

**NAVY CHILDREN SCHOOL**  
**Split Up Syllabus (2022-23)**  
**Class –XII Computer Science (083)**

**1. Prerequisites:** Computer Science- Class XI

**2. Learning Outcomes:** Student should be able to

- apply the concept of function.
- explain and use the concept of file handling.
- use basic data structure: Stacks.
- explain basics of computer networks.
- use Database concepts, SQL along with connectivity between Python and SQL.

**3. Distribution of Marks:**

Unit No	Unit Name	Term-1	Term-2
I	Computational Thinking and Programming - 2	35	5
II	Computer Networks	---	10
III	Database Management	---	20
	Total	35	35

**4. Monthly Split up syllabus:**

**TERM-I**

Month	Chapter	Content/Practical/Assignment
April/May	1. Python Revision Tour 2. Python Revision Tour-II 3. Working with Functions 4. Using Python Libraries	<ul style="list-style-type: none"> <li>• Revision of Python topics covered in Class XI.</li> <li>• Functions: types of function (built-in functions, functions defined in module, user defined functions),</li> <li>• creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)</li> </ul>

June/ July	5. File Handling Intro.  6. Text Files	<ul style="list-style-type: none"> <li>• Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths</li> <li>• Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file.</li> </ul>
August	7. Binary Files	<ul style="list-style-type: none"> <li>• Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file.</li> </ul>
Sept	8. CSV files	<ul style="list-style-type: none"> <li>• CSV file: import csv module, open / close csv file, write into a csv file using csv.writerow() and read from a csv file using csv.reader( ).</li> </ul>
Oct/Nov	Revision / Pre Board Examination	<ul style="list-style-type: none"> <li>• All topics of Term-1 syllabus</li> </ul>

## **TERM-II**

Dec/ Jan	9.Data Structures – Stack (LIFO list)  10. Database Management	<ul style="list-style-type: none"> <li>• Data Structure: Stack, operations on stack (push &amp; pop), implementation of stack using list.</li> <li>• Database concepts: introduction to database concepts and its need Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)</li> </ul>
Feb	11. SQL	<ul style="list-style-type: none"> <li>• Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int,</li> </ul>

	12. Interface of Python with MySQL database	<p>float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command</p> <ul style="list-style-type: none"> <li>• Aggregate functions (max, min, avg, sum, count), group by, having clause, joins : Cartesian product on two tables, equi-join and natural join</li> <li>• Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications</li> </ul>
Feb/ March	13.Computer Networks-	<ul style="list-style-type: none"> <li>• Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)</li> <li>• Data communication terminologies: concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)</li> <li>• Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)</li> </ul>

		<ul style="list-style-type: none"> <li>• Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)</li> <li>• Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)</li> <li>• Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP</li> <li>• Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting</li> </ul>
March	Revision / Pre Board Exam	<ul style="list-style-type: none"> <li>• All topics of Term-2 syllabus</li> </ul>

**5. Blue Print:** As per the CBSE SQP to be released by CBSE on its website in due course of time.

**6. Practical Work:** As per the CBSE list of suggested Practical for the Academic Year 2022-23.

**7. Worksheets:** Term-I and Term-II chapter wise worksheets appended below with suggested answer key.

**8. Sample QP/ Blueprint:** Term-I and Term-II Sample Question Papers appended below. Pre-Board QP to be set as per the CBSE SQP to be released by CBSE on its website in due course of time.

## TERM-1 Sample Question Paper

**Class: XII Computer Science (Code 083)**

**(Theory: Term-1)**

**Maximum Marks: 35**

**Time Allowed: 90 Minutes**

### General Instructions:

- The question paper is divided into 3 Sections - A, B and C.
- Section A, consist of 25 Questions (1-25). Attempt any 20 questions.
- Section B, consist of 24 Questions (26-49). Attempt any 20 questions.
- Section C, consist of 6 case study based Questions (50-55). Attempt any 5 questions.
- All questions carry equal marks.

