

End Semester Examinations - 2015-16 Even Semester - May 2016

14CE3027 Hydrologic Processes

Set A

Time : 3 hrs
Total Marks: 100

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1. a. Explain how the calculations of average rainfall over the area are made. (10)
b. How can we estimate the missing precipitation data also enumerate the benefits and limitations of each method? (10)
- OR**
2. Explain the various types of distributions used to represent hydrologic variables and also the suitability of these distributions for various hydrologic processes. (20)
3. a. Explain how the calculations of average rainfall over the area made (10)
b. Explain the method used to test the consistency of records. (10)
- OR**
4. a. Write the various steps involved in the derivation of unit hydrograph. (10)
b. Explain the various factors affecting runoff. (10)
5. a. Explain the various factors affecting evaporation. (10)
b. Explain the water budget determinations of reservoir evaporation. (10)
- OR**
6. a. Discuss the various methods used for determination of Evapo – transpiration. (10)
b. Explain the estimation of infiltration losses. (10)
7. a. Briefly explain the physical properties of soils affecting soil moisture. (10)
b. Explain the various forces responsible for holding water in soil. (10)
- OR**
8. a. Explain how the soil water measurement is carried out. (10)
b. How will you construct a infiltration-capacity curve and explain its applications. (10)
9. a. Enumerate the various processes undergone by water in the surface, subsurface and in the atmosphere. Explain with a diagram the complete circulation processes. (5)
b. Explain the significance of radiation in atmosphere with reference to condensation. (7)
c. What do you mean by hydrologic budget or water balance of drainage basin. (8)
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Wishing you All the Best
