

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 toCIDR	NAT	Both			
MClacking IPv4 addresses? Incor	rectIncorrect	Correct None	Incorrect		
Which of the following is not					
MCa IPv6 feature?MobilityIncor	rectAggregationIncorrectA	Auto Configuring Incorrect E	nd to End ConnectivityCorr	ect	
Find Binary Equivalent of IP			•		
11000010.101011110.1100100.100	00100				
MCaddress 192.168.100.100?				Incorrect	
11000000.10101001.1100111.110	00100 Incorrect 11000000.1	0101000.1100100.1100100	Correct		
11000010.10101110.1100100.110	00100 Incorrect				
Find decimal equivalent	Correct 129.11.12.239	Incorrect128.11.11.239	Incorrect129.11.11.231	Incorrect	
10000001 00001011					
MC00001011 11101111.					
129.11.11.239					
If a block of addresses is	Incorrect205.16.37.34	Incorrect 205.16.37.32	Correct 205.17.37.39	Incorrect	
granted to a small					
organization. If one of					
the addresses is					
205.16.37.39/28. What					
is the first address in the					
MCblock? 205.17.37.38					
Which of the following is not	Incorrect Timestamp	IncorrectAddressMAsk	Incorrect Address	Correct	
MCa type of query message?			Deplete		
Echo					
Which of the following	IncorrectDestination	Correct Redirection	IncorrectParameter	Incorrect	
is not type of Error	Quench		Problem		
Reporting					
MCmessage? Source Quench					
Which of the following has	IncorrectOSPF	IncorrectNone	IncorrectRIP	Correct	
MCloop instability problem?					
BGP					
Which of the following	IncorrectRIP	IncorrectDVR	IncorrectOSPF	Correct	
MC uses Dijkstra?BGP					
Which of the following	IncorrectBGP	IncorrectOSPF	Correct PVR	Incorrect	
broadcast packets to all					
MCdestinations? RIP					

