



Name : .....  
Roll No. : .....  
Invigilator's Signature : .....

**CS/MCA/SEM-1/MCA-102/2011-12**

**2011**

**BUSINESS SYSTEMS AND APPLICATION**

Time Allotted : 3 Hours

Full Marks : 70

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**GROUP - A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) Expert system is a part of
  - a) CRM
  - b) AI
  - c) ERP
  - d) none of these.
- ii) MYCIN is related with
  - a) Business
  - b) E-com
  - c) Medical sciences
  - d) none of these.
- iii) OLTP stands for
  - a) Online transaction processing
  - b) Online time processing
  - c) Offline transaction processing
  - d) none of these.

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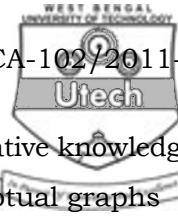
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- iv) Enterprise resource planning systems attempt to
  - a) Plot a starship course
  - b) Provide knowledge when and where it is needed
  - c) Plan the strategy of a firm
  - d) Integrate repetitive transaction processing system.
- v) Sensitivity analysis is used to
  - a) Choose uncontrollable variables
  - b) Set up a model and define its variables
  - c) Check how changes in the independent variables affect the dependent variables
  - d) none of these.
- vi) Which of the following is not a basis for classifying DSS ?
  - a) Degree of dependency
  - b) Degree of non-procedurality
  - c) Case based *vs* population based
  - d) Institutional *vs* ad hoc
  - e) Readymade *vs* custom made.
- vii) Which of the following capabilities is best differentiate EIS from DSS ?
  - a) What-if
  - b) Modeling
  - c) Graphics
  - d) User interface.
- viii) Intangible benefits of supply chain management do not include
  - a) Information visibility
  - b) Transportation logistics cost reduction
  - c) Improved process
  - d) Standardization
  - e) flexibility.

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- ix) Which of the following is a form of Declarative knowledge ?
- a) Collection of facts      b) Conceptual graphs  
c) Logical proposition      d) all of these.
- x) Decision table contains condition and
- a) values      b) action  
c) table      d) relationship.

**GROUP - B**

**( Short Answer Type Questions )**

Answer any *three* of the following.       $3 \times 5 = 15$

2. What is transaction ? Explain briefly the role of Transaction Processing Systems (TPS) in business process.
3. What is SDLC and its various phases ?
4. What are the major advantages of a goal seeking over a what-if analysis ?
5. Distinguish between individual DSS and group DSS. Explain why the user is considered a component of the DSS.       $3 + 2$
6. How can efficiency and effectiveness of a system be measured ? Which of these is most important ? Why ?
- $2 + 1 + 2$

**GROUP - C**

**( Long Answer Type Questions )**

Answer any *three* of the following.       $3 \times 15 = 45$

7. a) What is GDSS ? What are the three computer based supports available in GDSS ?       $3 + 4$
- b) What is expert system ? Write down the advantages and disadvantages of expert system.       $2 + 6$

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8. a) What are the main characteristics and limitations of an Expert System ? 5 + 2
- b) Differentiate between the following : 4 × 2
- i) Declarative knowledge and Procedural knowledge
  - ii) Human intelligence and Machine intelligence
  - iii) Structured decisions and Unstructured decisions.
  - iv) Data warehouse and Data mart.
9. a) You are about to buy a car. Follow Simon's four phase model and describe your activities in each step. 9
- b) Discuss the four major decision areas of supply chain management. 6
10. a) Define the input, process, outputs for the following systems : 2 + 2 + 2+ 2
- i) operating systems (software)
  - ii) accounting system
  - iii) heating system
  - iv) school system.
- b) Define a database and database management system. Describe how it solves the problem of a traditional file environment. 2 + 2 + 3
11. Write short notes on any *three* of the following : 3 × 5
- a) Total Quantity Management
  - b) Simulation and decision variables
  - c) Network Topology
  - d) Data Flow Diagram
  - e) Virtual Office.