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(FOR THE CANDIDATES ADMITTED

23UHY617

DURING THE ACADEMIC YEAR 2023 ONLY)

REG.NO. :

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

END-OF-SEMESTER EXAMINATIONS : MAY 2026

B.A. History

MAXIMUM MARKS: 75

SEMESTER: VI

TIME : 3 HOURS

PART – III

23UHY617-Introduction to Industry 4.0

Section - A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. (K1)

MULTIPLE CHOICE QUESTIONS.

- 1) What are the advantages of Industry 4.0?
 - a) Improved productivity and efficiency
 - b) Low cost of implementation
 - c) Creating more vacancies for workers
 - d) No risk of hacking into the internal network
- 2) The Internet of Things (IoT), access to real-time data, and the introduction of cyber-physical systems mark the big changes for this era. _____
 - a) 3rd Industrial Revolution
 - b) Industry 4.0
 - c) Manufacturing Age
 - d) Industrial Revolution
- 3) When did Industry 4.0 start?
 - a) 2007
 - b) 2010
 - c) 2013
 - d) 2016
- 4) Which of the following is not a driver of Industry 4.0?
 - a) There is more data accessible.
 - b) The processing of information is much faster.
 - c) New materials allow lighter products.
 - d) The algorithms for forecasting and optimization are better than two decades before.
- 5) Which industry branches are suitable for industry 4.0 development?
 - a) Internet of Gadgets
 - b) Internet of Devices
 - c) Internet of Things
 - d) Internet of Systems

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES (K2)

- 6) What is Industry 4.0?
- 7) Define “Conceptual Framework”.
- 8) Comment on Roadmap for industry 4.0.
- 9) Relate the use of Internet of Robotic Things.
- 10) Write a note on augmented reality.

(CONT....2)

SECTION – B (5 X 5 = 25 MARKS)**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

- 11) a) Discover the core idea of industry 4.0.
(OR)
b) Examine the origin concept of industry 4.0.
- 12) a) Determine the State of Art in industry 4.0.
(OR)
b) Evaluate the supportive technologies of industry 4.0.
- 13) a) Summarize the advantages of technology roadmap for industry 4.0.
(OR)
b) Estimate the process development phase of roadmap.
- 14) a) Show the salient features of physical robotics.
(OR)
b) Outline the manufacturing for industrial robotic applications.
- 15) a) Illustrate the benefits of Augmented Reality.
(OR)
b) Describe the software technology used in Augmented Reality.

SECTION-C (5 X 8 = 40 MARKS)**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

- 16) a) Elaborate the current state of industry 4.0. (K4)
(OR)
b) Analyze the process of India preparing for industry 4.0. (K4)
- 17) a) Demonstrate the main components of Industry 4.0. (K5)
(OR)
b) Assess the proposed framework for Industry 4.0. (K5)
- 18) a) Identify the proposed frame work for technology roadmap. (K4)
(OR)
b) Elucidate the strategy phase for technology roadmap. (K4)
- 19) a) Discover the recent technological components of robots. (K5)
(OR)
b) Conclude the cloud robotics and cognitive architecture for cyber. (K5)
- 20) a) Integrate the hardware used for Augmented Reality. (K5)
(OR)
b) Assume the industrial applications of AR. (K5)
