

Course Name: **Operating System**

Course Code: **201CSL211**

**Day and Date: Thursday, 01.06.2023**

Seat No:
----------

**Time: 1.00 am to 12.00 pm**

**Max. Marks- 50**

**Instructions:**

- i. Question No. 1&2 is compulsory.
- ii. Figure to the right indicate full marks.
- iii. Give suitable general Instructions
- iv. Any other Course Specific Instructions.
- v. Noquestions shouldrepeat from MSE/ISE

BT	CO's	Q.No.		Marks	Weightage
		<b>Q.1</b>	<b>All Questions are compulsory</b>	<b>20</b>	<b>40%</b>
<b>1,2</b>	<b>CO2</b>	<b>a</b>	List the types of Operating System. Explain any 3 types of Operating System. <b>Explanation of each type[3X2]</b>	<b>6M</b>	
<b>1,2</b>	<b>CO1</b>	<b>b</b>	Describe the different models used for inter-process communication. Suggest which model is better and why? <b>MS-Explanation of each model[06],Suggestion[01]</b>	<b>7 M</b>	
<b>1,2</b>	<b>CO1</b>	<b>c</b>	What is deadlock? Explain Banker's Algorithm. <b>MS – Each method [02], Bankers Algorithm[05]</b>	<b>7 M</b>	
		<b>Q.2</b>	<b>All Questions are compulsory</b> (internal sub question permitted for optional questions either a or b)	<b>10</b>	<b>60%</b>
<b>1,2</b>	<b>CO2</b>	<b>a</b>	What is Segmentation? Explain the basic segmentation method. <b>MS – Definition[01],Explanation [03]</b>	<b>4</b>	
<b>1,2</b>	<b>CO1</b>	<b>b</b>	Draw and Explain schematic view of Swapping. <b>MS - Sketch [02],Explanation[04]</b> <b>OR</b> Discuss the procedure for page fault in demand paging with the help of a schematic diagram. <b>MS-Sketch [02], Procedure [ 04]</b>	<b>6</b>	
		<b>Q.3</b>	<b>All Questions are compulsory</b> (internal sub question permitted for optional questions either a or b)	<b>10</b>	
<b>1,2</b>	<b>CO1</b>	<b>a</b>	Write short note on the following terms Direct File Access method <b>MS –Explanation of each method [1 x 4]</b>	<b>4</b>	<b>6</b>
<b>1,2</b>	<b>CO1</b>	<b>b</b>	Draw and Explain the interrupt – driven I/O cycle with Polling and Interrupt concepts. <b>MS –Sketch[02], Explanation [04]</b> <b>OR</b> What are file attributes and Explain the minimal set of requirements needed for the file operations. <b>MS –File attributes [03], File operations [06]</b>	<b>6</b>	

		<b>Q.4</b>	<b>Attempt any two out of three questions</b>		<b>10</b>
<b>1,2</b>	<b>CO1</b>	<b>a</b>	With a neat diagram explain Architecture of the UNIX operating system <b>Architecture with Explanation [05]</b>	Unit : 6	<b>5</b>
<b>1,2</b>	<b>CO1</b>	<b>b</b>	Write a note on Network based Operating Systems <b>Explanation [05]</b>		<b>5</b>
<b>1,2</b>	<b>CO1</b>	<b>C</b>	Explain System calls for the file system in Unix? <b>Explanation [05]</b>		<b>5</b>

\*\*\*\*\*

**\*\*\*This is a Question Paper sample Template\*\*\***

**You are requested to ensure that,**

- a) The title block of the question paper is as per format
- b) The course name is correctly mentioned with correct course code as per S. Y. B. Tech/B. Arch syllabus structure.
- c) The name of the examination is correctly mentioned
- d) The instructions are appropriate and do not violate the present rules
- e) There can be variations in the Sub questions Marks, but the total of sub questions coming under main questions should not vary.
  - i) However internal options may be given to few sub questions with equal marks.
  - ii) Optional questions should be in the range of 20 to 30% of the total marks of the questions paper (50 marks).
  - iii) Alongwithsubjectivequestionpaper providethemodelanswerpaper.
- f) **Faculty should strictly follow the guidelines/instruction (attached with this format) while setting the question paper.**
- g) **Use Times New Roman, 12 Bold, for main question and Times New Roman, 12, for Sub question.**