1. Which of the following is a feature of the Fourth industrial revolution?
    a. Use of Mainframes and the Internet
    b. Mass production
    c. Utilization of machines in production processes
    d. Use of AI ML, and CPS

Answer: d

Justification: Refer to slides 3-6 from lecture 1 of week 2.

2. _____ has helped in producing objects that are mutable and adaptable. Fill in the blank.
    a. Digital fabrication
    b. Additive manufacturing
    c. Synthetic biology
    d. None of the above

Answer: a

Justification: Refer to slides 10-11 from lecture 1 of week 2.

3. Select the option that best describes the tipping point.
    a. Radical change in the future that leads to innovation
    b. Change that leads to failing economy
    c. A point which marks the profit in business
    d. A space in factory floor for goods collection

Answer: a

Justification: Refer to slides 22 from lecture 1 of week 2.

4. Which of the following is/are drivers of sustainability in Industry 4.0?
    a. Globalization
    b. Socio-economic factors
    c. Environmental factors
    d. All of the above

Answer: d

Justification: Refer to pages 58-62 from the book Introduction to Industrial Internet of Things and Industry 4.0.

5. Information regulation in public is covered under which of the following laws?
    a. Employment and Labor rules
    b. Advertisement regulations
    c. Environmental rules
    d. Privacy regulation

Answer: b

Justification: Refer to slides 14-18 from lecture 2 of week 2.

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6. How does population growth affect the manufacturing industry?
    a. It affects the food supplies
    b. It affects the availability of industrial locations
    c. It affects the political actions and outcomes
    d. All of the above

Answer: d

Justification: Refer to slides 19 from lecture2 of week 2.

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7. Which of the following statements is true about recession?
    a. Recession is the extremity of depression
    b. Recession stays for only two months
    c. Recession is observable on GDP of a country
    d. All of the above

Answer: c

Justification: Refer to slides 24-25 from lecture 2 of week 2.

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8. The lean manufacturing system, introduced by Toyoto, is based on which of the following approaches?
    a. JIDOKA
    b. JIT
    c. Both a and b
    d. SUDOKA

Answer: c

Justification: Refer to pages 171-173 from the book Introduction to Industrial Internet of Things and Industry 4.0.

9. Which of the following is not an impact of the Lean production system on manufacturing?
    a. Highest lead time
    b. Low cost
    c. High quality
    d. All of the above

Answer: a

Justification: Refer to slides 9-11 from lecture 3 of week 2.

10. What is KPI in the context of performance management?
    a. Key Product Index
    b. Key Performance Indicator
    c. Key Performance Index
    d. Key Product Identifier

Answer: b

Justification: Refer to slides 12-13 from lecture 3 of week 2.

11. Which of the following statements is/are true about smart and connected products?
    a. Smart and connected products are cheaper
    b. Decrease environmental impact
    c. Improves recall process of products
    d. All of the above

Answer: d

Justification: Refer to slides 3-4 from lecture 4 of week 2.

12. Lock-in centric business models helps in
    a. Preventing customer migration
    b. Eliminating errors
    c. Making faster transactions
    d. Creating new market for innovative product

Answer: a

Justification: Refer to slides 13-16 from lecture 4 of week 2.

13. What is the function of the digital layer in a smart business architecture?
    a. Data storage
    b. Data analysis
    c. Data processing
    d. All of the above

Answer: d

Justification: Refer to slides 22 from lecture 4 of week 2.

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14. Which of the following is not a characteristic of a smart factory?
    a. Proactivity
    b. Agility
    c. Opaque
    d. Optimization

Answer: c

Justification: Refer to slides 11 from lecture 5 of week 2.

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15. Which of the following falls under the Agility characteristic of a smart factory?
    a. Predicting future challenges
    b. Real-time tracking
    c. Connected smart devices
    d. Self-configuration

Answer: d

Justification: Refer to slides 11-16 from lecture 5 of week 2.