Batch-05 id-2403A510e1 Name:CHANDA HARINI

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| **SCHOOL OF COMPUTERSCIENCEANDARTIFICIAL INTELLIGENCE** | | | | | **DEPARTMENTOFCOMPUTERSCIENCE ENGINEERING** | | | | |
| **ProgramName:**B.Tech | | | | **AssignmentType:Lab** | | | **AcademicYear:**2025-2026 | | |
| **CourseCoordinatorName** | | | | VenkataramanaVeeramsetty | | | | | |
| **Instructor(s)Name** | | | | Dr.V.Venkataramana(Co-ordinator) | | | |  | |
| Dr.T.SampathKumar | | | |
| Dr.PramodaPatro | | | |
| Dr.BrijKishor Tiwari | | | |
| Dr.J.Ravichander | | | |
| Dr.MohammandAliShaik | | | |
| Dr.AnirodhKumar | | | |
| Mr.S.Naresh Kumar | | | |
| Dr.RAJESHVELPULA | | | |
| Mr.KundhanKumar | | | |
| Ms.Ch.Rajitha | | | |
| Mr.MPrakash | | | |
| Mr.B.Raju | | | |
| Intern1(Dharmateja) | | | |
| Intern2(Sai Prasad) | | | |
| Intern3(Sowmya) | | | |
| NS\_2( Mounika) | | | |
| **CourseCode** | | | 24CS002PC215 | **CourseTitle** | | AIAssistedCoding | | | |
| **Year/Sem** | | | II/I | **Regulation** | | R24 | | | |
| **Date and Day ofAssignment** | | | Week2 - Wednesday | **Time(s)** | |  | | | |
| **Duration** | | | 2Hours | **Applicableto Batches** | |  | | | |
| **AssignmentNumber:2.3**(Presentassignmentnumber)/**24**(Totalnumberofassignments) | | | | | | | | | |
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|  | **Q.No.** | **Question** | | | | | | | ***ExpectedTi me***  ***to***  ***complete*** |
|  | 1 | Lab4:AdvancedPromptEngineering – Zero-shot, One-shot,andFew-shotTechniques  **Lab Objectives:**   * ToexploreandapplydifferentlevelsofpromptexamplesinAI-assistedcode generation. | | | | | | | Week2 - Wednesday |

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|  | * Tounderstandhowzero-shot,one-shot,andfew-shotpromptingaffectAIoutput quality. * Toevaluatetheimpactofcontextrichnessandexample quantityonAI performance. * Tobuild awarenessofpromptstrategy effectivenessfordifferentproblem types.   **LabOutcomes (LOs):**  Aftercompleting thislab,studentswill beableto:   * Usezero-shotpromptingtoinstructAIwithminimalcontext. * Useone-shotpromptingwith asingle exampletoguideAIcodegeneration. * Applyfew-shotpromptingusingmultiple examplesto improveAIresponses. * CompareAIoutputsacrossthethreeprompting strategies.   **TaskDescription#1**   * + Zero-shot:PromptAItowriteafunctionthatcheckswhetheragivenyearisaleap year.   **Prompt:**    **Code:**    **Output:**    **ExpectedOutput#1**   * + AI-generatedfunctionwithnoexamplesprovided   **TaskDescription#2**   * + One-shot:Giveoneinput-outputexampletoguideAIinwritingafunctionthat converts centimeters to inches.   **Prompt:** |  |

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|  | **Code:**    **Output:**    **ExpectedOutput#2**   * Functionwithcorrectconversionlogic   **TaskDescription#3**   * Few-shot:Provide2–3 examplestogenerateafunctionthatformatsfullnamesas   “Last,First”.  **ExpectedOutput#3**   * Well-structuredfunctionrespectingthe examples   **Prompt:**    **Code:** |  |

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|  | **Output:**    **TaskDescription#4**   * Comparezero-shotandfew-shotpromptsforwritingafunctionthatcountsthe number of vowels in a string.   **ExpectedOutput#4**   * Functionaloutputandcomparativereflection   **Prompt:** |  |

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|  | **Code:**    **Output:**    **TaskDescription#5**   * Usefew-shotpromptingtogenerateafunctionthatreadsa.txtfileandreturnsthe number of lines.   **ExpectedOutput#5**   * Workingfile-processingfunctionwithAI-guided logic   **Prompt:**    **Code:** |  |

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|  | **Output:**    **Note:Reportshouldbesubmittedaworddocumentforalltasksinasingledocumentwith prompts, comments & code explanation, and output and if required, screenshots**  **Evaluation Criteria:** | | |  |
| **Criteria** | **Max Marks** |  |
| ZeroShot(Task#1) | 0.5 |
| OneShot (Task#2) | 0.5 |
| FewShot(Task#3&Task#5) | 1.0 |
| Comparison(Task#4) | 0.5 |
| **Total** | **2.5 Marks** |