

Total No. of Questions : 8]

SEAT No. :

P-9145

[Total No. of Pages : 2

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**S.E. (Artificial Intelligence & Machine Learning)**

**SOFTWARE ENGINEERING**

**(2019 Pattern) (Semester - III) (218545)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :*

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate marks.
- 4) Assume suitable data, if necessary.

**Q1)** a) Explain the term Coupling in the context of software design. Also explain the different types of coupling. [9]

b) Explain any three design concepts. [9]

OR

**Q2)** a) Write short note on : (Any three) [9]

- i) Data flow architecture style
- ii) Object oriented architecture
- iii) Layered system architecture
- iv) Data-centred architecture

b) Write and Explain the Interface design steps with diagrammatical representation. [9]

**Q3)** a) Explain with suitable diagram the project management life cycle. [9]

b) Write short note on : [8]

- i) W<sup>5</sup>HH Principle
- ii) 4 Ps of Project management

OR

*P.T.O.*

- Q4)** a) List the different project estimation techniques. Explain with example how size oriented metrics are used for project estimation. [9]  
b) Write short note on : [8]  
i) Work Breakdown Structure (WBS).  
ii) Program Evaluation Review Technique (PERT).

- Q5)** a) Explain the need of quality management? Discuss eight Quality Dimensions. [9]  
b) What is defect? Describe steps in defect management process. [9]

OR

- Q6)** a) Write short note on : [9]  
i) Unit Testing  
ii) Integration testing  
iii) Regression testing  
b) What is objective of Testing? Differentiate between testing & debugging. [9]

- Q7)** a) Explain Test driven development (TDD) in detail. [9]  
b) What is the need of SCM repository? List and explain the SCM repository features. [8]

OR

- Q8)** a) What are the tasks carried out in SCM Process? [9]  
b) Write short note on : [8]  
i) CASE Tools  
ii) Technology evolution

