

Code No: R22A0001

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

I B.Tech I Semester Supplementary Examinations, June/July 2024**English****(ECE, CSE, CSE-AIML & CSE-DS)**

Roll No									
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Time: 3 hours**Max. Marks: 60****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (10 Marks)**Marks****(Write all answers of this part at one place)**

- | | | | |
|----------|---|---|-------------|
| 1 | A | Rewrite the sentence correcting the tense form:
“We have watched the movie last night.” | [1M] |
| | B | Write a topic sentence for the paragraph on ‘Global Warming.’ | [1M] |
| | C | Define ‘Salutation’ in formal letter. Give an example. | [1M] |
| | D | Write an appropriate ‘subject line’ for a cover letter you are writing as part of your job application. | [1M] |
| | E | Convert the sentence into passive voice:
My mother knows them well. | [1M] |
| | F | Convert the sentence into active voice:
The project has been completed by the team well before the deadline. | [1M] |
| | G | How many articles are there in English? What are they? | [1M] |
| | H | What is a colon mark? Use it in a sentence. | [1M] |
| | I | Write the meanings of the words: affect-effect. | [1M] |
| | J | What is an antecedent with respect to ‘noun-pronoun agreement’? | [1M] |

PART-B (50 Marks)**SECTION-I**

- | | | | |
|----------|---|---|-------------|
| 2 | A | Elaborate JK Rowling’s ideas on “the benefits of failure”. | [5M] |
| | B | What does JK Rowling have to say on the “importance of imagination” in her Harvard Convocation Address? | [5M] |

OR

- | | | | |
|----------|---|--|-------------|
| 3 | A | Write a brief note on the parts of a paragraph. | [5M] |
| | B | Discuss any three word-formation methods giving two examples each. | [5M] |

SECTION-II

- | | | | |
|----------|--|--|--------------|
| 4 | | Write a detailed critical summary of the poem ‘The Road Not Taken’ by Robert frost focusing on its themes, message and the symbols used by the author. | [10M] |
|----------|--|--|--------------|

OR

- | | | | |
|----------|---|--|-------------|
| 5 | A | Write an argumentative essay on the topic: ‘Dowry System in the Society’. | [5M] |
| | B | Write a synonym and an antonym each for the following words:
1. Meticulous 2. Basic 3. Rarely 4. Destroy 5. Universal | [5M] |

SECTION-III

- 6 A What are 'CC' and 'BCC' in email writing? Write a note on their uses. [5M]
 B Identify the underlined words in the following sentences either as [5M]
 transitive or intransitive verbs.
 1. Ramu laughed heartily.
 2. Krishna completed all his projects.
 3. My mother cooks well.
 4. I found the book very interesting.
 5. My friend studied economics.

OR

- 7 Write a formal complaint letter to the manager of a hotel you stayed during your recent tour, discussing the poor facilities and service. [10M]

SECTION-IV

- 8 Write a detailed summary of Abraham Lincoln's letter to his son's teacher covering its purpose and message. [10M]

OR

- 9 A Fill in the blanks with correct articles. Use **X** if no article is required. [5M]
 1. Are you coming to ____ party next Saturday?
 2. I bought ____ new TV set yesterday.
 3. I think ____ man over there is very ill. He can't stand on his feet.
 4. I watched ____ video you had sent me.
 5. She was wearing ____ ugly dress when she met him.
 6. I am crazy about reading ____ history books.
 7. She is ____ nice girl.
 8. Do you want to go to ____ restaurant where we first met?
 9. He is ____ engineer.
 10. He thinks that ____ love is what will save us all.
 B Fill in the blanks with phrasal verbs using the following verbs (believe, fill, get, look, put, switch, take, throw, turn, try) and the prepositions (away, down, for, in, off, on, out). [5M]
 1. Quick! ----- the bus. It's ready to leave.
 2. I don't know where my book is. I have to ----- it.
 3. It's dark inside. Can you ----- the light, please?
 4. ----- the form, please.
 5. I need some new clothes. Why don't you ----- these jeans?
 6. It's warm inside. ----- your coat.
 7. This pencil is really old. You can ----- it.
 8. It's so loud here. Can you ----- the radio a little?
 9. The firemen were able to ----- the fire in Church Street.
 10. Does your little brother ----- ghosts?

