QPC: RJ18001167 AR - 18 Reg. No. | | | | | | | | | | |

GIET MAIN CAMPUS AUTONOMOUS GUNUPUR – 765022

B. Tech Degree Examinations, June – 2021

(Sixth Semester)

BEIPE6040 / BECPE6040 / BECOE6050 – INTERNET OF THINGS

(Common to AEI, E.C.E and Mechanical Engg.)

Time: 2 hrs Maximum: 50 Marks

Answer ALL Questions

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions) **(1 x 10 = 10 Marks)**

Q.1. Answer ***ALL*** questions			[CO#]	[PO#]
a.	IoT systems have the characteristic of		1	1
	(i) self-adapting	(ii) self-configuring		
	(iii) None of the above	(iv) Both (i)and (ii)		
b.	The IoT–level required for designing home automation IoT systems including smart lighting is		1	1
	(i) Level 1	(ii) Level 2		
	(iii) Level 3	(iv) Level 4		
c.	M2M Network stands for		1	1
	(i) Mobile 2 Mobile	(ii) Machine 2 Machine		
	(iii) Mobile 2 Machine	(iv) Machine 2 Mobile		
d.	The correct sequence of layers from bottom to top is		2	1
	(i) Application-Link-Network-Transport	(ii) Transport-Application-Link-Network		
	(iii) Link-Network-Transport-Application	(iv) Application-Transport-Network-Link		
e.	One problem in IoT applications is that IPv6 addresses are		2	1
	(i) Too small	(ii) Too long		
	(iii) Medium	(iv) None of the above		
f.	Message Queue Telemetry Transport (MQTT) was introduced by		3	1
	(i)MicroSoft	(ii) INTEL		
	(iii)Google	(iv) IBM		
g.	Python IDE is		3	1
	(i) Owned by Microsoft	(ii) Owned by Facebook		
	(iii) Free software	(iv) Apple OS		
h.	Thermocouple is used for measuring		3	1
	(i) Pressure	(ii) Temperature		
	(iii) Humidity	(iv) All of the above		
i.	Raspberry Pi 3B has		4	1
	(i) 1 GB RAM	(ii) 2 GB RAM		
	(iii) 3 GB RAM	(iv) 1.4 GB RAM		
j.	Node MCU have		4	1
	(i) 1 analog input pin	(ii) 16 analog input pin		
	(iii) Both (i) and (ii)	(iv) None of the above		

PART – B: (Short Answer Questions) **(2 x 5 = 10 Marks)**

Q.2. Answer ***ALL*** questions	[CO#]	[PO#]
a. What is IOT-Level 2 system?	1	1
b. Difference between Analog and Digital Sensor.	1	1
c. Draw the diagram for Request-Response communication Model.	2	1
d. Give some idea about REST based communication API.	3	1
e. What is process specification of system?	4	1

PART – C: (Long Answer Questions) **(6 x 5 = 30 Marks)**

Answer ***ANY FIVE*** questions	Marks	[CO#]	[PO#]
3. Explain the basic architecture of IoT network.	(6)	1	1
4. Explain IoT protocol Stack.	(6)	1	1
5. Explain at least 4 types of sensors used in IoT applications.	(6)	2	1
6. Design the deployment of the weather monitoring IoT system.	(6)	2	1
7. Design the functional and operational view specifications for Home intrusion detection System.	(6)	3	1
8. Write about 5 major players of Cloud Platforms-as-a-Service business in the market.	(6)	3	1
9. Draw the diagram indicating Steps involved in IoT system design methodology.	(6)	4	1
10. Describe about domain model specification considering home automation as proposed IoT system.	(6)	4	1

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