KIT's College of Engineering (Autonomous), Kolhapur
Department of Computer Science & Engineering

Course Name: - UNIX Operating System   **Course Code: - UCSE0601**

ISE 1 Component 1 – Assignment (A.Y. 2022-2023)

Instructions:

   a. **Deadline to complete this ISE component is 5th March 2023 11.59 PM IST.**
   b. **Draw suitable diagram wherever necessary.**
   c. **Upload handwritten answers to the following Questions in a PDF file.**
   d. **Rename the PDF file with your Roll Number.**
       Example – A10.pdf

Q1. Draw a neat and labeled diagram of UNIX Kernel architecture and explain it in detail.   **CO2**

Q2. Explain the response of a process for the following scenarios with respect to the buffer: -   **CO2**
   a. **Buffer is busy**
   b. **Buffer is free**
   c. **Block is not in hash queue**
   d. **No free buffers in the system**
   e. **Block is marked delayed write in free list.**

Q3. Contrast between in-core inode and disk inode.   **CO3**

Q4. Write and explain the algorithm to convert pathname to inode.   **CO3**

Q5. List the features of UNIX OS.   **CO1**

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