2015
MCA
5th SEMESTER EXAMINATION
SOFTWARE ENGINEERING
PAPER—502
Full Marks : 100
Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.
Illustrate the answers wherever necessary.

Answer any five questions.

1. (a) What is Software Crisis? What factors have contributed to the making of the Software crisis? What are possible solutions to the Software crisis? 2+2+3

(b) Discuss with a Schematic diagram, the important activities carried out in the Evolutionary model of Software development. 2+5

2. (a) When does the project planning activity start and end in a software life cycle? List the important activities software project manager perform during project planning. 2+2

(Turn Over)
(b) What are the different categories of software
development projects according to the COCOMO
estimation model?
Show how the following are estimated in the Basic
COCOMO estimation technique: Cost, Effort and
Duration. 6+4

3. (a) What is Risk? Mention the three common types of
risk that a typical software project may suffer from? 1+3

(b) What do you mean by ‘Software Configuration’ and
‘Software Configuration Management’?
Briefly discuss how can you manage Software
Configuration. 4+6

4. (a) What is SRS? Why is it needed?
Mention the desirable qualities of the SRS documents.
Under what circumstances of specification, the SRS
is considered as a Bad document. 1+1+3+3

(b) Briefly describe the structure of a SRS document. 6

5. (a) Briefly explain the different activities carried out in
Software design phase?
Describe the features of a good design. 2+3

(b) What is Cohesion? Mention the different classes of
cohesion that a module may possess. 2+7
6. (a) 'A Design is said to be a good one – if it have high cohesion and low coupling.' — Discuss. 5

(b) What do you mean by the term testing? What are the different kinds of Software testing that are usually performed on a large software products? 2+7

7. Answer any two: 2x7

(a) Draw the control flow graph for the function find largest, which will find the largest number from a set of input numbers. From the control graph determine its cyclometric complexity.

(b) System testing.

(c) Define DFD. Draw a DFD for online University system.

[Internal Assessment] 30