Q.N.	Section-A
	<b>This section consists of 25 Questions (1 to 25). Attempt any 20 questions from this section. Choose the best possible option.</b>
1	Find the invalid identifier from the following a. none b. address c. Name d. pass
2	Consider a declaration L = (1, 'Python', '3.14'). Which of the following represents the data type of L? a. list b. tuple c. dictionary d. string
3	Given a Tuple tup1= (10, 20, 30, 40, 50, 60, 70, 80, 90). What will be the output of print (tup1 [3:7:2])? a. (40,50,60,70,80) b. (40,50,60,70) c. [40,60] d. (40,60)
4	Which of the following option is not correct? a. if we try to read a text file that does not exist, an error occurs. b. if we try to read a text file that does not exist, the file gets created. c. if we try to write on a text file that does not exist, no error occurs. d. if we try to write on a text file that does not exist, the file getsCreated.
5	Which of the following options can be used to read the first line of a text file Myfile.txt? a. myfile = open('Myfile.txt'); myfile.read() b. myfile = open('Myfile.txt','r'); myfile.read(n) c. myfile = open('Myfile.txt'); myfile.readline() d. myfile = open('Myfile.txt'); myfile.readlines()

6	<p>Assume that the position of the file pointer is at the beginning of 3rd line in a text file. Which of the following option can be used to read all the remaining lines?</p> <ul style="list-style-type: none"> <li>a. myfile.read()</li> <li>b. myfile.read(n)</li> <li>c. myfile.readline()</li> <li>d. myfile.readlines()</li> </ul>
7	<p>A text file student.txt is stored in the storage device. Identify the correct option out of the following options to open the file in read mode.</p> <ul style="list-style-type: none"> <li>i. myfile = open('student.txt','rb')</li> <li>ii. myfile = open('student.txt','w')</li> <li>iii. myfile = open('student.txt','r')</li> <li>iv. myfile = open('student.txt')</li> </ul> <ul style="list-style-type: none"> <li>a. only i</li> <li>b. both i and iv</li> <li>c. both iii and iv</li> <li>d. both i and iii</li> </ul>
8	<p>The return type of the input() function is</p> <ul style="list-style-type: none"> <li>a. string</li> <li>b. integer</li> <li>c. list</li> <li>d. tuple</li> </ul>
9	<p>Which of the following operator cannot be used with string data type?</p> <ul style="list-style-type: none"> <li>a. +</li> <li>b. in</li> <li>c. *</li> <li>d. /</li> </ul>
10	<p>Consider a tuple tup1 = (10, 15, 25, 30). Identify the statement that results in an error.</p> <ul style="list-style-type: none"> <li>a. print(tup1[2])</li> <li>b. tup1[2] = 20</li> <li>c. print(min(tup1))</li> <li>d. print(len(tup1))</li> </ul>
11	<p>Which of the following statement is incorrect in the context of binary files?</p> <ul style="list-style-type: none"> <li>a. Information is stored in the same format in which the information is held in memory.</li> <li>b. No character translation takes place</li> <li>c. Every line ends with a new line character</li> <li>d. pickle module is used for reading and writing</li> </ul>
12	<p>What is the significance of the tell() method?</p> <ul style="list-style-type: none"> <li>a. tells the path of file</li> <li>b. tells the current position of the file pointer within the file</li> <li>c. tells the end position within the file</li> <li>d. checks the existence of a file at the desired location</li> </ul>

