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II B.TECH I SEM

SUPPLEMENTARY EXAMINATIONS

APRIL 2025

NEC NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)

II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCE3TH05 **ENGINEERING SURVEYING**

Time: 3 hours (CE) Max. Marks: 60

Note: Answer All **FIVE** Questions.
All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No.		Questions	Marks
1		Unit-I	
	a	i) A 20 m chain was found to be 15 cm too long after chaining a distance of 1600 m. It was found to be 30 cm too long at the end of day's work after chaining a total distance of 3200 m. Determine the correct distance if the chain was correct before the commencement of the work.	[6M]
		ii) State the reasons for incorrect length of Chain?	[6M]
		OR	
	b	i) Give the broad classification of Surveying?	[6M]
		ii) List the instruments for Direct measurement of Distances?	[6M]
2		Unit-II	
	a	The following bearings are taken on a closed compass traverse.	[12M]

Line	F.B	B.B
AB	S $37^0$30' E	N $37^0$30' W
BC	S $43^0$15' W	N $44^0$15' E
CD	N $73^0$00' W	S $72^0$15' E
DE	N $12^0$45' E	S $13^0$15' W
EA	N $60^0$00' E	S $59^0$00' W

Compute the interior angles and correct them for observational errors. Assuming the observed bearing of the line AB to be correct, adjust the bearing of the remaining sides.

		OR	
	b	i) Differentiate between a Closed Traverse and Open Traverse	[6M]
		ii) Explain the terms "Local attraction" and "Magnetic declination"	[6M]
3		Unit-III	
	a	i) Explain the principle of leveling?	[6M]
		ii) Compare the collimation method with Rise and Fall method.	[6M]
		OR	
	b	i) Define the terms "Contour Interval" and "Horizontal Equivalent of Contour"?	[6M]
		ii) Discuss in detail the methods of direct and indirect contouring.	[6M]
4		Unit-IV	
	a	i) Write the temporary adjustments of a transit theodolite	[6M]
		ii) Write the permanent adjustments of a theodolite	[6M]
		OR	
	b	What are the different methods of setting out simple curves? Explain Rankines method of deflection angles for setting out curves.	[12M]
5		Unit-V	
	a	i) What are the advantages of plane table surveying?	[6M]
		ii) Explain about temporary and permanent adjustments of plane table surveying.	[6M]
		OR	
	b	Briefly explain about different methods in plane table surveying.	[12M]

NARASARAOPETA ENGINEERING COLLEGE
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II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCE3TH06

BUILDING MATERIALS AND BUILDING CONSTRUCTION

Time: 3 hours (CE) Max. Marks: 60

Note: Answer All **FIVE** Questions.

All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No		Questions	Marks
1		Unit-I	
	a	i) Explain about the dressing of stones? Draw the sketches of stones neatly?	[6M]
		ii) Discuss briefly about various methods of manufacturing of Tiles?	[6M]
		OR	
	b	i) Explain about the materials like Gypsum, Glass?	[6M]
		ii) Describe with neat sketch a brick manufacturing kiln	[6M]
2		Unit-II	
	a	i) Draw the cross section of a tree and explain the structure of timber.	[12M]
		ii) Describe Ashlar stone masonry and state its use in construction of structures.	
		OR	
	b	i) Explain the classification of wood used in buildings in detail?	[4M]
		ii) Explain about Galvanized Iron, Fiber – Reinforced Plastics	[4M]
3		Unit-III	
	a	i) Explain the constituents of lime stone.	[6M]
		ii) Explain the chemical composition of cement?	[6M]
		OR	
	b	i) What is Lime and what are the various ingredients of lime?	[6M]
		ii) Explain why gypsum is added during the manufacture of cement?	[6M]
4		Unit-IV	
	a	i) What are the different types of roofs explain any two?	[6M]
		ii) Draw Neatly King Post Trusses and Explain.	[6M]
		OR	
	b	i) Explain any two types of flooring in detail?	[6M]
		ii) Explain about form work and scaffoldings?	[6M]
5		Unit-V	
	a	i) Explain the different types of painting?	[6M]
		ii) write about vanishes, Form Works	[6M]
		OR	
	b	i) Write shorts notes on the following a) White Washing b) Distempering	[6M]
		ii) Explain in detail about Damp Proofing and water proofing materials	[6M]

