

USN : 

J.N.N COLLEGE OF ENGINEERING, SHIVAMOGGA  
DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

**II-INTERNAL ASSESSMENT**

Semester: 7-CBCS  
Subject: ARM Embedded Systems (18EC753)  
Faculty: Mr. Benak Patel M P

Date: 05 JAN 2022  
Time: 10:50 AM – 12:20 PM  
Max Marks:50

Q.No	Answer Any 2 Question(s)		Marks	CO	BTL
1	a	Explain the importance Barrel shifter Data Processing instructions with relevant examples.	10	2	L2
	b	Explain different addressing modes for load store multiple instructions with relevant examples.	15	2	L3
<b>OR</b>					
2	a	Explain the terminology Atomic operation and explain how SWP instruction is used to implement semaphore.	10	2	L2
	b	Explain the working of stack Memory considering STMFD and STMED .	15	2	L3
<b>OR</b>					
3	a	Explain Push and Pop instruction in Thumb stack operations with example.	10	3	L3
	b	Explain conditional execution in ARM and explain the same by writing an ALP subroutine to find GCD of two numbers.	15	2	L2
<b>OR</b>					
4	a	Explain ARM-Thumb interworking with BX and BLX instruction usage.	10	3	L3
	b	What are Pseudoinstructions and Explain with example how 32bit long constants are loaded into a register.	15	2	L2
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