

Time:3 hrs

Marks:80

Question 1 is compulsory and solve any 3 from remaining 5 questions

- 1 Attempt any FOUR [20]
- a What is difference between IIOT and CPS
 - b What is the architecture of IIOT?
 - c What is the advantage of Foundation Fieldbus?
 - d What's the difference between protocol, middleware, web services and API?
 - e Explain any two methods for securing the OT (Operational Technology) systems.
- 2 a What environmental factors contributed to the Industrial Revolution? [10]
- b What is the 3-tier architecture of IIoT? [10]
- 3 a What is HART communication protocol? Explain the working of HART. [10]
- b Explain the IOT Protocol stack. [10]
- 4 a Explain the security benefits of Blockchain Technology to IoT. [10]
- b Explain the recommended IoT security best practices to keep devices and users secure. [10]
- 5 a Write short note on LoRa and LoRaWAN. [10]
- b What is blockchain based cryptocurrency for IoT? [10]
- 6 a Explain a typical CONOPs (Concept of Operations) document for a generic Internet of Things (IoT) application. [10]
- b What are the applications of IoT towards healthcare? [10]
