B.SC. (I. T.) SEM. - VI (2011 COURSE) : SUMMER - 2018
SUBJECT : Elective I : PARALLEL AND DISTRIBUTED COMPUTING

Day : **Saturday** Time : **10.00 am to 12.00 Noon**
Date : **26/05/2018** **S-2018-0992** Max. Marks : **40**

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

Q.1 List and describe the various Parallel Processing paradigms? **(08)**

Q.2 Describe the various hardware and software trade-offs related to Parallel Computer Architectures? **(08)**

Q.3 Differentiate between Grid & Cluster Computing? Elaborate with an application & commercial platform / product for each of them? **(08)**

Q.4 Explain the following technology terms, with diagrams: **(08)**
a) NUMA-Q
b) COMA

Q.5 Explain the following features with respect to the IPC Messaging system: **(08)**
a) Correctness
b) Portability

Q.6 Explain the various Dataflow and Communication models for Parallel & Distributed Computing? **(08)**

Q.7 Describe Any Two of the following aspects of using Shared Memory Multiprocessors: **(08)**
a) Cache Coherence
b) Protocol Design Trade-offs
c) Synchronization

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