

Register No.: ..... Name.: .....

**SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)**

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

**FOURTH SEMESTER MBA DEGREE EXAMINATION (S), SEPT 2022  
(2020 Scheme)****Course Code :** 20MBA204**Course Name:** Industry 4.0 and AI Applications for Business**Max. Marks :** 60**Duration: 3 Hours****PART A***(Answer all questions. Each question carries 2 marks)*

1. List the importance of adaptive manufacturing?
2. List the technologies that can be adopted for making your cities smart.
3. Differentiate between Android and AI.
4. Summarize the possibility of designing sustainability dynamic model.
5. Explain some security risk associated with Industry 4.0 ?

**PART B***(Answer any 3 questions. Each question carries 10 marks)*

6. Discuss the consequences of Industry 4.0 in Society Vs Safety and need of regulations.
7. Explain different types of communication devices in Industry4.0 with examples?
8. Explain the application of Industry 4.0 techniques in Inventory Management and Quality Control?
9. Evaluate the historical context of Industrial Revolution from Industry 1.0 to the present
10. Analyse the difference between Process planning using Traditional and I 4.0 method ?  
List the benefits, opportunities and challenges of implementing IoT?

**PART C**

*(Compulsory question, the question carries 20 marks)*

11. The talent requirements and number of skilled workers MBA Fourth Semester that the Swiss manufacturing industry will need to implement industry 4.0 remains unclear because of uncertainty about the areas where staff is needed, the time required to source the talent and the actual talent. The digital transformation to industry 4.0 will bring new challenges for many employees. Creative working processes, such as strategic planning or research and development, will have a greater need for the skills required to identify, introduce and implement the new and innovative business opportunities offered by industry 4.0. New business models and new models for corporation constitute the real value for industry 4.0, however this is not always apparent. Space for creativity needs to be established. This is a challenge for senior management: exploring the new, innovative business opportunities offered by industry 4.0 is not always easy while running a business on a day -to -day basis. To answer the question how companies can learn how change can be managed will be of key importance for senior management. Digitisation increases also the importance of new technical skills, notably in the case of operating activities and mechanical working processes in production, purchasing, warehouse and logistics. New process dependent systems making greater use of technology may prove to be a major challenge for existing employees. In some cases, employees require retraining or further training in operating these new applications if they are to make full use of them. In future Swiss manufacturing companies will have to pay even greater attention to developing the competencies of their employees and recruiting a digitally sophisticated workforce.

a) Explain the changes in working environment and nature of work, relationship between company, owners, employees and customers in the era of Industry 4.0.?

10 Marks

b) Analyse the ethical and social issues which impact the business due to digitization of the enterprise.?

10 Marks

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