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BOARD DIPLOMA EXAMINATION, (C-16)
MARCH/APRIL-2019
DIT- FOURTH SEMESTER EXAMINATION
OPERATING SYSTEMS

Time: 3 hours

Max. Marks: 80

PART-A**3x10=30M**

Instructions: 1) Answer all questions.
2) Each question carries three marks.
3) Answer should be brief and straight to the point and shall not exceed five simple sentences.

- 1) Define an operating system. List any three popular operating systems.
- 2) What is Spooling.
- 3) Differentiate between Process and Program.
- 4) What is a Semaphore? Give an example.
- 5) List the advantages of interprocess communication.
- 6) What is overlay.
- 7) Define fragmentation? List the types of fragmentations.
- 8) List any 3 disk free space managing methods.
- 9) Define Latency time?
- 10) List any three objectives of file management systems.

PART-B

5x10=50M

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- Instructions:** 1) Answer any **five** questions.
2) Each question carries **ten** marks.
3) The answer should be comprehensive and the criterion for valuation is the content but not length of the answer.

- 11) Explain briefly the components of the Operating System.
- 12) Draw and explain the process State diagram?
- 13) a) What is a Process Scheduling? (2+4+4)
b) Explain SJF, Round robin Process Scheduling algorithms. Give examples.
- 14) a) State the necessary conditions for arising a Deadlock.
b) Briefly explain Deadlock Prevention methods with example.
- 15) Explain Single Partition and Multiple Partitions of memory. (5+5)
- 16) a) What is Virtual memory? (2+8)
b) How the logical address is mapped with physical address in virtual memory with an illustration.
- 17) a) List various Disk Scheduling algorithms? (2+4+4)
b) Explain any two Disk Scheduling algorithms with example.
- 18) Explain various File Access methods in detail.

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