

Seat No. : \_\_\_\_\_

**NQ-124**

**November-2017**

**5<sup>th</sup> Year M.Sc. (CA & IT) Integrated**  
**Distributed Operating System**

**Time : 3 Hours]**

**[Max. Marks : 100**

1. (A) Answer the following questions : (Any **three**) **18**
  - (1) Discuss Distributed Computing System Models in detail.
  - (2) Explain Synchronization in Message Passing.
  - (3) Explain Failure Handling in Message passing with example.
  - (4) Explain RPC(remote procedure call) model in detail.

(B) Explain Reply message in RPC. **2**
2. (A) Answer the following questions : (Any **three**) **18**
  - (1) Explain Implementation of RPC model in detail.
  - (2) Discuss Server Creation semantics in RPC.
  - (3) Explain strict consistency model and sequential consistency model in Distributed Shared Memory.
  - (4) Explain Replacement Strategy in Distributed Shared Memory.

(B) Explain Call Semantic in RPC. **2**
3. (A) Answer the following questions : (Any **three**) **18**
  - (1) Explain Load balancing algorithm in detail.
  - (2) Explain Stateful and Stateless server with example.
  - (3) Explain Location Policies in load sharing in detail.
  - (4) Explain address space transfer Mechanisms in Process Migration.

(B) Explain Thrashing. **2**
4. (A) Answer the following questions : (Any **three**) **18**
  - (1) Explain Models for organizing Thread in detail.
  - (2) Discuss File models in detail.
  - (3) Explain File Sharing Semantic in detail.
  - (4) Discuss Process Transfer policy in Load balancing in detail.

(B) Explain Stable storage. **2**
5. Explain following : (Any **four**) **20**
  - (1) Implicit and explicit process addressing
  - (2) Call message in RPC
  - (3) Idempotency in Message passing
  - (4) Process Migration
  - (5) Cache Location in Distributed file system.

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