SECTION-V

- 10 Discuss in detail how some of the childhood experiences of Abdul Kalam contributed to the development of his character. Include the influence of his village environment, family members, teachers etc. [10M]

OR

- 11 A How does a memo differ from a formal letter in its purpose and structure? [5M]
 B Compose a short office memo written by the superintendent informing the workers about the change in lunch timings. [5M]

Code No: R22A0023

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

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I B.Tech I Semester Supplementary Examinations, June/July 2024**Mathematics-I**

(Common to all branches)

Roll No									
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Time: 3 hours**Max. Marks: 60****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (10 Marks)**Write all answers of this part at one place**

- 1 A Define rank of a matrix. [1M]
 B Define unitary matrix. [1M]
 C Find eigenvalues of the matrix $\begin{bmatrix} 1 & 0 & 1 \\ 0 & 4 & 0 \\ 0 & 0 & 3 \end{bmatrix}$ [1M]
 D If $A = \begin{bmatrix} 1 & -1 \\ 0 & 1 \end{bmatrix}$, then compute A^{2023} [1M]
 E If $x = r \cos \theta$, $y = r \sin \theta$ and $\frac{\partial(x,y)}{\partial(r,\theta)} = r$, then compute $\frac{\partial(r,\theta)}{\partial(x,y)}$ [1M]
 F Define functional dependence. [1M]
 G Define integrating factor of differential equation. [1M]
 H Solve $y - x \frac{dy}{dx} - \left(\frac{dy}{dx}\right)^2 = 0$ [1M]
 I Solve $(1 - D^2)y = 0$ [1M]
 J Find P.I of $(D^3 - 1)y = e^{-x}$ [1M]

PART-B (50 Marks)**SECTION-I**

- 2 Find the rank of the matrix by reducing to normal form [10M]

$$\begin{bmatrix} 2 & 1 & 3 & 5 \\ 4 & 2 & 1 & 3 \\ 8 & 4 & 7 & 13 \\ 8 & 4 & -3 & -1 \end{bmatrix}$$

OR

- 3 Find the values of k for which the system of equations [10M]

$$(3k - 8)x + 3y + 3z = 0$$

$$3x + (3k - 8)y + 3z = 0$$

$$3x + 3y + (3k - 8)z = 0 \quad \text{have a non-trivial solution.}$$

SECTION-II

- 4 If $A = \begin{bmatrix} 2 & 1 & 1 \\ 0 & 1 & 0 \\ 1 & 1 & 2 \end{bmatrix}$, then show that A satisfies its characteristic equation [(5+5)M]

and using this result express the polynomial

$A^8 - 5A^7 + 7A^6 - 3A^5 + A^4 - 5A^3 + 8A^2 - 2A + I$ as a second degree polynomial.

- 5 Diagonalize the matrix $A = \begin{bmatrix} 0 & 1 & 1 \\ 1 & 0 & -1 \\ 1 & -1 & 0 \end{bmatrix}$ OR [10M]

SECTION-III

- 6 A If $x + y + z = u, y + z = uv, z = uvw$, then evaluate $\frac{\partial(x,y,z)}{\partial(u,v,w)}$ [5M]

- B If $x + y + z = u, xy + yz + zx = v, x^2 + y^2 + z^2 = w$, then show that u, v, w are functionally dependent and find its relation. [5M]

OR

- 7 A rectangular box open at the top is to have a volume of 32 cubic feet. Find the dimension of box requiring least material for its construction. [10M]

SECTION-IV

- 8 A Solve $\frac{dy}{dx} + \frac{y \cos x + \sin y + y}{\sin x + x \cos y + x} = 0$ [5M]

- B The rate at which bacteria multiply is proportional to instantaneous N numbers present. If the original number doubles in 2 hours, when it will be tripled? [5M]

