

**M. TECH. –I (COMPUTER ENGINEERING) (CBCS – 2015 COURSE)
: WINTER - 2017**

SUBJECT: MOBILE OPERATING SYSTEM

Day: **Friday**
Date: **19/01/2018**

Time: **11.00 AM TO 02.00 PM**
Max. Marks: 60

w-2017-2778

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.
- 4) Assume suitable data if necessary.

SECTION-I

Q1 Explain the differences among processes, Programs and threads. List the basic possible states for a process. Discuss any additional state. Is it possible to have Intermediate states? **(10)**

OR

Explain the main advantages and disadvantages of using various views for the operations of computer system. Give Good arguments. **(10)**

Q2 a) Is there external fragmentation in fixed partitioning? Discuss and give good arguments. **(05)**
b) Describe the translation of Logical address to Physical Address. **(05)**

OR

Write a pseudo code to map an application I/O request to Physical I/O request. Allow the application request to cross cluster boundaries. **(10)**

Q3 Comment on 'Invasive and Malicious Software'. **(10)**

OR

Write a Pseudo code to implement an Access Matrix so an OS manager can control access to Processes associated with domains that request resources from objects. Explain how you would attempt to write a similar pseudo code to implement domains of access rights pairs. Why is first task easier? **(10)**

SECTION-II

Q4 Define the information architecture. Describe the various facets of mobile information architecture? **(10)**

OR

Describe the 'Set of rules' used for defining mobile strategy. **(10)**

Q5 a) What is Portability? What makes UNIX so portable? Why is Portability important? **(05)**
b) The fork primitives create two identical classes. Yet those processes can yield very different results. Explain how? **(05)**

OR

a) Explain the Linux Architecture. **(05)**
b) Distinguish an Image from a Process with respect to Linux OS. **(05)**

Q6 Describe the architecture of IOS and its features. **(10)**

OR

Describe the architecture of Windows OS and its features. **(10)**