**Code No.PC407AD**

**METHODIST COLLEGE OF ENGINEERING & TECHNOLOGY**

**(An Autonomous Institution)**

**B.E. (AI &DS) IV-Semester ( Supplementary) Examination, FEB-2024**

**Subject: SOFTWARE ENGINEERING**

**Time: 3 hours Max.Marks:60**

**Note: Missing data, if any, maybe suitably assumed.**

**PART-A**

**Answer All the questions. (10X2M=20M)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q.No.** | **Questions** | **Marks** | **CO** | **BTL** |
| **1. a.** | **Distinguish between Personal Software Process and Team Software Process.** | **2** | **1** | **4** |
| **b.** | **List the challenges faced by software engineering.** | **2** | **1** | **1** |
| **c.** | **Compare Elicitation and Elaboration of requirements.** | **2** | **2** | **5** |
| **d.** | **Identify the importance ofsoftware engineering principles.** | **2** | **2** | **3** |
| **e.** | **Relate abstraction with information hiding** | **2** | **3** | **2** |
| **f.** | **Why is quality of design crucial?** | **2** | **3** | **1** |
| **g.** | **What is data design?** | **2** | **4** | **1** |
| **h.** | **Identify the criteria for choosing a programing language for a project** | **2** | **4** | **3** |
| **i.** | **Differentiate Alpha Testing and Beta Testing.** | **2** | **5** | **2** |
| **j.** | **What do you mean by risk in a software project?** | **2** | **5** | **1** |

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**PART-B**

**Answer Any Five questions**. **(5X8M=40M)**

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| --- | --- | --- | --- | --- | --- |
| **Q.No.** |  | **Questions** | **Marks** | **CO** | **BTL** |
| **2.** |  | **An IT company received a project which involves releasing of requirements one after another based on priority. Judge the suitable process model for the scenario along with detailed explanation of the implementation.** | **8** | **1** | **5** |
| **3.** |  | **Explain about modelling and construction principles of SE.** | **8** | **2** | **2** |
| **4.** |  | **Design a use case diagram considering “Flipkart” as a project case study and discuss all the steps involved in modelling the diagram.** | **8** | **3** | **6** |
| **5.** |  | **Choose and explain the appropriate architectural style for developing an highly parallel Machine Learning system.** | **8** | **4** | **5** |
| **6.** |  | **Explain in detail about White-box Testing.** | **8** | **5** | **2** |
| **7.** | **a** | **Discuss in short about theUnified process.** | **4** | **1** | **1** |
| **b** | **What are the various types of requirements?** | **4** | **2** | **1** |
| **8.** | **a** | **Construct a sequence diagram for depicting interactions during booking a train ticket on IRCTC.** | **4** | **3** | **6** |
| **b** | **List the good programming practices.** | **4** | **4** | **1** |
| **9.** | **a** | **Explain about ISO 9000 quality standard.** | **4** | **5** | **2** |
| **b** | **Develop an activity diagram for demonstrating electricity bill payment on PayTM.** | **4** | **3** | **6** |

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