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 thrd1(i):
        print(i)
        i = i + 1


i=10
        t1 = threading.Thread(target= thrd1, 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.upack   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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