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322636(22)

B. E. (Sixth Semester) Examination, 2020

(Old Scheme)

(CSE, IT Branch)

(Elective-I)

ADVANCED OPERATING SYSTEM

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Part (a) is compulsory of each questions. Attempt any two parts from (b), (c) and (d).

Unit-I

1. (a) Give an example of distributed OS.   2

   (b) What do you mean by resource sharing? What are the challenges in designing distributed OS?   7

(c) Explain distributed file system with suitable diagram. 7

(d) Define following terms : 7

   (i) Process and thread

   (ii) Domain name systems

   (iii) X.500 directory service

Unit-II

2. (a) What is Digital Signature? 2

(b) Describe data encryption techniques in detail. 7

(c) Explain distributed algorithm design principle by considering coordination issues. 7

(d) Write short notes on : 7

   (i) Public key and private key

   (ii) Interaction models

Unit-III

3. (a) What is Shell? 2

(b) Explain internal architecture of UNIX. 7

(c) Describe memory management in Unix operating system. 7

(d) Write short notes on :

   (i) Process management in Unix 3

   (ii) Meaning of following unix commands : 4

   cp, mv, ftp, tar

Unit-IV

4. (a) What is IP CONFIG command? 2

(b) Explain windows OS architecture in detail. 7

(c) Explain I/O and Process management in windows O.S. 7

(d) Write short notes on :

   (i) Windows programming environment tools 4

   (ii) Windows administrative tools 3

Unit-V

5. (a) Define process management 2

(b) Explain system call for Unix OS. 7

(c) What are the functions of memory management in windows OS? 7

(d) Describe file systems in any operating system in detail, with suitable block diagram. 7