13	<p>Which of the following statement is true?</p> <ul style="list-style-type: none"> <li>a. pickling creates an object from a sequence of bytes</li> <li>b. pickling is used for object serialization</li> <li>c. pickling is used for object deserialization</li> <li>d. pickling is used to manage all types of files in Python</li> </ul>
14	<p>Syntax of seek function in Python is <code>myfile.seek(offset, reference_point)</code> where <code>myfile</code> is the file object. What is the default value of <code>reference_point</code>?</p> <ul style="list-style-type: none"> <li>a. 0</li> <li>b. 1</li> <li>c. 2</li> <li>d. 3</li> </ul>
15	<p>Which of the following components are part of a function header in Python?</p> <ul style="list-style-type: none"> <li>a. Function Name</li> <li>b. Return Statement</li> <li>c. Parameter List</li> <li>d. Both a and c</li> </ul>
16	<p>Which of the following function header is correct?</p> <ul style="list-style-type: none"> <li>a. <code>def cal_si(p=100, r, t=2)</code></li> <li>b. <code>def cal_si(p=100, r=8, t)</code></li> <li>c. <code>def cal_si(p, r=8, t)</code></li> <li>d. <code>def cal_si(p, r=8, t=2)</code></li> </ul>
17	<p>Which of the following is the correct way to call a function?</p> <ul style="list-style-type: none"> <li>a. <code>my_func()</code></li> <li>b. <code>def my_func()</code></li> <li>c. <code>return my_func</code></li> <li>d. <code>call my_func()</code></li> </ul>
18	<p>Which of the following character acts as default delimiter in a csv file?</p> <ul style="list-style-type: none"> <li>a. (colon) :</li> <li>b. (hyphen) -</li> <li>c. (comma) ,</li> <li>d. (vertical line)  </li> </ul>
19	<p>Syntax for opening Student.csv file in write mode is <code>myfile = open("Student.csv","w",newline=")</code>. What is the importance of <code>newline=""</code>?</p> <ul style="list-style-type: none"> <li>a. A newline gets added to the file</li> <li>b. Empty string gets appended to the first line.</li> <li>c. Empty string gets appended to all lines.</li> <li>d. EOL translation is suppressed</li> </ul>
20	<p>What is the correct expansion of CSV files?</p> <ul style="list-style-type: none"> <li>a. Comma Separable Values</li> <li>b. Comma Separated Values</li> <li>c. Comma Split Values</li> <li>d. Comma Separation Values</li> </ul>

21	<p>Which of the following is not a function / method of csv module in Python?</p> <p>a. read()  b. reader()  c. writer()  d. writerow()</p>
22	<p>Which one of the following is the default extension of a Python file?</p> <p>a. .exe  b. .p++  c. .py  d. .p</p>
23	<p>Which of the following symbol is used in Python for single line comment?</p> <p>a. /  b. /*  c. //  d. #</p>
24	<p>Which of the following statement opens a binary file record.bin in write mode and writes data from a list lst1 = [1,2,3,4] on the binary file?</p> <p>a. with open('record.bin','wb') as myfile:  pickle.dump(lst1,myfile)  b. with open('record.bin','wb') as myfile:  pickle.dump(myfile,lst1)  c. with open('record.bin','wb+') as myfile:  pickle.dump(myfile,lst1)  d. with open('record.bin','ab') as myfile:  pickle.dump(myfile,lst1)</p>
25	<p>Which of these about a dictionary is false?</p> <p>a) The values of a dictionary can be accessed using keys  b) The keys of a dictionary can be accessed using values  c) Dictionaries aren't ordered  d) Dictionaries are mutable</p>
<b>Section-B</b>	
<b>This section consists of 24 Questions (26 to 49). Attempt any 20 questions.</b>	
26	<p>What is the output of following code:</p> <pre>T= (100) print (T*2)</pre> <p>a. Syntax error  b. (200,)  c. 200  d. (100,100)</p>

27	<p>Suppose content of 'Myfile.txt' is:</p> <pre style="border: 1px solid black; padding: 5px; display: inline-block;"> Twinkle twinkle little star How I wonder what you are Up above the world so high Like a diamond in the sky </pre> <p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") data = myfile.readlines() print(len(data)) myfile.close() </pre> <p>a. 3 b. 4 c. 5 d. 6</p>
28	<p>Identify the output of the following Python statements.</p> <pre> x = [[10.0, 11.0, 12.0],[13.0, 14.0, 15.0]] y = x[1][2] print(y) </pre> <p>a. 12.0 b. 13.0 c. 14.0 d. 15.0</p>
29	<p>Identify the output of the following Python statements.</p> <pre> x = 2 while x &lt; 9:     print(x, end='')     x = x + 1 </pre> <p>a. 12345678 b. 123456789 c. 2345678 d. 23456789</p>
30	<p>Identify the output of the following Python statements.</p> <pre> b = 1 for a in range(1, 10, 2):     b += a + 2 print(b) </pre> <p>a. 31 b. 33 c. 36 d. 39</p>

