



SF-7815

B. E. - IV (Sem. VIII) (I.T.) Examination

May / June - 2011

Distributed Operating Systems

Time : 3 Hours]

[Total Marks : 100

Instructions :

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवही पर अवश्य कर्तवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
← B. E. - 4 (SEM. 8) (I.T.)	<input type="text"/>
Name of the Subject :	<input type="text"/>
← DISTRIBUTED OPERATING SYSTEMS	<input type="text"/>
← Subject Code No. : <input type="text" value="7"/> <input type="text" value="8"/> <input type="text" value="1"/> <input type="text" value="5"/> ← Section No. (1, 2,.....) : <input type="text" value="1&2"/>	<input type="text"/>
	Student's Signature

SECTION - I

- 1 (a) Answer the following : 10
- (i) Discuss two main protocols working at transport layer.
 - (ii) Define : Open Distributed System.
 - (iii) What is the difference between tightly coupled system and loosely coupled system ?
 - (iv) How the degree of reliability is expressed in multicast communication ?
 - (v) What is the difference between Monolithic kernel and Microkernel model ?
- (b) Write short notes : (any two) 10
- (i) Group Management
 - (ii) RPC stub generation
 - (iii) Workstation-Server Model.
- 2 (a) What are the main differences between a network operating system and a distributed operating system ? 8
- (b) What are the major issues in designing a distributed operating system ? 10

OR

- (c) Describe blocking and non blocking types of IPC. 10
Which is easier to implement and why ? Discuss their relative advantages and disadvantages.

- 3** Do as directed : (any two) **12**
- (i) Discuss various switching techniques.
 - (ii) Justify the statement : “Stateful servers are more efficient than Stateless servers.”
 - (iii) Discuss desirable features of good Message-Passing System.

SECTION - II

- 4** (a) State various consistency models and explain any three in detail. **8**
- (b) Write a short note on Replicated Non Migrating Blocks (RNMBs) strategy. **6**

OR

- (b) Explain the desirable features of a good distributed file system. **6**
- (c) Explain various situations of Thrashing in DSM systems. **4**
- 5** (a) What are the desirable features of a good global scheduling algorithm ? **8**
- (b) Explain classification of Load-Balancing Algorithms. **8**

OR

- (b) Explain different Address Space Transfer Mechanisms. **8**
- 6** (a) List and explain various models for Organizing Threads. Also explain thread scheduling in brief. **8**
- (b) Do as directed :
- (i) Explain bidding method of Location Policies. **4**
 - (ii) Discuss Priority Assignment Policies in brief. **4**
