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BR—407—2016

FACULTY OF COMPUTER SCIENCE

M.Sc. (First Year) (First Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(CBCS Pattern)

COMPUTER SCIENCE

Paper CS-104

(Distributed Database Concepts)

(Wednesday, 23-11-2016)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (i) Q. No. 1 is compulsory.

(ii) Write answers in brief and at the point.

1. Attempt any *three* of the following : 3×5=15

- (a) What is distributed system ? Explain.
- (b) Explain in brief various Network types.
- (c) Explain Server System Architecture.
- (d) Explain dense index.
- (e) Explain parallel system.

2. Attempt any *three* of the following : 3×5=15

- (a) Explain heterogenous distributed database.
- (b) Discuss in detail data fragmentation.
- (c) Explain B+ tree index file.
- (d) Explain static hashing in detail.

3. Solve any *three* of the following : 3×5=15

- (a) Explain data warehouse and data marts.
- (b) Explain multimedia databases.
- (c) Explain the implementation of stable storage.
- (d) Explain in detail log based recovery.

P.T.O.

4. Answer any *three* of the following :

3×5=15

- (a) Explain OLTP in detail.
- (b) Explain mobility databases.
- (c) Explain shadow paging.
- (d) Explain remote backup system.

5. Write short notes on any *three* :

3×5=15

- (a) Time in database
- (b) Non-volatile storage
- (c) Interquery parallelism
- (d) Atomicity
- (e) Bitmap indices.