

B.TECH. SEM -IV (COMPUTER) 2014 COURSE (CBCS) :
SUMMER - 2018

SUBJECT: FUNDAMENTALS OF SOFTWARE ENGINEERING

Day: **Saturday**
Date: **09/06/2018**

S-2018-2284

Time: **10.00 AM TO 01.00 PM**
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagrams wherever necessary.
- 4) Assume suitable data if necessary.

Q.1 a) What is software Engineering? Explain the need of software engineering. [05]

b) Is software engineering applicable when WebApps are built? If so how might it be modified to accommodate the unique characteristics of WebApps? [05]

OR

a) What is software process framework? Write down process framework activity in detail. [05]

b) What is Software Development Lifecycle (SDLC)? Explain which SDLC model is appropriate for developing Railway reservation system, also explain why? [05]

Q.2 a) What is Requirement Engineering? Explain Requirement Elicitation and Analysis process in detail. [05]

b) What is SRS? List down the functional and non-functional requirements for Library Management System. [05]

OR

a) What is the purpose of Domain Analysis? How is it related to the concept of requirements pattern? Explain. [05]

b) What is DFD? Generate the Level-0, Level-1 DFD for online shopping system. [05]

Q.3 a) Differentiate between Transform and Transaction Flow. [05]

b) Draw the Data Design Model for Aadhaar online enrollment system. [05]

OR

a) What is the difference between functional abstraction and data abstraction? Explain with suitable example. [05]

b) Draw the component level and deployment level design to model the ATM's. [05]

P.T.O.

Q.4 a) With neat labelled diagram explain V&V Model in detail? [05]

b) What is software testing? Differentiate between white-box testing and black box testing. [05]

OR

a) Explain the testing strategies for OOPS in detail? [05]

b) What is Debugging? Explain Debugging process and Debugging strategies? [05]

Q.5 What is software quality? Explain how quality is assured? Elaborate on the factors that influences software quality? [10]

OR

What is SCM? What is the relationship between SCM and software maintenance? Explain the SCM activity in detail. [10]

Q.6 a) Explain Function Point Analysis in detail. [05]

b) Why project management is important? Also explain project scheduling. [05]

OR

a) Explain the method of COCOMO estimation with example. State the pros and cons of this method. [05]

b) Classify the categories of risk management. Also explain any two types of risk. [05]

* * * *

090618-m-engineering-pune