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NARASARAOPETA ENGINEERING COLLEGE
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II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCC3TH02 NUMERICAL METHODS AND TRANSFORMATIONS

Time: 3 hours (Common to CE, EEE, ME) Max. Marks: 60

Note: Answer All **FIVE** Questions. All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No		Questions	Marks
1		Unit-I	
	a	i) Using Newton's Iterative method, find the real root of $x\,\text{Sin}x + \text{Cos}\,x = 0$ which is near $x=\pi$ correct to 3 decimal places.	[6M]
		ii) Express $f(x) = x^4-12x^3+24x^2-30x+9$ and its successive differences in factorial notation. Hence show that $\Delta^5\{f(x)\}=0$.	[6M]
		OR	
	b	i) Solve $x^3-5x+3=0$ by using Regula-Falsi method.	[6M]
		ii) Using Lagrange's interpolation formula, find y(10) from the following table:	[6M]

x	5	6	9	11
y	12	13	14	16

2		Unit-II		
	a	Find y(0.1) and y(0.2) using Runge-Kutta fourth order formula given that $\frac{dy}{dx}=x^2-y$ and y(0)=1		[12M]
		OR		
	b	i) Evaluate $\int_0^6 \frac{1}{1+x^2}dx$ using Simpon's rules and Trapezoidal rule.		[6M]
		ii) Find $\int_0^6 \frac{e^x}{1+x}dx$ approximately using Simpson's 3/8th rule on integration.		[6M]
3		Unit-III		
	a	i) Find $L\{te^{-2t}\,\text{Cos}2t\}$		[6M]
		ii) Find $L\{\frac{1-\cos 2t}{t^2}\}$		[6M]
		OR		
	b	i) Find $L^{-1}\{\frac{s+3}{s^2-3s+2}\}$		[6M]
		ii) Using Laplace transform, solve $\frac{d^2y}{dt^2}+2\frac{dy}{dt}+5y=e^{-t}\sin t$, given that y(0)=0, y'(0)=1.		[6M]
4		Unit-IV		
	a	i) Explain Fourier series and Dirichlet's conditions		[3M]
		ii) Find the Fourier series to represent the function $f(x)=\begin{cases}-k\ when\ -\pi<x<0\\ k\ when\ 0<x<\pi\end{cases}$ Also		[9M]

		deduce that $\frac{\pi}{4}=1-\frac{1}{3}+\frac{1}{5}-\frac{1}{7}+\ldots..$	
		OR	
	b	i) Express f(x) = Cos x as Fourier cosine series in $(0,\pi)$.	[6M]
		ii) Find the half range cosine and sine series for the function $f(x) = x^2$ in the range $0 \leq x \leq \pi$.	[6M]
5		Unit-V	
	a	i) Using Fourier integral, show that $e^{-x}\cos x=\frac{2}{\pi}\int_0^{\infty}\frac{\lambda^2+2}{\lambda^4+4}\cos\lambda x\,.\,d\lambda$	[6M]
		ii) Find the Fourier cosine transform of $1/(1+x^2)$	[6M]
		OR	
	b	i) State and Prove Change of Scale property.	[4M]
		ii) Find the Fourier Sine transform of $\frac{1}{x(x^2+a^2)}$	[8M]

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NARASARAOPETA ENGINEERING COLLEGE
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II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BEE3TH04 **ELECTRICAL MACHINES-I**

Time: 3 hours (EEE) Max. Marks: 60

Note: Answer All **FIVE** Questions.

All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No		Questions	Marks
1		Unit-I	
	a	i) Explain the Principles of electromechanical energy conversion with suitable diagrams?	[6M]
		ii) Identify a multi excited system and explain the how the force is developed?	[6M]
		OR	
	b	i) Classify DC machines based on excitation.	[6M]
		ii) Draw and Explain OCC of DC shunt generator	[6M]
2		Unit-II	
	a	Explain in detail with suitable diagrams about Armature reaction and commutation?	[12M]
		OR	
	b	i) Develop Torque and back-emf equations of dc motor.	[4M]
		ii) Write an application of dc motor	[4M]
		iii)Describe the losses in DC Machine	[4M]
3		Unit-III	
	a	i) Draw 3 point starter and explain?	[6M]
		ii) Describe the method of Speed control by armature voltage with necessary diagram.	[6M]
		OR	
	b	i) How to pre-determine the efficiency of a machine for half load by Swinburne's method? Explain suitably.	[12M]
4		Unit-IV	
	a	i) Illustrate with necessary diagrams the operation of transformer on no load and on load for lagging, leading and unity power factors loads	[12M]
		OR	
	b	i) Explain the objective of conducting open circuit of a transformer?	[6M]
		ii) Describe the function of auto transformer.	[6M]
5		Unit-V	
	a	i) Make use of three transformer obtain various possibilities of three phase connections with diagrams	[12M]
		OR	
	b	i) Explain in detail about off load and on load tap changers	[12M]

