



# INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM  
Post Graduate Diploma in Materials Management - 2 years  
PAPER No. 9 (enrollment code- PGMM, PGSM)

Dec. 2024

## IT Applications in Management

Date : 18.12.2024  
Time : 10.00 a.m. to 1.00 p.m.

Max. Marks : 70  
Duration : 3 Hrs.

### Instructions:

1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. **Total : 20 Marks**
2. From Part B – Answer any 3 questions out of 5 questions. Each question carries 10 marks **Total : 30 Marks**
3. Part C is a case study (compulsory) with questions. **Total: 20 Marks**

### Part – A

[20 Marks]

(Attempt all questions. Each sub question carries 1 mark.)

#### Q.1 Fill In The Blanks

(5 Marks)

1. .... is the process of examining data sets to draw conclusions they contain.
2. .... is the cycle of inputting, processing, outputting, storing information in an information system.
3. .... are a set of quantifiable factors that are critical to the success of an organization.
4. .... stores all data as a unified body in a single central computer such as a mainframe.
5. .... is a set of computers connected together for the purpose of sharing resources.

#### Q.2 . Match The Following:

( 5 Marks)

##### A

1. LTE
2. Big data
3. Cognitive computing
4. E-commerce
5. Bar code

##### B

- A. data set
- B. machine learning algorithms
- C. goods and services on a computer network
- D. identifying the object
- E. cellular technology

#### Q. 3. Say True or False

(5 Marks)

1. Social network is defined by a user's connections and interactions with other people.
2. Batch data are high latency, or not in real time.
3. Digital dashboard is a graphical user interface used to publish data across an organization.
4. Chatbot is a service powered artificial intelligence that stimulates a conversation with a customer.
5. Data silo are distributed data stores.

#### Q. 4. Write the full forms of the following

( 5 Marks)

1. TOS
2. CTR
3. FBS
4. QMS
5. BPS

## **PART – B**

**(Answer Any Three. Each question carry 2 \* 5 = 10 marks)**

**[30 Marks]**

- Q.5. A) Explain the role of IT in improving business processes. **(5 Marks)**  
B) Describe IT infrastructure, IT architecture, and enterprise architecture. **(5 Marks)**
- Q.6. A) Differentiate between a database and a data warehouse. **(5 Marks)**  
B) Explain various benefits companies can gain from the Internet of Things (IoT) and edge computing. **(5 Marks)**
- Q.7. A) List and explain the IT defense tools that can be used to protect organizations from cyberattacks. **(5 Marks)**  
B) Describe different phases of decision-making. **(5 Marks)**
- Q.8. A) How Semantic Web technology enhances the accuracy of search engines results? Elaborate. **(5 Marks)**  
B) Explain how mobile technologies are creating opportunities for new forms of commerce. **(5 Marks)**
- Q.9. A) Elaborate the approaches in which HRIS can improve the HR function. **(5 Marks)**  
B) What are the key factors that lead to a successful ERP implementation? Explain. **(5 Marks)**

## **PART - C [ Compulsory ]**

**[ 20 Marks ]**

**Q. 10 Read the following case answer the questions.**

Blockchain technology (BCT) is widely used in various applications where different stakeholders of their own interest are coming together where they cooperate and coordinate in trustless decentralized environment. The BCT is more suitable for supply chain management (SCM) applications. The food items supply chain is sensitive issue, and it is difficult to handle the problems food traceability, safety enable, authentication of stakeholders, security and consensus, transparency in transactions, food items shortfall, matching demand and supply chain wastage of material, etc. The Hyper ledger fabric transaction flow is formed to record the world state by passing communication channels on peer to peer through farmers to distributors, distributors to food processing industry, food processing industry to distributors, distributors to retailers, and lastly retailers to customers. This uses core components of blockchain technology by designing specific architecture, writing smart contracts on Ethereum platform which provides facilitation for certain kind of food supply chain ordering services as a public permissioned platform. It uses the properties of distributed and peer-to-peer supply chain architecture.

**Questions:( 2 x 10 = 20 marks)**

1. Identify various supply chain management flows and the major capabilities of SCM.
2. Describe the role of a CRM system with respect to customer lifetime value.
3. Explain the different markets served by online retailers and the strategies they set to conduct e-commerce.
4. Describe how search engines work and identify ways that businesses gain competitive advantage by using search technology effectively.

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