This question paper contains **4+1** printed pages]

BP—25—2016

FACULTY OF COMPUTER SCIENCE

B.Sc. (SE) (Third Year) (Sixth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

SOFTWARE ENGINEERING

Paper S6.4

(Enterprise Resource Planning)

Or

(Elective : Data Mining)

Or

(Elective : Artificial Neural Network)

(Friday, 25-11-2016) **Time : 10.00 a.m. to 1.00 p.m.**

Time— Three Hours *Maximum Marks*—80

(Enterprise Resource Planning)

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Assume suitable data, if necessary.

1. Attempt the following : 20

   (*a*) EIS

   (*b*) Close loop MRP

   (*c*) OLAP

   (*d*) Explain evolution of ERP.

2. (*a*) What is ERP ? Explain the advantages of ERP. 8

   (*b*) Explain decision support system in detail. 7

   Or

   (*c*) Explain the benefits of PDM. 8

   (*d*) Explain bill of material in detail. 7

3. (*a*) Explain the BPR in detail. 8

   (*b*) Explain CAD/CAM in detail. 7

P.T.O.

Or

(*c*) Explain data mining in detail. 8

(*d*) Explain MTS and MTO in detail. 7

4. (*a*) What is data management ? 8

(*b*) Explain the concept of JIT in detail. 7

Or

(*c*) Explain integrated data model. 8

(*d*) Explain MRP and BOM in detail. 7

5. Attempt any *three* of the following : 15

(*a*) MIS

(*b*) Business Model

(*c*) SAP AG

(*d*) Plant Maintenance

(*e*) Material Management.

OR

(Elective : Data Mining)

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Figures to the right indicate full marks.

(*iii*) Assume suitable data, wherever necessary.

(*iv*) Draw neat labelled diagram wherever necessary.

1. Attempt the following : 20

(*a*) Introduction of datamining.

(*b*) Knowledge discovery in database.

(*c*) Database/OLTP system.

(*d*) Concept of clustering.

2. (*a*) Describe the various data mining issues. 8

(*b*) Define classification and explain issues in classification. 7

Or

(*c*) Explain the similarity and distance measures in clustering. 8

(*d*) Describe the concept of outliers in detail. 7

3. (*a*) Explain the statistical based algorithm in detail. 8

(*b*) Explain minimum spanning tree with algorithms. 7

Or

(*c*) Define webmining. Explain web structure mining. 8

(*d*) How are the data mining applications useful in retail industry ? 7

4. (*a*) Describe the squared error clustering with algorithm. 8

(*b*) Explain the buzzy sets and fuzzy logic with diagram. 7

Or

(*c*) Elaborate the term "Data mining for biomedical and DNA data analysis". 8

(*d*) Explain the concept of web content mining in detail. 7

5. Write short notes on (any *three*) : 15

(*a*) Basic data mining task

(*b*) Hierarchical algorithm

(*c*) Data warehousing

(*d*) Information retrieval

(*e*) Web usage mining.

P.T.O.

OR

(Elective : Artificial Neural Network)

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Figures to the right indicate full marks.

(*iii*) Assume suitable data, if necessary.

(*iv*) Draw neat labelled diagram wherever necessary.

1. Attempt the following : 20

(*a*) Biological neurons

(*b*) Perceptron learning

(*c*) Palm recognition

(*d*) Linearly separability.

2. (*a*) What is neural network ? Explain the architecture of neural network. 8

(*b*) Define learning. Explain supervised and unsupervised learning. 7

Or

(*c*) Explain back propagation algorithm in detail. 8

(*d*) Explain the Hopfield algorithm in detail. 7

3. (*a*) Explain the concept of McCullohh-Pits neuron model. 8

(*b*) Explain the counterpropagation network. 7

Or

(*c*) Describe the various applications of expert system. 8

(*d*) Explain the concept character, face, finger and Iris recognitions. 7

4. (*a*) Describe the fuzzy neurons and fuzzy neural network. 8

(*b*) Explain application of BP and RBF network. 7

Or

(*c*) Explain the multilayered feedforward network. 8

(*d*) Explain the concept of fuzzy associative memory. 7

5. Write short notes on (any *three*) : 15

(*a*) Application in pattern recognition

(*b*) Boltzmann machine

(*c*) Delta learning rule

(*d*) Recurrent network

(*e*) Reinforcement learning.