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NARASARAOPETA ENGINEERING COLLEGE
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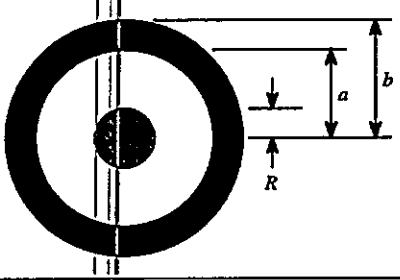
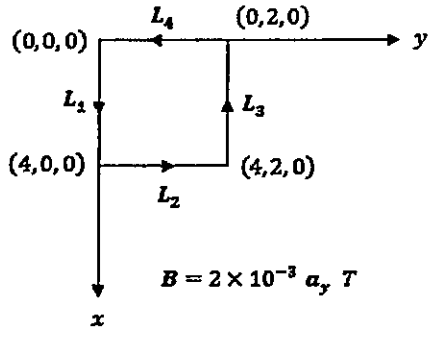
II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BEE3TH05 **ELECTRO MAGNETIC FIELDS**

Time: 3 hours (EEE) Max. Marks: 60

Note: Answer All **FIVE** Questions All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No		Questions	Marks
1		Unit-I	
	a	i) The electric field in a spherical co-ordinate is given by E=(r/5)ar. Show that closed E.dS=(.E)dv.	[6M]
		ii) Define the potential difference and absolute potential. Give the relation between potential and field intensity.	[6M]
		OR	
	b	i) Explain three co-ordinate system.	[6M]
		ii)) A uniform line charge L =25Nc/m lies on the x=3m and y=4m in free space . Find the electric field intensity at a point (2,3,15)m.	[6M]
2		Unit-II	
	a	Suppose the electric potential is given by the expression $V(\bar{r}) = A\frac{e^{-\lambda r}}{r}$ for all r (A and λ are constants). Find the electric field $\bar{E}(\bar{r})$, the charge density $\rho(\bar{r})$ and the total charge Q.	[12M]
		OR	
	b	i) what are the Applications of Gauss's law	[4M]
		ii) Explain poissons and lapace's equations.	[4M]
		iii) Drive an expression The curl of E	[4M]
3		Unit-III	
	a	i) The capacitance of the conductor formed by the two parallel metal sheets, each 100cm2,in area separated by a dielectric 2mm thick is , 2×10-10 micro farad .a potential of 20KV is applied to it . find (i) Electric flux (ii) Potential gradient in kV/m (iii) The relative permittivity of materials (iv) Electric flux density	[6M]
		ii) derive the equations for a current density J(x) and a magnetic induction B(x)	[6M]
		OR	
	b	i) derive The Equations of Magnetostatics and Ampère's Law	[6M]
		ii) A metal sphere of radius R, carrying charge q, is surrounded by a thick concentric metal shell of inner radius a, outer radius b, see Fig. The shell carries no net charge.Find the surface charge density σ at R, at a, and at b. also Find the potential at the center of the sphere, using  infinity as reference.	[6M]
4		Unit-IV	
	a	i) A charge of 2×10^{-3} C is moving with a uniform velocity of $3\boldsymbol{a}_x$ m/sec in a magnetic flux density of $(2\boldsymbol{a}_x - 3\boldsymbol{a}_y)$ T, Find the magnetic force experienced by the charge. (b) If we consider an electric field intensity of $(-2\boldsymbol{a}_x + 2\boldsymbol{a}_y)$ v/m , then find the magnitude of the total force on the charge.	[6M]
		ii) derive the equation for energy in a permanent magnetic dipole moment in an external magnetic induction	[6M]

