

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF B.TECH (GEOLOGY), 2016/2017
SESSION

COURSE: GEL523 (ENVIRONMENTAL GEOLOGY)

UNIT: 2

DATE: 23RD OCTOBER, 2017

TIME ALLOWED: 2 Hours

INSTRUCTIONS: Answer two questions from each section.

SECTION A

1. Write explanatory notes on the following:
 - i. Geological hazards: their causes, effects and remediation
 - ii. Geological processes
2. Write brief notes on any two of the following:
 - i. Man and the environment
 - ii. Mass movement
 - iii. Flooding
3. Discuss the causes of flooding and its preventive or adjustment measures.

SECTION B

4. (a) What are the two conditions on which land can be considered to be derelict?
(b) Briefly outline the factors to be considered in the reclamation of derelict land.
(c) Discuss the physical and chemical methods of contaminated land treatment.
5. (a) Explain how climate moderates the environmental impact of mineral development.
(b) Enumerate four strategies for mitigating the environmental impact of mineral development.
6. a) Describe the procedures for estimating the area and volume of a municipal liquid waste disposal system.
b) What is the recommended safe attenuation distance between septic tanks and drinking water sources?
c) What parameter in groundwater will indicate contamination from domestic liquid waste disposal system?