



23MBPC601

MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING

(A Unit of Rajalaxmi Education Trust®, Mangalore)
Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE, New Delhi
Accredited by NAAC with A+ Grade & ISO 9001:2015 Certified Institution

Model Question Paper

Third Semester MBA Degree Examination

Emerging Technologies and Application in Business

Time: 3 Hours

Max. Marks: 100

Note: 1. Answer any FOUR full questions from Q1 to Q7.

2. Question No. 8 is compulsory.

3. M: Marks, L: RBT (Revised Bloom's Taxonomy) level, C: Course outcomes.

			M	L	C
Q1	a.	Explain with example the term “Artificial Intelligence”	03	L2	CO4
	b.	Mr. Kevin, a bank employee who deals very less with technology, computers and cell phones, carries a notion that AI is just ChatGPT. Educate Mr. Kevin by explaining the different types of AI and make him understand that AI encompasses much more than ChatGPT.	07	L2	CO4
	c.	A leading fintech company is exploring blockchain technology for secure transactions. Discuss the benefits and challenges of it in modern digital infrastructure.	10	L3	CO1
Q2	a.	“Data science can add value to any business”. Justify the given statement elaborating whether business really needs data science.	03	L2	CO2
	b.	Augmented reality (AR) and virtual reality (VR) are both technologies that use digital elements to alter reality, but they differ in how they do so. Explain how this statement can be right.	07	L2	CO3
	c.	A software development firm is building a data analytics platform that processes various types of information, including numbers, text, and images. Illustrate different data types and their representations in computer systems.	10	L3	CO2
Q3	a.	“Digital privacy preserves human dignity”. Elaborate the concept of digital privacy in the light of the given statement.	03	L2	CO4
	b.	Technology, which has made our lives incomparably better, is now one of the greatest threats humankind is facing. Demonstrate the ethics that can help to ensure that technology is developed and used responsibly, and that it benefits society while protecting individual's rights.	07	L3	CO1
	c.	Elaborate the applications of IoT at Smart Home and Smart Grid.	10	L3	CO2
Q4	a.	Explain the applications of AR with reference to Management.	03	L2	CO3
	b.	As a digital marketing consultant, you come across clients who are from various sectors like healthcare, education and business. When you suggest them of implementing VR applications in their areas, they abruptly deny saying they think it is just for games. Demonstrate the impact of Virtual Reality on different sectors and help them to understand.	07	L3	CO3
	c.	A smart home company is developing a new system that allows users to control	10	L3	CO2

		their home's lighting, heating, and security from a smartphone app. Illustrate the key parts of the Internet of Things (IoT) architecture that the company would need to implement to make the smart home system work. Also elaborate how IoT has impacted our lives.			
Q5	a.	Is cloud computing beneficial for business administration? Explain how can cloud computing add value to Business.	03	L2	CO4
	b.	Data breaching has become the most common activity among cybercriminals over the last few years since they started targeting IoT. What advantages do you think IoT has over these bottlenecks?	07	L2	CO2
	c.	A custom motorcycle company wants to improve its production process by using 3D printing to create custom parts for its motorcycles. These parts include components such as exhaust pipes, brackets, and handles, which are often highly specialized and need to be tailored to individual customer specifications. The company aims to reduce production costs, shorten lead times, and provide more customization options for its customers. In this scenario, explain how additive manufacturing technology would be applied to produce the custom motorcycle parts.	10	L3	CO4
Q6	a.	Elaborate the challenges of IoT.	03	L2	CO4
	b.	An IR expert says, Digitizing industrial processes to accomplish an adaptive yet extensive production and service network like manufacturing industry the performance can be enhanced. Connecting the statement to IR 4.0 Demonstrate emerging technologies in IR 4.0 and how it could shape the future of a business	07	L3	CO1
	c.	A global retail company wants to optimize its supply chain operations by using big data analytics. They have multiple data sources, including sales data from various stores, inventory data from warehouses, customer feedback from social media, and IoT data from logistics trucks. The company wants to understand consumer demand patterns, predict inventory needs, and improve delivery efficiency. Given the above scenario, make use of the stages of the Big Data life cycle to address the company's goals.	10	L3	CO4
Q7	a.	Explain Mixed Reality and different areas where it can be applied.	03	L2	
	b.	Eliza, the first chatbot, was invented in the 1960s, but soon ran up against its limitations: It couldn't answer follow-up questions. That's different now. Explain how the scenario has changed over the decades explaining in detail the Industrial Revolution and how Industry has evolved over this period of several decades.	07	L3	CO2
	c.	AI-driven innovations in business processes and educational strategies transform traditional models of customer engagement and personalized learning. They also can help healthcare systems address the challenges of patient care. Validate the statement by explaining the applications of AI.	10	L3	CO4

<u>CASE STUDY (Compulsory)</u>					
Q8		FintechOS works with banks and companies in the finance industry to digitize their customer experience by building custom platforms. Their goal is to make their service more accessible to their non-technical clients by leveraging artificial intelligence for a low-code digital creation process. "We replaced a three-day paper-based process with a 15-minute digital customer journey, thanks to Azure's Integrated AI capabilities," says Remco Jorna, Chief of Technology Officer at FintechOS. "Azure services freed us from preparing the underlying platform and let us focus on developing our solution."			
		Questions:			
	a.	Elaborate the improvements that can be seen by FintechOS after the implementation of AI Tools?	10	L3	CO4
	b.	State how FintechOS can improve the security of customer identity by using AI Tools.	5	L2	CO4
	c	Discuss the challenges they may face with this change.	5	L3	CO2