		OR		
	b	i)	Consider a current carrying loop in a uniform magnetic field of $2 \times 10^{-3}\ \boldsymbol{a}_y$ T as shown in Fig. Find total force and total torque on the loop if it carries a current of 4 A.  	[6M]
		ii)	Two differential current elements; $I_1 d\boldsymbol{l}_1 = 8 \times 10^{-4}\ \boldsymbol{a}_z\ Am$ and $I_2 d\boldsymbol{l}_2 = -8 \times 10^{-4}\ \boldsymbol{a}_z\ Am$ are located at (0, 0, 0) and (0, 2, 0) respectively. Calculate $d\,(d\boldsymbol{F}_1)$ and $d\,(d\boldsymbol{F}_2)$.	[6M]
5		Unit-V		
	a	i)	explain Faraday's Law of Induction	[6M]
		ii)	explain Maxwell's Equations in Integral Form and Instantaneous Form	[6M]
		OR		
	b	i)	$\boldsymbol{E} = 377 \sin(10^9 t - 5y)\boldsymbol{a}_z$ is travelling in a medium characterized by $\mu = \mu_0$ find ϵ_r ,$\boldsymbol{H}$, $v\ \lambda$ *and* average power density.	[6M]
		ii)	explain Maxwell's Equations in Phasor Form.	[6M]

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NARASARAOPETA ENGINEERING COLLEGE
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II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCI3TH02 **FRONT END WEB TECHNOLOGIES**

Time: 3 hours (CSE, IT) Max. Marks: 60

Note: Answer All **FIVE** Questions.

All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No		Questions	Marks
1		Unit-I	
	a	i) Explain the different types of text formatting styles in HTML with suitable examples.	[6M]
		ii) Describe the use of the HTML5 Canvas element with JavaScript. Explain how to draw basic shapes: arcs, circles, and triangles using the <canvas> element with an example code snippet.	[6M]
		OR	
	b	i) Explain the different types of lists in HTML along with their attributes and examples.	[6M]
		ii) Describe the role of multimedia elements in HTML5. Explain how audio (<audio>) and video (<video>) elements are used in HTML5, including their attributes.	[6M]
2		Unit-II	
	a	i) Explain four types of CSS. Explain their advantages, disadvantages, and when to use them with examples.	[6M]
		ii) Describe the CSS Box Model and its components with example of how they affect webpage layout.	[6M]
		OR	
	b	i) What are pseudo-classes and pseudo-elements in CSS? Explain.	[6M]
		ii) Explain different types of positioning in CSS. Describe relative, absolute, fixed, and static positioning with suitable examples.	[6M]
3		Unit-III	
	a	i) Explain the different types of objects in JavaScript and how they can be created and modified. Explain how properties and methods are added or modified.	[4M]
		ii) Create an HTML form with the following fields: Name (text), Email (text), Age (number), Password (password), Submit button. Use JavaScript to validate the form: "Name should not be empty. Email should be in the correct format (example@gmail.com). Age should be between 18 and 60. Password should be at least 6 characters long." If validation fails, display an error message next to the field.	[8M]
		OR	
	b	i) Explain how JavaScript can be used for positioning elements, changing colors and fonts, and modifying content dynamically.	[6M]
		ii) Discuss Key Event and Mouse Event handling in JavaScript with examples of different event types.	[6M]

4		Unit-IV	
	a	i) Explain any three jQuery selectors with examples.	[6M]
		ii) How does jQuery handle filtering and element selection within a context? Explain filtering methods like filter(), each(), find() with suitable example.	[6M]
		OR	
	b	i) Describe different types of jQuery events and their usage. Explain "form events" and "document/window events" with example.	[6M]
		ii) Explain event delegation in jQuery and how it manages persistent event handling. Write a program demonstrating on() for dynamic elements and off() to remove event handlers.	[6M]
5		Unit-V	
	a	i) Explain the implementation and customization of Drag and Drop in jQuery UI with an example.	[6M]
		ii) How can a sortable list be customized and its state saved using jQuery UI? Explain with an Example.	[6M]
		OR	
	b	i) Explain the features and customization options of the jQuery UI Dialog widget. Describe how to create, style, make it modal in a Dialog with an example.	[6M]
		ii) How can the jQuery UI Datepicker and Accordion be customized for advanced functionality? Explain how to localize the Datepicker, modify its behavior with an example.	[6M]

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NARASARAOPETA ENGINEERING COLLEGE
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II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCI3TH03 **OOPS THROUGH JAVA**

Time: 3 hours (CSE, IT) Max. Marks: 60

Note: Answer All **FIVE** Questions.

