

AQ – 2942

Second Semester M. E. (Civil Engg.) F. T. Examination

GEOSYNTHETICS

Paper - 2 SFGE 3

P. Pages : 2

Time : Three Hours]

[Max. Marks : 80

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

1. Solve any two :—

- (a) Discuss role of Geosynthetics in landslide mitigation and Erosion control. 8
- (b) Explain various functions of Geosynthetics and draw graphical symbol suggested by International Geosynthetic society. 8
- (c) Discuss sampling to be carried out in laboratory testing and evaluation of Geotextile. 8

2. Solve any two :—

- (a) Discuss utility of various types of synthetic fibers in construction engineering and earthwork. 8
- (b) State relationship between properties and functions of geotextiles. Also explain six basic functions of Geotextile. 8
- (c) Describe Hydraulic Requirements from the Geotextiles for its application in Shore Protection Works. 8

3. Solve any two :—

- (a) Discuss functions of Geosynthetics in pavements and related systems. 8

AQ – 2942

P.T.O.

- (b) Describe procedure for determining Tensile strength and puncture resistance as per Kocner (1997). 8
- (c) Explain AASHTO method of design for paved roads with Geosynthetics. 8

4. Solve any two :—

- (a) Draw neat sketch for various types of reinforced soil wall and abutments after Bs 8006,1995. 8
- (b) Describe procedure to check internal stability and determining reinforcement requirements of Geosynthetic Reinforced soil walls as per FHWA. 8
- (c) Summarise various partial factors to be used for Geosynthetic Reinforced soil wall as per BS. 8006,1995. 8

5. Solve any two :—

- (a) Describe silt Fence installation method. 8
- (b) Explain Rolled erosion control products on slopes and in channels. 8
- (c) Explain problems associated with Hard Armor systems and how Geosynthetic loads solution. 8