OR

- 9 Solve $x = 2py + \frac{y}{2p}$, where $p = \frac{dy}{dx}$ [10M]

SECTION-V

- 10 Solve $(D^2 + a^2)y = \sec ax$ by using method of variation of parameters [10M]

OR

- 11 Solve $(x^2 D^2 - xD + 1)y = \log x$ [10M]

Code No: **R22A0021****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**

(Autonomous Institution – UGC, Govt. of India)

I B.Tech I Semester Supplementary Examinations, June/July 2024**Applied Physics****(EEE, ME, ECE, IT, AE, CS&IT, CSE-CS & CSE-IOT)**

Roll No									
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Time: 3 hours**Max. Marks: 60****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (10 Marks)**Write all answers of this part at one place)**

- | | | | |
|---|---|---|------|
| 1 | A | State the properties of laser beam | [1M] |
| | B | Note down the formula for attenuation loss in optical fiber | [1M] |
| | C | Calculate the ground state energy for an electron in a 1D potential box of length 1\AA | [1M] |
| | D | Explain the physical significance of wave function | [1M] |
| | E | Note down the expression for Fermi-Dirac distribution function | [1M] |
| | F | Which material has an energy gap in the order of 1 eV | [1M] |
| | G | What is meant by photo voltaic effect | [1M] |
| | H | What is the necessity of doping in semi conductors | [1M] |
| | I | Define electric susceptibility | [1M] |
| | J | Mention the value of magnetic susceptibility in case of dia magnetic materials | [1M] |

PART-B (50 Marks)**SECTION-I**

- | | | | |
|---|---|--|------|
| 2 | A | What do you understand by population inversion? How it is achieved? | [3M] |
| | B | Describe the construction and working of ruby laser with a neat labelled diagram | [7M] |

OR

- | | | | |
|---|---|---|------|
| 3 | A | What is the acceptance angle of an optical fiber and derive an expression for it | [7M] |
| | B | Draw the block diagram of fiber optic communication system and explain the function of each block | [3M] |

SECTION-II

- | | | | |
|---|---|---|------|
| 4 | A | State and explain Heisenberg's uncertainty principle | [4M] |
| | B | What are matter waves? Obtain an expression for the wave length of matter waves | [6M] |

OR

- | | | | |
|---|---|--|------|
| 5 | A | Explain in detail the Davisson and Germer's experiment to prove the existence of matter wave | [7M] |
| | B | Write the properties of matter waves. | [3M] |

6 A What are the assumptions of classical and quantum free electron theory **[4M]**
 B Using Kronig-Penney model show that the energy spectrum of an **[6M]**
 electron contains a number of allowed energy bands separated by
 forbidden bands

7	A	Explain the concept of density of states and derive an expression for it	[7M]
	B	Classify materials into metals, semi-conductors and insulators on the basis of origin of energy bands in solids	[3M]

8	A	Discuss the principle and characteristics of solar cell with neat sketch	[5M]
	B	Explain the working of Photo diode with neat sketch.	[5M]

9	A	Discuss in detail the dependence of Fermi level on carrier concentration and temperature	[5M]
	B	Explain the fabrication of LED	[5M]

10	A	Derive Clausius-Mossotti relation in dielectrics	[5M]
	B	Explain Piezo-electricity and Ferro-electricity	[5M]

11	A	List out properties of Anti-ferro and Ferri-magnetic materials	[5M]
	B	Draw the Hysteresis curve based on domain theory and explain	[5M]

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MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

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I B.Tech I Semester Supplementary Examinations, June/July 2024

Engineering Chemistry

(EEE, ME, ECE, IT, AE, CS&IT, CSE-CS & CSE-IOT)

Roll No								
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Time: 3 hours**Max. Marks: 60**

Note: This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 10 marks.

