1115
M.Sc. (Information Technology)
First Semester
MS-22: Software Engineering and Management (Old)

Time allowed: 3 Hours

Max. Marks: 80

NOTE: Attempt _five_ questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I – IV.

x-x-x

UNIT- I

I. a) Define Software Engineering. Explain its various characteristics in detail along with its importance. (2,4,2)

   b) Why SRS is framed? Explain its various components. (2,6)

II. a) Define Software Inspection. How an inspection team is composed? Explain various inspection procedures. (2,2,4)

   b) What is SRS? Give its various elements. (2,6)

UNIT – II

III. a) How a project is planned? Explain problem based estimation for Project Planning. (2,6)

   b) Draw difference between DFD and ER diagrams. (4,4)

IV. a) What is Risk? How is it estimated? Explain. (2,6)

   b) What is structured analysis and how is it carried out? (2,6)

UNIT – III

V. a) What is the role of metrics in project development? Explain how software is measured for various project parameters? (2,6)

   b) What are objectives of software design? Also explain various design principles. (4,4)

VI. a) What is metric? Explain its various types. (2,6)

   b) What is object-oriented design and how is it carried out? (2,6)

UNIT- IV

VII. a) Write a brief note on system administration and training.

   b) What is the performance and acceptance criteria for hardware and software selection? Explain. (8,8)

(2)

VIII.   Write short notes on <u>any two</u> of the following:-
a) Operation Plan
b) Hardware acquisition
c) Site preparation   (8,8)

UNIT- V

IX.   Explain the following:-
a) Software Process
b) Checklist
c) Cocomo
d) Fourth Generation Techniques
e) GUI
f) Data dictionary
g) Modular design
h) Vendor selection   (8x2)

x-x-x