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BMS College of Engineering, Bangalore-560019

(Autonomous Institute, Affiliated to VTU, Belgaum)
May 2017 Semester End Main Examinations

Course: Unix System Programming   **Duration: 3 Hours**
Course Code: 15IS4DCUSP   **Max Marks: 100**
                                                        Date: 12.05.2017

Instruction: Answer FIVE FULL questions, choosing one from each unit.

UNIT-1

1.	**a)**	What is POSIX standard? Explain the different subset of POSIX standard?	**06**
	b)	Write the difference between ANSI C and K& RC?	**06**
	c)	Explain the common characteristics of API and Describe the error status codes?	**08**

UNIT-2

2.	**a)**	Explain different ways of process termination?	**06**
	b)	Define command line arguments. Write a program to demonstrate command line arguments?	**06**
	c)	Explain the following i) Environment list ii) Environment of unix process.	**08**

UNIT-3

3.	**a)**	Explain the following system call: i) fork() ii) vfork() iii) exit iv) wait()	**10**
	b)	Giving the prototype explain different variant of exec system call?	**10**

OR

4.	**a)**	What is job control? Summarize the job control fetures with the help of figure.	**10**
	b)	Write a note on i) controlling terminal ii) session	**10**

UNIT-4

5.	**a)**	Define signal? List any five posix defined signals.	**10**
	b)	Explain with diagram different ways to generate log message.	**05**
	c)	Explain coding rules for daemon to prevent unwanted interactions from happening.	**05**

UNIT-5

6. **a)** With a neat block diagram, explain how FIFO can be used to implement client server communication mode? Discuss the applications of FIFO. **10**

b) Define message Queues. List the API's with their argument details that are used to create, control, send and receive messages from a message queues. **08**

c) Explain P open functions. **02**

OR

7. **a)** What is a socket? Discuss how it create and destroy a socket. **10**

b) Explain the different client server connection function using socket, with example program. **10**

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