar potential   7 M

(OR)

10. Verify Green's theorem in plane for $\oint\limits_c \left[(xy + y^2)dx + x^2 dy\right]$ where c is bounded by $y = x$ and $y = x^2$ 14 M

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

B. Tech. II Sem. (R18) Regular Examinations of April/May 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)	Describe the formation of Newton's rings with necessary theory?	9M
	(b)	A convex lens on a plane glass plate is exposed to a monochromatic light. The diameter of the 10th dark ring is 0.433 cm. Find the wavelength of the light is used if the radius of curvature of the lens is 70 cm.	5M

(OR)

2.	(a)	Describe the Fraunhofer diffraction due to single slit?	9M
	(b)	The first diffraction maxima due to a single slit diffraction are at 30^0 for a light of wavelength 5000 A^0. Find the width of the slit?	5M

UNIT – II

3.	(a)	Derive the relation between various Einstein coefficients	8M
	(b)	Describe optical resonator	6M

(OR)

4.	(a)	Explain the construction and working of Nd-YAG laser?	10M
	(b)	Describe the population inversion mechanism in the emission of laser radiation?	4M

UNIT – III

5.	(a)	Explain the motion of particle in one dimension and several dimensions?	5M
	(b)	Derive the formal solution of kinematical equations?	9M

(OR)

6.	(a)	What are the polar coordinates and explain velocity and acceleration in polar coordinates?	7M
	(b)	What are the Newton's laws and explain applications of Newton's laws.	7M

UNIT – IV

7.	(a)	What is rigid body? Explain motion of a rigid body in the plane?	6M
	(b)	Derive the kinematics in a co-ordinate system rotating and translating in the plane?	8M

(OR)

8.	(a)	Explain angular momentum about a point of a rigid body in planar motion?	7M
	(b)	Explain the Euler's laws of motion?	7M

UNIT-V

9.	(a)	What are the assumptions of free electron theory of metals?	5M
	(b)	Describe the electrical conductivity in a metal using classical free electron theory?	9M

(OR)

10.	(a)	What is p-n junction diode? Draw the energy band diagram of an unbiased p-n junction diode	8M
	(b)	Explain its characteristics under forward and reverse biased conditions with circuit diagrams?	6M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April /May 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 do you mean by Simple Harmonic Motion? Derive an expression for displacement, Velocity, Time period and Phase of a body executing simple harmonic oscillation.	10M
	(b)	A particle executes a simple harmonic motion of period 10 seconds and amplitude of 1.5 metre. Calculate its maximum acceleration and velocity.	4M

(OR)

2.	(a)	Differentiate free and Forced vibrations.	4M
	(b)	Discuss damped harmonic oscillations with two examples. Derive expressions for the period and amplitude of damped harmonic oscillator for over-damped, critical damped and under damped cases	10M

UNIT – II
3.	(a)	Discuss the Huygens' principle of propagation of wavefront	4M
	(b)	Derive the expression for fringe width using Young's double lit experiment	10M

(OR)

4.	(a)	What is meant by interference? State the fundamental conditions for the production of interference fringes.	4M
	(b)	Discuss the Fraunhofer diffraction at a single slit. Obtain the condition for principle maximum and minimum.	10M

UNIT – III
5.	(a)	Explain the different processes when radiation interacts with matter.	5M
	(b)	Classify the different types of lasers based on the active medium. Explain the construction and working of a solid-state laser with a neat sketch of energy level diagram.	9M

(OR)

6.	(a)	Give the importance of population inversion in laser system.	4M
	(b)	Discuss the construction and working of semiconductor p-n junction diode laser. Specify the advantages and drawbacks of diode lasers. Calculate the angle of divergence of a light beam issuing out of He-Ne laser, which produces spot diameters of 4mm and 6mm at 1m and 2m distances respectively.	10M

UNIT – IV
7.	(a)	Derive an expression for de-Broglie wavelength of matter waves. Obtain the relation between De Broglie wavelength and kinetic energy of the electrons. Find the de-Broglie wavelength of the electron accelerated through a potential difference of 182 volts.	6M
	(b)	Derive the Schrodinger time dependent wave equation for a free particle.	8M

(OR)

8.	(a)	Assuming the time independent Schrodinger's wave equation, discuss the solution for a particle in a one dimensional potential well of infinite height and hence show the electron's energy levels are quantized.	10M
	(b)	An electron is confined to move in a one dimensional potential well of length 5 Å. Find the quantized energy values for the three lowest energy levels.	4M

UNIT-V
9.	(a)	Discuss the importance of Fermi energy level in semiconductors. Write down the Fermi-Dirac distribution function for the probability of occupation of energy level E by an electron. Show that the probability of its occupancy by an electron is zero if $E>E_F$ and unity if $E< E_F$ at temperature 0K.	8M
	(b)	Differentiate direct and indirect bandgap semiconductors with suitable examples.	6M

(OR)

