

Total number of printed pages-3

53 (IT 605) SWEN

2017

SOFTWARE ENGINEERING

Paper : IT 605

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer **any five** questions out of **seven**.

1. (a) What is software development life cycle model? 5
- (b) Briefly discuss about the different phases of waterfall model of software development. 10
- (c) Why waterfall model is not used by software industries? 5

2. (a) Identify the problems that would arise if someone tries to develop a large software product without using software engineering principles. 10

Contd.

- (b) How Delphi cost estimation technique overcome the problems of expert judgement technique? 5
- (c) Briefly discuss about basic COCOMO. 5
3. (a) Discuss about the computation of function point metric. 10
- (b) What are the different techniques used for project estimation? Briefly discuss *any one* of them. 3+7
4. (a) What is collection diagram? Explain with an example. 2+6
- (b) What are the different types of user interphases? Explain with example. 8
- (c) What is Black-Box Testing? 4
5. (a) What is Data Flow Diagram (DFD)? Explain it with the example of Personal Library System. 6

- (b) Explain in details, what are the steps that follow in transforming a DFD model into structured chart. 7
- (c) What are the different relationship exist between different classes in an ODD technique? 7
6. (a) What is a Legacy Software Product? What is Common Object Request Broker Architecture (CORBA)? 2+4=6
- (b) Schematically draw the architecture of a CASE environment and explain how the different tools are integrated. What are the advantates of CASE tools? 6+8=14
7. (a) Briefly discuss about the different approaches adopted to perform integration testing. 10
- (b) What are the differences between 5+5=10
- (i) Black Box testing and White Box testing?
- (ii) α -testing and β -testing?