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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester M.Sc Computer Science Degree Examination, April 2024

MCS4E03 e – Fundamentals of Big Data

(2022 Admission onwards)

Time: 3 hours   Max. Weightage : 30

Section A

Answer any *four* questions. Each carry *2* weightage

1. What is Bigdata? Explain its importance

2. Define the term text analytics.

3. What are semi structured data? What are its characteristics?

4. What is a collection in MongoDB? List different types of collections.

5. Write the features of document databases.

6. Explain the concept of data redundancy in Hadoop environment

7. Explain the function of job tracker and task tracker in Hadoop cluster

(4x 2=8 weightage)

Section B

Answer any *four* questions. Each carry *3* weightage

8. List and explain the four dimensions of Bigdata

9. List and explain different types of bigdata analytics

10. What are the important modifications required inbusiness intelligence products to handle bigdata

11. List and explain important features of NoSQL databases.

12. Explain the FILTER and TRANSFORM operators in Jaql.

13. What are wrapper classes? Explain any three wrapper classes

14. Explain about Pig and Hive

(4x3=12 weightage)

Section C

Answer any *two* questions. Each carry *5* weightage

15. Explain in detail about various components of the Bigdata stack.

16. Write detailed notes on any five Bigdata solutions.

17. With the help of a diagram, explain the Hadoop architecture

18. Explain in detail about various types of NoSQL databases.

(2x5=10 weightage)

32

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester M.Sc Computer Science Degree Examination, April 2024

MCS4E04 d – Storage Area Networks

(2022 Admission onwards)

Time: 3 hours

Max. Weightage : 30

Section A
Answer any *four* questions. Each carries *2* weightage

1. Differentiate Server centric and Storage centric architectures.

2. Differentiate multi-mode optical cable and single-mode optical cable

3. Explain Stripping and Mirroring with diagrams.

4. What are the different types of Ports in FC?

5. Differentiate SAN and NAS.

6. Explain SNMP and TELNET.

7. Write about Remote Mirroring.

(4x 2 = 8 weightage)

Section B
Answer any *four* questions. Each carries *3* weightage

8. Explain Intelligent Disk Subsystems

9. Explain the different types of I/O Channels.

10. Write about the Fibre Channel Topologies.

11. Explain the In band and Out of band network management functions

12. What are the four major components of Storage Area Network? Explain

13. Explain the Classes of Service.

14. How SAN can be protected from failures?

(4 x 3 = 12 weightage)

Section C
Answer any *two* questions. Each carries *5* weightage

15. Write about the different RAID levels using diagrams.

16. Write about the Layers of Fibre Channel.

17. Explain the storage management issues and tasks.

18. Explain the iSCSI Technology.

(2 x 5 = 10 weightage)