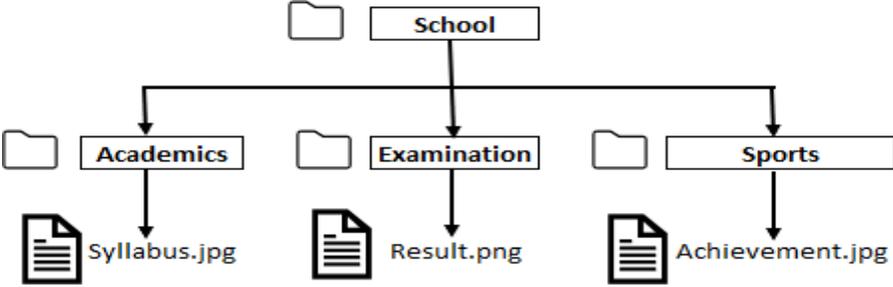
31	<p>Identify the output of the following Python statements.</p> <pre>lst1 = [10, 15, 20, 25, 30] lst1.insert( 3, 4) lst1.insert( 2, 3) print (lst1[-5])</pre> <p>a. 2 b. 3 c. 4 d. 20</p>																		
32	<p>Raghav is trying to write a tuple tup1 = (1,2,3,4,5) on a binary file <b>test.bin</b>. Consider the following code written by him.</p> <pre>import pickle tup1 = (1,2,3,4,5) myfile = open("test.bin",'wb') pickle._____#Statement 1 myfile.close()</pre> <p>Identify the missing code in Statement 1.</p> <p>a. dump(myfile,tup1) b. dump(tup1, myfile) c. write(tup1,myfile) d. load(myfile,tup1)</p>																		
33	<p>A binary file employee.dat has following data</p> <table border="1" data-bbox="641 1024 1079 1276"> <thead> <tr> <th>Empno</th> <th>empname</th> <th>Salary</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>Anuj</td> <td>50000</td> </tr> <tr> <td>102</td> <td>Arijita</td> <td>40000</td> </tr> <tr> <td>103</td> <td>Hanika</td> <td>30000</td> </tr> <tr> <td>104</td> <td>Firoz</td> <td>60000</td> </tr> <tr> <td>105</td> <td>Vijaylakshmi</td> <td>40000</td> </tr> </tbody> </table> <pre>def display(eno):     f=open("employee.dat","rb")     totSum=0     try:         while True:             R=pickle.load(f)             if R[0]==eno:                 #Line1                 totSum=totSum+R[2]     except:         f.close()     print (totSum)</pre> <p>When the above mentioned function, display (103) is executed, the output displayed is 190000.</p> <p>Write appropriate jump statement from the following to obtain the above output.</p>	Empno	empname	Salary	101	Anuj	50000	102	Arijita	40000	103	Hanika	30000	104	Firoz	60000	105	Vijaylakshmi	40000
Empno	empname	Salary																	
101	Anuj	50000																	
102	Arijita	40000																	
103	Hanika	30000																	
104	Firoz	60000																	
105	Vijaylakshmi	40000																	

	a. jump	b. break	c. continue	d. return
34	What will be the output of the following Python code? <pre>def add (num1, num2):     sum = num1 + num2 sum = add(20,30) print(sum)</pre> <p>a. 50 b. 0 c. Null d. None</p>			
35	Evaluate the following expression and identify the correct answer. $16 - (4 + 2) * 5 + 2 ** 3 * 4$ <p>a. 54 b. 46 c. 18 d. 32</p>			
36	What will be the output of the following code? <pre>def my_func(var1=100, var2=200):     var1+=10     var2 = var2 - 10     return var1+var2 print(my_func(50),my_func())</pre> <p>a. 100 200 b. 150 300 c. 250 75 d. 250 300</p>			
37	What will be the output of the following code? <pre>value = 50 def display(N):     global value     value = 25     if N%7==0:         value = value + N     else:         value = value - N print(value, end="#") display(20) print(value)</pre> <p>a. 50#50 b. 50#5 c. 50#30 d. 5#50#</p>			