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

The six IPv4 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.
 Three strategies used to handle the transition from version 4 to version 6 are dual stack,
  tunneling, and
TF header translation.
 No ICMP error message will be generated in response to a datagram carrying an
TF ICMP error message
 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.
 In ICMP message, a node sends a message that is answered in a specific format by the destination
 Packet InterNet Groper (ping) is an application program that uses the services of
 ICMP to test the reachability
TF of a host.
 The checksum for ICMP is calculated by using both the header and the data fields
TF of the ICMP message
 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.
  When a packet sent to a
 unicast address, it directs it to be delivered to the interface identified
TF by that address
According to RFC 4291, the global
addresses
                     _Unspecified
                                         IncorrectLoopback
                                                                       IncorrectLinklocal
                                                                                                   IncorrectSpecified
                                                                                                                                 Correct
 Unique Local addresses
 have an initial part of
TF FC00::/7
 In an IPv4 embedded address, an IPv4 address is present in the lower order
TF 28 bits.
 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
MCor different networks.
                                              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
 IPv6 has a unique ability of automatically configuring itself, even without aid of an address configuration protocol such
TF as DHCPv6.
 If a NA message (as a reply to NS message) is received in NDP, it indicates
               of address
                                            Presence
                                                                    IncorrectDeplection
                                                                                                 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
```

6LoWPAN supports both TF mesh-under and route-over. 1				
address				
is not assigned to any MCphysicla interface.Unspecified address used	Incorrect Loopback	Correct Linklocal	IncorrectSpecified	Incorrec
MConly as source address. Unspecifiedaddress is similar to	Correct Loopback	Incorrect Linklocal	IncorrectSpecified	Incorrec
MCprivate address in IPv4. Unique Local	Correct Loopback	IncorrectLinklocal	Incorrect Specified	Incorrec
is a routable address in IPV6,similar to public MCIPv4 address.Uniqu Local LoWPAN Nodes to IP nodes communic	IncorrectGlobal Unicast	Correct Linklocal	IncorrectSpecified	Incorrec
TF normal IP nodes 1 6LoWPAN compression is stateless, and	•	J		
TF simple and reliable 1	•			
RPL routes are optimized for communic TF sinks for the topology 1	eation and transmission of pac	ekets to or from one or more of	f roots acting like	
NDP responsible for gathering information MCrequired for				
*	IncorrectConfiguration	Incorrect both	Correctnone	Incorrec
TF cycles 1 A RPL Instance provides routes to certa DODAG roots or alternate paths TF within the DODAG 1		able via the		
Which of the following is not MCa drawback of LoWPAN? Low Bandwidth Which of the following is not MCan advantage of LoWPAN? LOW	Incorrect Security	IncorrectLow Power	Correct Sleeping mode	Incorrec
COST In high	IncorrectsHOrt Range	IncorrectLow Power	IncorrectSleeping mode	Correct
In 6LoWPAN, the key functionality is carried out at the LoWPAN				
MClayer. network DHCP is the abbreviation of	Incorrectlink	Incorrect physical	Incorrect adaptation	Correct
	Incorrect Dynamic Host Configuration Protocol	Correct Dynamic Hyper Control Protocol	Incorrect Dynamic Hyper Configuration Protocol Inco	orrect
not related to MCNAD? Neighbor Solicitation Networks (are made up of constrained nodes	IncorrectRouter Advertisement	IncorrectRouter Solicitation	IncorrectNeighbor Respons	se Correct
(both routers and their interconnect) of limited processing capability,				
MCmemory and powerLow Power and Lossy speed netw orks, the packe	Correct High Power and Lossy	IncorrectLow Power and Lousie	IncorrectHigh Power and Lousie	Incorrec
t				
is				
decre				
ment ed at				
ou at				

COAP_HTTP does not include					
		Correct GET	IncorrectPUT	IncorrectDELETE	Imagement
MCthe following? None Which of the following is not		Correct GE1	mcorrectr 0 1	IncorrectDELETE	Incorrect
Which of the following is not MCa terminology in RFC 7252?None Which of the following is not MCa terminology in RFC 7252?CON		Correct Sender	Incorrect Recipient	IncorrectClient	Incorrect
		IncorrectNON CON	IncorrectACK	Incorrect None	Correct
CoAP stands	ogy in Ki C 7232 (CON	meditectivon con	MCOTTECTACK	incorrectivone	Correct
MCfor	.Constrained	Correct Constrained	Incorrect Constant	Incorrect Constant	
Application Pro		Application Program	Application Program	Application Protocol	Incorrect
each	otocor	Application Flogram	Application Flogram	Application Frotocol	Hicorrect
hop					
and					
hence					
a					
loopi					
ng					
packe					
t is					
quick					
ly					
destr					
oyed					
even					
if the					
loop					
has a					
short					
MCduration	TTL	Correct RTL	IncorrectLTR	IncorrectLTT	Incorrect
The	IIL	Correct RTL	MeditectETR	mediteetE11	Hicorrect
LOAPIS					
CoAP is					
a simple					
a simple					
a simplelayer					
a simplelayer protocol					
a simplelayer protocol targeted					
a simplelayer protocol targeted to simple					
a simplelayer protocol targeted to simple electronic					
a simple layer protocol targeted to simple electronic devices					
a simplelayer protocol targeted to simple electronic devices (e g					
a simplelayer protocol targeted to simple electronic devices (e g IoT/M					
a simplelayer protocol targeted to simple electronic devices (e g IoT/M 2 M					
a simplelayer protocol targeted to simple electronic devices (e g IoT/M					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things)					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow them to					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow them to commu					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow them to commu nicate interact					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow them to commu nicate interact ively					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow them to commu nicate interact ively over					
a simple layer protocol targeted to simple electronic devices (e g IoT/M 2 M things) to allow them to commu nicate interact ively					

MC Application Correct Network IncorrectLink IncorrectTranspo
The CoAP is designed for low power sensors and for actuators that need to be controlled or monitored remotely using

 ${\bf Incorrect} Transport$

Incorrect

MC

TF IP/Internet networks

1