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| **P.V.P SIDDHARTHA INSTITUTE OF TECHNOLOGY** | |
| **BRANCH : Computer Science & Engineering** | **REGULATION : PVP20** |
| **Course: B.Tech** | **SUBJECT : Software Project Management(PE-IV)** |
| **Subject Code: 20CS4702B** | **Year and Semester: IV-I** |
| **QUESTION BANK** | |

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| **UNIT - 1** | | | | |
| **Q. NO.** | **QUESTION** | **CO** | **LEVEL** | **MARKS** |
|  | What is a project?. Explain distinguished characterisitcs of a project. | CO1 | L2 | 14 |
|  | Discuss briefly about the Activities covered by Software Project Management. | CO1 | L2 | 14 |
|  | Explain about categorizing software projects. | CO1 | L2 | 14 |
|  | Discuss How you can categorize Stakeholders for a project. | CO1 | L2 | 14 |
|  | Explain about setting objectives, sub-objectives and goals of a project. | CO1 | L2 | 14 |
|  | What is Management?. what are the activities of the management. | CO1 | L2 | 14 |
|  | Briefly explain about management control. | CO1 | L2 | 14 |
|  | What is the difference between a method and a methodology? What are the essential items that must be  planned before carrying out a method or methodology? | CO1 | L2 | 14 |
|  | Discuss the main differences between managing the development of a conventional project and an  outsourced project. | CO1 | L2 | 14 |
|  | Explain the major activities carried out by a software project manager and the order in which these are  carried out. | CO1 | L2 | 14 |

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| **UNIT - 2** | | | | |
| **Q. NO.** | **QUESTION** | **CO** | **LEVEL** | **MARKS** |
| 1 | Identify the major risks that could affect the success of the Brightmouth College payroll project and try to rank them in order of importance. | CO2 | L3 | 14 |
| 2 | Explain why discounted cash fl ow techniques provide better criteria for project selection than net profi t  or return on investment. | CO1 | L2 | 14 |
| 3 | An insurance company has examined the way that it settles house insurance claims. It decides to introduce a new computer-based claims settlement system which will reduce the time taken to settle claims. This reduction in effort is partly achieved by enabling the claims clerk to obtain the information needed directly, rather than having to go through other departments. Also, as part of the new  process, new repair work will be allocated by the insurance company to authorized builders, decorators, plumbers etc., rather than the claimant having to make arrangements to get estimates, and so on.  **(a) Explain the possible benefits and disbenefits that might be generated by this application.** | CO1 | L2 | 14 |
| 4 | An insurance company has examined the way that it settles house insurance claims. It decides to introduce a new computer-based claims settlement system which will reduce the time taken to settle claims. This reduction in effort is partly achieved by enabling the claims clerk to obtain the information needed directly, rather than having to go through other departments. Also, as part of the new  process, new repair work will be allocated by the insurance company to authorized builders, decorators, plumbers etc., rather than the claimant having to make arrangements to get estimates, and so on.  When the application is implemented, some of the claims staff at the insurance company complain about the additional stress of dealing with irate customers grumbling about trades people being slow to do repair work or about poor quality workmanship. Also, in some places there are shortages of qualified repair people leading to delays in getting work done.  **a) Analyse Which projected benefits are being affected by these developments?**  **b)Analyse How would you deal with these problems?**  **c) Analyse How would you assess your success in dealing with these problems?** | CO4 | L2 | 14 |
| 5 | Explain Risk Identification and Ranking in Software Project management. | CO1 | L2 | 14 |
| 6 | BuyRight, a software house, is considering developing a payroll application for use in academic institutions and is currently engaged in a cost–benefit analysis. Study of the market has shown that, if BuyRight can target it efficiently and no competing products become available, it will obtain a high level of sales generating an annual income of £800,000. It estimates that there is a 1 in 10 chances of this happening.  However, a com petitor might launch a competing application before its own launch date and then sales might generate only £100,000 per year. It estimates that there is a 30% chance of this happening. The most likely outcome, it believes, is somewhere in between these two extremes – it will gain a market lead by launching before any competing product becomes available and achieve an annual income of £650,000. BuyRight has therefore calculated its expected sales income as in Table 2.6.  TABLE 2.6 BuyRight’s income forecasts    Development costs are estimated at £750,000. Sales levels are expected to be constant for at least four years. Annual costs of marketing and product maintenance are estimated at £200,000, irrespective of the market share.  **Would you advise going ahead with the project?** | CO4 | L4 | 14 |
| 7 | Analyse how to overcome objections to cost-benefit averaging using Sensitivity analysis using an example | CO4 | L4 | 14 |
| 8 | Explain about programme management for a project | CO1 | L2 | 14 |
| 9 | Analyse what steps are to be taken for creating and planning a programme. | CO4 | L4 | 14 |
| 10 | Explain how to Apply Benefits Management when expected benefits have not materialized | CO2 | L3 | 14 |

