

AP EAMCET Syllabus || Download Engineering/ Agriculture & Medical
Exam Pattern

AP EAMCET Exam Pattern

AP EAMCET Exam Pattern for Engineering Stream (Normal to all)

Sr. No.	Subject	Marks	Duration	Exam Type
1	Mathematics	80	3 Hours	Objective type
2	Physics	40		
3	Chemistry	40		
Total		160 Marks		

AP EAMCET Exam Pattern for Medical Stream (Common for all branches sack)

Sr. No.	Subject	Marks	Duration	Exam Type
1	Botany	40	3 Hours	Objective type
2	Zoology	40		
3	Chemistry	40		
4	Chemistry	40		
Total		160 Marks		

AP EAMCET Syllabus

AP EAMCET Syllabus for Mathematics

Algebra	Matrices
	Binomial Theorem Partial fractions
	De Moivre's Theorem: De Moivre's theorem
	Functions
	Mathematical Induction
	Permutations and Combinations
	Quadratic Expressions
Trigonometry	Trigonometric Equations
	Hyperbolic Functions
	Inverse Trigonometric Functions
	The periodicity of Trigonometric functions
	Properties of Triangles
	Trigonometric Ratios
	Variations Graphs
Coordinate geometry	Circle
	Direction Cosines and Direction Ratios
	Ellipse
	Hyperbola
	Locus
	Pair of Straight Lines
	Parabola
	Plane

	System of circles
	The Straight Line
	Three-Dimensional Coordinates
	Transformation of Axes
Calculus	Applications of Derivatives
	Definite Integrals
	Differential equations
	Differentiation
	Integration
	Limits and Continuity
Probability	Buyer's theorem,
	The classical definition of probability
	Independent and dependent events conditional probability
	Probability Distributions
	Random experiments and events
	Random Variables
Measures of Dispersion	Range
	Mean deviation
	Coefficient of variation

Syllabus for Chemistry:

Atomic structure
Biomolecules
Chemical bonding and molecular structure
Chemical equilibrium and acids-bases
Chemistry in everyday life

Classification of elements and periodicity in properties
D and f block elements & coordination compounds
Electrochemistry and chemical kinetics
Environmental chemistry
General principles of metallurgy
Hydrogen and its compounds
Organic chemistry-some basic principles and techniques and hydrocarbons
P- block elements group 13 (boron family)
P-block elements – group 14 (carbon family)
P-block elements
Polymers
Solid state
Solutions
States of matter: gasses and liquids
Stoichiometry
Surface chemistry
The s – block elements
Thermodynamics

Syllabus for Physics:

Alternating current
Atoms
Communication systems
Current electricity
Dual nature of radiation and matter
Electric charges and fields

Electromagnetic induction
Electromagnetic waves
Electrostatic potential and capacitance
Gravitation
Kinetic theory
Laws of motion
Magnetism and Matter
Mechanical properties of fluids
Mechanical properties of solids
Motion in a plane
Motion in a straight line
Moving charges and magnetism
Nuclei
Oscillations
Physical-world
Ray optics and optical instruments
Semiconductor electronics
Systems of particles and rotational motion
Thermal properties of matter
Thermodynamics
Units and measurements
Wave Optics
Waves
Work, Energy, and power

Syllabus For Zoology

- Zoology
- Structural organization in animals
- Animal diversity-i: invertebrate phyla
- Animal diversity-ii: Phylum: Chordata
- Locomotion & reproduction in protozoa
- Biology & human welfare
- Type study of *Periplaneta americana*
- Ecology & Environment
- Human anatomy and physiology-i
- Human anatomy and physiology ii
- Human anatomy and physiology-iii
- Human anatomy and physiology-iv
- Human reproduction
- Genetics
- Organic evolution
- Applied biology

Syllabus for Botany:

- Diversity in the living world
- Structural organization in plants- morphology
- Reproduction in plants
- Plant Systematics
- Cell structure and function
- Internal organization of plants
- Plant ecology
- Plant physiology
- Microbiology
- Genetics
- Molecular biology
- Biotechnology
- Plants, microbes and human welfare