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BT—15—2016

FACULTY OF COMPUTER STUDIES

M.Sc. (SE) (Second Year) (Third Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

SOFTWARE ENGINEERING

(Distributed Operating System)

(Monday, 21-11-2016)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—100

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Assume suitable data if necessary.

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|----|-----|---|----|
| 1. | (a) | What is distributed computing system. | 10 |
| | (b) | Explain network types. | 10 |
| | | <i>Or</i> | |
| | (c) | Explain synchronization in message passing. | 10 |
| | (d) | What are the desirable features good distributed file system. | 10 |
| 2. | (a) | Explain process migration. | 10 |
| | (b) | Explain architecture of QSM. | 10 |
| | | <i>Or</i> | |
| | (c) | Explain clock synchronization. | 10 |
| | (d) | What are features good message passing system. | 10 |
| 3. | (a) | Explain encoding and decoding of messages. | 10 |
| | (b) | Explain advantages of process migration. | 10 |
| | | <i>Or</i> | |
| | (c) | Explain replacement strategy in DSM. | 10 |
| | (d) | Explain file accessing models. | 10 |
| 4. | (a) | Explain event ordering. | 10 |
| | (b) | Explain deadlock. | 10 |

P.T.O.

Or

- (c) Explain distributed algorithm for mutual exclusion. 10
- (d) Explain features of good scheduling algorithm. 10
- 5. Write short notes on the following (any *four*) : 20
 - (i) Location transparency
 - (ii) Wait for graph
 - (iii) Multidatagram message
 - (iv) Group communication
 - (v) Implementation of logical clocks
 - (vi) Granularity.