

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May2020

Course: IPv6 Analysis & Applications

Program: B.Tech CSE+IoT

Semester: Vith

Course Code: ECEG3010

Which of the following is not a temporary solution to CIDR lacking IPv4 addresses? NAT	Both	Correct	None	Incorrect
Which of the following is not a IPv6 feature? Mobility	Aggregation	Incorrect	Auto Configuring	Incorrect
Find Binary Equivalent of IP 11000010.10101110.1100100.1000100				Correct
Find decimal equivalent 10000001 00001011	Correct 129.11.12.239	Incorrect 128.11.11.239	Incorrect 129.11.11.231	Incorrect
If a block of addresses is granted to a small organization. If one of the addresses is 205.16.37.39/28. What is the first address in the block?	Incorrect 205.16.37.34	Incorrect 205.16.37.32	Correct 205.17.37.39	Incorrect
Which of the following is not a type of query message ? Echo	Incorrect Timestamp	Incorrect AddressMask	Incorrect Address Deplete	Correct
Which of the following is not type of Error Reporting message? Source Quench	Incorrect Destination Quench	Correct Redirection	Incorrect Parameter Problem	Incorrect
Which of the following has loop instability problem? BGP	Incorrect OSPF	Incorrect None	Incorrect RIP	Correct
Which of the following uses Dijkstra? BGP	Incorrect RIP	Incorrect DVR	Incorrect OSPF	Correct
Which of the following broadcast packets to all destinations? RIP	Incorrect BGP	Incorrect OSPF	Correct PVR	Incorrect

Packets in the IPv4 layer are called datagrams. A datagram consists of a header, 20 to 40 bytes and data. The maximum length of a datagram is 65,535

TF bytes.

The IPv4 datagram header consists of a fixed, 10-byte section and a variable options section with a maximum of

TF 40 bytes.

An IPv6 datagram is composed of a base header

TF and a payload 1

The six IPv6 options each have a specific function. They are as follows: filler between options for alignment purposes, padding, recording the route the datagram takes, selection of an optional route by the sender, selection of certain routers that must be visited, and recording of processing

TF times at routers.

The MTU is the maximum number of bytes that a data link protocol can encapsulate.

MTUs is constant for all

TF protocol .

Extension headers add functionality to the IPv6

TF datagram. 1

Three strategies used to handle the transition from version 4 to version 6 are dual stack, tunneling, and

TF header translation. 1

No ICMP error message will be generated in response to a datagram carrying an

TF ICMP error message 1

No ICMP error message will be generated for a datagram having a special address such as 127.0.0.0 or

TF 0.0.0.0. 1

In ICMP message, a node sends a message that is answered in a specific format by the destination

TF node. 1

Packet InterNet Groper (ping) is an application program that uses the services of ICMP to test the reachability

TF of a host. 1

The checksum for ICMP is calculated by using both the header and the data fields

TF of the ICMP message 1

ICMPv6, like version 4, reports errors, handles group memberships, updates specific router checks the viability of a host but doesn't updates

TF host table.

Unicast mode of addressing is used to uniquely identify an IPv6 interface (host) a network

TF segment. 1

When a packet sent to a unicast address, it directs it to be delivered to the interface identified

TF by that address 1

According to RFC 4291, the global addresses

MCare_____Unspecified

IncorrectLoopback

IncorrectLinklocal

IncorrectSpecified

Correct

Unique Local addresses have an initial part of

TF FC00::/7 1

In an IPv4 embedded address, an IPv4 address is present in the lower order

TF 28 bits. 1

For IPv6 hosts communicate easily within an IPv4 infrastructure, automatic tunneling mechanism INATAR is

TF currently defined.

—
identifi
es zero
or
more
interfa
ces
(group
of
IPv6
interfa
ces)
which
are
present
on the
same

MC_____of address

Anycast

IncorrectGlobal Unicast

IncorrectUnicast

IncorrectMulticast

In an IPv6 unicast or anycast address, the second part is normally a 128-bit interface identifier which denotes the

TF network interface of a host. Solicited-node multicast addresses are used as a more efficient approach to IPv4's broadcast address

TF 1

IPv6 has a unique ability of automatically configuring itself, even without aid of an address configuration protocol such

TF as DHCPv6. 1

If a NA message (as a reply to NS message) is received in NDP, it indicates

MC_____of address

Presence

IncorrectDepletion

IncorrectDuplication

Correct Absence

IPv6-over-IPv4 tunneling provides an encapsulation of IPv6 packets with an IPv4 header so that IPv6 packets can be sent over an IPv6-only

TF infrastructure

MC:::1 is a Unspecified

IncorrectLoopback

CorrectLinklocal

IncorrectSpecified

Incorrect

COAP_HTTP proxying does not include which of the following? None		Correct GET	Incorrect PUT	Incorrect DELETE	Incorrect
Which of the following is not a terminology in RFC 7252? None		Correct Sender	Incorrect Recipient	Incorrect Client	Incorrect
Which of the following is not a terminology in RFC 7252? CON CoAP stands		Incorrect NON CON	Incorrect ACK	Incorrect None	Correct
MC for _____ . Constrained Application Protocol		Correct Constrained Application Program	Incorrect Constant Application Program	Incorrect Constant Application Protocol	Incorrect
each hop and hence a looping packet is quickly destroyed even if the loop has a short					
MC duration TTL		Correct RTL	Incorrect LTR	Incorrect LTT	Incorrect
The CoAP is a simple _____ layer protocol targeted to simple electronic devices (e.g. IoT/M2M things) to allow them to communicate interactively over the Internet					
MC Application		Correct Network	Incorrect Link	Incorrect Transport	Incorrect
The CoAP is designed for low power sensors and for actuators that need to be controlled or monitored remotely using IP/Internet networks	1				

