

50306



PART – B

(5×16=80 Marks)

11. a) Briefly explain the steps involved in water resources planning. (16)

(OR)

b) Define storage capacity of the reservoir. List out and explain the storage zones of reservoir with neat sketch. (16)

12. a) Summarize the consumptive use of water and the factor affecting consumptive use of water. How will you measure it? (16)

(OR)

b) List the impurities which make water unfit for irrigation and discuss the effects of impurities in detail. (16)

13. a) State and explain in detail about the benefits and ill-effects of irrigation. (16)

(OR)

b) 800 m³ of water is applied to a farmer's rice field of 0.6 hectares. When the moisture content in the soil falls to 40% of the available water between the field capacity (36%) of soil and permanent wilting (15%) of the soil crop combination. Determine the field application efficiency. The root zone depth of rice is 60 cm. Assume porosity = 0.4. (16)

14. a) What are the different types of cross drainage works that are necessary on a canal alignment? State briefly the conditions under which each one is used. (16)

(OR)

b) Enumerate the requirements of good lining and discuss the factors which are responsible for selecting a suitable material. (16)

15. a) Discuss briefly the various techniques used for distributing water in the farms. (16)

(OR)

b) Enumerate and discuss the factors affecting the irrigation scheduling. (16)