

**CLASS XII A1&B**

**UNIT TEST 1**

**TIME 2HRS**

**MAX.MARKS:50**

**COMPUTER NETWORKS**

1. Define networks. 1
2. Define Protocol. 1
3. Define Transmission medium. What are the types? 1
4. What is the difference between a passive and an active hub? 1
5. What are the three criteria necessary for effective and efficient networks? 1
6. Define errors. List out the types of error. 1
7. Define CSMA /CD. 2
8. Change the following IP address from dotted decimal notation to binary notation. 1
  - i. 114.34.2.8
  - ii. 129.14.6.8
9. Change the following IP address from binary notation to dotted decimal notation. 1
  - i. 01111111 11110000 01100111 01111101
  - ii. 11110111 11110011 10000111 11011101
10. Define DNS. Name some generic domain labels. 2
11. What are the things define by URL? 1
12. What is parity bit? What are the types? 1
13. What is Retransmission? Where it is used? 1
14. Compare IPv4 and IPv6 Address. 2
15. What are ACK, RTS, CTS, HTTP. 2
16. Consider the following network map showing how routers of various networks are connected.
  
- Prepare routing tables for any three routers of your choice. 3
17. Compare IMAP and POP. 1

**PYTHON**

1. Which of the following can be used as valid variable identifier(s) in Python ? 2  
 (i)4thSum            (ii)Total    (iii)Number#    (iv) \_Data
2. What is the length of the tuple shown below? 1  
 (i) T=(((‘a’,1),’b’,’c’),’d’,2),’e’,3)
3. Rewrite the following code in Python after removing all syntaxerror(s). Underline each correction done in the code. 2  

```

      STRING=""WELCOME
      NOTE""
      for S in range[0,8]:
      print STRING(S)
      print S+STRING
    
```
4. Figure out the problem with the following code fragment. Correct the code and then print the output. 2

I. s1=”must”	V. print(s1+s2)
II. s2=”try”	VI. print(s2*n2)
III. n1=10	VII. print(s1+n1)
IV. n2=3	VIII. print(s2*n2)
5. The following code is not giving desired output. We want to input value as 20 and obtain output as 40. Could you pinpoint the problem? 1  

```

      n=input(“enter number”)
      d=n*2
      print(d)
    
```
6. Why is following code giving errors? 1  

```

      name=”India”
      print(“greeting !!!”)
      print(“hello”,name)
      print(“how you do”)
    
```
7. Write a Python program which accepts the radius of a circle from the user and compute the area. 3
8. Why does the expression 2+3\*4 result in the value 14 and not the value 24. 1
9. Convert the following for loop into while loop 2  

```

      for i in range(1,100)
    
```

```
if i%4==2:
    print i,"mod",4,"=2"
```

10. What would be the output of the following code snippets? 1  
(i) print 4+9 (ii) print "4+9"
11. Write the output for the following codes: 1  
A={10:1000,20:2000,30:3000,40:4000,50:5000}  
print a.items()  
print a.keys()  
print A.values()
12. Write the output from the following code: 1  
t=('a','b','c','a','b')  
print max(t)  
print min(t)
13. Below are seven segments of code each with a part colored. Indicate the data type of Each colored part by choosing the correct type of data from the following type. 1  
(a)int (b) float (c) bool (d) str (e) list of int  
(i) if temp <32: (ii) m=[ ]  
print("Freezing") for i in range(3):  
m.append(i)  
print(m)
14. Predict the output of the following 2  
x=45  
while x<50:  
print(x)  
for p in range(1,10):  
print(p)
15. What is the output produced by the following code snippet? 1  
alst=[1,2,3,4,5,6,7,8,9]  
print(alst[::3])
16. Why can't List be used as keys? 2
17. What are nested list? 1