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1st SEMESTER EXAMINATION, 2022 – 23
1st Year, M.Tech – Computer Science & Engineering)
Open-Source Software Technologies

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Duration: 3:00 hrs.   **Max Marks: 100**

Note: - Attempt all questions. All Questions carry equal marks. In case of any ambiguity or missing data, the same may be assumed and state the assumption made in the answer.

Q 1.	Answer any four parts of the following.	5x4=20
	a) Explain the basic rules applied for naming the PERL variables.	
	b) Draw an OSS Community Development Process.	
	c) Discuss Kernel mode and Linux mode of operations in Linux Environment.	
	d) Explain the Errors and Exception Handling in PYTHON programming	
	e) What is the main difference between Linux and Windows?	
	f) Define SANE.	
Q 2.	Answer any four parts of the following.	5x4=20
	a) Illustrate the internal structure of a typical PYTHON module with the suitable example.	
	b) Draw hierarchical structure of Linux File system and explain any five directories.	
	c) What is Multimedia Software for Linux?	
	d) How to set python environment variable PYTHONPATH on Windows and? On LINUX	
	e) What is Ghostscript . How to use Ghostscript, Can Ghostscript edit Pdf.	
	f) How to test php installation with a phpinfo() page under UNIX / Linux Apache / nginx ?	
Q 3.	Answer any two parts of the following.	10x2= 20
	a) Discuss the role of each phase in an OSS Community Development Process.	
	b) Write is shell programming? Write a shell that will sequentially clear screen, print only name of current directory, display name of all currently logged in users.	
	c) Explain cc vs gcc compiler.	
Q 4.	Answer any two parts of the following.	10x2= 20
	a) Write a MySQL program for the following Operations.	
	• Create a database	
	• Create a table	
	• Load data into the table	
	• Retrieve data from the table in various ways	
	• Use multiple tables	
	b) Illustrate the internal structure of a typical PYTHON module with the suitable example	
	c) Write a short note on Perl File Handling.	
Q 5.	Answer any two parts of the following.	10x2= 20
	a) What is NGINX. How Does NGINX Work? Explain Features of NGINX. Difference between Apache and NGINX.	
	b) Explain the five key perspectives on Free / Open Source Software's.	

	c) Explain Open-source, how Open-Source development model work. and also define the values of Open-source (why people choose open source over proprietary software)?	

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