1M4M19163 (Pages : 2) Reg. No:............................
Name: ....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester MSc Degree Examination, March /April 2019

MCS4E01(4) – Storage Area Networks

(2017 Admission onwards)

Time: 3 hours   Max.weightage : 36

Section A
Answer *all* questions. Each question carries a weight of 1

1. Discuss any two limitations of storage centric IT infrastructure.

2. Write a note on OBS.

3. Write a note on switched Fabric Topology.

4. How server centric storage IT infrastructure can overcome the limitations of storage centric storage IT infrastructure?

5. Identify the factors that make a good SAN.

6. Discuss about F_Port.

7. Discuss about Active/active (load sharing) IO channels.

8. Contrast between RAID 0+1 or RAID 10.

9. Distinguish between in-band and out-band SAN appliances.

10. Identify the treasons for the failure of storage systems.

11. Write a note of storage virtualization on a network.

12. Mention how performance can be increased in storage virtualization.

(12 x 1 = 12 weightage)

Section B
Answer *any 6* questions. Each question carries a weight of 2

13. Differentiate between SAN and NAS.

14. Discuss how to replace a server with in a storage network.

15. Discuss about JBOD.

16. "RAID 0 increases the performance of the virtual hard disk, but not its fault tolerance" – Justify this statement.

17. Discuss any two data transformation paths.

18. Write a short note on infiniband.

19. Discuss any two implementation considerations of storage virtualization.

20. Discuss about the network part of a SAN.

21. Explain about the functions of HBA.

22. Discuss about the challenges in implementing a SAN configuration into a data centre.

<div align="right">(6 x 2 = 12 weightage)</div>

Section C
Answer *any three* questions. Each question carries a weight of 4

23. Discuss about software and network part of a SAN.

24. Discuss about symmetric and asymmetric storage virtualization.

25. Discuss about in-band and out-band SAN appliance.

26. Discuss about any four levels of RAID.

27. Discuss about iSCSi technology. How the enterprises will be benefitting by making use of it?

28. Discuss about the SAN hardware devices.

<div align="right">(3 x 4 = 12 Weightage)</div>

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester MSc Degree Examination, March /April 2019
MCS4C01 – Principles of Software Engineering
(2017 Admission onwards)

Time: 3 hours   Max.weightage : 36

Section A
Answer all questions

1. Give the IEEE definition of Software Engineering.

2. List the features of quality of software according to ISO standard.

3. How can we connect a software project and a development problem?

4. How is requirement of a software defined by IEEE?

5. What is problem analysis?

6. What is a DFD?

7. What is software architecture?

8. List the different types of architectural views.

9. What does coupling depict?

10. What are the two fundamental principles in software design process?

11. Define a test case.

12. What is the main focus of integration testing?

(12x1=12 weightage)

Section B
Answer any six questions

13. What are the ETVX properties?

14. What are the advantages and disadvantages of prototype model?

15. Write a short note on data dictionary of a DFD.

16. Give a brief description on use case diagrams.

17. What do you mean by defect logging?

18. Describe information hiding in detail.

19. Describe the incremental coding process with the help of a flowchart.

20. Briefly describe the metrics of size of a program or code.

21. Differentiate between functional abstraction and data abstraction.

(6x2=12 weightage)

Section C
Answer any three questions

22. (a) Explain in detail the six attributes of the ISO standard of quality.

    (b) Write notes on maintainability and productivity.

23. Describe in detail the waterfall model

24. Describe in detail the three architectural views of a system.

25. Write note on

    (a) Modularity.

    (b) Coupling and Cohesion.

26. Explain white box and black box testing.

27. Write note on

    (a) Coding standards.

    (b) Test driven development.

(3x4=12 weightage)