10.	(a)	Explain the variation of Fermi level With temperature in an n-type and p-type semiconductors.	6M
	(b)	Mention the significance of Kronig-Penney Model. Explain how this model explains the origin of bands and classify the solids based in the bands.	8M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April/May 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) What is a Wavefront? Briefly explain Huygens' wave theory of light.   4M
   (b) Discuss the principle behind the formation of Newton's rings. Describe Newton's rings experiment to determine the wavelength of monochromatic light.   10M

(OR)

2. (a) State the Principle of superposition waves and explain with an example.   4M
   (b) Discuss the theory of plane transmission grating and derive an expression for maxima and minima. Explain the intensity distribution in diffraction pattern.   10M

UNIT – II

3. (a) Mention five important characteristics of laser   4M
   (b) Explain the construction and working of He-Ne laser with a neat sketch of Energy level diagram.
       Find the relative population of the two states in a laser that produces a light beam of wavelength 6943 Å at 300 K and 500 K   10M

(OR)

4. (a) Determine the Einstein's Coefficients relating the different processes involved in the interaction of radiation with matter.   6M
   (b) Discus the construction and working of any one solid state laser with neat energy level diagram   8M

UNIT – III

5. (a) Define Simple harmonic motion. Consider a simple harmonic electrical oscillator and determine the voltage and energy equations of the system   6M
   (b) Derive the equation of motion for a Mechanical forced oscillator having spring-mass system. Discuss the steady state conditions of the oscillator.   8M

(OR)

6. (a) Distinguish between free and forced vibrations with examples.   4M
   (b) A damping oscillator is subjected to a damping force proportional to its velocity. Derive the differential equation of the oscillation. Discuss the under-damped, over-damped and critical damped motions of the oscillations.   10M

UNIT – IV

7. (a) Define transverse waves. Considering the motion of transverse waves on a string derive the wave equation.   6M
   (b) Consider the case of a reflection and transmission of waves at a boundary. Draw the conclusions regarding the boundary behavior of the waves. Determine the Amplitudes of transmission and reflected waves.   8M

(OR)

8. (a) How longitudinal waves are produced. Give some examples.   4M
   (b) Define Stationary waves. Explain how stationary waves are formed. Derive the wave equation for nodes and antinodes. Discuss the characteristic properties of stationary waves.   10M

UNIT-V

9. (a) Discuss the advantages and drawbacks of free electron theory of metals.   4M
   (b) Differentiate drift and diffusion processes in the semiconductor. Derive the current density in semiconductors due to drift and diffusion mechanisms   10M

(OR)

10. (a) Discuss the influence of Fermi energy level in a extrinsic semiconductor on the variation of doping concentration and ambient temperature   10M
    (b) Differentiate direct and indirect bandgap semiconductor with examples.   4M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B. Tech. II Sem. (R18) Regular Examinations of April/May 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 Schrodinger wave equation and write its applications	7 M
	(b)	Explain the molecular orbital diagram of diatomic molecules with suitable example	7 M

(OR)

2.	(a)	Explain the crystal field theory and write notes on crystal field splitting of energy levels in tetrahedral complexes	7 M
	(b)	Define doping. Explain the types of doping with suitable examples.	7 M

UNIT – II

3.	(a)	Write short notes on (i) Effective nuclear charge (ii) Electron affinity	7 M
	(b)	Explain in detail the variations of s, p, d, f orbital energies of atoms in the periodic table	7 M

(OR)

4.	(a)	Explain about hard and soft acids and bases with examples.	7 M
	(b)	Write short notes on (i) oxidation states (ii) electronegativity	7 M

UNIT – III

5.	Explain the factors influencing corrosion	14M

(OR)

6.	Explain in detail about the boiler troubles	14M

UNIT – IV

7.	(a)	Define electronic spectroscopy. Explain the types of electronic transitions in electronic spectroscopy	7 M
	(b)	Illustrate the phenomenon of fluorescence and write its medicinal applications	7 M

(OR)

8.	Discuss about vibrational and rotational spectra of diatomic molecules	14M

UNIT-V

9.	(a)	Write notes on diastereomers and enantiomers	7 M
	(b)	Explain the conformational analysis of cyclohexane	7 M

(OR)

10.	(a)	Describe the SN^1 reaction mechanism with suitable examples	7 M
	(b)	Explain about Clemmensen reduction	7 M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
B.Tech. II Sem (R18) Regular End Examinations of April/May 2019
SUB: ENGLISH (Common to ECE & CSE)

Time : 3 Hours   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) The soup are hot.
   b) This lights are bright.
   c) It is raining when I got home lastnight.
   d) I have not ate anything.
   e) If I am a child, I would play outside.
   f) Everyone have seen that movie.
   g) I fell asleep while I watched Television.
   h) I have lived in Canada since 10 months.
   i) The students were not interested in the lesson because it was bored.
   j) She sat in the end of the table.
   k) I stopped to smoke cigarettes because it was unhealthy.
   l) It is very good weather.
   m) He adviced me to take rest.
   n) I can't find nothing in my neighborhood.
   o) The news on TV are always sad.
   p) Everybody accept their responsibilities.
   q) I use to play football during my school days.