38	<p>What will be the output of the following code?</p> <pre>import random List=["Delhi", "Mumbai", "Chennai", "Kolkata"] for y in range(4):     x = random.randint(1,3)     print(List[x],end="#")</pre> <p>a. Delhi#Mumbai#Chennai#Kolkata#  b. Mumbai#Chennai#Kolkata#Mumbai#  c. Mumbai# Mumbai #Mumbai # Delhi#  d. Mumbai# Mumbai #Chennai # Mumbai</p>
39	<p>What is the output of the following code snippet?</p> <pre>def ChangeVal(M,N):     for i in range(N):         if M[i]%5 == 0:             M[i]//=5         if M[i]%3 == 0:             M[i]//=3 L = [25,8,75,12] ChangeVal(L,4) for i in L:     print(i,end="#")</pre> <p>a) 5#8#15#4#  b) 5#8#5#4#  c) 5#8#15#14#  d) 5#18#15#4#</p>
40	<p>Suppose content of 'Myfile.txt' is</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Humpty Dumpty sat on a wall  Humpty Dumpty had a great fall  All the king's horses and all the king's men  Couldn't put Humpty together again</p> </div> <p>What will be the output of the following code?</p> <pre>myfile = open("Myfile.txt") record = myfile.read().split() print(len(record)) myfile.close()</pre> <p>a. 24      b. 25      c. 26      d. 27</p>
41	<p>Find the output of the following code:</p> <pre>Name="Python3.1" R="" for x in range(len(Name)):     if Name[x].isupper():         R=R+Name[x].lower()</pre>

	<pre> elif Name[x].islower():     R=R+Name[x].upper() elif Name[x].isdigit():     R=R+Name[x-1] else:     R=R+"#" print(R) </pre> <p>a. pYTHOn##@  b. pYTHOnN#@  c. pYTHOn#@  d. pYTHOnN@#</p>
42	<p>Suppose content of 'Myfile.txt' is</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">Honesty is the best policy.</div> <p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") x = myfile.read() print(len(x)) myfile.close() </pre> <p>a. 5    b. 25    c. 26    d.27</p>
43	<p>Suppose content of 'Myfile.txt' is</p> <p>Culture is the widening of the mind and of the spirit.</p> <p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") x = myfile.read() y = x.count('the') print(y) myfile.close() </pre> <p>a. 2    b. 3    c. 4    d. 5</p>
44	<p>What will be the output of the following code?</p> <pre> x = 3 def myfunc():     global x     x+=2     print(x, end=' ') print(x, end=' ') myfunc() print(x, end=' ') </pre>

	<p>a. 3 3 3  b. 3 4 5  c. 3 3 5  d. 3 5 5</p>
45	<p>Suppose content of 'Myfile.txt' is</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Ek Bharat Shreshtha Bharat</p> </div> <p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") vlist = list("aeiouAEIOU") vc=0 x = myfile.read() for y in x:     if(y in vlist):         vc+=1 print(vc) myfile.close() </pre> <p>a. 6    b. 7    c. 8    d. 9</p>
46	<p>Suppose content of 'Myfile.txt' is</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Twinkle twinkle little star  How I wonder what you are  Up above the world so high  Like a diamond in the sky  Twinkle twinkle little star</p> </div> <p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1 print(line_count) myfile.close() </pre> <p>a. 2  b. 3  c. 4  d. 5</p>

47	<p>Consider the following directory structure.</p>  <p>Suppose root directory (School) and present working directory are the same. What will be the absolute path of the file Syllabus.jpg?</p> <ol style="list-style-type: none"> <li>School/syllabus.jpg</li> <li>School/Academics/syllabus.jpg</li> <li>School/Academics/../syllabus.jpg</li> <li>School/Examination/syllabus.jpg</li> </ol>
48	<p>Assume the content of text file, 'student.txt' is:</p> <pre>Arjun Kumar Ismail Khan Joseph B Hanika Kiran</pre> <p>What will be the data type of data_rec?</p> <pre>myfile = open("Myfile.txt") data_rec = myfile.readlines() myfile.close()</pre> <ol style="list-style-type: none"> <li>string</li> <li>list</li> <li>tuple</li> <li>dictionary</li> </ol>
49	<p>What will be the output of the following code?</p> <pre>tup1 = (1,2,[1,2],3) tup1[2][1]=3.14 print(tup1)</pre> <ol style="list-style-type: none"> <li>(1,2,[3.14,2],3)</li> <li>(1,2,[1,3.14],3)</li> <li>(1,2,[1,2],3.14)</li> <li>Error Message</li> </ol>

**Section-C**  
**Case Study based Questions**

**This section consists of 6 Questions (50 -55) Attempt any 5 questions.**

Rohit, a student of class 12, is learning CSV File Module in Python. During examination, he has been assigned an incomplete python code (shown below) to create a CSV File 'Student.csv' (content shown below). Help him in completing the code which creates the desired CSV File.

