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Q. No.	
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PAPER CODE	U222-215 (ESE)
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**May 2022 (ENDSEM) EXAM**

**S.Y. B. TECH. (SEMESTER - II) AI & DS**

**COURSE NAME:** Operating System

**COURSE CODE:** ADVA22205

**(PATTERN 2020)**

Time: [1Hr]

[Max. Marks: 30]

**(\*) Instructions to candidates:**

- 1) Figures to the right indicate full marks.
- 2) 'a' part of every question is compulsory
- 3) Use of scientific calculator is allowed
- 4) Use suitable data where ever required

Q.1 a) Discuss the importance of Lock and implementation of Lock using Disabling and enabling Interrupts. [4]

b) Discuss the concept of Dining Philosophers with appropriate example. [6]

**OR**

b) Interpret the concept of Pthread Locks and Building A Lock. [6]

Q2 a) Compare Explicit I/O and Memory Mapped I/O. [4]

b) Interpret your views on Files and Directories. [6]

**OR**

b) Discuss characteristics of RAID level 5 with neat diagram and example. [6]

Q.3 a) Discuss XOR Function in Checksum. [4]

b) Interpret your views on Performance evaluation factors of computer systems. [6]

**OR**

b) Discuss Steps for Using Checksum [6]