Code No: 125EN

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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