**CSV File**  
1,AKSHAY,XII,A  
2,ABHISHEK,XII,A  
3,ARVIND,XII,A  
4,RAVI,XII,A  
5,ASHISH,XII,A

**Incomplete Code**

```
import _____ #Statement-1
fh = open(_____,_____, newline="") #Statement-2
stuwriter = csv. _____ #Statement-3
data = [ ]
header = ['ROLL_NO', 'NAME', 'CLASS', 'SECTION']
data.append(header)
for i in range(5):
    roll_no = int(input("Enter Roll Number : "))
    name = input("Enter Name : ")
    Class = input("Enter Class : ")
    section = input("Enter Section : ")
    rec = [ _____ ] #Statement-4
    data.append(_____) #Statement-5
stuwriter. _____(data) #Statement-6
fh.close()
```

50 Identify the suitable code for blank space in the line marked as Statement-1.

a) csv file  
b) CSV  
c) csv  
d) cvs

51 Identify the missing code for blank space in line marked as Statement-2.

a) "Student.csv", "wb"  
b) "Student.csv", "w"  
c) "Student.csv", "r"  
d) "Student.cvs", "r"

52 Choose the function name (with argument) that should be used in the blank space of line marked as Statement-3.

a) reader(fh)  
b) reader(MyFile)  
c) writer(fh)  
d) writer(MyFile)

53	<p>Identify the suitable code for blank space in line marked as Statement-4.</p> <ul style="list-style-type: none"><li>a) 'ROLL_NO', 'NAME', 'CLASS', 'SECTION'</li><li>b) ROLL_NO, NAME, CLASS, SECTION</li><li>c) 'roll_no','name','Class','section'</li><li>d) roll_no,name,Class,section</li></ul>
54	<p>Identify the suitable code for blank space in the line marked as Statement-5.</p> <ul style="list-style-type: none"><li>a) data</li><li>b) record</li><li>c) rec</li><li>d) insert</li></ul>
55	<p>Choose the function name that should be used in the blank space of line marked as Statement-6 to create the desired CSV File?</p> <ul style="list-style-type: none"><li>a) dump()</li><li>b) load()</li><li>c) writerows()</li><li>d) writerow()</li></ul>

**TERM-1 Sample Question Paper****MARKING SCHEME****Class: XII Computer Science (Code 083)**

1	d. pass
2	b. tuple
3	d. (40,60)
4	b. if we try to read a text file that does not exist, the file gets created.
5	c. myfile = open('Myfile.txt'); myfile.readline()
6	d. myfile.readlines()
7	c. both iii and iv
8	a. string
9	d. /
10	b. tup1[2] = 20
11	c. Every line ends with a new line character
12	b. tells the current position of the file pointer within the file
13	b. pickling is used for object serialization
14	a. 0
15	d. Both a and c
16	d. def cal_si(p, r=8, t=2)
17	a. my_func()
18	c. ,
19	d. EOL Translation is suppressed
20	b. Comma Separated Values
21	a. read()
22	c. .py
23	d. #
24	a. with open('record.bin','wb') as myfile: pickle.dump(lst1,myfile)
25	b. The keys of a dictionary can be accessed using values
26	c. 200
27	b. 4
28	d. 15.0
29	c. 2345678
30	c. 36
31	b. 3
32	b. dump(tup1, myfile)
33	c. continue
34	d. None
35	c. 18
36	d. 250 300
37	b. 50#5
38	b. Mumbai#Chennai#Kolkata#Mumbai#
39	b. 5#8#5#4#
40	c. 26
41	b. pYTHOnN#@
42	d. 27

43	b. 3
44	d. 3 5 5
45	b. 7
46	a. 2
47	b. School/Academics/syllabus.jpg
48	b. list
49	b. (1,2,[1,3.14],3)
50	c. csv
51	b. "Student.csv","w"
52	c. writer(fh)
53	d. roll_no,name,Class,section
54	c. rec
55	c. writerows()

## TERM-2 SAMPLE QUESTION PAPER

Class: XII

Computer Science

(Code 083)

(Theory: Term-2)

Maximum Marks: 35

Time: 2 hours

### General Instructions

- The question paper is divided into 3 sections – A, B and C
- Section A, consists of 7 questions (1-7). Each question carries 2 marks.
- Section B, consists of 3 questions (8-10). Each question carries 3 marks.
- Section C, consists of 3 questions (11-13). Each question carries 4 marks.
- Internal choices have been given for question numbers 7, 8 and 12.

