



Future Vision

# FUTURE VISION BIE

By K B Hemanth Raj

Visit : <https://hemanthrajhemu.github.io>

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Regards

- K B Hemanth Raj (Admin)

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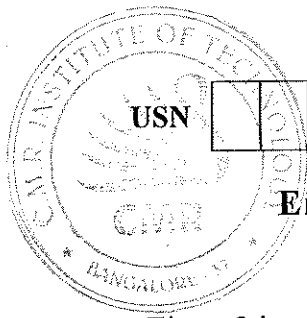
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# CBCS SCHEME

15CS81

## Eighth Semester B.E. Degree Examination, June/July 2019 Internet of Things Technology

Time: 3 hrs.

Max. Marks: 80

**Note:** Answer FIVE full questions, choosing one full question from each module.

### Module-1

- 1 a. What is IOT? Explain in detail on Genesis of IOT. (08 Marks)
- b. What does IOT and digitalization mean? Elaborate on this concept. (04 Marks)
- c. Write a short note on "IOT impact in Real World". (04 Marks)

OR

- 2 a. Discuss IOT challenges. (08 Marks)
- b. With a neat diagram, explain architecture of IOT. (04 Marks)
- c. Explain Core IOT functional stack. (04 Marks)

### Module-2

- 3 a. List and explain different types of sensors. (08 Marks)
- b. Elaborate on small physical objects and small virtual objects. (04 Marks)
- c. Explain "IOT Access Technologies". (04 Marks)

OR

- 4 a. Briefly explain protocol stack utilization IEEE 802.15.4. (08 Marks)
- b. What is SANET? Explain some advantages and disadvantages that a wireless based solution offers. (08 Marks)

### Module-3

- 5 a. Explain working of IP as the IOT network layer. (08 Marks)
- b. Write note on Business case for IP. (04 Marks)
- c. Discuss need for optimization. (04 Marks)

OR

- 6 a. Describe application protocols for IOT. (08 Marks)
- b. Discuss the various methods used in IOT application transport. (08 Marks)

### Module-4

- 7 a. What do you mean by data and analytics for IOT? Explain. (04 Marks)
- b. Discuss Bigdata analytics tools and technology. (04 Marks)
- c. With a case study relate the concept of securing IOT. (08 Marks)

OR

- 8 a. Explain in detail how IT and OT security practices and systems vary in real time. (08 Marks)
- b. Discuss OCTAVE and FAIR formal risk analysis. (08 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

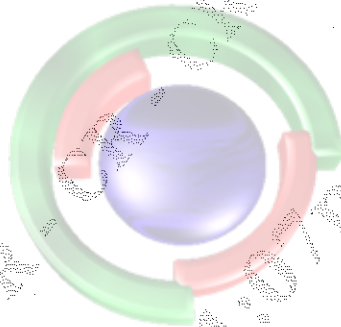
**Module-5**

- 9 a. Give a brief note on Arduino UNO. (04 Marks)  
b. With a neat diagram, explain Raspberry Pi board. (04 Marks)  
c. With a neat diagram, explain wireless temperature monitoring system using Raspberry Pi. (08 Marks)

**OR**

- 10 a. Explain in detail smart city IOT architecture. (08 Marks)  
b. With the case study explain smart and connected cities using Raspberry Pi. (08 Marks)

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## Quick Links for Faster Access.

**CSE 8<sup>th</sup> Semester** - <https://hemanthrajhemu.github.io/CSE8/>

**ISE 8<sup>th</sup> Semester** - <https://hemanthrajhemu.github.io/ISE8/>

**ECE 8<sup>th</sup> Semester** - <https://hemanthrajhemu.github.io/ECE8/>

## 8<sup>th</sup> Semester CSE - TEXTBOOK - NOTES - QP - SCANNER & MORE

**17CS81 IOT** - <https://hemanthrajhemu.github.io/CSE8/17SCHEME/17CS81/>

**17CS82 BDA** - <https://hemanthrajhemu.github.io/CSE8/17SCHEME/17CS82/>

**17CS832 UID** - <https://hemanthrajhemu.github.io/CSE8/17SCHEME/17CS832/>

**17CS834 SMS** - <https://hemanthrajhemu.github.io/CSE8/17SCHEME/17CS834/>

## 8<sup>th</sup> Semester Computer Science & Engineering (CSE)

**8<sup>th</sup> Semester CSE Text Books:** <https://hemanthrajhemu.github.io/CSE8/17SCHEME/Text-Book.html>

**8<sup>th</sup> Semester CSE Notes:** <https://hemanthrajhemu.github.io/CSE8/17SCHEME/Notes.html>

**8<sup>th</sup> Semester CSE Question Paper:** <https://hemanthrajhemu.github.io/CSE8/17SCHEME/Question-Paper.html>

**8<sup>th</sup> Semester CSE Scanner:** <https://hemanthrajhemu.github.io/CSE8/17SCHEME/Scanner.html>

**8<sup>th</sup> Semester CSE Question Bank:** <https://hemanthrajhemu.github.io/CSE8/17SCHEME/Question-Bank.html>

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