

Total No. of Questions : 12]

SEAT No. :

**P3956**

[Total No. of Pages : 2

**[5462] - 680**

**M.E. (Computer Engineering)**

**SOFTWARE DEVELOPMENT AND VERSION CONTROL**

**(2017 Course) (Semester - I) (510103)**

*Time : 3 Hours]*

*[Max. Marks :50*

*Instructions to the candidates:*

- 1) *Attempt Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10, Q11 or Q12.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*

**Q1)** What are the limitations of linear development process? Explain the incremental and reactive software development process. **[9]**

OR

**Q2)** Explain in detail quality attributes of the design product. What are the techniques used for assessing the design quality? **[9]**

**Q3)** Describe the components of the data centered software architecture. What are the benefits and limitations of data centered architectures? **[8]**

OR

**Q4)** What are the various distributed architecture styles? Explain them with suitable examples. **[8]**

**Q5)** Explain in detail the architecture reconstruction process. **[8]**

OR

**Q6)** Explain the following terms. **[8]**

- a) Module views
- b) Component - and - connector views.

**P.T.O.**

- Q7)** a) Explain the principles of source code management. [4]  
b) Write short note on: Improving quality of processes by system virtualization. [4]

OR

- Q8)** a) Explain the configuration management framework. [4]  
b) Write short note on: Environment configuration control. [4]

- Q9)** Explain version control best practices on Git for management of files. [8]

OR

- Q10)** What are the different types of version control systems? Explain them in detail. [8]

- Q11)** Explain the setup of any version control tool with respect to. [9]  
a) basic configuration  
b) commits  
c) branching

OR

- Q12)** Compare the features of the following version control tools. [9]  
a) GIT  
b) GitHub  
c) CVS

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