United International University (UIU)

Dept. of Computer Science & Engineering (CSE)

Final Term Exam:: Trimester: Summer 2023
Course Code: CSE 469, Course Title: PROJECT MANAGEMENT
Total Marks: **40**   Duration: 2 hours

Any examinee found adopting unfair means will be expelled from the trimester / program as per UIU disciplinary rules.

Answer all the questions.

The Scenario

We want to develop Inventory Management Software. There will be 2 aspects of the software. The storekeeper will be able to give inputs of all types of items in the store. Items will be categorized as types. For example, Furniture, computer, cars, etc. Under these categories, individual items will be registered. Item categories and Item definitions will be stored in database. Another aspect is that the users can place requisition for these items over software. All types of requisitions will also be stored in the database. Now, to develop an inventory portal you have to do the necessary steps. Now answer the followings

1. Find the DET (Data Element Type) and RET (Record Element Type) for the calculation of ILF (Internal Logical Files). Also determining the Function Point value for the scenario. [CO3] **5**

2. Write down descriptive form of a use case "Place a requisition" in appropriate format.

   [CO2] **5**

3. Write down in descriptive form for one important functional requirement and one nonfunctional requirement in appropriate format for the related with the scenario mentioned in question 1. [CO2] **5**

4. Develop a Gantt chart for the above project and mention the different assumptions or consideration need to be considered (e.g., weekly holidays and government holidays) for making a pragmatic estimation. [CO5] **5**

5. Mention the major objectives of document review techniques. Provide a comparative view among any two of the following different document review techniques: Inspections, Desk-checks, and Walk-throughs. [CO4] **5**

6. If a project manager wants to achieve the Level IV CMMI Level, what are the compliance/rubrics/guideline he needs to follow during a software project development. Define the concept KPA (key process area) in CMMI perspective. [CO4] 4+1 = **5**

7. a) Justify the complexity category according to COCOMO of the project described in above scenario. For 5500 lines of code of embedded type, find the all the COCOMO parameters

   b) Define DMAIC concept in perspective of six sigma optimization method. **3+2 = 5**

   [CO5]

Software project	a_b	b_b	c_b	d_b
Organic	2.4	1.05	2.5	0.38
Semi-detached	3.0	1.12	2.5	0.35
Embedded	3.6	1.20	2.5	0.32

8. Prepare and demonstrate the Project Management document as a group wise covering the following components on your project: estimation through COCOMO model and Function point methods, Scheduling through a PM tool, document and code review techniques, best practices of change management and application of anyone for your project, briefing on different levels of CMMI, process improvement concepts etc. **Already evaluated in classroom, no need to answer in examination**. [CO2-CO5]

5