

**KENDRIYA VIDYALAYA SANGATHAN JAMMU REGION**  
**CLASS XII SUB COMPUTER SCIENCE(083)**  
**PERIODIC TEST 3**

MAX MARKS 40

TIME 90 MIN

**Note: All questions are compulsory .**

- Q 1. The process of inserting an element in stack is called \_\_\_\_\_. 1
- Q 2. What is data structure ? 1
- Q 3. What is the situation called when an insertion is attempted in a full stack? 1
- Q 4. Stack is an example of First in first out (LIFO) true/false 1
- Q 5. Differentiate between FTP and HTTP. 1
- Q 6 Rearrange the following terms in decreasing order of data transfer rate. 1  
Gbps, Mbps, Tbps, Kbps, Bps
- Q 7. Explain Switching Techniques.
- Q 8. Define the term Baud Rate. 1
- Q 9. What is Cyber Crime? 1
- Q 10. Name any two Sever side scripting languages. 1
- Q 11. Define RJ-45 and Ethernet Card 1
- Q 12 Find the output of the following code. 2
- ```
Result =0
Listofnumber = [40, 50, 60]
Listofnumber.append (30)
Result=Result+ Listofnumber.pop ( )
Result=Result+ Listofnumber.pop ( )
print (Result)
print (Listofnumber)
```
- Q No 13. Identify the errors in this code and correct it with underline 2
- ```
Def PUH(Arr) :
    s= [ ]
    for x at range(0,len(Arr)):
        if Arr[x] %5 =0 :
            s.append(Arr[x])
        if len(s)==0:
            print("Empty Stack ")
        Else :
            Print(s)
```
- Q No 14. Write a function in python **PUSH (s, x) and POP(s)** for performing insertion and deletion operation in stack s . S is the list used for implementing stack and x is the value to be inserted. 2
- Q No 15. What is the significance of ARPANET in the network? 2
- Q No 16. Expand the following terminologies: 2
- (i) CDMA (ii) GSM (iii) FTP (iv) WLL
- Q No 17. Difference between Client side Scripting and Server Side Scripting. 2
- Q 18. Define Web Browser and web server with examples . 2

**Q 19 Read the code carefully and answer the following questions:**

**def push(Country,N):**

**Country.\_\_\_\_\_ (len(Country),N) #Statement 1**

**#Function Calling**

```
Country=[]
C=['Indian', 'USA', 'UK', 'Canada', 'Sri Lanka']
for i in range(0,len(C),_____): #Statement 2
push(Country,C[i])
print(Country)
```

**Required Output:**

['Indian', 'UK', 'Sri Lanka']

I. Identify the suitable code for the blank of statement 1.

- a. .append()
- b. .insert()
- c. .extend()
- d. .append(len(Country),N)

- (i)only a is correct
- (ii) only b is correct
- (iii) Both and d is correct
- (iv)All are correct

II. Fill the statement 2, to insert the alternate element from Country list.

- a. 3
- b. 0
- c. -1
- d. 2

- (i) only c is correct
- (ii) only d is correct
- (iii)Both c and d will produce the same output
- (iv)B and c correct

```
def pop(Country):
if _____: #Statement 3
return "Under flow"
else:
return Country._____() #Statement 4

#Function Calling
for i in range(len(Country)+1):
print(_____) #Statement 5
```

**Required Output:**

Sri Lanka  
UK  
India  
Under flow

III. Fill the statement 3, to check the stack is empty.

- a. Country=[]
- b. Country.isEmpty()

- c. len(country) == 0
- d. No of the above

- (i) a and c is correct
- (ii) b and c is correct
- (iii) Only c is correct
- (iv) only d is correct

IV. Fill the statement 4, to delete an element from the stack.

- a. pop(1)
- b. pop()
- c. del country[1]
- d. Country.delete(1)

- (i) Both a and c are correct
- (ii) Both b and d are correct
- (iii) Only b is correct
- (iv) Only d is correct

V. Fill the statement 5, to call the pop function.

- a. pop(C)
- b. pop(Country)
- c. call pop(Country)
- d. def pop(Country)

- (i) both b and d are correct
- (ii) only b is correct
- (iii) only c is correct
- (iv) only a is correct

Q 20. University Of Delhi is setting up a network between is different wings. There are four wings named Science(S), Journalism (J), Arts (A) and Home science (H). 5

**Distance between various wings:**

Wing A to Wing S	100 M
Wing A to Wing J	200 M
Wing A to Wing H	400 M
Wing S to Wing J	300 M
Wing S to Wing H	100 M
Wing J to Wing H	450 M

**Number of computers:**

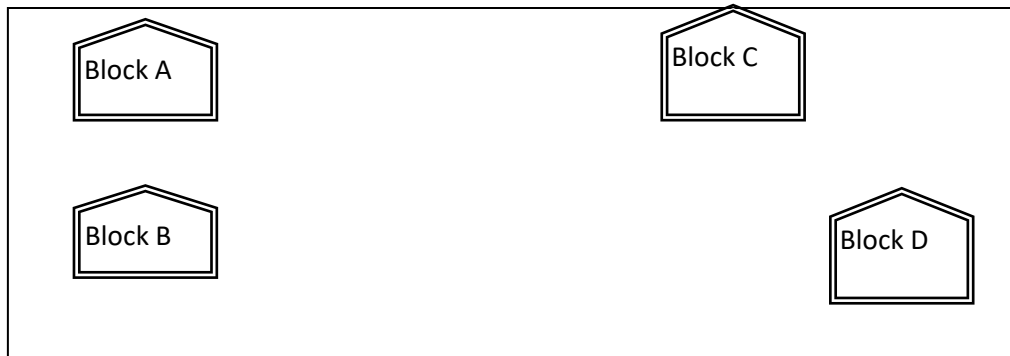
Wing A	150
Wing S	10
Wing J	5
Wing H	50

- a. Suggest the most suitable Topology for Networking the Computes of all wings
- b. Name the Wing Where the server is to be installed. Justify your answer.
- c. Suggest the placement of hub/switch in the network.
- d. Mention the economic way to provide internet accessibility to all wings.

e. Suggest cable /wiring layout for connecting all wings

Q 21. Knowledge Supplement Organisation has set up its new center at Mangalore for its office and web based activities. It has 4 blocks of buildings as shown in the diagram below:

5



**Center to center distances between various blocks**

Block A to Block B	50 m
Block B to Block C	150 m
Block C to Block D	25 m
Block A to Block D	170 m
Block B to Block D	125 m
Block A to Block C	90 m

**Number of Computers**

Block A	25
Block B	50
Block C	125
Block D	10

- Suggest a cable layout of connections between the blocks. 1
- Suggest the most suitable place (i.e. block) to house the server of this organisation with a suitable reason 1
- Suggest the placement of the following devices with justification. 2  
(i) Repeater (ii) Hub/Switch
- The organization is planning to link its front office situated in the city in a hilly region where cable connection is not feasible, suggest an economic way to connect it with reasonably high speed? 1

