Printed Pages – 3 CS – 701

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 1058 Roll No. | | | | | | | | | | |

B.Tech

SEVENTH SEMESTER EXAMINATION, 2006-07

SOFTWARE ENGINEERING

Time : 3 Hours *Total Marks : 100*

Note : *(i) Attempt ALL questions.*

(ii) All questions carry equal marks.

(iii) Be precise in your answer.

1. Attempt ***any four*** parts of the following : **(5x4=20)**

(a) What is software engineering ? Also outline the major goals of software engineering.

(b) Discuss different phases of the software development life cycle ?

(c) Discuss the evolution of software engineering discipline.

(d) What do you understand by software crisis ? Also write main reasons of software crisis.

(e) Discuss different categories of software applications ?

(f) "Software does not wear out" explain.

2. Attempt *any four* parts of the following : (5x4=20)

(a) Explain waterfall model, also discuss the limitations of this model.

(b) What are Software Metrics ? Discuss the types of software metrics.

(c) Give different steps of prototyping model ? Also state for which type of applications, this model is useful.

(d) Define coupling and cohesion and their uses in determining software design strength.

(e) What is the need of software measurement ? Also discuss the importance of software measurement.

(f) Write different steps of bottom-up design ? Also discuss its benefits and limitations.

3. Attempt *any two* parts of the following : (10x2=20)

(a) Write a detailed note on structured programming. Also discuss elements of structured programming.

(b) What are the objectives of software testing ? Write a note on

(i) White box testing

(ii) Black box testing

(c) What do you understand by programming style ? Also state importance of verification in software development.

4. Attempt *any two* parts of the following : (10x2=20)

(a) (i) What do you understand by software project management ? Give general activities of project management.

(ii) Write short notes on function oriented and object oriented design of software.

(b) (i) What is software project estimation ? Write in breaf about COCOMO estimation models.

(ii) What do you understand by "Software Configuration Management"? Explain.

(c) (i) Discuss the need of software quality assurance. Also give the importance of FTR.

(ii) Discuss the uses of Data Flow Diagrams (DFDS) for software development process. Draw a DFD for library management software with usual functions.

5. Attempt *any two* parts of the following : **(10x2=20)**

(a) (i) Compare ISO and SEI-CMM for software.

(ii) Discuss reliability and reliability modeling.

(b) Write note on CASE tools. Also state benefits of CASE tools for software engineers.

(c) What do you understand by Reverse Engineering ? Differentiate between Reverse Engineering and Re-engineering.

- o O o -

