Code No: 125EN

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, November/December - 2017
COMPUTER ORGANIZATION AND OPERATING SYSTEMS
(Common to ECE, ETM)

Time: 3 hours   Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B
consists of 5 Units. Answer any one full question from each unit. Each question carries
10 marks and may have a, b, c as sub questions.

PART - A

(25 Marks)

1.a) With a neat diagram explain the basic operational concepts of computer.   [2]
  b) What is Stack Organization?   [3]
  c) Define Cache Memory.   [2]
  d) What is a Micro Program?   [3]
  e) What is an Interrupt?   [2]
  f) What is an IO Processor?   [3]
  g) Define Trashing.   [2]
  h) How to describe the deadlock? Give an example.   [3]
  i) List any four file operations.   [2]
  j) Mention the objectives of File management System.   [3]

PART - B

(50 Marks)

2.   Explain the instruction cycle with a neat flow chart.   [10]
OR
3.   Give explanation about the fixed point and floating point representations in detail. [10]

4.   What is Virtual Memory? Explain in detail.   [10]
OR
5.   With neat diagram, explain address selection for control memory.   [10]

6.   Explain about different modes of transfer.   [10]
OR
7.   Discuss about interrupt priorities.   [10]

8.   What are the goals of memory management? Explain the Contiguous Memory
       Allocation techniques.   [10]
OR
9.a)   What are the differences between paging and segmentation?
  b)   Explain the Deadlock Prevention Technique.   [5+5]

10.   Explain the different file allocation methods.   [10]
OR
11.   Write short notes on file sharing and file protection.   [10]

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