All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No		Questions	Marks
1		Unit-I	
	a	i) Compare and contrast procedural programming and object-oriented programming (OOP). Discuss their key differences with suitable example.	[6M]
		ii) Explain automatic type promotion in expressions in Java. Provide at least two complex examples to illustrate how type promotion works in different scenarios.	[6M]
		OR	
	b	i) Describe the role of constructors in Java. How do constructors differ from methods? Explain with an example, including parameterized and default constructors.	[6M]
		ii) Explain three different uses of 'this' keyword with examples.	[6M]
2		Unit-II	
	a	i) Explain method overloading and method overriding in Java. Provide examples demonstrating their differences, including how the compiler and JVM handle them.	[6M]
		ii) What is inheritance in Java? What are its different types? Explain how multiple inheritance is achieved in Java with an example.	[6M]
		OR	
	b	i) What is the significance of access protection in Java packages? Explain different access specifiers with examples to show their impact on package-level access control.	[6M]
		ii) How do static methods in interfaces work in Java? Explain their purpose and demonstrate with an example how they differ from default methods in interfaces.	[6M]
3		Unit-III	
	a	i) Compare and contrast String, StringBuffer, and StringBuilder classes in Java. Explain their key differences with respect to mutability, performance, and thread safety. Demonstrating when to use each.	[6M]
		ii) What is Exception? Explain the role of the finally block in exception handling. How does it differ from catch? Provide a detailed example illustrating a scenario where finally is essential, even when exceptions do not occur.	[6M]
		OR	
	b	i) In how many ways a thread can be created in java. Explain any one method.	[4M]
		ii) How inter-thread communication is achieved in Java? Provide an example to illustrate producer-consumer problem handling using inter-thread communication.	[8M]
4		Unit-IV	
	a	i) Compare and contrast ArrayList and LinkedList in Java. Discuss scenarios where one is preferred over the other. Support your answer with an example.	[6M]
		ii) Explain the differences between HashMap, Hashtable, and TreeMap in Java. Discuss their key characteristics in terms of synchronization, ordering, and performance.	[6M]

		OR	
	b	i) Why are character streams preferred for handling text data over byte streams? Demonstrate with an example of reading and writing text files using FileReader and FileWriter.	[6M]
		ii) What is StringTokenizer in Java? How does it differ from split() in String class? Provide an example that demonstrates tokenization of a sentence using StringTokenizer, including different delimiters.	[6M]
5		Unit-V	
	a	i) Explain the lifecycle of an applet in Java. Describe the different stages and their corresponding methods with an example of a simple applet implementation.	[6M]
		ii) What is the Delegation Event Model in Java? Explain its working principle and how event listeners are used to handle events. Provide an example demonstrating the handling of button click events.	[6M]
		OR	
	b	i) What is a Layout manager? Explain in brief about various layout managers supported by JAVA.	[6M]
		ii) Describe how parameters are passed to an applet using the <APPLET> tag in HTML. Provide an example demonstrating how an applet can retrieve and display parameters from an HTML page.	[6M]

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NARASARAOPETA ENGINEERING COLLEGE
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II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCI3TH04 MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE

