Reg No : .....

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

# **Third Semester**

B.Sc Geology and Water Management Model III

## **VOCATIONAL COURSE - GW3VOT05 - IRRIGATION AND HYDROPOWER**

2017 Admission Onwards

B7F4F348

Time: 3 Hours

Max. Marks: 80

#### Part A

Answer any **ten** questions. Each question carries **2** marks.

- 1. Discuss about advantages of Perennial irrigation.
- 2. Describe the diversion scheme.
- 3. Define Lift irrigation.
- 4. Discuss about the Merits of Surface Irrigation Methods.
- 5. Discuss about Wild Flooding.
- 6. Describe Medium Salinity Water.
- 7. Describe High Na Water.
- 8. Define Feeder canal.
- 9. Define Thal.
- 10. Discuss about Intake structure.
- 11. Describe about surge tank.
- 12. Discuss about Energy production by Turbines.

(10×2=20)

#### Part B

Answer any **six** questions. Each question carries **5** marks.

Page 1/2



- 13. Describe about the necessity and scope of irrigation.
- 14. Describe about the scope of irrigation and ill effects of irrigation.
- 15. Distinguish between Sprinkler and Drip irrigations.
- 16. Discuss about disadvantages of Drip irrigation.
- 17. Discuss the steps for improving quality of irrigation water.
- 18. Explain about the quality of irrigation water related to water requirements of crops.
- 19. List out the advantages of Inundation canal.
- 20. Describe Canal classification based on alignment with neat sketches.
- 21. Describe the types of hydel power plants.

(6×5=30)

#### Part C

## Answer any **two** questions. Each question carries **15** marks.

- 22. Describe about the different methods of surface irrigation with their advantages and disadvantages.
- 23. Describe about surface and subsurface irrigation methods with neat sketches.
- 24. Give details on irrigation canals.Briefly describe various types, functions and the financial outputs of canals.
- 25. Explain the principal components and mechanisms of hydroelectric power plants. Add a note on its Merits.

(2×15=30)