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[ PPU-D-I(H)-IT-2 ]

**Degree (Part-I) Examination, 2025**

**( Vocational )**

**INFORMATION TECHNOLOGY**

**[ Paper : Second ]**

**Paper Code : 400502**

**Time : Three Hours]**

**[Maximum Marks : 75**

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**Note :** Candidates are required to give their answers in their own words as far as practicable. All the questions are of **equal** value. Answer **any five**, selecting at least one from each group.

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**GROUP-A**

1. Write short notes on the following terms/keywords:
  - (a) Primary Key
  - (b) Foreign Key

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( 1 )

**Turn Over**

2. (a) Describe the major advantages of Database management system and file management system.
- (b) Describe the Codd's 12 rules.
3. What is Normalization? Describe the 1NF and 2NF rules with suitable example.

### GROUP-B

4. Write short notes on the following:
- (a) Multiprogramming
- (b) Threading
- (c) Real time OS
5. (a) Write a program to swap two number using pointer.
- (b) Write the difference between paging and segment. Describe the simple paging technique.

6. Write the function of OS in detail.
7. Discuss the Round-Robin Scheduling algorithm with suitable example.

### **GROUP-C**

- ~~8.~~ Write short notes on the following:
  - ~~(a)~~ Capacitor
  - ~~(b)~~ Transistor
  - (c) Semi-Conductor
9.
  - (a) Write the difference between intrinsic and extrinsic capacitor.
  - (b) Describe the halfwave and fullwave rectifier.
10. Describe the efficiency distortion in amplifier along with their merits and demerits.

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**THE END**