

S.NO	SUBJECT	SUBJECT CODE	COURSE	SEMESTER	UNIT	DOA	DOS	QUESTION 1	QUESTION 2
	ENGG. MATH-I	BAS103	BTECH (ALL)	1	1ST			Q-1. WRITE THE DEFINITION (I) ORTHOGONAL MATRIX (II) HERMITION MATRIX (III) SINGULARAR MATRIX AND NON SINGULAR MATRIX	Q-1. Find Inverse by cayley hamilton theorem $A = \begin{bmatrix} 7 & 2 & -2 \\ -6 & -1 & 2 \\ 6 & 2 & -1 \end{bmatrix}$
	ENGG. MATH-I	BAS103	BTECH (ALL)	1	2nd			Q-1. If $y = a \cos(\log x) + b \sin(\log x)$ , then show that $X^2 y_{n-2} + (2n+1)xy_{n-1} + (n^2+1)y_n = 0$	Q-2. Evaluate $\lim_{x \rightarrow \infty} \frac{2x-3}{y^2 x^2 + 4y^2}$
	ENGG. MATH-I	BAS103	BTECH (ALL)	1	3rd			Q-1. If $u = \tan^{-1} \left( \frac{x^2+y^2}{x-y} \right)$ , prove that $x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = 2 \cos 3u$	Q-2. Expand $x^2 y + 3y - 2$ in Power of $x-1$ and $y+2$ using Taylor's theorem.
	ENGG. MATH-I	BAS103	BTECH (ALL)	1	4th			Q-1. Evaluate $\int_0^\infty \int_0^\infty e^{-x^2(1+y^2)} x dx dy$	Q-2. Find the area of the curve $\left(\frac{x}{a}\right)^{2/3} + \left(\frac{y}{b}\right)^{2/3} = 1$
	ENGG. MATH-I	BAS103	BTECH (ALL)	1	5th			Q-1. Use Divergence Theorem to evaluate $\iiint_V \vec{F} \cdot d\vec{S}$ where $\vec{F} = 4xi - 2y^2j + z^2k$ and $S$ is the surface bounding the region $x^2 + y^2 = 4, z=0$ and $z=3$ .	Q-2. State and verify Green's theorem in the plane for $\oint_C (3x^2 - 8y^2)dx + (4y - 6xy)dy$ where $C$ is the boundary of the region bounded by $x \geq 0, y \leq 0, 2x - 3y = 6$
	SOFT SKILLS-1	BAS 105	B.TECH ALL	1	1			WHAT DO YOU UNDERSTAND BY NEW WORD FORMATION EXPLAIN WITH EXAMPLES?	EXPLAIN WORD POWER WITH SUITABLE EXAMPLES?
	SOFT SKILLS-1	BAS 105	B.TECH ALL	1	2			DESCRIBE THE TRAITS OF A GOOD LISTENER?	DEFINE PRONUNCIATION AND ALSO EXPLAIN CONTENT AND SEQUENCING
	SOFT SKILLS-1	BAS 105	B.TECH ALL	1	3			WHAT IS CHURNING AND ASSIMILATION?	WHAT DO YOU UNDERSTAND BY NOTICE AND MINUTES OF MEETING?
	SOFT SKILLS-1	BAS 105	B.TECH ALL	1	4			WHAT IS KINESICS EXPLAIN IN DETAIL?	WHAT ARE THE 7C'S OF COMMUNICATION?
	SOFT SKILLS-1	BAS 105	B.TECH ALL	1	5			EXPLAIN APPLICATION OF 4 A'S ?	DESCRIBE THE TECHNIQUES OF MANAGING STRESS AT WORKPLACE?
	COMMUNICATION SKILLS		POLY 1ST	1	1			WHAT IS THE DIFFERENCE BETWEEN FORMAL AND INFORMAL COMMUNICATION?	WHAT IS PSYCHOLOGICAL BARRIERS OF COMMUNICATION?
	COMMUNICATION SKILLS		POLY 1ST	1	2			DEFINE ADJECTIVE AND ADVERB?	WHAT DO YOU UNDERSTAND BY PUNCTUATION
	COMMUNICATION SKILLS		POLY 1ST	1	3			WHAT IS THE DIFFERENCE BETWEEN PREFIX AND SUFFIX?	EXPLAIN SYNONYMS AND ANTONYMS?
	COMMUNICATION SKILLS		POLY 1ST	1	4			WHAT IS PICTURE COMPOSITION?	EXPLAIN NOTICE WRITING?
