

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Seventh Semester B.Tech Degree Regular and Supplementary Examination December 2021 (2015 Scheme)

Course Code: EE461**Course Name: Modern Operating Systems**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer all questions, each carries 5 marks.*

Marks

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| 1 | Explain the role of OS as Resource Manager | (5) |
| 2 | Differentiate between client server computing environment and distributed computing Environment | (5) |
| 3 | State the different multi-threading models. Illustrate with suitable diagrams | (5) |
| 4 | Enlist five file attributes. What you mean by extended file attribute? | (5) |
| 5 | Explain segmentation technique. | (5) |
| 6 | Enlist five types of files. Give its extension names to each. | (5) |
| 7 | Define seek time and disk bandwidth. | (5) |
| 8 | Explain RIAD Technology | (5) |

PART B*Answer any two full questions, each carries 10 marks.*

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| 9 | Discuss monolithic structure and layered structure of OS with necessary diagrams | (10) |
| 10 | a) Explain Cluster Computing Environment with an example | (5) |
| | b) Explain the different User – Operating System interfaces | (5) |
| 11 | a) What is the need of system calls in operating system | (3) |
| | b) Explain the procedure of making a system call, with proper illustration | (7) |

PART C*Answer any two full questions, each carries 10 marks.*

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| 12 | a) Differentiate between multi programming and multi-processing. | (5) |
| | b) Differentiate between external fragmentation and internal fragmentation | (5) |

- 13 Explain the concept of Demand paging? Explain the steps involved in demand paging with proper illustration (10)
- 14 Describe processes and their states. Explain Process Control Block(PCB) (10)

PART D

Answer any two full questions, each carries 10 marks.

- 15 Explain programme threats and system threats with proper examples. (10)
- 16 What are the operations that can be performed on files? (10)
- 17 a) Differentiate between viruses and worms. (5)
- b) Distinguish between sequential access file & direct access file. (5)
