

PD-515
(564) M.Sc. COMPUTER SCIENCE (FOURTH SEMESTER)
Examination June 2021
Paper-I

Name/Title of Paper- **ADVANCE TRENDS AND TECHNOLOGY IN COMPUTER SCIENCE**
Time: 3:00 Hrs.]

[Maximum Marks: 80
[Minimum Pass Marks: 29

नोट: दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note: Answer from Both the Section as Directed. The Figures in the right-hand margin indicate marks.

SECTION –A

1. Choose the Correct answer 2X5=10
- a. All of the following accurately describe Hadoop, Except.
 - i. Open Source
 - ii. Real time
 - iii. Java Based
 - iv. Distributed Computing approach.
 - b. Which of the following has many features of that is now known as cloud computing?
 - i. Web Service
 - ii. Software
 - iii. All of the mentioned
 - iv. Internet
 - c.Grids consist of one or more systems working together to provide a single point of access to users.
 - i. Cluster
 - ii. Computer Cluster
 - iii. Desktop
 - iv. Pairing
 - d. The set of loosely connected Computers are Called as.....
 - i. LAN
 - ii. WAN
 - iii. Workstation
 - iv. Cluster.
 - e. A Wireless telecommunications Network for device to device Connections within a very short range.
 - i. WWAN
 - ii. PAN
 - iii. WLAN
 - iv. Sensor network.
2. Write the short type answer for the following questions. 2X5=10
- i. How is map reduce related to big Data?
 - ii. What is the use of Cloud Computing in Business Applications.?
 - iii. What is the difference between grid Computing systems and distributed systems?
 - iv. What are the main goals of Clustering?
 - v. Write the Characteristics of pervasive Computing.

SECTION –B

Answer anyone long-answer type questions from each unit. 60

Unit-1

3. a. What is Big-data? Explain different 'V's of Big-data analytics. 6
b. Explain location Based Services with Example.

Or

- a. Explain the massively parallel processing (MPP) 6
b. How to Implementation of Big-data.

Unit-2

4. a. Explain business application and examples of cloud computing. 6
b. Explain Benefits and limitations of Cloud Computing.

Or

- a. What is the difference between web Application and Web browsers. 6
b. Explain Cloud Storage Provides with Example.

Unit-3

3. a. Explain architecture and service modeling of grid Computing. 6
b. Write down the characterization of grid.

Or

- a. Explain grid computing road maps with example. 6
b. What is GMA? Explain overview of GMA.

Unit-4

4. a. What is Cluster Computing? Explain the planning? Architecture of Cluster Computing. 6
b. Explain node H/W ? Node s/w of Cluster technology.

Or

- a. Explain the Cluster workload management activities with example. 6
b. What is virtualization? Explain Virtualization technology with Example.

Unit-5

5. a. Write the pervasive Computing principle. 6
b. Explain pervasive web application architecture with example.

Or

- a. Explain device categories and device characteristics. 6
b. Explain smart identification and embedded Controls.