

University of Mumbai
Examination 2020 under Cluster 06
(Lead College: Vidyavardhini's College of Engg Tech)
Examinations Commencing from 6th January 2021 to 6th January 2021

Program: **Electronics Engineering**

Curriculum Scheme: Rev 2016 Examination: BE Semester VII

Course Code: **ELXDLO7032** and Course Name: **Advanced Networking Technologies**

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	High-speed switching, reliability and fault tolerance are considerations at the ---- layer
Option A:	Core
Option B:	Distribution
Option C:	Application
Option D:	Access
2.	The 802.11 MAC Sublayer Protocol uses The method of -----
Option A:	Carrier Sense Multiple Access/Collision Avoidance
Option B:	virtual circuit switching
Option C:	non real time data
Option D:	packet switching
3.	Methods of Control in Firewall are -----
Option A:	User Control
Option B:	Access Control
Option C:	User Control, Access Control, Behavior Control and Direction control
Option D:	Direction control
4.	LAN uses IEEE ---- and WAN uses IEEE ----
Option A:	802.14,802.11
Option B:	802.11, 802.16
Option C:	802.15, 802.13
Option D:	802.11, 802.12
5.	Google App Engine, is an example
Option A:	IAAS
Option B:	PASS
Option C:	SAAS
Option D:	HAAS
6.	Network designs vary depending on the size Small network: ----- Medium-size network: ----- Large network: -----
Option A:	up to 200 devices,200 to 1,000 devices,1,000+ devices
Option B:	up to 100 devices,100 to 500 devices,1,000+ devices
Option C:	up to 500 devices,500 to 1,000 devices,1,000+ devices
Option D:	up to 100 devices,100 to 500 devices, 500+ devices

7.	_____ layer in ATM reformats the data received from other network.
Option A:	ATM physical
Option B:	ATM Logical
Option C:	ATM Adaptation
Option D:	ATM Data
8.	Structured Engineering Principles in Network Management are -----
Option A:	Hierarchy, Modularity, Flexibility, Security
Option B:	Hierarchy, Modularity, Resiliency, Security
Option C:	Modularity, Resiliency, Flexibility, Security
Option D:	Hierarchy, Modularity, Resiliency, Flexibility
9.	VCI is abbreviated as _____ identifier.
Option A:	Virtual Circuit
Option B:	Virtual Channel
Option C:	Virtual code
Option D:	Virtual connection
10.	One of the main challenges that prevent end users from adopting cloud storage services is -----
Option A:	The fear of gaining data
Option B:	The fear of data corruption
Option C:	The fear of losing data or data corruption
Option D:	The fear of losing data
11.	Bluetooth operating range of Class 2 radio device is up to _____
Option A:	1 meter
Option B:	10 meter
Option C:	100 meter
Option D:	50 meter
12.	In Bluetooth, the _____ link is used when data integrity is more important than avoiding latency.
Option A:	SCO
Option B:	ACO
Option C:	ACL
Option D:	SCL
13.	Segmentation is done by _____
Option A:	Link manager layer (LML)
Option B:	Baseband and radio layers
Option C:	Logical link control and adaptation protocol layer (L2CAP)
Option D:	RFCOMM Layer
14.	which of the following type of RFID tag have battery.
Option A:	Passive
Option B:	Active
Option C:	Semi-passive
Option D:	both Active and Semi - passive

15.	how many low power states in bluetooth
Option A:	1
Option B:	2
Option C:	3
Option D:	4
16.	Garbage collection time in RIP is
Option A:	30
Option B:	60
Option C:	120
Option D:	180
17.	which area of OSPF network is called backbone area?
Option A:	area 0
Option B:	area 1
Option C:	area 2
Option D:	area 3
18.	What is the administrative distance of OSPF?
Option A:	90
Option B:	100
Option C:	110
Option D:	120
19.	In SONET, each synchronous transfer signal STS-n is composed of _____
Option A:	2000 frames
Option B:	4000 frames
Option C:	16000 frames
Option D:	8000 frames
20.	DWDM stands for _____
Option A:	Digital Wavelength-Division Modulation.
Option B:	Dense Wavelength-Division Multiplexing
Option C:	Double Wavelength-Division Modulation
Option D:	Dense Wavelength-Division Modulation

Q2 (20 Marks Each)	
A	Solve any Two 5 marks each
i.	Explain SONET architecture.
ii.	Compare RIP with OSPF.
iii.	Draw and explain “Cloud Computing Architecture”. Explain SPI framework of Cloud Computing.
B	Solve any One 10 marks each
i.	Why is Congestion Control necessary? What are its Causes and discuss relevant solutions.
ii.	With suitable diagrams discuss a typical enterprise hierarchical LAN

	campus network design showing three layers.
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Q3. (20 Marks Each)	
A	Solve any Two 5 marks each
i.	
ii.	Draw and explain ATM Network interfaces and ATM cell format.
iii.	Discuss Avoidance of Collisions by 802.11 MAC Sublayer, with suitable diagram.
B	Solve any One 10 marks each
i.	Explain Bluetooth protocol stack.
ii.	Explain OSPF protocol with example and frame format.