Silver Oak College of Engineering & Technology
Department of Civil Engineering
Subject wise Viva Topics
3rd Sem Civil Div-A, B & C

Sub: MECHANICS OF SOLIDS (2130003)

Questions	Topic
Q-1	Explain Fundamental principles of mechanics
Q-2	Explain Pappus guldinus theorem
Q-3	Equations from C.G and M.I -one dimensional wires,two dimensional shapes ,three dimensional solids
Q-4	Definations from stress and strain
Q-5	Types of friction
Q-6	Definations from torsion
Q-7	Types of beams,Types of loads, Types of supports
Q-8	Relation between S.F and B.M
Q-9	Types of forces
Q-10	Assumptions from bending stress in beams and torsion

Sub: ADVANCED ENGINEERING MATHAEMATICS (2130002)

Questions	Topic
Q-1	Fourier Series for even/odd function in the intervals(-π,π) or (-l,l)
Q-2	Half Range Sine/Cosine series in the interval (0,l)
Q-3	Linear Differential Equations with initial conditions
Q-4	Undetermined Coefficients method for non homogeneous differential equations
Q-5	Variation of parameter method
Q-6	Use of Convolution theorem to obtain inverse Laplace transform
Q-7	Solution of ODE using Laplace transform
Q-8	Lagrange's Partial Differential Equation (Pp+Qq=R)
Q-9	Special Type of Non linear partial differential equation
Q-10	(1) $f(p,q)=0$ (2) $f(z,p,q)=0$ (3) $f(p,x) = g(q,y)$ (4) clairaut's equation: $z=px+qy+f(p,q)$

Sub: SURVEYING (2130601)

Questions	Topic
Q-1	Enlist various methods of plane tabling and explain any two methods
Q-2	Explain the procedure of setting table
Q-3	How the temporary of adjustment of theodolite is carried out?
Q-4	Describe the process of repetition and reiteration
Q-5	Discuss the procedure of indirect levelling on steep ground.
Q-6	Describe transition curve and vertical curves
Q-7	Explain inn detail the procedure for finding out area of an irregular figure using planimeter.
Q-8	What is sounding? Write purpose of sounding and explain different equipments used for locating sounding.
Q-9	What do you understand by hydrographic survey?
Q-10	Explain the the process of setting out the culvert.

Sub: GEOTECHNICS & APPLIED GEOLOGY (2130606)

Questions	Topic
Q-1	What is difference between two phase and three phase diagram?
Q-2	Explain liquid limit, plastic limit and shrinkage limit
Q-3	What are different types of soil stratum in nature?
Q-4	What are different types of soil structures which occur in nature?
Q-5	Distinguish between free water and held water
Q-6	What is capillary water?
Q-7	Define permeability, Seepage and Coefficient of permeability.
Q-8	State and explain factors affecting permeability
Q-9	Define the terms -weathering, erosion and denudation.
Q-10	What are Igneous, Sedimentary and Metamorphic rocks? Give

Sub: FLUID MECHANICS (2130602)

Questions	Topic
Q-1	Define Viscosity and give the difference between Dynamic Viscosity and Kinematic Viscosity.
Q-2	Explain Pascal's Law and Hydrostatic Law.
Q-3	Explain total pressure and centre of pressure.
Q-4	Explain the conditions of equilibrium of a floating and submerged body..
Q-5	What is metacentre? Explain how metacentric height is determined analytically.
Q-6	Define and explain velocity potential function and stream function.
Q-7	Derive the continuity equation of three dimensional flow.
Q-8	State Bernoulli's thorem. List out its engineering applications.
Q-9	Classify different types of orifices according to its shape, size, discharge condition and shape of upstream ege. Explain in brief.
Q-10	Define Venacontracta and explain Hydraulc Coefficients.

Sub: BUILDING CONSTRUCTION (2130607)

Questions	Topic
Q-1	What is difference between two phase and three phase diagram?
Q-2	Describe english bond and flemish bond with the figures with essential features.
Q-3	Explain various terms related to roof.
Q-4	Define shoring and explain the method
Q-5	Define underpinning and explain the method
Q-6	What is the importance of reinforcement in concrete? Describe the advantages
Q-7	Explain the methods of mixing,placing, compacting and curing of
Q-8	Explain various types of scafolding.
Q-9	Explain in brief the damp proofing treatment and anti-termite treatment.
Q-10	Define the technical terms related to stairs