Time: 3 hours **(CSE, IT)** Max. Marks: 60

Note: Answer All **FIVE** Questions. All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No.		Questions	Marks
1		Unit-I	
	a	i) Explain pdnf, pcnf with suitable examples.	[6M]
		ii) Identify whether $(p\rightarrow q)\rightarrow r$, $p\rightarrow(q\rightarrow r)$ are logically equivalent or not.	[6M]
		OR	
	b	i) Show that $(P\rightarrow(Q\rightarrow R))\leftrightarrow(P\rightarrow Q)\rightarrow(P\rightarrow R)$.	[6M]
		ii) Apply appropriate method to show the statement formula $[(P \wedge Q) \wedge R] \leftrightarrow [(P \wedge Q) \wedge (P \wedge R)]$ is a tautology	[6M]
2		Unit-II	
	a	i) Show that $(x)P(x) \wedge (x)Q(x)$ and $(x)(P(x) \wedge Q(x))$ are not logically equivalent.	[6M]
		ii) Show that the following R V ~Q, ~R V S, S→ ~Q, P ^ Q=> ~Q	[6M]
		OR	
	b	i) Verify the validity of the following argument "every living thing is a planet or an animal. Joe's gold fish is alive and it is not a planet. All animals have hearts. Therefore Joe's gold fish has a heart".	[4M]
		ii) If n is a positive integer, using mathematical induction prove that $1.2+2.3+3.4+\ldots\ldots\ldots\ldots+n(n+1)=\frac{n(n+1)(n+2)}{3}$	[8M]
3		Unit-III	
	a	i) What are the rules for constructing a Hamiltonian path and Hamiltonian cycle?	[6M]
		ii) Explain kruskal's algorithm to find minimal spanning tree of the graph with suitable example?	[6M]
		OR	
	b	i) Compare and Contrast Euler and Hamiltonian graphs with examples?	[6M]
		ii) Define Walk, Trail, Paths and circuit? Explain with suitable graphs examples.	[6M]
4		Unit-IV	
	a	i) Solve the Recurrence Relation $u_{n+2}=u_{n+1}+u_n$ $u_2=1$, $u_3=2$. ?	[12M]
		OR	
	b	i) What is a Generating function and explain the operations on generating functions?	[6M]
		ii) Solve the recurrence relation $a_n = a_{n-1}+ 2a_{n-2}$ with $a_0 =2$ and $a_1 =7$.	[6M]
5		Unit-V	
	a	i) Identify the equivalent expression for the Boolean expression x'y'z +yz+ xz.	[6M]
		ii) Out of 9 girls and 15 boys how many different committees can be formed each consisting of 6 boys and 4 girls?	[6M]
		OR	
	b	i) In how many ways can the letters of the word COMPUTER be arranged? How many of them begin with C and end with R? how many of them do not begin with C but end with R?	[6M]
		ii) Applying pigeon hole principle show that of any 14 integers are selected from the set S = {1, 2, 3,……..,25} there are at least two whose seem is 26. Also write a statement that generalizes this result.	[6M]

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NEC NARASARAOPET'A ENGINEERING COLLEGE
(AUTONOMOUS)

II B.Tech I Semester Supple Examinations, April-2025

Sub Code: 19BCI3TH06 **COMPUTER ORGANIZATION**

Time: 3 hours (CSE, IT) Max. Marks: 60

Note: Answer All **FIVE** Questions.
All Questions Carry Equal Marks (5 X 12 = 60M)

Q.No.		Questions	Marks
		Unit-I	
1	a	i) Explain the functional units of computer	[6M]
		ii) What is register transfer language? Explain the basic symbols used in register transfer.	[6M]
		OR	
	b	i) Explain tri-state buffer in detail	[6M]
		ii) Draw the block diagram of arithmetic logic shift unit and explain its operations	[6M]
		Unit-II	
2	a	Explain the memory reference instructions in detail	[12M]
		OR	
	b	i) Explain the instruction cycle with an example	[6M]
		ii) Explain how registers are connected to common bus in the computer with a neat diagram	[6M]
		Unit-III	
3	a	i) Evaluate the arithmetic statement X = (A+B) * (C+D) using a general register computer with three address, and two address instruction format	[6M]
		ii) Compare and Contrast RISC and CISC	[6M]
		OR	
	b	i) Compare the hard wired control unit and micro programmed control unit	[6M]
		ii) Explain the operation of a Micro programmed control unit using a diagram	[6M]
		Unit-IV	
4	a	i) What is auxiliary memory? Explain the various memory components used as auxiliary memory in computer systems.	[6M]
		ii) Analyze the memory hierarchy in terms of speed, size and Cost.	[6M]
		OR	
	b	i) Show the step by step multiplication process using Booth algorithm when the following binary numbers are multiplied (+15) * (-13). Assume 5-bit registers that hold signed numbers and draw the flow chart for the corresponding example	[12M]
		Unit-V	
5	a	i) Explain the following with respect to asynchronous data transfer. a) Strobe control b)Handshaking c) Asynchronous serial transfer d) Asynchronous communication Interface.	[12M]
		OR	
	b	i) Explain about the Daisy chain priority interrupt.	[6M]
		ii) With a neat sketch explain the working principle of DMA	[6M]