

**B. TECH. SEM - III (INF. TECH.) (2014 COURSE) (CBCS) :  
SUMMER - 2018**

**SUBJECT: FUNDAMENTALS OF SOFTWARE ENGINEERING**

Day : **Monday**  
Date : **21/05/2018**

**S-2018-2249**

Time: **02.30 PM TO 05.30 PM**  
Max. Marks: 60

---

**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Assume data suitable if **NECESSARY**.
- 

**Q.1** Why is software engineering termed as a layered technology? Justify. (10)

**OR**

Define software engineering. Explain the formal method model of software engineering.

**Q.2** State and explain the analysis modelling principles of software engineering. (10)

**OR**

State and explain the fundamental principles of coding phase.

**Q.3** How is DFD an useful tool for flow oriented modeling? Explain in detail (10)

**OR**

With reference to data modeling explain the following terms with appropriate examples of each

- |                 |                     |               |
|-----------------|---------------------|---------------|
| i) Data objects | ii) Data attributes | iii) Relation |
| iv) Cardinality | v) Modality.        |               |

**Q.4** What is an Archtype? How is architecture refined into components? (10)

**OR**

State and explain the framework activities involved in the user interface analysis and design process.

**Q.5** What is version control? Explain the capabilities and process of version control. (10)

**OR**

Define SCM repository. What are the function implemented by a SCM repository?

**Q.6** What is the need for structural testing? How is it carried out? (10)

**OR**

How is debugging different than testing? State and explain the uses of debugging.

\* \* \* \* \*

---