

(2 Hours.)

[Total Marks: 60]

- N. B.:** (1) All questions are compulsory.
(2) Numbers to the right indicate marks.
(3) Make suitable assumptions wherever necessary and state the assumptions made.
(4) Answers to the same question must be written together.
(5) Mixing of Sub-Questions is not allowed.
(6) Draw neat labelled diagrams wherever necessary.

1. Attempt any two of the following:

12

- Explain any two scheduling algorithm in detail.
- Differentiate between GRUB –I and GRUB-II.
- What is the fundamental difference between process and a thread?
- Explain Operating System Booting Process.

2. Attempt any two of the following:

12

- Write a short note on :Paging.
- Explain the concept of segmentation and state its characteristics.
- Write in brief about Linux memory management.
- Explain with an example Least Recently Used (LRU) page replacement algorithm.

3. Attempt any two of the following:

12

- Write a short note on File System Implementation.
- Explain the concept of Disk Terminals.
- Explain other UNIX security issues in brief.
- What is Direct Memory Access? Explain in detail.

4. Attempt any two of the following:

12

- Explain the Android Activity Lifecycle.
- Write a short note on SQLite.
- Explain in brief about WebKit.
- Describe in detail Android libraries

5. Attempt any two of the following:

12

- Explain in detail Linux kernel.
- Elaborate the concept of virtual memory.
- What are uses of content provider? Give Example.
- Explain how deadlock can be avoided in operating system.
