

(6 Pages)

Reg. No. :

**Code No. : 20610 E Sub. Code : SECS 6 A/
SESE 6 A**

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Sixth Semester

Computer Science/Software Engineering —
Major Elective

INTERNET OF THINGS

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Machine to machine communication towards an emerging paradigm known as
 - (a) IIOT
 - (b) IOT
 - (c) M2M
 - (d) I2M

2. GIS stands for _____
 - (a) Geographic Information System
 - (b) Geostationary Information System
 - (c) Geo Information System
 - (d) None

3. Who invented the term the internet of things?
 - (a) Bill Gates (b) Kevin Ashton
 - (c) Steve Jobs (d) McDonald

4. What is the name of the first recognized IOT device?
 - (a) Smart watch (b) ATM
 - (c) Radio (d) Video Game

5. IEEE 802.15.4 are integrated on tiny solutions
 - (a) SoC (b) M2M
 - (c) IoT (d) IEEE

6. Stand alone smart thermostats use _____ to communicate with web services.
 - (a) LAN (b) MAN
 - (c) WIFI (d) Web

7. The NGC is the single point of contact for communication towards the _____ and _____.
- (a) GSCL, NGC (b) GSCL, DSCL
(c) GRAR, NGC (d) GSCL, NRAR
8. _____ which defines a protocol for retrieving sensor metadata for serial port (RS232)
- (a) PUCK (b) DUCK
(c) SOC (d) SOS
9. The Network Resources are software components hosted somewhere in the _____ or _____.
- (a) Cloud, Data
(b) Cloud, Database
(c) Network, Cloud
(d) Network, Data
10. RFI _____
- (a) Radio Frequency Identification
(b) Radio Frequency Identify
(c) Radio F-Index
(d) Radio F-ID

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write short notes on M2M Communication.

Or

- (b) Explain about Game Changers.

12. (a) Write about IOT value chains.

Or

- (b) Write short notes on Sensors and RFID.

13. (a) Write down the examples of Deployment scenario for devices.

Or

- (b) Write short notes on Wide Area Networking.

14. (a) Write down any four topological entities of device and Gateway Domains.

Or

- (b) Explain about Model notation and semantics.

15. (a) Explain :
(i) Sensors
(ii) Tags

Or

- (b) Write short notes on Virtual Entity functional group.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write in detail about IOT.

Or

- (b) Write about trends in information and communications technologies.

17. (a) Explain in detail about M2M value chain.

Or

- (b) Write about Information-driven global value chain.

18. (a) Explain about the objectives on IOT architecture.

Or

- (b) Write brief notes on Communication Layer.

19. (a) Explain about ETSI M2M high-level architecture.

Or

(b) Write notes on Information model.

20. (a) Explain briefly about functional model.

Or

(b) Write in detail about Information view.
