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AA—25—2019

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (CS) (Fifth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2019

(CBCS Pattern)

COMPUTER SCIENCE

Paper-(S5.CC.5)

(Operating System)

(Wednesday, 16-10-2019)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

- N.B. :—* (i) All questions are compulsory.
(ii) Figures to the right indicate full marks.
(iii) Assume suitable data, if necessary.

1. Answer any *five* of the following : 5×3=15
 - (a) What is operating system ? Explain.
 - (b) Explain multiprocessor system.
 - (c) What is Booting ? Explain.
 - (d) What is job scheduling in OS ?
 - (e) Explain system calls.
 - (f) Explain multithreading.
 - (g) List out any *four* names of operating systems.
2. Attempt any *two* of the following : 2×5=10
 - (a) Explain the responsibilities of an operating system.
 - (b) Explain command interpreter.
 - (c) What is GUI ? Explain.
3. Attempt any *two* of the following : 2×5=10
 - (a) Explain the extended machine concept.
 - (b) What is process control ? Explain.
 - (c) What is queues ? Explain scheduling queues.
4. Attempt any *two* of the following : 2×5=10
 - (a) What is priority scheduling ? Explain.
 - (b) What is pthreads ? Explain.
 - (c) Explain fragmentation in detail.

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5. Answer any *two* of the following : $2 \times 5 = 10$
- (a) Explain the sequential and direct access methods.
 - (b) Explain paging memory management.
 - (c) What is context switching ? Explain.
6. Answer any *two* of the following : $2 \times 5 = 10$
- (a) Explain Round-Robin scheduling.
 - (b) Explain contiguous allocation method.
 - (c) Explain computer system organization.
7. Answer any *two* of the following : $2 \times 5 = 10$
- (a) Explain bit vector space management.
 - (b) Explain segmentation in memory management.
 - (c) Explain operating system resource manager.