2. (A) Write a short note on the process of word formation.   1x7 =7

   (B)   (i) Write synonyms for the following   4x1=4
                    (a) drowsy   (b) cleanse   (c) foe   (d) ecstasy
              (ii) Write antonyms for the following   3x1=3
                (a) draught   (b) dearth   (c) common

3. (A) Write dialogues on the situation given below: 1x7=7

   "You wish to go abroad for further studies, but your parents insisit that you stay at home and
      do some business. Try to convince them using persuasive language".

 (B) Give the meanings of idioms and phrases given below and use them in sentences of your own
                                                                               7x1=7
        (i) call off   (ii) come about   (iii) break in   (iv) keep off
        (v) cock and bull story (vi) at the eleventh hour (vii) jack of all trades

4. (A) i) Make five meaningful sentences on the following pattern   1x5=5

Subject +	Verb +	Object +	To infinitive
They	advised	him	to take rest

   2) Punctuate the following.   2M

      We had a great time in france the kids really enjoyed it

  (B) List out various features of Paragraph writing.   7M

5. (A) Rewrite the following sentences as directed   1x7=7

    i.   Implementation of rules has not yet taken place. (frame a sentence using 'implementation' as verb)

    ii.   He walked slowly. (frame a sentence using 'walk' as subject)

    iii.   He caught a big fish. (change into passive voice)

    iv.   My pen was stolen. (change into active voice)

    v.   Who gave you this book? (change into passive voice)

    vi.   " Iron is a metal" the teacher said. (change into indirect speech)

    vii.   He said to the boy, " What are you doing here?" (change into indirect speech)

  (B) Rewrite the following sentences as directed.   1x7=7

    i.   Akbar is one of the greatest kings. (change into comparative degree)

    ii.   Shakespeare is greater than any other writer in English. (change into positive degree)

    iii.   Iron is more useful than any other metal. (change into superlative degree)

    iv.   The sun came out and it was soon quite hot. (change into simple sentence)

    v.   He explained the excellence of the poem. (change into complex sentence)

    vi.   If you do not practice you will never become efficient. (change into compound sentence)

    vii.   A man who is dead needs no money. (change into simple sentence)

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

    (i) John is ------------ Italian.

    (ii) He is --------- young research scholar.

    (iii) Meet ----------- man in blue.

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

    (i) They have been waiting ---------- three hours.

    (ii) He prefers coffee ------ tea.

    (iii) This metal is made up -------- iron.

    (iv) I will meet you ---------- cross roads.

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

    (i) Everybody ---------- (help) when there is a problem.

    (ii) The boy or his brothers --------- (run) everyday.

    (iii) Indira Gandhi -------- (die) in 1984.

    (iv) He -------- (steal) my pen yesterday.

    (v) Ram -------- (live) in this village since 1985.

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

    (i) Kohli is ------- capable --------Sachin.

(ii) ---------- the Principal -------- the receptionist attended the party.

7. Read the following passage and answer the questions

At one time, in the history of India, most women knew very well how to bring up their infants and they lived a perfectly healthy life, free from diseases. The overall standard of women and children in the country was much better than those of other civilizations of that period. But ever since India was exposed to frequent invasions by foreign nations, life became unsafe and property was unprotected, and people were forced to congregate in towns in such a compact way, that led to awful insanitation and diseases. The traditional knowledge of domestic and personal health and hygiene was ignored. Women were confined indoors for fear of insults and a train of social and unhealthy dangers followed. It is a problem now, how we can restore the original conditions of healthy and happy life in India. This is a socio-economic problem which needs to be given priority to bring back the original culture and restore welfare of women and children in India.

Questions: 7x1=7
    i.   What was the main cause of the poor health conditions of women in India?
    ii.   How did life become unsafe and property unprotected?
    iii.   Why were the women confined indoors?
    iv.   When were women leading a perfectly healthy life?
    v.   How are foreign invasions responsible for poor health conditions?
    vi.   What question has the writer posed before the reader?
    vii.   What does the 'congregate' mean in the passage?

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

Men and women are of equal rank but they are not identical. They are be peerless pair being supplementary to one another, each helps the other so that without one the existence of the other cannot be conceived and, therefore it follows as a necessary corollary from these facts that anything that will impair the status of either of them will involve the equal ruin of them both. In framing any scheme of women's education this cardinal truth must be constantly kept in mind. Man is supreme in the outward activities of a married air and therefore it is in the fitness of things that he should have a greater knowledge thereof. On the other hand, noise life is entirely the sphere of woman and, therefore in domestic affairs, in the upbringing and education of children, woman ought to have more knowledge Not that knowledge should be divided into water tight compartment's or that so that some branches of knowledge should be closed to anyone, but unless courses of instruction are based on discriminating appreciation of these basic principles, the fullest life of man and woman cannot be developed. Among the manifold misfortunes that may befall humanity, the loss of health is one of the severest. All the joys which life can give cannot outweigh the sufferings of the sick. Among the manifold misfortunes that may befall humanity, the loss of health is one of the severest. All the joys which life can give cannot outweigh the sufferings of the sick.

8. A) Write an essay on the following in about 250 words.   1x7=7
   (i) Advantages and disadvantages of Technology.

  B) Expand the following into a paragraph   1x7=7
   (i) A bird in hand worth two in bush