

SUBJECT WISE		MOCK TESTS	
GENERAL STUDIES	TECHNICAL	GENERAL STUDIES	TECHNICAL
12	08	05	05

SUBJECT WISE TESTS (General Studies)

- Each test carries 30 Marks and 30 minutes duration.
- Each test consists of 30 One marks questions.
- **NEGATIVE MARKS:** For each wrong answer will be penalized with $1/3^{\text{rd}}$ of the marks prescribed for the question.

TEST NO	SUBJECT/TEST NAME	TEST STATUS
MEG – 01	National and International Importance: Events of National and International Importance.	Available Now
MEG – 02	Current Affairs: International, national and regional.	Available Now
MEG – 03	General Science: General Science and its applications to the day to day life Contemporary developments in Science & Technology and information Technology.	Available Now
MEG – 04	Economic and Political history: Social- economic and political history of modern India with emphasis on Andhra Pradesh.	Available Now
MEG – 05	Indian polity and governance: constitutional issues, public policy, reforms and e-governance initiatives with specific reference to Andhra Pradesh.	Available Now
MEG – 06	Economic Development: Economic development in India since independence with emphasis on Andhra Pradesh.	Available Now
MEG – 07	Geography: Physical geography of Indian sub-continent and Andhra Pradesh.	Available Now
MEG – 08	Disaster Management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.	Available Now
MEG – 09	Sustainable Development: Sustainable Development and Environmental Protection	Available Now
MEG – 10	Mental Ability: Logical reasoning, analytical ability and data interpretation.	Available Now
MEG – 11	Data Analysis: a) Tabulation of data b) Visual representation of data c) Basic data analysis (Summary Statistics such as mean, median, mode, variance and coefficient of variation) and Interpretation	Available Now
MEG – 12	Bifurcation of AP: Bifurcation of Andhra Pradesh and its Administrative, Economic, Social, Cultural, Political, and Legal implications/problems.	Available Now

SUBJECT WISE TESTS (Technical)

- Each test carries 30 Marks and 30 Minutes duration.
- Each test consists of 30 One Mark questions.
- **NEGATIVE MARKS:** For each wrong answer will be penalized with $1/3^{\text{rd}}$ of the marks prescribed for the question.

TEST NO	SUBJECT/TEST NAME	TEST STATUS
MET – 13	<p>Solid Mechanics – 1:</p> <p>i) Forces: Different types of forces, gravitational, frictional, axial, tensile or compressive. Law of Parallelogram and triangle of forces, polygon of forces, problems.</p> <p>ii) Centre of gravity and moment of inertia. Simple plane figures, Simple machines, law of machine, Mechanical advantage, velocity ratio and efficiency, wheel and axle, pulleys and simple screw jack-problems.</p> <p>iii) Simple Stresses and strains: Different types of stresses and strains, stress-strain diagram for ductile materials. Factor of safety, ultimate strength and working strength, elastic constants, Poisson ratio. Deformations, volume changes. Relations between elastic constants. Hooke's Law. Compound rods, temperature stresses, strain energy, impact loading.</p>	Available Now
MET – 14	<p>Fluid Mechanics – 1:</p> <p>i) Introduction: Scope of hydraulics in Engineering. Definition and properties of fluid.</p> <p>ii) Fluid pressure and its measurement: Atmospheric pressure, Gauge pressure and absolute pressure. Piezometer, Manometer-U-tube, Inverted U-tube, and differential manometers.</p> <p>iii) Pressure on plane surface immersed in liquid-Horizontal, vertical and inclined plane surface.</p>	Available Now
MET – 15	<p>Solid Mechanics – 2:</p> <p>i) Riveted and welded joints, different modes of failures, efficiency of joints, thin cylindrical shells, longitudinal and circumferential stresses and volume changes.</p> <p>ii) Shear force and bending moment diagrams for simply supported, over hanging and cantilever beams. Relation between intensity of loading, shear force and bending moment.</p>	Available Now
MET – 16	<p>Fluid Mechanics – 2:</p> <p>i) Flow of fluids: Type of flow-uniform flow, non-uniform flow, streamline flow, Turbulant flow, steady flow and unsteady flow, Energies in fluid motion-Datum head, pressure head and velocity head. Total energy of fluid in motion - Bernoulli's theorem. Practical application of Bernoulli's theorem - flow measurement- pitot tube venturimeter - Orificemeter.</p> <p>ii) Flow through orifices and Mouth Pieces: Definition of orifice, types of orifices, Vena contracta, coefficient of velocity, coefficient of contraction, coefficient of discharge. Submerged and partially submerged orifices. Flow through orifices</p> <p>iii) under variable heads - Time of emptying a rectangular tank through orifices. Mouth pieces - different types of problems.</p>	Available Now