PART-A (10 MARKS)

Write all answers of this part at one place

- | | | | |
|---|---|--|------|
| 1 | A | Write the significance of Nernst equation? | [1M] |
| | B | The E°_{cell} of an aluminum air battery is 2.73 V and it involves a 12 electron process. Calculate the free energy change of the battery in kJ. | [1M] |
| | C | A small steel pipe is fitted into a large copper tank then the corrosion rate increases. Give the reason. | [1M] |
| | D | Rusting of iron is quicker in saline water than in ordinary water. Give your reason. | [1M] |
| | E | Write an example for thermosetting polymer. | [1M] |
| | F | What is an Elastomer? Give an example. | [1M] |
| | G | Give examples for 0D, 1D, 2D and 3D nanomaterials. | [1M] |
| | H | Comment on the surface area of nanomaterials to that of bulk materials. | [1M] |
| | I | What is caustic embrittlement? | [1M] |
| | J | What is meant by priming? | [1M] |

PART-A (50 MARKS)

SECTION-I

- | | | | |
|---|---|--|------|
| 2 | A | Explain briefly about the <u>construction</u> and working Principle of Calomel electrode with neat sketch. | [5M] |
| | B | Differentiate between primary and secondary batteries. | [5M] |

OR

- | | | | |
|---|---|---|------|
| 3 | A | Define electrochemical series and write its applications. | [5M] |
| | B | Explain briefly about construction and working principle of Li-Ion batteries. | [5M] |

SECTION-II

- 4 A Explain briefly about the oxidation corrosion with suitable examples. [5M]
B What are the main causes and effects of corrosion. [5M]

OR

- | | | | |
|---|---|---|------|
| 5 | A | Explain briefly about the impressed current cathodic protection method with suitable example. | [5M] |
| | B | Differentiate Galvanic corrosion and Differential aeration corrosion with suitable examples. | [5M] |

SECTION-III

- 6 A Differentiate thermoplastic and thermosetting polymers with suitable examples. [5M]
 B What is polymerization? Classify the following as addition and condensation polymers: Terylene, Bakelite, Polyvinyl chloride, Polythene. [5M]

OR

- 7 A Distinguish between condensation and addition polymerization with examples. [5M]
 B Explain briefly about the preparation, properties and applications of Polyvinylchloride (PVC). [5M]

SECTION-IV

- 8 A Explain briefly about the Sol-gel method for the preparation of nanomaterials. [5M]
 B Give two examples and applications each for shape memory alloys. [5M]

OR

- 9 A Why nanomaterials are different from bulk materials? Discuss any one method of preparation of nanomaterials. [5M]
 B Differentiate piezoelectric materials and shape memory alloys. [5M]

SECTION-V

- 10 How is exhausted resin regenerated in an ion-exchanger? What are merits and demerits of ion-exchange method? [10M]

OR

- 11 A Explain briefly about the disinfection of water by chlorination and ozonisation processes. [5M]
 B Differentiate scale and a sludge. Describe the disadvantages of scale and sludge formation? [5M]

Code No: R22A0201

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

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I B.Tech I Semester Supplementary Examinations, June/July 2024**Principles of Electrical and Electronics Engineering**

(CSE, CSE-AIML, CSE-DS & B.Tech-AIML)

Roll No									
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Time: 3 hours**Max. Marks: 60****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

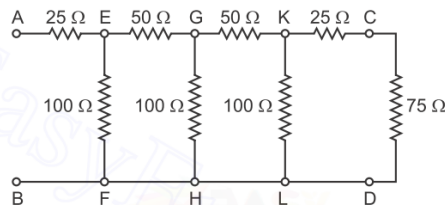
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (10 Marks)**Write all answers of this part at one place)**

- 1
 - A Write any two limitations of Ohm's Law. [1M]
 - B Write the steps to solve the super position theorem. [1M]
 - C An alternating voltage is given by $v = 100 \sin 314 t$ volts. Its average value will be _____. [1M]
 - D Why three-phase systems are preferred over single-phase systems in power distribution? [1M]
 - E What is the role of the commutator in a DC generator? [1M]
 - F What is the significance of back EMF in a DC motor. [1M]
 - G Why a P-N junction diode conducts in the forward-biased condition. [1M]
 - H Calculate the efficiency of the bridge rectifier. [1M]
 - I Draw the circuit connection of common base configuration of a BJT. [1M]
 - J What are the applications of JFET [1M]

