



Tribhuvan University
Faculty of Humanities & Social Sciences
OFFICE OF THE DEAN
2019

Bachelor in Computer Applications

Full Marks: 60

Course Title: System Analysis & Design

Pass Marks: 24

Code No: CACS 203

Time: 3 hours

Semester: III

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

Group B

Attempt any SIX questions.

[$6 \times 5 = 30$]

3. When would you use agile methodologies? How is it different from waterfall approach to system development?
4. Why is project management important? Briefly explain the activities performed by the project manager during project execution.
5. List various methods of interacting with a system. Briefly explain the factors to be considered while designing a form?
6. What are the deliverables from coding and testing? Briefly explain the different approaches to installation.
7. Why is normalization required? State second normal form and explain it with a proper example.
8. Construct an E-R Diagram for football club that has a name and a ground and is made up for players. A player can play for only one club and a manager identified by his name manage a club. A footballer has a registration number, name and age. A club manager also buys players. Each club plays against other clubs in the league and matches have a date, venue and score.
9. Maintenance is an on-going process. Do you agree? Explain the process of maintaining information systems.

Group C

Attempt any TWO questions.

[$2 \times 10 = 20$]

10. Develop a context diagram and top level logical DFD for the system made up of the following.

B & B is a mail-order company that distributes CDs, DVDs of music, games, movies, software at discount prices to club members.

- When an order processing clerk receives an order form, he or she verifies that the sender is a club member by checking the Member file.
- If the sender is not a member, the clerk returns the order along with a membership application form.
- If the customer is a member, the clerk verifies the order item data by checking the item file.
- Then the clerk enters the order data and saves it to the Daily Order file. The clerk also prints an invoice and shipping list for each order, which are forwarded to Order Fulfillment Department.

10. With proper reasoning, explain how CASE Tools aid in information system development? You have been hired as a system analyst in TU tech software development company and you are asked to analyze the way system works. What qualities do you need to have to analyze such type of systems?

11. a) Why software project often fails? Explain different types of software testing?
b) List of OOAD. Differentiate between structured methodologies and object oriented methodologies.