

GANPAT UNIVERSITY

B.Tech.Sem. IV (All Branches)(CBCS),

Regular Examination –MAY: 2014

2OS401 – Water Resources Management(Open Elective)

Max.Time: 3 Hours

Max. Marks: 70

- Instructions: -**
- (1) Answer to the two sections must be written in **separate** answer books.
 - (2) Figures to the **right** indicate **full** marks.
 - (3) Assume suitable data if required.

Section - I

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|----|---|----|
| 1 | (A) Define: 'Hydrology' and Explain 'Hydrologic Cycle' with schematic diagram. | 6 |
| | (B) List advantages and disadvantages of drip irrigation. | 6 |
| OR | | |
| 1 | (A) Give comparison between Surface irrigation, Sprinkler irrigation and Drip irrigation. | 6 |
| | (B) Explain: Function of irrigation water. | 6 |
| 2 | (A) Explain in detail ' factors responsible for occurrences of flood ' | 6 |
| | (B) Write a note on :Factors affecting infiltration | 5 |
| OR | | |
| 2 | (A) Write short note on 'Flood Forecasting'. | 6 |
| | (B) Explain the methods for estimation of missing rainfall data. | 5 |
| 3 | Attempt the Following. | 12 |
| | (A) Write a note on " Water Conservation" | |
| | (B) Define Consumptive use of water. Which factors affecting it? | |
| | (C) Methods of Stream flow measurement. | |

Section - II

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|----|---|----|
| 4 | (A) Enlist: Applications of Hydrology in Engineering. | 6 |
| | (B) Describe various types of precipitation with sketch | 6 |
| OR | | |
| 4 | (A) Explain: Factors affecting runoff. | 6 |
| | (B) Describe various forms of precipitation. | 6 |
| 5 | (A) What are the different methods for the measurement of precipitation?
Describe I.M.D. rain gauge. | 6 |
| | (B) Define 'Dam' and Give Classification of Dam | 5 |
| OR | | |
| 5 | (A) Define: 'Watershed' and explain characteristics of watershed. | 6 |
| | (B) Describe the measures of seepage control through the embankment of an earthen dam. | 5 |
| 6 | Attempt the Following. | 12 |
| | (A) Differentiate Clearly: Barrage & Weir. | |
| | (B) Explain: Infiltration Indices | |
| | (C) Write short note on: Ill effects of irrigation | |

End of Paper