<b>Section -A</b>			
<b>Each question carries 2 marks</b>			
<b>Q. No</b>	<b>Part No.</b>	<b>Question</b>	<b>Marks</b>
1.		Give any two characteristics of stacks.	(2)
2.	(i)	Expand the following: <b>SMTP , XML</b>	(1)
	(ii)	Out of the following, which is the fastest wired and wireless medium of transmission?  <b>Infrared, coaxial cable, optical fibre, microwave, Ethernet cable</b>	(1)
3.		Differentiate between char(n) and varchar(n) data types with respect to databases.	(2)
4.		A resultset is extracted from the database using the cursor object (that has been already created) by giving the following statement.  <b>Mydata=cursor.fetchone()</b>  (a) How many records will be returned by fetchone() method? (b) What will be the datatype of Mydata object after the given command is executed?	(2)

5.		<p>Write the output of the queries (a) to (d) based on the table, Furniture given below:</p> <p><b>Table: FURNITURE</b></p> <table border="1" data-bbox="377 292 1247 866"> <thead> <tr> <th>FID</th> <th>NAME</th> <th>DATEOFPURCHASE</th> <th>COST</th> <th>DISCOUNT</th> </tr> </thead> <tbody> <tr> <td>B001</td> <td>Double Bed</td> <td>03-Jan-2018</td> <td>45000</td> <td>10</td> </tr> <tr> <td>T010</td> <td>Dining Table</td> <td>10-Mar-2020</td> <td>51000</td> <td>5</td> </tr> <tr> <td>B004</td> <td>Single Bed</td> <td>19-Jul-2021</td> <td>22000</td> <td>0</td> </tr> <tr> <td>C003</td> <td>Long Back Chair</td> <td>30-Dec-2016</td> <td>12000</td> <td>3</td> </tr> <tr> <td>T006</td> <td>Console Table</td> <td>17-Nov-2019</td> <td>15000</td> <td>12</td> </tr> <tr> <td>B006</td> <td>Bunk Bed</td> <td>01-Jan-2021</td> <td>28000</td> <td>14</td> </tr> </tbody> </table> <p>(a) <code>SELECT SUM(DISCOUNT) FROM FURNITURE WHERE COST&gt;15000;</code></p> <p>(b) <code>SELECT MAX (DATEOFPURCHASE) FROM FURNITURE;</code></p> <p>(c) <code>SELECT * FROM FURNITURE WHERE DISCOUNT&gt;5 AND FID LIKE "T%";</code></p> <p>(d) <code>SELECT DATEOFPURCHASE FROM FURNITURE WHERE NAME IN ("Dining Table", "Console Table");</code></p>	FID	NAME	DATEOFPURCHASE	COST	DISCOUNT	B001	Double Bed	03-Jan-2018	45000	10	T010	Dining Table	10-Mar-2020	51000	5	B004	Single Bed	19-Jul-2021	22000	0	C003	Long Back Chair	30-Dec-2016	12000	3	T006	Console Table	17-Nov-2019	15000	12	B006	Bunk Bed	01-Jan-2021	28000	14	(2)
FID	NAME	DATEOFPURCHASE	COST	DISCOUNT																																		
B001	Double Bed	03-Jan-2018	45000	10																																		
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T006	Console Table	17-Nov-2019	15000	12																																		
B006	Bunk Bed	01-Jan-2021	28000	14																																		
6.	(i)	Which command is used to view the list of tables in a database?	(1)																																			
	(ii)	Give one point of difference between an equi-join and a natural join.	(1)																																			
7.		<p>Consider the table, <b>MOVIEDETAILS</b> given below:</p> <p><b>Table: MOVIEDETAILS</b></p> <table border="1" data-bbox="361 1703 1255 1824"> <thead> <tr> <th>MOVIEID</th> <th>TITLE</th> <th>LANGUAGE</th> <th>RATING</th> <th>PLATFORM</th> </tr> </thead> <tbody> <tr> <td>M001</td> <td>Minari</td> <td>Korean</td> <td>5</td> <td>Netflix</td> </tr> <tr> <td>M004</td> <td>MGR Magan</td> <td>Tamil</td> <td>4</td> <td>Hotstar</td> </tr> </tbody> </table>	MOVIEID	TITLE	LANGUAGE	RATING	PLATFORM	M001	Minari	Korean	5	Netflix	M004	MGR Magan	Tamil	4	Hotstar	(2)																				
MOVIEID	TITLE	LANGUAGE	RATING	PLATFORM																																		
M001	Minari	Korean	5	Netflix																																		
M004	MGR Magan	Tamil	4	Hotstar																																		