	FUNDAMENTALS OF ELECTRICAL ENGG.	BEE101	B.TECH	1	1			DESCRIBE BRIEFLY THE FOLLOWING ELEMENTS ; (i) UNILATERAL & BILATERAL (ii) ACTIVE & PASSIVE	DESCRIBE THE FOLLOWING ELEMENTS; (i) IDEAL VOLTAGE SOURCE , (ii) IDEAL CURRENT SOURCE
	FUNDAMENTALS OF ELECTRICAL ENGG.	BEE101	B.TECH	1	2			Show the condition for resonance in a parallel RLC circuit.	DETERMINE THE RMS VALUE OF SINUSOIDAL CURRENT $i = \sin 5t$ IN ONE COMPLETE CYCLE.
	FUNDAMENTALS OF ELECTRICAL ENGG.	BEE101	B.TECH	1	3			Derive the emf equation of a transformer.	Derive the condition for maximum efficiency in single phase transformer
	FUNDAMENTALS OF ELECTRICAL ENGG.	BEE101	B.TECH	1	4			List all the important parts of a D.C. Motor and explain the importance of each..	what is the difference between asynchronous motor and synchronous motor?
	FUNDAMENTALS OF ELECTRICAL ENGG.	BEE101	B.TECH	1	5			Write short notes on MCB and MCCB	Explain different types of wires and cables
	P. P. S	BCS101	B.TECH(ALL)	1	1			Differentiate between algorithm and pseudocode.	Draw block diagram of computer and explain each of its components in brief
	P. P. S	BCS101	B.TECH(ALL)	1	2			^^	Define flowchart and draw a flowchart to find largest among three numbers
	P. P. S	BCS101	B.TECH(ALL)	1	3			Differentiate between call by value and call by reference with proper example	Explain Logical, Unary and Bitwise operators in detail.
	P. P. S	BCS101	B.TECH(ALL)	1	4			What is searching? Write a program to implement linear search.	Define recursion. Write a program to find sum of Fibonacci series using recursion
	P. P. S	BCS101	B.TECH(ALL)	1	5			Define dynamic memory allocation. Differentiate between malloc () and calloc () with proper example.	Explain different file opening modes. Write a program to read content of any file and display the number of lines and words in that file.
	APPLIED MATHEMATICS -1 (B)		POLY	1	1			Find four Geometric mean between 160 and 5 .	Find the 9th term in the expansion of $(x+3)^{10}$
	APPLIED MATHEMATICS -1 (B)		POLY	1	2			If vectors $a = 2j + 3k$ and $-i + 5j + ak$ are perpendicular , Find the value of a .	Find the square root of $3+4i$
	APPLIED MATHEMATICS -1 (B)		POLY	1	3			$a^3 \cos (B-C) + b^3 \cos (C-A) + c^3 \cos (A-B) = 3abc$	Prove that $\tan^{-1}(1/2) + \tan^{-1}(1/5) + \tan^{-1}(1/8) = \pi/4$
	APPLIED MATHEMATICS -1 (B)		POLY	1	4			Evaluate $\lim_{x \rightarrow 0} \frac{\sin x}{x}$	If $\sin y = x \sin (a+y)$ then Find $dy/dx$
	APPLIED MATHEMATICS -1 (B)		POLY	1	5			Find the equation of Tangent and Normal of curve $x^2 + 5y^2 = 14$ at $(3,1)$	Find the maximum and minimum value of $(x-1)(x-2)(x-3)$ .
	CONSTRUCTION OF BUILDING		POLY	1	1			WHAT IS THE CONSTRUCTION PROCESS OF BUILDING	VARIOUS TEST OF STONE CONSTRUCTION MATERIAL.
	CONSTRUCTION OF BUILDING		POLY	1	2			DESCRIBE THE QUALITIES AND USE OF MARBLE	WHAT IS AGGREGATE AND ITS SIZE.
	CONSTRUCTION OF BUILDING		POLY	1	3			WRITE THE PROCESS MANUFACTURING OF BRICK.	WHAT IS CEMENT AND ITS TYPES.
	CONSTRUCTION OF BUILDING		POLY	1	4			MENTION THE COMMON DEFECTS OF TIMBER	MENTION USE AND INGREDIENTS OF PAINT.
	CONSTRUCTION OF BUILDING		POLY	1	5			WRITE THE DIFFERENT USES OF PLASTICS.	WHAT IS SEASONING OF TIMBER.
