



Faculty of Computers
And Artificial Intelligence

Network Programming
Third level
NC321



year: 2022
Date: 23/6/2022
Time: 2 hours

Q1. Computer Networks Multiple Choice Questions (MCQs) (60 DEGREE)

- 1- One of the following classes are used for connection based socket programming?
a. Datagram Socket b. Datagram Packet c. Both a, b d. Otherwise
- 2- The recvfrom method used in
a. Server socket b. Client socket c. Both a, b d. Otherwise
- 3- ----- is the port number for domain service
a. 80 b. 53 c. 21 d. 25
- 4- ----- sockets, negotiates a new stream with another machine using a three-way handshake
a. UDP b. TCP c. both a, b d. Otherwise
- 5- ----- Flag is used to set broad cast option in UDP.
a. SO_BROADCAST b. SOL_BROADCAST c. BROADCAST d. SOCKET_BROADCAST
- 6- Which method of the socket module allows you to send data to a given address in client STREAM socket using sok socket object?
a. sok.sendto(address, data) b. sok.send (address, data) c. sok.send (data) d. Otherwise
- 7- The result of the following python program is

```
def thr1(i):  
    print(i)  
    i = i + 1  
  
i=10  
t1 = threading.Thread(target= thr1, args=(i))  
print(i)  
t1.start()
```


a. 10 b. 10 c. Exception d. Otherwise
- 8- ----- method used only in Server Socket
a. accept() b. connect() c. bind() d. Otherwise
- 9- What method that return the address of this socket's own local endpoint?
a. mysocket.gethostname() b. mysocket.gethostbyname() c. mysocket.getpeername() d. mysocket.getsockname()
- 10- to disallowed receiving data in sok socket object we use -----
a. sok.SHUT_RD() b. sok.shutdown(socket.SHUT_RD)
c. sok.shutdown(socket.SHUT_WR) d. shutdown(sok.SHUT_WR)
- 11- What method used to return the remote address to which sok socket object is connected?
a. sok.gethostbyaddr() b. sok.gethostbyname() c. sok.getpeername() d. sok.gethostname()
- 12- ----- DNS record type that specifies a mail server responsible for accepting email messages
a. AAAA b. A c. MX d. NS
- 13- What function used to get port number for http service?
a. getservbyport('http') b. getservbyname('http') c. getprotobyname('http') d. Otherwise

- 14- To convert hostname to IP address we use
a. socket.gethostbyaddr(address) b. socket.gethostbyname(host) c. sok.getpeername()
d. socket.gethostname()

15- In pack method what is the size of return value if the format = '<i>'
2 bytes b. 8 bytes c. 4 bytes d. Otherwise

- 16- ----- DNS record type that used to map a domain name as an alias for another domain
a. AAAA b. MX c. TXT d. CNAME

17- Consider the following program

```
def resolve_mail(domain):  
    answer=dns.resolver.query(domain,'MX')  
    if answer.rrset is not None:  
        records = sorted(answer)  
        for record in records:  
            -----(1)-----  
            resolve_host(name)  
  
resolve_mail('google.com')
```

To print the priority of the mail server we write in (1)

- a. print(record.priority) b. print(record.preference) c. print(record.exchange) d. Otherwise
- 18- To delimit your messages so that the receiver can tell where one message ends we use -----
a. Use fixed length message b. Delimit your messages with special characters c. prefix each message with its length d. All of the above
- 19- In dns.resolver.query(name, qtype, raise_on_no_answer=False) , raise_on_no_answer option used to
a. Prevent exception happen when the record type not exists b. Prevent showing answer
c. Prevent display record type d. Otherwise
- 20- To bind s socket to host and port we use-----
a. bind (host, port) b. s.bind((host, port)) c. socket.bind(host, port) d. s.bind(host,port)
- 21- ----- method used to set time out for s socket object
a. s.settimeout(10) b. s.settimeout() c. both a, b d. socket.settimeout()
- 22- Which protocol use for real-time services?
a. TCP b. UDP c. both a and b d. Otherwise
- 23- In encode method what is default value for encoding parameter?
a. utf-16 b. ascii c. cp500 d. UTF-8
- 24- If we send several blocks of data that are each prefixed with their length, we encode the length with ...
a. struct.pack b. struct.unpack c. encode d. bytes
- 25- if we pass a hostname instead of an IP address to bind () method and the hostname lookup fails -----
---- exception will appear
a. OSError b. socket.timeout c. socket.gaierror d. Otherwise
- 26- In TCP socket ----- method used to receive data in server assume we create sok socket object
a. sok.recv(bufsize) b. sok.recvfrom(bufsize) c. both a, b d. Otherwise
- 27- ----- option allow you to reuse the port and IP for server in TCP socket
a. SOCKET_REUSEADDR b. REUSEADDR c. SO_REUSEADDR d. Otherwise

28- Consider the following program

```
import socket
infoL =socket.getaddrinfo(None, 'smtp', socket.AF_INET, socket.SOCK_STREAM)
inf = infoL[0]
----- (1) -----
sok.bind(inf[4])
sok.listen()
```

To create socket object we write in (1)

- a. sok = socket.socket(inf [0:3])
- b. sok = socket.socket(*inf [0:3])
- c. sok = socket.socket(inf)
- d. sok = socket.socket(*inf)

29- To get protocol number for TCP we use -----

- a. socket.getprotobyname('TCP')
- b. socket.getprotobynumber('TCP')
- c. socket.getprotoname('TCP')
- d. Otherwise

30-The address family for IPv4 is -----

- a. AF_INET4
- b. AF_INET6
- c. AF_INET
- d. Otherwise

“with best wishes “

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