TEST NO	SUBJECT/TEST NAME	TEST STATUS
MET – 17	<p>Solid Mechanics – 3:</p> <p>i) Theory of simple bending: Assumptions, basic flexure formula, bending stresses, modulus of section, moment of resistance. Circular bending. Distribution of shear stress in common structural sections.</p> <p>ii) Deflection in cantilever and simply supported beams under simple loading- propped cantilever beams subjected to simple loading, determination of reaction. SF and BM diagrams.</p> <p>iii) Simple plane and pin-jointed trusses: Stresses by method of joints and method of sections.</p>	Available Now
MET – 18	<p>Fluid Mechanics – 3:</p> <p>i) Notches and Weirs: Definition of notch, types of notches - Rectangular notch, Triangular notch and trapezoidal notch. Discharge over a rectangular, triangular and a trapezoidal notches.</p> <p>ii) Flow through pipes: Major and minor losses - Loss of head at entrance, loss of head due to sudden enlargement, due to sudden contraction, loss of head at exit of the pipe. Frictional loss in pipe-Chezy formula and Daycy's formula.</p> <p>iii) Hydraulic gradient and total energy line. Discharge through parallel pipes and branched pipes connected to a reservoir. Flow through syphon pipe.</p> <p>iv) Hydraulic transmission of power-flow through nozzle at the end of a pipe line- diameter of nozzle for Max H.P. available. Water hammer and its effect. Laminar and turbulent flow in pipes-Critical velocity and Reynold number.</p>	Available Now
MET – 19	<p>Solid Mechanics – 4:</p> <p>i) Torsion: Assumptions, basic formula of torsion, power transmission by shafts of uniform circular sections close-coiled springs, strain-energy in simple beams and shafts, sudden and impact loading. Principal stresses and principal planes. Mohr's circle of stress.</p> <p>ii) Thin cylinders under internal pressure stresses and volume changes.</p> <p>iii) Columns and struts: Direct and bending stresses, core of section. Short and long columns under axial loading-various end-conditions. Euler and Rankine formulae, Slenderness ratio, simple built-up columns.</p>	Available Now
MET – 20	<p>Fluid Mechanics – 4:</p> <p>i) Impact of jets: Formulae for the force of jet on a fixed vertical flat plate, fixed inclined flat plates, moving flat plates, series of flat plates fixed on the rim of a wheel. Force of jet striking at the centre and at the top of a fixed curved blade and moving curved blade, velocity triangles. Work done, power and efficiency in the above cases. Simple problems. Water turbines: Introduction to water turbines. Use of water turbines in Hydroelectric power stations line sketch showing layout of hydro-electric power plant with head race, dam, sluice gate, pen stock turbine, generator and tail race. Classification of turbines - impulse and reaction turbines brief sub-classification of axial, radial and tangential flow type. Pelton wheel, Francis turbine and Kaplan turbine, power and efficiency of turbines.</p> <p>ii) Centrifugal pump: Installation, mountings and other accessories. Priming of centrifugal pump. Efficiency, cavitation. Simple problems on work, power and efficiency</p>	Available Now

MOCK TESTS (General Studies)

- Each test carries 150 Marks and 150 minutes duration.
- Each test consists of 150 One marks questions.
- **NEGATIVE MARKS:** For each wrong answer will be penalized with **1/3rd** of the marks prescribed for the question.

TEST NO	SUBJECT/TEST NAME	TEST STATUS
MEG – 21	GS - Full Length Mock Test – 1	Available Now
MEG – 22	GS - Full Length Mock Test – 2	Available Now
MEG – 23	GS - Full Length Mock Test – 3	Available Now
MEG – 24	GS - Full Length Mock Test – 4	Available Now
MEG – 25	GS - Full Length Mock Test – 5	Available Now

MOCK TESTS (Technical)

- Each test carries 150 Marks and 150 minutes duration.
- Each test consists of 150 One mark questions.
- **NEGATIVE MARKS:** For each wrong answer will be penalized with **1/3rd** of the marks prescribed for the question.

TEST NO	SUBJECT/TEST NAME	TEST STATUS
MET – 26	Full Length Mock Test – 1	Available Now
MET – 27	Full Length Mock Test – 2	Available Now
MET – 28	Full Length Mock Test – 3	Available Now
MET – 29	Full Length Mock Test – 4	Available Now
MET – 30	Full Length Mock Test – 5	Available Now