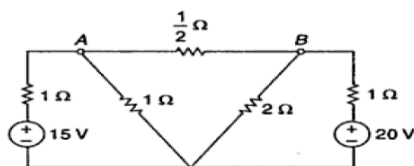
PART-B (50 Marks)**SECTION-I**

- 2
 - A A voltage of 200 V is applied to a tapped resistor of 500 Ω . Find the resistance between two tapping points connected to a circuit needing 0.1 A at 25 V. Calculate the total power consumed. [5M]
 - B What is the equivalent resistance of the ladder network shown in Fig. [5M]



OR

- 3
 - A A 50 Ω resistor is in parallel with 100 Ω resistor. Current in 50 Ω resistor is 7.2 A. How will you add a third resistor and what will be its value if the line current is to be 12.1 A? [5M]
 - B Find the current flowing through the 2 Ω resistor by using mesh analysis. [5M]



SECTION-II

- 4 A Derive and discuss the average value of the sinusoidal voltage waveform. [5M]
 B A $318 \mu\text{F}$ capacitor is connected across a 230 V, 50 Hz system. Determine (i) the capacitive reactance (ii) r.m.s. value of current and (iii) equations for voltage and current. [5M]

OR

- 5 A Describe the behavior of a pure resistive circuit in response to a sinusoidal input and derive the relationship between voltage and current. Also calculate the power. [5M]
 B Describe and derive the voltage & current relationships between a three-phase delta connection [5M]

SECTION-III

- 6 A Derive and explain the EMF equation for a DC generator. [5M]
 B Provide a detailed explanation of the construction and working principle of a single-phase transformer. [5M]

OR

- 7 A Derive and discuss the torque equations for a DC motor. [5M]
 B A 250 KVA, 11 KV /415 V, 50 Hz, single phase transformer has 80 turns on the secondary, calculate: [5M]
 i. The rated primary and secondary currents,
 ii. The no of primary turns,
 iii. The max value of the flux,
 iv. Voltage induced per turn

SECTION-IV

- 8 A Discuss the voltage-current characteristics of a P-N junction diode and discuss its applications. [5M]
 B Explain the operation and construction of a half-wave rectifier and calculate its ripple factor and efficiency. [5M]

OR

- 9 A Explain how a Zener diode is employed as a voltage regulator. [5M]
 B Explain the construction and operation of Zener diode. [5M]

SECTION-V

- 10 A Explain in detail the symbols used for N-P-N and P-N-P transistors and highlighting the significance of each element [5M]
 B Elaborate on the operating principle of an N-channel JFET. [5M]

OR

- 11 A Describe the input and output characteristics of the CB configuration of NPN transistor. [5M]
 B Discuss in detail the construction and working principle of Depletion mode MOSFET. [5M]

Code No: **R22A0301****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**

(Autonomous Institution – UGC, Govt. of India)

I B.Tech I Semester Supplementary Examinations, June/July 2024**Computer Aided Engineering Graphics
(CSE, CSE-AIML, CSE-DS & B.Tech-AIML)**

Roll No									
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Time: 3 hours**Max. Marks: 60**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 12 marks.

SECTION-I

- 1 A Draw a hyperbola when its double ordinate is 90 mm, abscissa is 35 mm and half the transverse axis is 45 mm. **[6M]**
- B Draw an involute of a circle of 50 mm diameter. Also draw a tangent and normal to the curve at a point 140 mm from the center of the circle. **[6M]**
- OR
- 2 A circle of 45mm diameter rolls along a straight line without slipping. Draw a curve traced out by a point P on the circumference for one complete revolution of the circle. Name the curve and draw a tangent to the curve at a distance 35mm from the straight line. **[12M]**

