Course Code	**:**	**BCOS-184**
Course Title	**:**	**E-Commerce**
Assignment Number	**:**	**BCA_NEW/BCAOL(V)184/Assign/2026-27**
Maximum Marks	**:**	**100**
Last Dates for Submission	**:**	**31st October, 2026 (For July 2026 Session)**
	:	**30th April, 2027 (For January 2027 Session)**

Note: Attempt all the questions.

Q1: Analyze the role of Emerging Technologies in E-Commerce. Discuss how Artificial Intelligence (AI), the Internet of Things (IoT), and Blockchain are transforming online business processes. **(10 Marks)**

Q2: Explain the Website Development Process in detail. Describe the significance of each step, from "Innovative Requirement" to "Maintenance". **(10 Marks)**

Q3: Discuss the various E-Commerce Business Models based on target customers. Provide real-world examples for B2B, B2C, C2C, and D2C models. **(10 Marks)**

Q4: Examine the Information Technology (IT) Act, 2000. What are its primary objectives, and how does it provide a legal framework for E-Commerce in India? **(10 Marks)**

Q5: Evaluate the "7C's of the E-Retail Mix." How do these components help an e-tailer provide superior value to customers compared to traditional 4P marketing? **(10 Marks)**

Q6: Distinguish between Inventory-based and Marketplace-based E-tailing models. Use examples like Amazon or Alibaba to illustrate your answer. **(6 Marks)**

Q7: What is a Payment Gateway? Explain its role as a "middleman" in securing online transactions between a customer and a merchant. **(6 Marks)**

Q8: Explain the "C.I.A. Triad" in the context of Cyber Security. Why is each component (Confidentiality, Integrity, and Availability) critical for an e-commerce business? **(6 Marks)**

Q9: Discuss the advantages and disadvantages of E-tailing for retailers. Focus on aspects like location utility and complex logistics management. **(6 Marks)**

Q10: What are the different types of Website Hosting? Briefly explain Shared, VPS, and Cloud hosting. **(6 Marks)**

Q11: Differentiate between HTTP and HTTPS. Why is the "S" version essential for e-commerce websites? **(5 Marks)**

Q12: Write a short note on FinTech. How is it redefining traditional banking services? **(5 Marks)**

Q13: What are the features of Virtual Currency? Mention why Distributed Ledger Technology (DLT) is used for these transactions. **(5 Marks)**

Q14: Briefly describe E-Governance in India. List at least three popular e-governance schemes (e.g., Digital India). **(5 Marks)**

Q1: Analyze the role of Emerging Technologies in E-Commerce. Discuss how Artificial Intelligence (AI), the Internet of Things (IoT), and Blockchain are transforming online business processes. (10 Marks)

Answer

E-commerce no longer means only displaying products and accepting orders on a website. Emerging technologies are changing how customers search, how sellers forecast demand, how goods move and how trust is created between parties who may never meet. Artificial Intelligence (AI), the Internet of Things (IoT) and blockchain make online business more responsive, data-driven and connected. Their value is best understood through the actual business activities they improve.

Artificial Intelligence: better decisions and personalised service

AI systems learn patterns from information such as search history, product views, past purchases and customer feedback. A recommendation engine can suggest suitable products instead of showing every buyer the same catalogue. Search tools can understand natural-language questions, while multilingual chatbots can answer routine enquiries at any hour. AI is also useful behind the screen: demand forecasting helps a retailer order the right stock, and fraud-detection systems flag unusual payment or login behaviour for further checks. For example, an online clothing store may estimate demand for winter jackets by considering previous sales, locations and seasonal trends. The store can then allocate inventory before a rush begins.

These systems are not perfect. Weak training data may produce poor recommendations; excessive personalisation can feel intrusive; and a chatbot may provide an incorrect answer. Businesses need consent-based data handling, human support for difficult cases, and regular evaluation of AI outputs. AI should assist decisions rather than remove accountability for them.

Internet of Things: connecting products and logistics

The IoT connects physical devices with networks so that they can collect and share information. Sensors, RFID tags, smart shelves, GPS trackers and temperature monitors create live information about inventory and deliveries. A warehouse can detect low stock and alert staff; a delivery fleet can report location and vehicle condition; and a cold-chain sensor can record whether medicines or food remained within safe temperature limits. These details improve the accuracy of promised delivery dates and reduce avoidable losses.

IoT also creates new ways of selling. A connected appliance may notify its owner that a consumable needs replacement, although placing an order should