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MCS-014

**BACHELOR OF COMPUTER
APPLICATIONS / MASTER OF
COMPUTER APPLICATIONS
(REVISED)
(BCA/MCA)**

Term-End Examination

December, 2024

**MCS-014 : SYSTEMS ANALYSIS
AND DESIGN**

Time : 3 Hours

Maximum Marks : 100

Weightage : 75%

Note : (i) *Question No. 1 is compulsory.*

(ii) *Attempt any **three** questions from the
rest.*

1. (a) What is SDLC ? Explain the phases of SDLC. 10
- (b) What is modular design ? Explain its advantages. Also, explain data coupling with the help of an example. 10
- (c) What is a form ? What is its importance ? How is form different from report ? Explain. 10
- (d) What is the need of system testing ? Explain the following testing methods : 10
 - (i) Recovery testing
 - (ii) Security testing
 - (iii) Performance testing
 - (iv) Stress testing

2. (a) Draw DFDs of Level-0 and Level-1 for 'Online Banking System'. Make necessary assumptions. 10
- (b) Develop SRS outline for 'Online Banking System'. Make necessary assumptions. 10
3. (a) What are CASE tools ? Explain various components of CASE tools. 10
- (b) Draw ERD for 'Online Examination System'. Make necessary assumptions. 10
4. (a) What is the need of feasibility study ? Explain technical feasibility and operational feasibility of a system. 10

(b) What is software maintenance ?

Explain different software maintenance activities. 10

5. Write short notes on the following : 10+10

(a) Cost-Benefit Analysis

(b) Decision Support System

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