**PVP20**

Code No: 20CS4702B

**PVP Siddhartha Institute OF TECHNOLOGY**

**(Autonomous)**

**Software Project Management(PE-IV)**

**Duration: 3 Hours Max. Marks: 70**

Note:

1. Contains 5 essay questions with an internal choice. Each question carries 14 Marks.
2. All parts of Question paper must be answered in one place.

 5 x 14 = 70 Marks

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|  |  |  | Blooms Level | CO | Max. Marks |
| **UNIT-I** |
| 1 | Explain the key ways in which managing an outsourcing project differs from a product development project. | L2 | CO1 | 14 |
| **OR** |
| 2 | Explain the major activities carried out by a software project manager and the order in which these are carried out. | L2 | CO1 | 14 |
| **UNIT-II** |
| **3** | Apply portfolio management for a project and discuss about the difficulties | L3  | CO2 | 14 |
| **OR** |
| **4** | **Solve the net present value for each of the projects A, B and C shown in below Table using each of the discount rates 8%, 10% and 12%.****For each of the discount rates, decide which is the best project. What can you conclude from these results?**Three estimated project cash flows | L3 | CO2 | 14 |
| **UNIT-III** |
| 5 | Apply various steps of project analysis to identify project characteristics | L3 | CO3 | 14 |
| **OR** |
| 6 | Identify how to choose a prototype for a software process. | L3 | CO3 | 14 |
| **UNIT-IV** |
| 7 | Calculate the productivity (i.e. SLOC per work month) of each of the projects in Table 5.1 and also for the organization as a whole. If the project leaders for projects a and d had correctly estimated the source number of lines of code (SLOC) and then used the average productivity of the organization to calculate the effort needed to complete the projects, how far out would their estimates have been fromthe actual effort?Some project data – effort in work months (as percentage of total effort in brackets) | L3 | CO3 | 14 |
| **OR** |
| 8 | Apply Software Effort estimation techniques to identify main ways of deriving estimates of software development effort. | L3 | CO3 | 14 |
| **UNIT-V** |
| 9 | Analyze various Strategies for Risk Reduction  | L4 | CO4 | 14 |
| **OR** |
| 10 | Analyze the given scenario : Mo is a systems analyst who is gathering requirements for an application which will record details of the training undertaken by fire-fighters in the client fire brigade. Details of the training units successfully completed by fi re-fighters are to be input to the application by trainers who are themselves senior and active fi re-fighters. Mo needs to interview a trainer to obtain his/her requirements. Because of the senior fi re-fighters’ other duties the interview has to be arranged two weeks in advance. There is then a 20% chance of the fi re-fighter being unable to attend the interview because of an emergency call-out.Each week that the project is delayed costs the fire brigade approximately £1,000.(a) Provide an estimate of the risk exposure (as a financial value) for the risk that the senior fire-fighter might not be able to attend at the times needed.(b) Suggest possible risk mitigation actions. | L4 | CO4 | 14 |