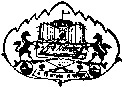
****

**SAVITRIBAI PHULE PUNE UNIVERSITY**

**INTERDISCIPLINARY SCHOOL OF SCIENTIFIC COMPUTING**

**Mid Semester Examination - II**

**Course No.: SC – 102**

**Title: Software Engineering**

**Date: 26/09/2018**

**Time: 1.5 Hrs. (11:45am to 1:15pm) Marks: 40**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Note: 1) Please read the questions carefully**

**2) There are no choices in any of the questions**

**3) State any assumptions you make to answer the questions.**

1. **Answer in one or two lines. (1 mark each.) (4)**
2. State any 2 Software Myths
3. Give any 2 reasons why we need to maintain / adapt or make changes to

legacy software systems

1. State any 2 umbrella activities associated with Generic process model.
2. Requirements analysis can be described as a set of which two activities?
3. **List and describe all the phases of Generic Process Model (4)**
4. **State whether the following statements are TRUE or FALSE (4)**
5. In Waterfall process model, customers are involved in the development process
6. Agile ensures that software is always delivered on time with all planned features
7. Evolutionary process models are better suited to build complex systems
8. Phased Software development model ensures strong management control over project

IV. **Review the given problem statement and list functional and non-functional (5)**

**requirements**

A Payment gateway service allows websites and mobile applications to process

payments. The service handles variety of payment methods. A successful

transaction transfers requested amount into the merchant’s account.

V. **Create an E-R diagram from the following relational database schema . (4)**

**Depict all the entities and relationships including their cardinality and ordinality.**

**Department**

Dep\_Id

Comp\_Id

Mgr\_Id

Name

Location

**Product**

Prod\_Id

Dept\_Id

Name

Category

**Company**

Comp\_Id

Name

Address

**Emp-Grp**

Grp\_Id

Emp\_Id

**Group**

Grp\_Id

Name

Purpose

**Manager**

Mgr\_Id

Dep\_Id

Name

Level

Budget

**Employee**

Emp\_Id

Mgr\_Id

Dept\_Id

Name

Designation

VI. **Write Use-case in descriptive or narrative form first and then draw (6)**

**a Use-case Diagram for the following problem statement.**

A Student borrows a book from a college library

VII. **State any 4 characteristics of good design and explain each in 1-2lines. (4)**

VIII. **State SOLID design principles and give one example of each. (5)**

IX. **Define and explain the following in 1-2lines each. (4)**

1. CRC
2. SRS
3. Cohesion
4. Coupling

**\*\*\*\*\***