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**EXAMINATION PAPER**

**FACULTY : COMPUTER SCIENCE & MULTIMEDIA**

**COURSE : BACHELOR OF INFORMATION TECHNOLOGY (HONS)**

**YEAR/ SEMESTER : FIRST YEAR / SEMESTER TWO**

**MODULE TITLE : SYSTEM ANALYSIS AND DESIGN**

**CODE : BIT 123**

**DATE : SEPTEMBER 17-2018, MONDAY**

**TIME ALLOWED : 3 HOURS**

**START : 1:00 PM FINISH : 4:00 PM**

**Instruction to candidates**

1. This question paper has THREE (3) Sections.
2. Answer **ALL** questions in Section A, MCQ.
3. Answer **5** questions in Section B, MSAQ
4. Answer **2** questions in Section C, MEQ
5. No scripts or answer sheets are to be taken out of the Examination Hall.
6. For Section A, answer in the OMR form provided.

***Do not open this question paper until instructed***

**SECTION A**

**Multiple Choice Questions (30\*1=30)**

1. **RAD Software process model stands for \_\_\_\_\_\_.**
2. rapid application development
3. relative application development
4. rapid application design
5. recent application development
6. **A depiction of the interactions among objects during a certain period of time best describes a:**
7. Sequence diagram
8. Composition diagram
9. Deployment diagram
10. Class diagram
11. **Information requirements of an organization can be determined by:**
12. Interviewing managers and users and arriving at the requirements based on consensus
13. Finding out what similar organizations do
14. Telling organization what they need based on your experience
15. Sending a questionnaire to all employees of the organization
16. **Among the attributes of a good systems analyst which of the following are essential :**
17. Knowledge of organization
18. Analytical mind
19. Ability to communicate orally
20. Both b & c
21. **Which model is also known as Verification and validation model?**
22. Waterfall model
23. Big Bang model
24. V-model
25. Spiral model
26. **The final specifications are arrived at:**
27. After feasibility study
28. During feasibility study
29. Just before implementation phase
30. When the system is being designed
31. **The expansion of CASE tools is:**
32. Computer Assisted Self Evaluation
33. Computer Aided Software Engineering
34. Computer Aided Software Environment
35. Core Aids for Software Engineering
36. **Which model is also called as the classic life cycle or the Waterfall model?**
37. Iterative Development
38. Linear Sequential Development
39. RAD Model
40. Incremental Development
41. **\_\_\_\_\_\_ are graphical representation of decision table, are also available and aid in the construction of decision tables.**
42. Decision graphs
43. Decision trees
44. Organization charts
45. Organization trees
46. **The main ingredient of the report documenting the \_\_\_\_\_\_ is the cost benefit analysis.**
47. system analysis
48. feasibility study
49. system analyst
50. system design
51. **Entity is a \_\_\_\_\_\_\_.**
52. object of relation
53. present working model
54. thing in real world
55. model of relation
56. **System evaluation is carried out:**
57. After the system has been operational for a reasonable time
58. During system implementation
59. Whenever managers of user organization want it
60. Whenever operational staff want it
61. **Which feasibility determines the availability of team and support staff?**
62. Technological Feasibility
63. Cultural Feasibility
64. Schedule feasibility
65. Resource Feasibility
66. **Which category of information system determines the sale of an item and a withdrawal from an ATM?**
67. Management Information System
68. Executive Information System
69. Decision Support System
70. Transaction Processing System
71. **Cost-Benefit Analysis is performed during:**
72. Analysis phase
73. Design phase
74. Feasibility study phase
75. Implementation phase

1. **Which of the following questions are useful in evaluating data flow diagrams?**
2. Are there any unnamed components in the data flow diagram?
3. Are there any processes that do not receive input?
4. Are there any data stores that are input but never referenced?
5. Both a and b
6. **\_\_\_\_\_\_\_\_ is a set of entities of the same type that share the same properties, or attributes**.
7. Entity set
8. Attribute set
9. Relation set
10. Entity model
11. **A state diagram is \_\_\_\_\_\_.**
12. a model of the states of an object and the events that cause the object to change from one state to another
13. a picture of the movement of data between external entities and the processes and data stores within the system
14. a detailed, logical representation of the entities, associations, and data elements for an organization or business area
15. depicts the interaction among objects during a certain period of time
16. **The most important attribute of a systems analyst is:**
17. Excellent programming skills
18. Very good hardware designing skills
19. Very good technical management skills
20. Very good writing skills
21. **A relationship is:**
22. An item in an application
23. A meaningful dependency between entities
24. A collection of related entities
25. Related data
26. **To easily modify the existing system it is necessary to:**
27. Use good software tools
28. Use the best hardware available
29. Design the system which can be changed at low cost
30. Keep the programming team happy
31. **The primary responsibility of a systems analyst is to:**
32. Specify an information system which meets the requirements of an organization
33. Write programs to meet specifications
34. Maintain the system
35. Meet managers of the organization regularly
36. **A sequence diagram \_\_\_\_\_\_.**
37. is a model of the states of an object and the events that cause the object to change from one state to another
38. is a picture of the movement of data between external entities and the processes and data stores within the system
39. is a detailed, logical representation of the entities, associations, and data elements for an organization or business area
40. depicts the interaction among objects during a certain period of time
41. **Which is NOT used in context level diagram?**
42. Source
43. Destination
44. Data flow
45. Data Store
46. **\_\_\_\_\_\_ is a graphical model that illustrates each basic step of data processing routines or system.**
47. System flowchart
48. Decision Tables
49. Decision Trees
50. Organization chart
51. **The descriptive property possessed by each entity set is \_\_\_\_\_\_.**
52. entity
53. attribute
54. relation
55. model
56. **Which of the following techniques and notations would you find within UML?**
57. Use cases
58. Class diagrams
59. State diagrams
60. All of the above
61. **Which is the most realistic relationship between e-commerce and e-business?**
62. E-business is a subset of e-commerce
63. E-commerce has no overlap with e-business
64. E-commerce is a subset of e-business
65. None of the above
66. **Upper CASE tools are used:**
67. For developing DFD’s
68. For screen design
69. During all phases of system analysis and design life cycle
70. For converting structured English procedures to source code into a language such as C
71. **A/An \_\_\_\_\_\_ represents a data/store-data at rest, or a temporary repository of data.**
72. arrow
73. circle
74. open ended box
75. square

**SECTION B**

**Short Answer Questions**

**Attempt any five (5) questions out of eight (8) questions (5\*6=30)**

1. Describe about MIS, DSS and Executive information system.
2. Explain about the class diagram.
3. Illustrate different types of feasibility Analysis.
4. Demonstrate about Context diagram with suitable examples.
5. Interpret about computer Aided Software engineering tools types.
6. Elaborate the attributes of System Analyst.
7. Discuss about Joint application development and Rapid Application Development.
8. State information security control with example.

**SECTION C**

**Long Answer Questions**

**Attempt any two (2) questions out of three (3) questions (2\*20=40)**

1. Explain about context diagram and DFD with suitable examples.
2. Explain global E Business. Discuss the types of E commerce. (6+14)
3. Explain SDLC. Describe all phases of SDLC in details. (6+14)

**\*\*\*\*BEST OF LUCK\*\*\*\***