

# **PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2022**  
**(Fifth Semester)**

## **Branch – COMPUTER SCIENCE**

## **SOFTWARE ENGINEERING AND DESIGN**

**Time: Three Hours**

**Maximum: 75 Marks**

## **SECTION-A (10 Marks)**

## **Answer ALL questions**

**ALL** questions carry **EQUAL** marks (10 x 1 = 10)

- 1 Software is not \_\_\_\_\_ to the environmental maladies that cause hardware to wear out.  
(i) Susceptible (ii) Classical  
(iii) Modern (iv) Debased

2 Agile software process is characterized in a manner that addresses a number of \_\_\_\_\_ assumptions..  
(i) Linear (ii) key (iii) peripheral (iv) secondary

3 The Information obtained from the customer during inception and elicitation is expanded and refined during \_\_\_\_\_.  
(i) Specification (ii) Elicitation  
(iii) Elaboration (iv) Negotiation

4 \_\_\_\_\_ is the most common manifestation of separation of concerns.  
(i) Refactoring (ii) Information Hiding  
(iii) Aspects (iv) Modularity

5 A Project Manager uses estimation to verify that delivery dates are \_\_\_\_\_.  
(i) Achievable (ii) Schedule Dependencies  
(iii) Quality Control (iv) Risk Planning

6 Expand BPR \_\_\_\_\_.  
(i) Business Practice Re-Engineering (ii) Business Process Re-Engineering  
(iii) Business People Re-Engineering (iv) Beta Process Re-Engineering

7 Problem Decomposition sometimes called \_\_\_\_\_.  
(i) Function and Performance (ii) Information Objectives  
(iii) Context (iv) Problem Elaboration

8 \_\_\_\_\_ Estimates on similar projects that have been already been completed..  
(i) Effort (ii) Delay  
(iii) Cost (iv) Base

9 \_\_\_\_\_ Goal of this group is organizational change that might lead to a better software Process.  
(i) Ideologists (ii) Tool Advocates  
(iii) Practitioners (iv) Reformers

10 \_\_\_\_\_ Detailed software process and product quality metrics establish the quantitative evaluation foundation..  
(i) Optimized (ii) Managed (iii) Defined (iv) Repeatable

### **SECTION - B (25 Marks)**

## **Answer ALL questions**

**ALL** questions carry **EQUAL** Marks       $(5 \times 5 = 25)$

- 11 a Analyze in detail about Defining a Framework Activity in Process Model with neat diagram.

OR

b Explain in brief about the Agile Unified Processing in Agile Development with example.

OR

- b Explain in brief about the Agile Unified Processing in Agile Development with example.

**Cont..**

- 12 a Describe in detail about Elicitation Work Products in Eliciting Requirements with example.  
 OR  
 b Outline in brief about Activity Diagram for Access Camera Surveillance using UML Models.
- 13 a Bring out in detail about the Graph-Based Testing Methods in Black-Box Testing with example.  
 OR  
 b Categorize the different Consistency of Object-Oriented Models with example.
- 14 a Explain in brief about the Software Scope and Problem Description in Product used in Project Management Concepts with Example.  
 OR  
 b Outline in detail about the Business Process Reengineering Model with neat diagram..
- 15 a Show with example various Levels used in Maturity Models in Software Process Improvement with example.  
 OR  
 b Explain with example Modern-Driven Software Development with example.

### **SECTION -C (40 Marks)**

**Answer ALL questions**

**ALL questions carry EQUAL Marks (5 x 8 = 40)**

- 16 a Elucidate in detail about various types of Software Myths with example  
 OR  
 b Explain in brief about Agile Modeling in Agile Development with example.
- 17 a Point Out in detail about Swimlane Diagram for access Camera Surveillance via Internet using UML with neat diagram.  
 OR  
 b Analyze in brief about Interface Design Elements in Design Concepts diagram with example.
- 18 a Enumerate in detail about the various types of System Testing with example.  
 OR  
 b Examine in detail about different Interface Testing Strategy in User Interface Testing with example.
- 19 a Classify the different types of Reverse Engineering with neat diagram.  
 OR  
 b Outline in detail about various Forward Engineering with neat diagram.
- 20 a Point out in brief about the Following with example.  
 (i) Education and Training in Software Process Improvement.  
 (ii) Critical Success Factors in Software Process Improvement .  
 OR  
 b Discuss in detail various Level used in Capability Maturity Model Integration (CMMI) with neat diagram..