

10. In a _____ one module of the new information system is activated at a time.
 SDLC CASE tool
 Phased Conversion Success factors
11. The step-by-step instructions that solve a problem are called _____.
 An algorithm A list
 A plan A sequential structure
12. Which of the following Information systems are aimed at improving the routine business activities on which all organizations depend?
 Management Information systems Decision support systems
 Transaction processing systems Management support systems
13. Cost-Benefit Analysis is performed during _____.
 Analysis phase Design phase
 Feasibility study phase Implementation phase
14. The first step in systems development life cycle (SDLC) is _____.
 Analysis Design
 Problem/Opportunity Identification Development and Documentation
15. The make-or-buy decision is associated with the _____ step in the SDLC.
 Problem/Opportunity Identification Design
 Analysis Development & Documentation
16. The problem statement includes the _____, which lists specific input numbers a program would typically expect the user to enter and precise output values that a perfect program would return for those input values.
 testing plan error handler
 IPO cycle input-output specification
17. Debugging is:
 creating program code.
 finding & correcting errors in the program code
 creating the algorithm
 identifying the task to be computerized
18. Translating the problem statement into a series of sequential steps describing what the program must do is known as:
 coding debugging
 creating the algorithm. writing documentation
19. The problem statement should include all of the following EXCEPT:
 input output processing storage
20. _____ spend most of their time in the beginning stages of the SDLC, talking with end-users, gathering information, documenting systems, and proposing solutions.
 System Analyst Project Manager
 Network Engineers Database Administrator

KATHMANDU UNIVERSITY
End Semester Examination
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Level : B.E./B. Sc.
Year : III
Time : 2 hrs. 30 mins.

Course : COMP 302
Semester : II
F. M. : 40

SECTION "B"

[6 Q. × 5 = 30 marks]

Attempt *ANY SIX* questions: [Question number 7 is compulsory]

1. What do you understand by Quality Assurance? Explain the goal of Quality Assurance.
2. Explain the different ways in which an analyst gathers requirements from the CUSTOMER.
3. Provide a brief explanation of the following concepts in object orientation:
 - a. Class and Object
 - b. Encapsulation
 - c. Message Passing
4. Explain about the phases of System Development Life Cycle (SDLC).
5. What is Data Dictionary? Explain about the types of Data Dictionary.
6. Explain about the phases of Software Requirement Analysis.
7. Develop Data Flow Diagram (DFD) using following:
 - a. Customer Service System
 - b. Order Management System
8. Write short notes on: [*ANY TWO*]
 - a. Transaction Processing System
 - b. Management Information System
 - c. Decision Support System

SECTION "C"

[1 Q. × 10 = 10 marks]

9. A university maintains data about the following entities with attributes.
 - a. **Course** : number, title, credits, syllabus
 - b. **Course offered** : course number, year, semester, instructor, timings, and class room
 - c. **Students** : student_ID, name, degree program
 - d. **Instructor** : ID_number, name, department and titleThe enrollment of students in courses and grades awarded to students in each course must be appropriately recorded. **Construct an E-R diagram for the university using standard notation.**

