



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2023 & Previous Admissions
VI Semester Final Examination – June 2026

Lwre 3208

Watershed Planning and Management (1+1)

Marks: 50
Time: 2 hours

- I** **Choose the correct answer** **(10x1=10)**
1. The product of relief and drainage density is called
 - (a) geometric number
 - (b) ruggedness number
 - (c) relative relief
 - (d) none of above
 2. Slope of ground surface may be considered as of ruggedness number.
 - (a) twice
 - (b) 3 times
 - (c) half
 - (d) equal
 3. In Rational method, the runoff coefficient is
 - (a) less than one
 - (b) one
 - (c) more than one
 - (d) none of these
 4. The technique of conservation of rain water at a place, where it falls, is known as.....
 - (a) water harvesting
 - (b) in-situ conservation
 - (c) ex-situ conservation
 - (d) moisture conservation
 5. Elevation difference between basin outlet and the highest point located on the perimeter of basin is called as
 - (a) relief ratio
 - (b) relief
 - (c) basin relief
 - (d) maximum basin relief
 6. One of the major causes for mass landslides in forest watersheds is
 - (a) high plant density
 - (b) too much of terracing
 - (c) construction of roads
 - (d) plantation of fruit crops
 7. Growing of trees and other forest produce on lands which were originally covered with forests is referred as.....
 - (a) afforestation
 - (b) vegetation
 - (c) plantation
 - (d) reforestation
 8. Curve plotted between relative height(h/H) and relative area (a/A) of watershed is known as.....
 - (a) stage curve
 - (b) hyetograph curve
 - (c) hydrograph
 - (d) hypsometric curve

9. Farm pond is useful for
- (a) runoff collection
 - (b) runoff control
 - (c) erosion control
 - (d) flood control
10. Contour trenching is not suitable for land slopes greater than
- (a) 3 %
 - (b) 7 %
 - (c) 20 %
 - (d) None of these

II Write short notes on ANY FIVE of the following (5x2=10)

1. Watershed
2. Water harvesting
3. Watershed Management
4. *In-situ* rainwater conservation
5. Land-use planning
6. Watershed delineation
7. Arable land

III Answer ANY FIVE of the following (5x4=20)

1. State and explain goals of land use planning.
2. Explain need for water harvesting structures.
3. State and explain factors influencing prioritizing watersheds.
4. What are the characteristics of contour lines?
5. Describe utility of Land Use/ Land Cover Data in watershed planning.
6. State the steps in the watershed planning process.
7. Describe effect of size of watershed on runoff.

IV Write an essay on ANY ONE of the following (1x10=10)

1. People's participation in watershed management.
2. Monitoring of watershed development programme.
