5 Aug 2023

Total No. of Questions: 5]

P-3795

SEAT No.:

[Total No. of Pages : 2

# [6025]-84

#### M.B.A.

## 404OSCM: SC-OSCM-06: INDUSTRY 4.0

(2019 Pattern) (Semester - IV)

Time: 2½ Hours]

[Max. Marks: 50

Instructions to the candidates:

- 1) All questions carry equal marks.
- 2) All questions are compulsory.

#### Q1) Answer in short (Solve any 5)

[2 marks each]

- a) Describe Mechatronics.
- b) Development of Industry 4.0 in developed countries.
- c) Explain 4th Industrial Revolution.
- d) Comparison of Industry 4.0 factory and today's factory.
- e) Write about Network economy.
- f) Western approach for manufacturing excellence.
- g) Challenges for Industry 4.0.
- h) Enlist various Industrial Revolution.

### Q2) Answer any two out of three.

[5 Marks Each]

- a) Explain the concept of Smart manufacturing.
- b) Comment on pillars of Industry 4.0.
- c) Comment on smart transportation.

| <b>Q3)</b> a)  | What are Robots & Cobots? Explain with examples.   | [10      |
|----------------|--|----------|
|                | $OR_{\odot}$   |          |
| b)             | Discuss about Automated Guided vehicle with examples.  | [10]     |
| <b>Q4)</b> a)  | Describe Big data analysis anti relevant examples.   | [10]     |
|                | OR   |          |
| b)             | Explain four types of Analysis & discuss each with examples.   | [10]     |
|                |  |          |
| Q5) a)         | Write the challenges and opportunities for industry with respect to  | industry |
| <b>2</b> 37 w) | 4.0.   | [10]     |
|                | De Vice Control of the Control of th | vomnlec  |
| b)             | Describe Smart Industry Readiness Index (SIRI) with relevant ex  | [10]     |
|                | 9000   |          |
|                |  |          |

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[5860]-414

M.B.A.

OSCM - 404 : INDUSTRY 4.0

(2019 Pattern) (Semester - IV) (SC - OSCM - 06)

Time: 2½ Hours]

[Max. Marks: 50

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Each question has an internal choice.

Q1) Answer any Five out of 8 questions:

[2 each]

- a) Write about Japanese Vs Western approach for manufacturing excellence.
- b) List the developments of Industry 4.0 in developed countries.
- c) Write about Mechatronics.
- d) Write about business and society with respect to Industrial revolution.
- e) What is internet of things.
- f) What are drivers for Industry 4.0
- g) What are enablers for Industry 4.0
- h) Compare Industry 4.0 factory and Today's factory.

Q2) Answer Any Two:

[5 each]

- a) Discuss about collaborative platform and product life cycle Management in Industry 4.0.
- b) Describe about Reference Architectural Model Industries 4.0 (RAMI 4.0)
- c) What is Big data analytics and its significance of V's of big data.

| Q3) | Ans | wer Any One :  | [10] |
|-----|-----|--|------|
|     | a)  | Discuss about virtual Reality and Mixed Reality with examples.   |      |
|     | b)  | Discuss about strategies for competing in an Industry 4.0 era.   |      |
| Q4) | a)  | Explain cloud computing for Industry 4.0                         | [10] |
|     |     | OR   |      |
|     | b)  | Discuss about automated guided vehicles.                         | [10] |
| Q5) | a)  | How leadership is impacting Industry 4.0 in the current scenario | [10] |
|     |     | OR   |      |
|     | b)  | Explain about smart Industry Readiness Index with examples.      | [10] |
|     |     | * [ * ] *   *  |      |

| Total       | l No | No. of Questions : 5] SEAT No. :                                |                 |
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| PB4765      |      | 765 [6201]-414 [Total No. o                                     | f Pages : 2     |
|             |      | S.Y.M.B.A.<br>404-OSCM-SC-OSCM-06 : INDUSTRY 4.0                |                 |
|             |      | (Revised 2019 Pattern) (Semester - IV)                          |                 |
| Instr       |      | 2½ Hours] [Max. Max. Max. Max. Max. Max. Max. Max.              | Marks : 50      |
| Q1)         | Ar   | Answer any 5 out of 7.  | [5×2=10]        |
|             | a)   | ) Define Internet of Things(IoT).                               |                 |
|             | b)   | What is Automated Guided Vehicle (AGV)?                         |                 |
|             | c)   | Enlist any 2 challenges which can be faced by Industry 4.0?     |                 |
|             | d)   | ) Define Horizontal & Vertical Integration?                     |                 |
|             | e)   | ) Mention any 2 drivers & 2 enablers for Industry 4.0?          |                 |
|             | f)   | What do you mean by the term "Manufacturing Excellence"?        |                 |
|             | g)   | Define "Network Economy".                                       |                 |
| <i>Q2</i> ) | Ar   | Answer Any 2 out of 3.  | $[2\times5=10]$ |
|             | a)   | Explain in brief about Software Defined Network(SDN).           | 5               |
|             | b)   | Differentiate between Robots & Cobots.                          | V.              |
|             | c)   | List & explain any 5 strategies for competing in an Industry 4. | 0 era.          |
| <b>Q</b> 3) | Ar   | Answer any 1 out of 2.  | ×10=10]         |

Explain in detail about digitalization and the networked economy with a) example.

example.

OR

What do you mean by Big Data Analytics (BDA) and significance of V's b) of big data. Explain with example.

#### **Q4**) Answer any 1 out of 2.

 $[1 \times 10 = 10]$ 

a) Explain in detail: Artificial Intelligence and Cloud Computing Basics.

**OR** 

b) Briefly Explain Smart Industry Readiness Index (SIRI)

Q5) Answer any 1 out of 2.

 $[1 \times 10 = 10]$ 

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a) Illustrate with examples the complete ecosystem comprising of Industry 4.0 and adaptiveness of Society 5.0.

OR

b) What is the future of work system and skill requirements in India. Explain with the help of example.