



- Notes :
1. All question carry equal marks.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Illustrate your answer necessary with the help of neat sketches.

1. Solve **any two**.
 - a) Discuss role of Geosynthetics in Erosion Control and Ground Improvement. 8
 - b) Explain MARV and its significance in Confirmation with ASTM D4759. 8
 - c) Discuss various developments carried out at IIT Delhi in testing and evaluation of Geotextiles. 8
2. Solve **any two**.
 - a) Explain Geotextile as Filters. 8
 - b) How does Geotextile influenced Geotechnical Engineering. 8
 - c) Describe Mechanical requirements from the Geotextiles for its application in shore Protection works. 8
3. Solve **any two**.
 - a) Write steps to be followed for designing unpaved road as per U.S. Department of Transportation, Federal Highway Administrations Method. 8
 - b) Describe Procedure for determining Impact Resistance as per Koerner (1997). 8
 - c) Describe Reflection Crack Retardation Test and Flexure Test for asphaltic overlays. 8
4. Solve **any two**.
 - a) Describe Reinforcement Mechanism of Geosynthetic Reinforced Soil Walls. 8
 - b) Explain External wall stability Check of Geosynthetic Reinforced Soil walls as per FHWA. 8
 - c) Draw Flow Diagram of the design procedure for Geosynthetic Reinforced soil walls after BS8006, 1995. 8
5. Solve **any two**.
 - a) Describe Silt Fence Installation method.
 - b) Explain Rolled Erosion Control Products on Slopes and in Channels.
 - c) Explain Installation Procedure of Geotextile under Hard Armour.
