

Code No: **RT41047****R13****Set No. 1**

**IV B.Tech I Semester Supplementary Examinations, February/March - 2018**  
**OBJECT ORIENTED PROGRAMMING AND OPERATING SYSTEM**  
(Electronics and Communication Engineering)

**Time: 3 hours****Max. Marks: 70***Question paper consists of Part-A and Part-B**Answer ALL sub questions from Part-A**Answer any THREE questions from Part-B*

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**PART-A (22 Marks)**

1. a) What is data encapsulation? [3]
- b) What are the types of operating systems? [4]
- c) Write about multi thread programming model? [4]
- d) What are different types of IPC? [4]
- e) What are the advantages of page replacement algorithms? [4]
- f) What is a Trojan horse? [3]

**PART-B (3x16 = 48 Marks)**

2. a) Differentiate between procedure oriented and object oriented languages? [8]
- b) Explain in brief about applications of OOP? [8]
3. a) Define Operating System? Explain in brief about the functions of an operating system? [8]
- b) Explain in brief about Distributed operating Systems? [8]
4. a) What is Process Control block? Explain about the role of PCB in Operating system? [8]
- b) Differentiate between User level threads and kernel Threads? [8]
5. a) Explain in brief about Contiguous memory allocation? [8]
- b) Differentiate between Internal and External Fragmentation? [8]
6. a) Explain in brief about Swap space management with example? [8]
- b) Explain in brief about the key design issues for implementing Stable Storage? [8]
7. a) Explain in brief about the Role of access control in system protection? [8]
- b) What is an Access Matrix? How it can be used for Protection? Explain some implementation Schemes? [8]