SECTION-II

- 3 Draw the projections of the following points on a common XY line. keep the distance between the projectors as 20 mm. **[12M]**
- (i) Point A is 30 mm above H.P and 40 mm in front of V.P.
- (ii) Point B is 30 mm above H.P and 40 mm behind the V.P
- (iii) Point C is 30 mm below H.P and 40 mm behind the V.P
- (iv) Point D is 30 mm below H.P and 40 mm in front of V.P
- (v) Point E is in H.P and 40 mm behind the V.P
- (vi) Point F is in the V.P and 40 mm below the H.P
- (vii) Point G is in both the H.P and V.P

OR

- 4 A line AB of 70 mm long has its end A at 10 mm above H.P and 15 mm in front of V.P. Its front view and Top view measure 50 mm and 60 mm respectively. Draw the projections of the line and determine its inclinations with H.P and V.P. **[12M]**

SECTION-III

- 5 A circular plate of 60 mm diameter has a hexagonal hole of 20 mm side, centrally punched. Draw the projection of the plate resting on H.P on a point, with its surface inclined at 30° to H.P. Any two parallel sides of the hexagonal hole are perpendicular to V.P. Draw the projections of the plate. **[12M]**

OR

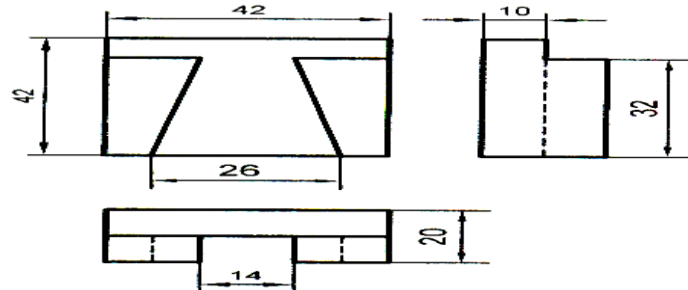
- 6 Draw the projections of a pentagonal prism of base 25 mm side and axis 50 mm long, when it is resting on one of its rectangular faces on H.P. The axis of the solid is inclined at 45° to V.P. **[12M]**

SECTION-IV

- 7 Draw the isometric view of a pentagonal pyramid, with side of base 25 mm and axis 60 mm long. The pyramid is resting on its base on H.P, with an edge of the base (away from the observer) parallel to V.P. [12M]

OR

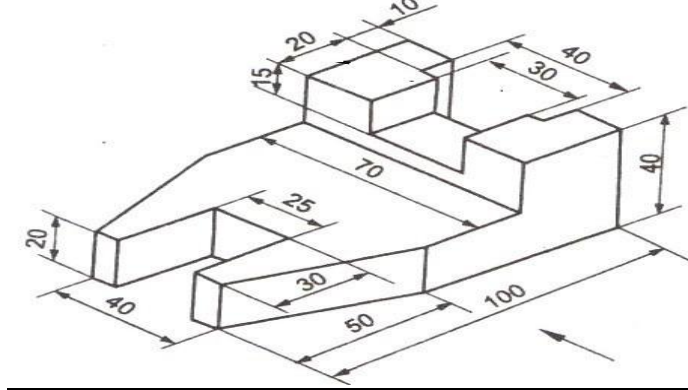
- 8 [12M]



