April – 2015

M.Sc. (IT) Semester – III Examination

Paper No. 10: Software Engineering (3599)

Duration: 2½ Hours   **Total Marks: 70**

Q-1   Do as directed   14

A)   Define Software and software engineering. Discuss various problems related to software engineering.

B)   Explain spiral model.

<div align="center">OR</div>

Q-1   Do as directed   14

A)   Explain waterfall model.

B)   What do you mean by requirement analysis? Explain different phase of requirement analysis.

Q-2   Do as directed   14

A)   What do you mean by SRS? Explain basic characteristics of SRS.

B)   Write note on software verification and validation.

<div align="center">OR</div>

Q-2   Do as directed   14

A)   Explain various components of SRS.

B)   Write note on problem analysis.

Q-3   Answer the following question   14

A)   Write short note on team structure.

B)   Write note on UDF.

<div align="center">OR</div>

Q-3   Answer the following question   14

A)   What do you mean by coupling? Explain different types of coupling.

B)   Explain object oriented approach for designing software.

Q-4   Answer the following question   14

A)   Explain black box testing.

B)   What do you mean by testing? Explain concept of test case and test criteria.

<div align="center">OR</div>

Q-4   Answer the following question   14

A)   Explain terms Error, Fault and Failure in detail.

B)   Explain level of testing.

Q-5   Prepare SRS for given Case study   14

Assume that you are assigned responsibility of developing a Library Information System for a University (LIS) . There are 5 libraries within the University. LIS needs to be University wide and needs to cater to all the 5 libraries in a network mode. So, any staff member or a student will be able to know the availability status of a book from any of the libraries and can perform basic operation like demanding book, issuing and returning book from any location.

<div align="center">OR</div>

Q-5   Prepare SRS for given Case study   14

Assume that you are assigned responsibility of developing a Student Admission System (SAS). Admissions take place through ONLINE admission system which provides functionality of submitting online admission form, preparing merit list, choice filling and confirming admission.