

ST. XAVIER'S COLLEGE

Maitighar, Kathmandu

Mid Term Examination

2017

Bachelor Level/Fourth Year/Seventh Semester/Computer Science and IT
Advanced Database Management System (CSC-401)

Full Marks: 40



Pass Marks: 16

Time: 2 hrs.

Candidates are required to answer the questions in their own words as far as practicable.

Attempt Any Eight Questions:

1. How does a category or union type differ from a regular shared subclass? What is a category used for? Illustrate your answer with suitable examples.
2. Draw an ER diagram for a hospital with a set of patients and a set of doctors. Associated with each patient a log of various test and examination conducted.
3. Describe the steps of the algorithm for database design by EER-to-OO mapping.
4. What is versioning? Why is it important? What is the difference between versions and configurations?
5. Write short notes on :
 - a) Deductive Database
 - b) Concurrency control
 - c) Spatial Database
 - d) ECA Model
 - e) Multimedia Database
6. What is the difference between persistent and transient objects? How persistence is handled in typical OO database systems?
7. What is the difference between structured and unstructured complex object? Differentiate identical versus equal objects with examples.
8. Discuss how time is represented in temporal databases and compare the different time dimensions.
9. Describe the main reasons for and potential advantages for distributed database. What additional functions does it have over centralized DBMS?
10. Explain mobile computing architecture with suitable diagram.

 *Best of Luck* 

ST. XAVIER'S COLLEGE

Mid-Term Examination 2017
Program/Semester: BSc. CSIT/7th Sem.
Subject- Internet Technology

Full Marks: 40
Time: 2 hours

Candidates are required to answer the questions in their own words as far as practicable.

Attempt All.

1.

- a) Explain how IANA, RIR, and ISPs work for the Internet resource management. [6]
- b) Explain about N-Tire Client-Server architecture supporting web applications with example. Also write about its benefits. [6]

2.

- a) Explain how Domain Name System works. [6]
- b) Explain the TCI/IP protocol suite/hierarchy. [6]

3.

- a) Mentioning about the IPv6 header structure, describe the features of IPv6. [6]
- b) Write about different IP v4 & IPv6 address types. [6]

4. Write short notes on [Any One] [4]

- a. cables and optical backbone supporting the Internet backbone
- b. PGP
- c. Internet RFCs



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MAITIGHAR, KATHMANDU

MIDTERM EXAMINATION

B.SC.CSIT 7th SEMESTER - 2017

Course Title: Network and System Administrator

Course Code: CSC-407

Time: 2Hrs

Full Marks: 40

Pass Marks: 18

Candidates are requested to answer the questions in their own words as far as practicable.

Attempt all Questions:

1. How to add user and group password [4]
2. Explain:
 - a) Explain the job scheduling with cron, crontab and anacron [6]
 - b) What do you mean by BIOS initialization? [2]
 - c) Boot Loader (MBR) initialization [3]
 - d) init initialization [2]
 - e) Kernel initialization [2]
- 3
 - a) Explain the Dynamic host IPV4 and IPV6 address.[4]
 - b) Explain the Network Interface Configuration with Static and Dynamic?[6]
- 4 What is process? Explain shell process and attributer process. [4]
5. Write shorts Notes on:
 - a) Quota Management.[3]
 - b) SSH configuration and Telnet. [3]



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MAITIGHAR, KATHMANDU

MID TERM EXAMINATION

B.SC. CSIT — SEVENTH SEMESTER - 2017

Course Title: Software Project Management

Course Code: CSC-408

Full Marks: 40

Pass Marks: 16

Long Answer Questions. (Any Two)

10 *2 = 20

1. Compare and contrast between project and product life cycle with necessary diagrams.
2. Explain project scheduling and its basic principles.
3. Explain the stepwise project planning process.

Short Answer Questions. (Any 5)

5*4=40

4. Define software project management? How is it different from any other project?
5. Differentiate between product, process and resource uncertainty while analyzing high level project risks.
6. Explain the various costs benefit evaluation techniques.
7. Explain the project control cycle with a flow diagram.
8. Define networking planning. Compare and contrast CPM and PERT.
9. Why is waterfall model suitable for quick development of small projects.
10. Write short notes on (Any Two)
 - i. Resource Allocation
 - ii. Applicability of Spiral Model
 - iii. Project as a system