Draw the isometric views from the below figure

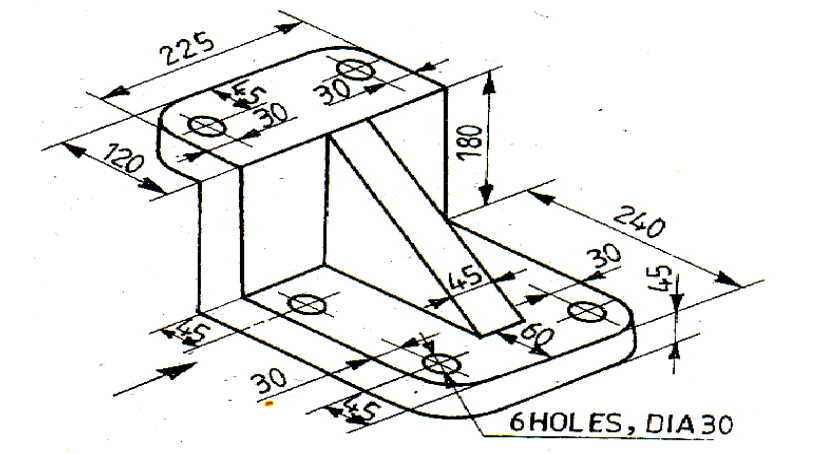
SECTION-V

- 9 Figure below shows a guide block. Draw its i) Front view ii) Top view and iii) Right side view. All Dimensions are in mm. [12M]



OR

- 10 Draw its i) Front view ii) Top view and iii) side view of the object shown in figure. All Dimensions are in mm. [12M]



Code No: **R22A0501****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**

(Autonomous Institution – UGC, Govt. of India)

I B.Tech I Semester Supplementary Examinations, June/July 2024**Programming for Problem Solving**

(Common to all branches)

Roll No									
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Time: 3 hours**Max. Marks: 60****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (10Marks)**Write all answers of this PART at one place**

- | | | |
|----------|--|-------------|
| 1 | A Differentiate between constants and variables? | [1M] |
| | B Define implicit type conversion with example? | [1M] |
| | C What is conditional operator? | [1M] |
| | D Can we use 'continue' statement in switch case? Give justification | [1M] |
| | E Differentiate between call by value and call by reference? | [1M] |
| | F What are global and local variables? | [1M] |
| | G What is a null pointer? What is its use? | [1M] |
| | H What is command line argument? | [1M] |
| | I What are the differences between structure and union? | [1M] |
| | J What is the use of fseek() function? | [1M] |

PART-B (50Marks)**SECTION-I**

- | | | |
|----------|--|-------------|
| 2 | A Explain formatted console i/o function. Also write various format specifiers used with these function? | [5M] |
| | B Explain the following: | [5M] |
| | (i) Machine Language | |
| | (ii) Assembly Language | |
| | (iii) Low and High-Level Languages | |

OR

- | | | |
|----------|---|-------------|
| 3 | A What is an expression? Explain the role of operator precedence and associativity in solving an expression | [5M] |
| | B Explain in detail, the sequence of steps to be followed in writing an algorithm for finding the sum of first 'N' natural numbers. | [5M] |
| | Hint: Sum of First 'N' natural numbers = $N(N+1) / 2$ | |

SECTION-II

- | | | |
|----------|--|-------------|
| 4 | A Explain different looping statements with syntax and examples. | [5M] |
| | B Write a C program to find factorial of given number using for loop | [5M] |
| | OR | |
| 5 | A Explain different decision statements in C with examples? | [5M] |

- B How we can access elements of one dimensional array? Write a program in C language to illustrate operation of an array. [5M]
- SECTION-III**
- 6 A What is a recursion? Write a program to find Fibonacci series using recursion? [5M]
- B What do you mean by storage class? How many storage classes are there in C? Explain the importance of each one? [5M]
- OR
- 7 A What is a function? What are the different types of functions? Explain function with argument and no return type with an example [5M]
- B How do you pass an array as a parameter to a function that computes the transpose of the matrix? [5M]
- SECTION-IV**
- 8 A Explain the following string handling functions with examples: (i) strcpy() (ii) strcat() (iii) strrev() (iv) strlen [5M]
- B Explain the arithmetic operations on pointers with example [5M]
- OR
- 9 A What do you understand by array of pointers? Give an example? [5M]
- B What is the difference between static memory allocation and dynamic memory allocation? Explain the difference between malloc() and calloc() functions. [5M]
- SECTION-V**
- 10 A How do you define a structure, structure variables, access their elements and perform operations on them? Explain with examples [5M]
- B Explain of the array of structure with an example [5M]
- OR
- 11 A Explain the following operations: (i) fseek(). (ii) ftell. (iii) rewind(). (iv) ferror() (v) fgetc() (vi) fputc() [5M]
- B Write a program to copy content of one file to another file? [5M]
