

Total No. of Questions : 10]

SEAT No. :

P4008

[5561]-715

[Total No. of Pages : 2

B.E. (Information Technology)

INTERNET OF THINGS (IOT)

(2015 Pattern) (414464(A)) (Elective-III) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume suitable data if necessary.*

Q1) a) Explain IOT architecture with neat diagram. **[5]**

b) Define IOT. Explain any one application of IOT. **[5]**

OR

Q2) a) Describe IOT level 6 with an example. **[5]**

b) Explain publish - subscribe model in detail. **[5]**

Q3) a) List and explain IOT functional stack along with its sub-layers. **[5]**

b) How do data collection and analysis approaches are differ in M2M and IOT. **[5]**

OR

Q4) a) Write a short note on IEEE 802.15.4 access technology. **[5]**

b) Write in detail about classifications of sensors and actuators. **[5]**

Q5) a) Explain IPV6 address space & Transmission modes. **[8]**

b) Describe IPV6 packet format & compare IPV4 & IPV6 headers. **[8]**

OR

Q6) a) With neat diagram explain MIPV6 in detail. **[8]**

b) Write a short note on Goals & header stacks of 6LOWPAN. **[8]**

Q7) a) What is Raspberry Pi? Explain about its versions and various interfaces in detail. **[8]**

b) Draw and explain Raspberry Pi block diagram and its components. **[8]**

OR

P.T.O.

Q8) a) Draw diagram and write algorithm and Python code to control LED using Raspberry Pi. **[8]**

b) Explain in brief : **[8]**

i) PC Duino.

ii) Beaglebone Board.

iii) Cubie board.

Q9) a) What is cloud storage? Briefly discuss advantages of cloud storage. **[8]**

b) What is WAMP? List the key components of WAMP. What is autobahn? **[10]**

OR

Q10) a) What is Django? Explain Django architecture and template system. **[8]**

b) What is amazon services for IOT? Explain concept of amazon auto scaling. List advantages and functions of amazon EC2. **[10]**

