



Sanjay Ghodawat University, Kolhapur

2018-19

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Year and Program: 2018-19

F.Y. M. Tech.

School of Technology

Department of Electronics Engineering

Course Code: EES506

Course Title: Embedded Linux

Semester – II

Day and Date: Friday

End Semester Examination

Time: Max Marks: 100

24/05/2019

(ESE)

2.30 to 5.30 pm

Instructions:

- 1) All questions are compulsory.
- 2) Assume suitable data wherever necessary.
- 3) Figures to the right indicate full marks.

Q.1	Attempt the following	Marks	Bloom's Level	CO
a)	Compare and contrast different types of host/target development setups?	07	L ₂	CO1
b)	List and give the significance of common top-level directories in Linux root file system. Comment on root file system?	07	L ₃	CO2
OR				
b)	Summarize the layout, organization and construction of Linux kernel.	07	L ₃	CO2
Q.2	Attempt the following			
a)	Analyze the following module utilities	07	L ₃	CO3
	a. insmod b. rmmod c. depmod			
OR				
a)	Elaborate on Memory Technology Device (MTD) subsystem.	07	L ₅	CO3
b)	Demonstrate the use of various tracing and profiling tools	07	L ₃	CO4
Q.3	Attempt any two of the following			
a)	Analyze Generic Architecture of an Embedded Linux System.	06	L ₄	CO1
b)	Identify the use of various binary utilities.	06	L ₃	CO2
c)	Illustrate the use of BusyBox in detail.	06	L ₃	CO3

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Q.4 Attempt any Two of the following

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|--|----|----------------|-----|
| a) Compare Pipes and Redirection with example. | 09 | L ₃ | CO5 |
| b) Examine If, For loop and While loop in Shell programming along with syntax. | 09 | L ₄ | CO5 |
| c) Analyze the steps for killing a process. Also explain with example how commands can be scheduled. | 09 | L ₄ | CO5 |

Q.5 Attempt any Two of the following

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|---|----|----------------|-----|
| a) Summarize the setting of serial port signals using setSerialSignal? Outline the steps to compile and test setSerialSignal. | 09 | L ₂ | CO6 |
| b) Determine the hardware design process for the Project Trailblazer. | 09 | L ₆ | CO6 |
| c) Discuss USB interfacing. Explain the significance of USB interfacing in the Project Trailblazer. | 09 | L ₅ | CO6 |

Q.6 Attempt any Three of the following

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|---|----|----------------|-----|
| a) Explain what is a Shell with example? Why to use Shell? What are different types of Shells? | 08 | L ₂ | CO5 |
| b) Analyze device drivers. Examine the requirements for developing a custom device driver for the Project Trailblazer? | 08 | L ₄ | CO6 |
| c) Determine the way to measure the average interrupt latency in the Project Trailblazer? Also give the features for implementing race timer for the Project Trailblazer. | 08 | L ₆ | CO6 |
| d) Summarize Control using Parallel Port. Outline the drawbacks of Standard Parallel Port Control with Port I/O? | 08 | L ₂ | CO6 |

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