2031
M.Sc. Information Technology
First Semester
MS-61: Software Engineering

Time allowed: 3 Hours   Max. Marks: 80

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. I which is compulsory and selecting one question from each Unit.*

x-x-x

I.   Explain the following:-

    a) Define black box testing

    b) Explain decomposition technique

    c) Describe software risk

    d) Explain feasibility   (4x4)

UNIT – I

II.   Explain waterfall model and spiral model in detail   (16)

III. Explain structured analysis in detail along with ER diagram and data dictionary. (16)

UNIT – II

IV.   Explain whole software design process in detail   (16)

V.   What do you understand by the term cost estimation? Differentiate between COCoMO II and COCoMO 81   (16)

UNIT – III

VI.   Explain the type of measurement. Describe the factors affecting software reliability in detail.   (16)

VII. Explain the classification of software metrics with the help of their features.   (16)

UNIT – IV

VIII. Explain the software testing strategies with their characteristics and usage.   (16)

IX.   Differentiate between:-

    a) Logic based testing and basic path testing

    b) Domain and boundary testing

    c) White box testing and black box testing techniques   (16)

x-x-x