P6980

[5865] - 103

First Year M.C.A. (Management)
IT13-OBJECT ORIENTED SOFTWARE ENGINEERING
(2020 Pattern) (Semester - I)

Time : 2½ Hours]   *[Max. Marks : 50*

Instructions to the candidates:
1) *All questions are compulsory.*
2) *For MCQ select appropriate choice from options.*
3) *Draw neat diagrams wherever necessary.*
4) *Figures to right indicate full marks.*

Q1) MCQ   **[10]**

    i)   The _____ usually involves building a small version of the intended system prior to building the proposed system.

       a)   Waterfall model   b)   Spiral model

       c)   Prototyping model   d)   Incremental model

    ii)   _____ model is best suited if requirements are easily understandable and defined.

       a)   Waterfall model

       b)   RAD model

       c)   Spiral model

       d)   None of the mentioned

    iii)   Which phase of RUP is used to established business case for the system?

       a)   Transition   b)   Inception

       c)   Construction   d)   Elaboration

    iv)   Which model is not suitable for accomodating any changes.

       a)   Spiral   b)   RAD

       c)   Waterfall   d)   Prototype

    v)   Which of the following model follow a purely sequential approach?

       a)   RAD   b)   Spiral

       c)   Prototype   d)   Waterfall

vi) In software maintenance removing errors spotted by users is known as_____.
   a) Corrective
   b) Adaptive
   c) Preventive
   d) Perfective

vii) The incremental model is _____.
   a) a reasonable approch when well-defined requirements
   b) good approch when a working case product quickly
   c) not used for commerecial projects
   d) approch to use projects with large development teams

viii) RAD model has _____ phases.
   a) 2
   b) 3
   c) 5
   d) 6

ix) Which one of the following is not a phase of prototyping?
   a) Quick design
   b) Engineering
   c) Coding
   d) Refinement

x) Which two models doesn't allow defining all requirements early in the cycle?
   a) Prototype & RAD
   b) Sprial & Prototype
   c) Waterfall & RAD
   d) Waterfall & Spiral

xi) The user system requirements are the part of _____
   a) SRS
   b) Design document
   c) FOD
   d) Feasibility Report

xii) Which of the following is a functional requirement?
   a) Maintainability
   b) Portability
   c) Robustness
   d) None of the mentioned

xiii) What characteristic of SRS is being depicted in "The product should have a good human interface".
   a) Consistent
   b) Correct
   c) Non-verifiable
   d) Ambiguous

xiv) Which of the following is/are included in SRS?
   a) External Interface
   b) Performance
   c) Functionality
   d) All of the mentioned

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xv) Providing keyboard shortcuts mostly addresses ____.

    a)   Efficiency   b)   Learnability

    c)   Attitude   d)   Utility

xvi) Informative feedback should be ____.

    a)   Relevant

    b)   Meaningful

    c)   Clear

    d)   All of the mentioned

xvii) What is role of quality review?

    a)   Find mistake and reduce work

    b)   Risk Management

    c)   Cost calculation

    d)   None of the mentioned

xviii) Which is not an Agile methodology?

    a)   Scrum   b)   Extreme programming

    c)   PMBOK3   d)   Crystal

xix) Agilty refers to_____.

    a)   Allotment   b)   Analysis

    c)   Activencess   d)   Advancement

xx) In Agile model SDLC is carried out in the form of _____.

    a)   Sprints   b)   Documents

    c)   Modules   d)   Phases

Q2) Prepare SRS in IEEE format for the following system. **[8]**

A 'Swami Sweets' has decided to automate billing system. Shop has several serving counters. Following functionalities will be considered.

- RFID card will be used for entering details of purchasing at respective counter.

- Bill is prepared at cash counter after reading RFID card entries.

- Bill amount is accepted using cash, card or gpay mode.

OR

Write SRS in IEEF format for event management system. The overall functioning is as follows.

- Booking of venue
- Assigning vendors
- Registration of vendors
- Generating quatations

Q3) Draw the <u>use case</u> and class diagram for a placement agency site which provides the facility for the condidate to register with their academic details, personal details & skill sets. Organizations can also register with their requirements. Searching faciltity is provided for searching job as well as condidate. **[20]**

OR

a) Draw state transition diagram for vending machine placed at super market. **[10]**

b) Draw Activity diagram for ordering grocery using mobile App. **[10]**

Q4) Attempt any <u>two.</u> **[8]**
  a) Explain extreme Programing (XP)
  b) What are 12 manifesto of Agile development?
  c) Write a difference between Agile and scrum.
  d) Write a short note on Feature Drive Development (FDD).

Q5) Design a user Interface for feedback of one day CET orientation program conducted by a reputed Institute. **[4]**

OR

Design UI for external examination form for SPPU. **[4]**

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