B.SC. (I. T.) SEM. - VI (2011 COURSE) : WINTER - 2017
SUBJECT : Elective I : PARALLEL AND DISTRIBUTED COMPUTING

Day : **Thursday** **W-2017-0885** Time : **02.30 PM TO 04.30 PM**
Date : **28/12/2017** Max. Marks : **40**

N. B. :
1) Attempt **Any FIVE** Full questions.
2) Figures to the right indicate **FULL** marks.

Q.1 Explain the various Program Partitioning Techniques & task scheduling algorithms used for Parallel & Distributed Computing? **(08)**

Q.2 Explain the necessity of Parallel Computer Architectures, along with their fundamental design issues? **(08)**

Q.3 Differentiate between Grid & Cluster Computing? Elaborate with an example for each category. **(08)**

Q.4 Explain the following terms, with necessary diagrams: **(08)**

a) Open MP
b) Fast MPI

Q.5 Describe the following aspects of Parallel & Distributed Computing: **(08)**

a) Network Security
b) Storage Area Networks

Q.6 Describe Any Two of the following Parallel Programming Models: **(08)**

a) Shared Variable
b) Message Passing
c) Middleware

Q.7 Write Short Notes, with illustrative diagrams, on the following: **(08)**

a) Hardware and software trade-offs related to Parallel Computer Architectures

b) Shared Memory Multi-Processor Architecture

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