



# 17583

15162

2 Hours / 50 Marks

Seat No.

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- Instructions :**
- (1) *All questions are compulsory.*
  - (2) *Answer **each** next main question on a **new** page.*
  - (3) *Illustrate your answers with **neat** sketches **wherever** necessary.*
  - (4) *Figures to the **right** indicate **full** marks.*
  - (5) *Assume suitable data, if **necessary**.*
  - (6) *Use of Non-programmable Electronic Pocket Calculator is **permissible**.*
  - (7) *Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.*

**Marks**

1. Answer **any nine** :

**(9×2=18)**

- a) State any two principles of watershed management.
- b) State any two objectives of watershed management.
- c) Define “conservation farming”.
- d) Explain meaning of land capability.
- e) Explain meaning of topology diversion structure.
- f) State any four uses of diversion structures.
- g) How is water yield assessment done ?
- h) Define “monoculture”.
- i) State any two uses of crop rotation.
- j) What is meant by water budgeting in watershed ?
- k) Enlist any two techniques utilized for water harvesting.

2. Answer **any four** :

**(4×4=16)**

- a) Explain the use of remote sensing in watershed management.
- b) Explain the causes of watershed detonation.
- c) Explain the various hydrological parameters required for watershed planning.
- d) Explain the factors affecting watershed management.
- e) Describe the geomorphologic characteristics of watershed.
- f) Explain the physical characteristic of watershed such as
  - i) hydrological cover
  - ii) geology

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**Marks**

**3. Answer any four :**

**(4×4=16)**

- a) Explain the role of grass in soil conservation.
  - b) Describe 'ley farming'.
  - c) Distinguish between strip cropping and cover cropping on any four points.
  - d) Explain the effect of cropping system on land management.
  - e) Explain the role of peoples participation in watershed management.
  - f) Enlist different ground water recharging techniques. Explain any one.
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