

Total Pages : 4

[ 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]**

---

**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.

---

**GROUP-A**

1. Write short notes on the following terms/keywords:

(a) Primary Key

(b) Foreign Key

**400502/600**

**( 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.

---

---

**THE END**