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| **UNIT - 3** | | | | |
| **Q. NO.** | **QUESTION** | **CO** | **LEVEL** | **MARKS** |
| 1 | Identify the products and activities of the project? Explain each step. | CO2 | L3 | 14 |
| 2 | Analyse whether we have to build or buy a project | CO4 | L4 | 14 |
| 3 | Identify project as either objective-driven or product-driven? And explain about other characteristics. | CO2 | L3 | 14 |
| 4 | Identify high-level project risks? | CO3 | L3 | 14 |
| 5 | Explain about general life cycle Approach? | CO1 | L2 | 14 |
| 6 | Compare Structure versus speed of Delivery for a project | CO1 | L2 | 14 |
| 7 | Identify the steps in waterwall model and explain | CO3 | L3 | 14 |
| 8 | Identify the steps in Spiral Model and Explain | CO3 | L3 | 14 |
| 9 | Identify what steps are involved in Prototyping Model | CO3 | L3 | 14 |
| 10 | Explain the drawback of software Prototyping | CO1 | L2 | 14 |

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| **UNIT - 4** | | | | |
| **Q. NO.** | **QUESTION** | **CO** | **LEVEL** | **MARKS** |
| 1 | Identify where the estimates are done for a software project | CO2 | L3 | 14 |
| 2 | 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 from the actual effort?  **TABLE 5.1** Some project data – e ort in work months (as percentage of total effort in brackets) | CO2 | L3 | 14 |
| 3 | Analyse various problems with **over** and **under** Estimates for a project. | CO4 | L4 | 14 |
| 4 | Identify the Basis for Software Estimation | CO2 | L3 | 14 |
| 5 | Identify main ways of software effort estimation techniques | CO2 | L3 | 14 |
| 6 | Explain about Bottom up Estimating for a software project | CO1 | L2 | 14 |
| 7 | The IOE annual maintenance contracts subsystem for which Amanda is responsible will have a transaction which sets up details of new annual maintenance contract customers.  The operator will input:  Customer account number  Customer name  Address  Postcode  Customer type  Renewal date  All this information will be set up in a CUSTOMER record on the system’s database. If a CUSTOMER account already exists for the account number that has been input, an error message will be displayed to the operator.  **Draw up an outline program structure diagram** for a program to do the processing described above. For each box on your diagram, estimate the number of lines of code needed to implement the routine in a programming language that you are familiar with, such as Java. | CO4 | L4 | 14 |
| 8 | Identify Various COSMIC Full Function Points for information systems. | CO2 | L3 | 14 |

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| **UNIT - 5** | | | | |
| **Q. NO.** | **QUESTION** | **CO** | **LEVEL** | **MARKS** |
| 1 | Explain about Risk in project management | CO1 | L2 | 14 |
| 2 | Identify various categories of risk in a project management | CO2 | L3 | 14 |
| 3 | Explain about Risk Identification in a Software Project Development. | CO1 | L2 | 14 |
| 4 | Analyse how Risk Assessment is estimated with an example | CO4 | L4 | 14 |
| 5 | Analyse how qualitative descriptions will impact on likelihood of each risk. | CO4 | L4 | 14 |
| 6 | Analyse Various Risk Planning stages and how to deal with them. | CO4 | L4 | 14 |
| 7 | Identify Risk management with an example. | CO4 | L4 | 14 |