[Time: $2\frac{1}{2}$ Hours]

Please check whether you have got the right question paper.

Q.P. Code:19853

[Marks:75]

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	C) Allswer III 1 - 2 Sentences	203
	1. What is Sense loT?	300
	2. What are the different raspberry pi model types?	2017
	State true or false for the following sentence and give a reason for your answer.	
	3. HTTP protocol works on client server architecture?	
	4. Node RED is a protocol for communication in IoT?	7
	5. Define Pulse Width Modulation.	
Q. 2	Attempt the following (Any THREE)	15
	a) Explain general architecture of an SoC with block diagram.	
	b) Write a short note on FPGA. Mention few advantages of FPGA.	
	c) Explore the features of raspberry pi model B in short.	
	d) Write the steps to install Raspbian operating system on raspberry pi model B.	
	e) Write a short note on graphic processing unit(GPU).	
	f) Explain ARM8 architecture with block diagram.	
Q. 3	Attempt the following (Any THREE).	15
	a) Explain the following linux commands: pwd, rm, touch, ssh, ping.	
	b) Write a short note on node js.	
	c) Draw the tree components of node.js. Mention few application of node.js.	
	d) Explain I ² C bus as communication interface in raspberry pi model kit.	
	e) Explain the use of linux command apt-get to install software in Raspbian model kit with example.	
	f) Explain UART as communication interface in raspberry pi model kit.	
Q. 4	Attempt the following (Any THREE)	15
	a) Explain, what is IoT? Give some examples.	
	b) Explain HTTP protocol used in IoT communication with block diagram.	
	c) Write a short note on Node-RED as software tool used in embedded designing.	
	d) Explain Native compiler and Cross compiler with example.	
308	e) What are the different modes of attacks in IoT based system?	
XXXX	f) What secur <mark>ity measures we can have in IoT communication?</mark>	
Q. 5	Attempt the following (Any THREE).	15
Z Z	a) How will you connect Raspbian OS with your system? Write the Steps.	
	b) Write a short note on free open source Raspbian OS.	
89.60	c) Explain XMPP protocol used in IoT communication with block diagram.	
ON B	d) Write a short note on Clayster as IoT service platform.	
	e) Write a python program and diagrammatically represent circuit connection to blink an LED using raspberry pi kit.	
XOX	***********	