KLS Gogte Institute of Technology, Belagavi

Program: B.E. Academic Year: 2023-24 (EVEN SEM)

Department: CSE Semester: VI Max. Marks: 25 marks **Compensatory IA**

**Course Title: Unix System & Network Programming Code: 21CS64**

**Duration: 1 Hr. Date: 21/06/2024**

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| **Q.No** | **PART A (Compulsory question)** | **[L ]** | **[CO]** | **[PO]** | **[M]** |
| **1.** | Explain the POSIX Feature test macros with an example. | **2** | **1** | **1** | **5** |
| **PART B (Answer any 1 questions)** | | | | | |
| **2.** | Make use of sysconf , pathconf and fpathconf to write a C/C++ program to implement the compile time and run time configuration limits for the below given tasks.   1. Max no. of links a file may have 2. Max size of block of data that may be automatically read from or written to a pipe file. 3. Max no. of chars allowed in path name 4. Max no. of chars allowed in file name | **3** | **2** | **1** | **10** |
| **3.** | Describe the subsets of POSIX standard? Develop a C/C++ program to illustrate the usage of the C preprocessor symbols. | **3** | **1** | **1** | **10** |
| **PART C (Answer any 1 question)** | | | | | |
| **4.** | Distinguish between setjmp and longjmp function along with their prototype and write a pseudocode to illustrate the usage of setjmp and longjmp function. | **4** | **2** | **3,5** | **10** |
| **5.** | Compare Text segment , Initialized data segment , Uninitialized data segment, Stack segment and Heap segment with a neat diagram. | **4** | **2** | **11** | **10** |

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| **Sign with Date** |  |  |  |  |
| **Faculty Members** | **Mod. Coordinator** | **PAC** | **IQAC** | **HOD** |
| **Remarks (if any)** |  | | | |