

Sem VIII

1815/16

Storage N/w Mgmt & Retrieval

I.T.
CBAS

QP Code : 721201

(3 Hours)

[Total Marks : 80

- N.B. : (1) Question number 1 is **compulsory**.
Out of remaining question solve any **three**
- (2) Draw figures wherever necessary .
- (3) Assume suitable data wherever necessary.

1. (a) Consider a disk I/O system in which an I/O request arrives at a rate of 100 I/O s per second. The disk service time is $R_s = 8\text{ms}$, Calculate the measures of disk performance **10**
- (a) Utilization of I/O controller (U)
- (b) Total response time (R)
- (c) Average Queue size
- (d) Total time spent by a request in the queue
- Considering the same disk I/O system and calculate the above measures of the disk performance if the disk service time is halved i.e. $R_s = 4\text{ms}$.
- (b) Explain ILM and its benefits. How ILM can be implemented as a strategy for hospital managementsystem. **10**
2. (a) Explain FC SAN topologies and FC protocol Stack **10**
- (b) Explain IP storage standards.
3. (a) Explain the Architecture and implementation related limitations of storage virtualization. **10**
- (b) Differentiate between symmetric and asymmetric storage virtualization and block level and file level storage virtualization. **10**
4. (a) What is Information Availability and Information unavailability? Explain BC planning life cycle. **10**
- (b) Explain Network data management protocol (NDMP). **10**
- 5 (a) Define Information system. List out the components of an information systems. **10**
What is the difference between general purpose and specialized information systems?
- (b) Explain the Boolean based matching process in detail. **10**
6. Write short notes on: (Any **four**) **20**
- (a) Intelligent Storage system (b) Zoned bit recording
- (c) FC ports (d) Comparison of FC SAN, iSCSI, NAS.
- (e) Backup Operations
- (f) Document surrogates (g) Document term Matrices