Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER –IV-EXAMINATION – WINTER-2022

Subject Code: 2840008 Date: 13/12/2022
Subject Name: Technology and Business
Time:10:30 AM to 01:30 PM Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 (a) Answer following multiple choice questions. **06**

1. _____ is nothing but using digital technology for business transformation.

A. Social Business
B. Digital Business
C. E-Commerce
D. Web 2.0

2. The set of processes developed in an organization to create, gather, store, transfer, and apply knowledge, best describes:
A. organizational leanings
B. knowledge management
C. organizational memory
D. knowledge assets

3. A knowledge-intensive computer program that captures the expertise of a human in limited domains of knowledge describes:
A. virtual reality
B. a neural network
C. a decision support system
D. an expert system

4. Which of the following refers to rule-based AI tolerates imprecision by using nonspecific terms called membership functions to solve problems?
A. Genetic algorithms
B. Expert system
C. Hybrid system
D. Fuzzy logic

5. What are the primary business benefits of an ERP system?
A) Sales forecasts, sales strategies, and marketing

campaigns
B) Market demand, resource and capacity constraints, and real-time scheduling
C) ***Forecasting, planning, purchasing, material management, warehousing, inventory, and distribution***
D) All of the above

6. In recent years, CRM has become a primary component of:

A) ERP vendors
B) ERP software solutions
C) CRM software
D) CRM solutions

Q.1 (b)		**(i)** Write answers in short. 1. Privacy policy 2. Firewall 3. ERP 4. Virus	**04**
		(ii) Write down short note on: Central Processing Unit (CPU)	**04**
Q.2	**(a)**	Explain major components of Business Intelligence. Also explain managerial issues involved with BI.	**07**
	(b)	Write down short note on: Role of IT in Knowledge Management System (KMS).	**07**
		OR	
	(b)	What do you mean by "Porter's Five Force Model"? Explain this model with example of any IT sector.	**07**
Q.3	**(a)**	Discuss why it is difficult to justify CRM and how metrics can help.	**07**
	(b)	List and describes the four drivers of Supply Chain Management.	**07**
		OR	
Q.3	**(a)**	Why should organizations analyze their processes before implementing an ERP solution?	**07**
	(b)	Describe advantages and disadvantages of outsourcing with respect to India	**07**
Q.4	**(a)**	Describe the six major categories of hardware and provide an example of each.	**07**
	(b)	Explain Porter's five forces model of IT industry.	**07**
		OR	
Q.4	**(a)**	Discuss in detail the benefits and challenges of e-business.	**07**
	(b)	Describe the role of IT in knowledge management.	**07**

Q.5 CASE STUDY:

Hash Café is a coffee shop giant that has 120 branches all over Philippines and has been in the business for 25 years. For the past 2 years, it has encountered problems supplying its branches. Furthermore, The management of Hash Café decided to create a technical working group to investigate the rising costs and supply chain issues in order to know where the problem lies and to suggest ways and means to address it.

The following were the findings made by the technical working group:

a. Fewer than 50% of outlet deliveries were arriving on time

b. Several poor outsourcing decisions had led to excessive expenses

c. The supply chain had evolved and had unnecessarily become complex.

(a) What do you think are the root causes of the major problems encountered by Hash Café? **07**

(b) What corrective actions should the management do to resolve each finding by the technical working group? **07**

OR

Q.5 **CASE STUDY:**

One of the world's largest manufacturers of computer chips, Intel needs little introduction. However, the company needed to reduce supply chain expenditure significantly after bringing its low-cost "Atom" chip to market. Supply chain costs of around $5.50 per chip were bearable for units selling for $100, but the price of the new chip was a fraction of that, at about $20.

Somehow, Intel had to reduce the supply chain costs for the Atom chip, but had only one area of leverage—inventory. The chip had to work, so Intel could make no service trade-offs. With each Atom product being a single component, there was also no way to reduce duty payments. Intel had already whittled packaging down to a minimum, and with a high value-to-weight ratio, the chips' distribution costs could not be pared down any further.

The only option was to try to reduce levels of inventory, which, up to that point, had been kept very high to support a nine-week order cycle. The only way Intel could find to make supply chain cost reductions was to bring this cycle time down and therefore reduce inventory.

Intel decided to try what was considered an unlikely supply chain strategy for the semiconductor industry: make to order. The company began with a pilot operation using a manufacturer in Malaysia. Through a process of iteration, they gradually sought out and eliminated supply chain inefficiencies to reduce order cycle time incrementally. Further improvement initiatives included:

- Cutting the chip assembly test window from a five-day schedule, to a bi-weekly, 2-day-long process
- Introducing a formal S&OP planning process
- Moving to a vendor-managed inventory model wherever it was possible to do so

through its incremental approach to cycle time improvement, Intel eventually drove the order cycle time for the Atom chip down from nine weeks to just two. As a result, the company achieved a supply chain cost reduction of more than $4 per unit for the $20 Atom chip—a far more palatable rate than the original figure of $5.50.

(a) What are the challenges faced in supply chain cost reduction? **07**

(b) How Intel reduced supply chain cost? **07**

****