	FCIT		Poly	1	1			COMPONENT AND CHARACTERISTIC OF COMPUTER?	TYPES OF MEMORY RAM ,ROM MONITOR MOUSE, KEYBOARD, DISK?
	FCIT		Poly	1	2			INTRODUCTION OF OPERATING SYSTEM AND NEED OF OPERATING SYSTEM?	CONCEPT OF GUI AND CUI STANDARDS?
	FCIT		Poly	1	3			COMPONENT OF WINDOWS AND FEATURES?	INSTALLATION OF THE APPLICATION SOFTWARE?
	FCIT		Poly	1	4			WHAT IS COMPUTER NETWORK?	DESCRIBE LAN, WAN, MAN?
	FCIT		Poly	1	5			DESCRIBE TOPOLOGY AND NETWORK TOPOLOGY?	CLOUD COMPUTING OF SERVICES?
	APPLIED CHEMISTRY		POLY	1	1			explain quantum number with example	writes the properties of s, p, d, f, block
	APPLIED CHEMISTRY		Poly	1	2			determine the calorific value of solid fuel using Bomb Calorimeter	define properties and mechanism of lubricant. Write its application
	APPLIED CHEMISTRY		POLY	1	3			explain municipality waste water and treatment	determine of hardness of water by EDTA method
	APPLIED CHEMISTRY		Poly	1	4			explain cementation process	define electrochemical cell( Galvanic cell and electrolyte)
	APPLIED CHEMISTRY		POLY	1	5			define thermoplastic and thermosetting plastic	write the application of polymer in industry and daily life.
	APPLIED PHYSICS		POLY	1	1			DEFINE STRESS AND STRAIN? EXPLAIN HOOKE'S LAW	EXPLAIN ZEROETH, FIRST AND SECOND LAW OF THERMODYNAMICS
	ENGG. PHYSICS	BAS101	B.TECH	1	1			WHAT IS THE SUPERCONDUCTIVITY? DISCUSS THE TEMPERATURE DEPENDENCE OF RESISTIVITY IN SUPERCONDUCTING MATERIAL	EXPLAIN LONDON PENETRATION DEPTH
	APPLIED PHYSICS		POLY	1	2			WHAT IS THE CENTRIPITAL ACCELERATION? PROVE THAT $a = v^2/r$	DEFINE WORK. GIVE THE EXAMPLE OF ZERO WORK, POSITIVE WORK AND NEGATIVE WORK
	ENGG. PHYSICS	BAS101	B.TECH	1	2			WHAT ARE THE MAXWELL EQUATION?	DRIVE EM WAVE EQUATION IN CONDUCTING MEDIUM
	APPLIED PHYSICS		POLY	1	3			WRITE THE APPLICATION OF FRICTION IN DAILY LIFE?	DEFINE ANGULAR MOMENTUM. WRITE THE CONSERVATION OF ANGULAR MOMENTUM
	ENGG. PHYSICS	BAS101	B.TECH	1	3			WHAT DO YOU UNDERSTAND BY COHERENT SOURCES? HOW ARE THESE OBTAINED IN PRACTICE?	DISCUSS THE PHENOMENA OF INTERFERENCE OF LIGHT DUE TO THIN FILMS AND FIND CONDITION OF MAXIMA AND MINIMA
	APPLIED PHYSICS		POLY	1	4			WHAT IS LINEAR AND ROTATIONAL MOTION?	WRITE KEPLER'S LAW OF PLANETARY MOTION?
	ENGG. PHYSICS	BAS101	B.TECH	1	4			WHAT IS OPTICAL FIBRE? EXPLAIN THE PRINCIPLE OF OPTIC FIBRE	DISCUSS THE DIFFERENT TYPES OF OPTICAL FIBRE. WHY GRADED INDEX FIBRE IS BETTER THAN MULTIMODE STEP INDEX FIBRE
	APPLIED PHYSICS		POLY	1	5			DEFINE STRESS AND STRAIN? EXPLAIN HOOKE'S LAW	EXPLAIN ZEROETH, FIRST AND SECOND LAW OF THERMODYNAMICS
	ENGG. PHYSICS	BAS101	B.TECH	1	5			WHAT IS THE SUPERCONDUCTIVITY? DISCUSS THE TEMPERATURE DEPENDENCE OF RESISTIVITY IN SUPERCONDUCTING MATERIAL	EXPLAIN LONDON PENETRATION DEPTH