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Paper Code : OE-EE 701 B Internet of Things

Time Allotted : 3 Hours

Full Marks : 70

The Figures in the margin indicate full marks.

Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

1. Answer any ten of the following

[1 x 10 = 10]

- ☒ API stands for
- ☒ IoT stands for
- ☒ NFV means
- ☒ For strings, operator performs concatenation
- ☒ Raspberry Pi operates
- ☒ IoT devices are associated with data through which methods?
- ☒ UDP stands for
- ☒ NVF infrastructure includes compute, and storage resources that are virtualized
- ☒ Which function print the output to the console?
- ☒ RISC OS is used as
- ☒ Body of IOT system is created by software supporting integration and binds all system devices
- ☒ The unique identifiers for the things of IoT are the

Group-B (Short Answer Type Question)

Answer any three of the following

[5 x 3 = 15]

- ☒ 2. Define M2M networking [5]
- ☒ 3. Write a python program to find the value of $5^{2.5}$ [5]
- ☒ 4. What is Request Response? [5]
- 5. Write a python program to segregate real and imaginary part of a complex number $5+7j$. [5]
- 6. Explain REST based Communication APIs [5]

Group-C (Long Answer Type Question)

Answer any three of the following

[15 x 3 = 45]

- 7. (a) What is the need for IOT systems management? [7]
- (b) Discuss NETCONF protocol layers [6]
- (c) What is YANG [2]
- 8. (a) Why python is called multi paradigm programming language? [6]
- (b) Discuss Tuples in python [5]
- (c) Discuss a while loop in python. [4]
- 9. (a) Write the steps of device management with NETCONF YANG [6]
- (b) Which limitations make SNMP unsuitable for IOT SYSTEMS [6]
- (c) What is NEETOPEER [3]
- 10. (a) Write a program to find area of a triangle. [4]
- (b) Write a program to read three numbers in three variables and swap 1st to variables with sums of 1st and second and second and third numbers respectively. [7]
- (c) Describe lists in python [4]
- 11. (a) Determine the IOT for designing structural Health monitoring System. [9]
- (b) Why do IOT systems have to be self adapting and self configuring [6]