

Bangladesh IT Quiz and Programming Contest - 2025

Syllebus

Module	Topc	Sub-Topic
Artificial Intelligence (AI)	Introduction to AI	Definition, History, Applications
	Machine Learning	Supervised, Unsupervised, Reinforcement Learning
	Deep Learning	Neural Networks, CNN, RNN
	Natural Language Processing	Text Processing, Chatbots, Sentiment Analysis
	Computer Vision	Image Recognition, Object Detection
	AI Ethics	Bias, Privacy, Fairness
Networking	Fundamentals	LAN, WAN, MAN, Topologies
	Models & Protocols	OSI Model, TCP/IP Model
	Devices	Routers, Switches, Firewalls
	Network Security	Encryption, VPN, IDS/IPS
	Wireless & Mobile Networks	Wi-Fi, 4G/5G
	Cloud Networking	Virtual Networks, SDN
Computer Programming (CP)	Basics	Syntax, Variables, Data Types
	Control Structures	Loops, Conditionals
	Functions & Modules	Reusability, Libraries
	Object-Oriented Programming	Classes, Inheritance, Polymorphism
	Data Structures	Arrays, Linked Lists, Stacks, Queues, Trees
	Algorithms	Searching, Sorting, Complexity
	Web Development	HTML, CSS, JavaScript
	Databases	SQL Basics, CRUD Operations
Recent Developments	Internet of Things (IoT)	Sensors, Smart Devices, Applications
	Blockchain	Cryptocurrency, Smart Contracts
	5G & Edge Computing	Features, Use Cases
	Quantum Computing	Qubits, Applications
	Green ICT	Energy Efficiency, Sustainable Computing