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## **(FOR THE CANDIDATES ADMITTED**

23UBI411

## **DURING THE ACADEMIC YEAR 2025ONLY)**

**REG.NO. :**

## **N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**

## **END-OF-SEMESTER EXAMINATIONS : MAY -2025**

B.COM B&I

**MAXIMUM MARKS: 75**

## **SEMESTER- IV**

## TIME : 3 HOURS

### **PART - III**

## INTRODUCTION TO INDUSTRY 4.0

## **SECTION – A**

**(10 X 1 = 10 MARKS)**

## **ANSWER THE FOLLOWING QUESTIONS.**

1. Industry 4.0 is associated with which type of industry transformation?  
(a) Heavy industry      (b) High-tech industry  
(c) Creative industry      (d) Green industry
2. Who coined the term Artificial intelligence at the Dartmouth Conference in 1956?  
(a) Alan Turing      (b) John McCarthy  
(c) Marvin Minsky      (d) Herbert A. Simon
3. What is one of the main challenges associated with big data applications?  
(a) Data security      (b) Data accuracy  
(c) Data variety      (d) Data privacy
4. How does IoT enhance learning in education?  
a) By automating administrative tasks  
b) By providing real-time feedback to students  
c) By managing school infrastructure  
d) By securing school networks
5. What benefit does Industry 4.0 offer consumers?  
(a) Standardized products  
(b) Reduced choices  
(c) Personalized products and services  
(d) Lower quality products

## **ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES**

6. Define Industry 4.0 .
7. What does AI stand for ?
8. What does the term "variety" refer to in the context of big data?
9. What does IoT technology primarily help manage in transportation?
10. Which technology is essential for Industry 4.0 advancements in manufacturing?

## SECTION – B

(5 X 5 = 25 MARKS)

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

11. a) What are the benefits of Industry 4.0?

(OR)

12. b) Explain the industrial Revolution 1.0 to 4.0.  
a) Differentiate between Natural(Human) Intelligence & Artificial Intelligence.  
**(OR)**  
b) What are the types of AI ?

13. a) What is Big data ?  
**(OR)**  
b) What are the essentials of Big data in Industries 4.0?

14. a) What are the Benefits of IOT in manufacturing industry?  
**(OR)**  
b) Difference between IOT and IIOT.

15. a) Discover the Artificial Intelligence jobs in 2030.  
**(OR)**  
b) What benefit does Industry 4.0 offer in terms of business sustainability?

**SECTION – C** **(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

16. a) What are the important tools that helps to implement Industry 4.0 in an industry?  
**(OR)**  
b) What is cyber physical system? Explain in detail.

17. a) Difference between AI foundation in Mathematical and Computer science.  
**(OR)**  
b) Discuss the AI History in detail.

18. a) What are the components of Big data ?  
**(OR)**  
b) What are the characteristics of Big data ?

19. a) Evaluate the role of IOT in Different sectors.  
**(OR)**  
b) Explain the concept of Augmented reality.

20. a) Investigate the evolving trend in Education 4.0.  
**(OR)**  
b) Explain the impact of industry 4.0 on society and government .

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