U.S.N

P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belgaum)
Sixth Semester, B.E. - Information Science and Engineering
Semester End Examination; June/July - 2015
Software Engineering

Time: 3 hrs   *Max. Marks: 100*

Note: Answer any **FIVE** full questions, selecting at least **TWO** full questions from each part.

PART - A

1. a. Define software engineering. Compare software Engineering with system Engineering.	4
b. Software is a product. Justify.	2
c. What are the key challenges facing software engineering?	6
d. Define Software process. Explain professional and ethical responsibility of software engineers.	8
2 a. Explain the Dimensions of dependability.	6
b. Design a Dataflow model of the Insulin pump.	6
c. Briefly explain the water-fall model with neat sketch.	8
3 a. Explain the complete structure of software requirement specification or document.	10
b. Briefly explain the requirement elicitation and analysis process.	10
4 a. Explain context models with suitable example.	6
b. Explain the project management activities.	6
c. Briefly explain the Project scheduling process.	8

PART – B

5 a. Define Architectural Design. Explain the common activities for architectural design process.	6
b. Explain Interrupt-driven control model.	6
c. Briefly explain the object-oriented design process.	8
6 a. Write a short note on:	
(i) Rapid Application Development	10
(ii) Software maintenance	
b. Explain the legacy system evolution.	10
7 a. Compare verification and validation. Explain Debugging processing.	6
b. Briefly explain the software inspection process.	6
c. Briefly explain the clean room software development process.	8
8 a. List out and explain the factors of governing staff selection.	10
b. Briefly explain COCOMO model.	10

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