M010	Kaagaz	Hindi	3	Zee5
M011	Harry Potter and the Chamber of Secrets	English	4	Prime Video
M015	Uri	Hindi	5	Zee5
M020	Avengers: Endgame	English	4	Hotstar

- (a) Identify the degree and cardinality of the table.  
(b) Which field should be made the primary key? Justify your answer.

**OR**

- (a) Identify the candidate key(s) from the table **MOVIEDETAILS**.  
(b) Consider the table **SCHEDULE** given below:

Table: SCHEDULE

SLOTID	MOVIEID	TIMESLOT
S001	M010	10 AM to 12 PM
S002	M020	2 PM to 5 PM
S003	M010	6 PM to 8 PM
S004	M011	9 PM to 11 PM

Which field will be considered as the foreign key if the tables **MOVIEDETAILS** and **SCHEDULE** are related in a database?

**SECTION – B**  
**Each question carries 3 marks**

8. Julie has created a dictionary containing names and marks as keyvalue pairs of 6 students. Write a program, with separate user defined functions to perform the following operations:
- Push the keys (name of the student) of the dictionary into a stack, where the corresponding value (marks) is greater than 75.
  - Pop and display the content of the stack. For example:
- If the sample content of the dictionary is as follows:
- (3)

		<p>R={"OM":76, "JAI":45, "BOB":89, "ALI":65, "ANU":90, "TOM":82}</p> <p>The output from the program should be: TOM ANU BOB OM</p> <p style="text-align: center;"><b>OR</b></p> <p>Alam has a list containing 10 integers. You need to help him create a program with separate user defined functions to perform the following operations based on this list.</p> <ul style="list-style-type: none"> <li>• Traverse the content of the list and push the even numbers into a stack.</li> <li>• Pop and display the content of the stack.</li> </ul> <p>For Example: If the sample Content of the list is as follows: N=[12, 13, 34, 56, 21, 79, 98, 22, 35, 38]</p> <p>Sample Output of the code should be: 38 22 98 56 34 12</p>													
9.	(i)	<p>A table, <b>ITEM</b> has been created in a database with the following fields: <b>ITEMCODE, ITEMNAME, QTY, PRICE</b></p> <p>Give the SQL command to add a new field, <b>DISCOUNT</b> (of type Integer) to the <b>ITEM</b> table.</p>	(1)												
	(ii)	<p>Categorize following commands into DDL and DML commands? <b>INSERT INTO, DROP TABLE, ALTER TABLE, UPDATE...SET</b></p>	(2)												
10.		<p>Charu has to create a database named <b>MYEARTH</b> in MYSQL. She now needs to create a table named <b>CITY</b> in the database to store the records of various cities across the globe. The table <b>CITY</b> has the following structure:</p> <p>Table: CITY</p> <table border="1"> <thead> <tr> <th>FIELD NAME</th> <th>DATA TYPE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td>CITYCODE</td> <td>CHAR(5)</td> <td>Primary Key</td> </tr> <tr> <td>CITYNAME</td> <td>CHAR(30)</td> <td></td> </tr> <tr> <td>SIZE</td> <td>INTEGER</td> <td></td> </tr> </tbody> </table>	FIELD NAME	DATA TYPE	REMARKS	CITYCODE	CHAR(5)	Primary Key	CITYNAME	CHAR(30)		SIZE	INTEGER		(3)
FIELD NAME	DATA TYPE	REMARKS													
CITYCODE	CHAR(5)	Primary Key													
CITYNAME	CHAR(30)														
SIZE	INTEGER														

AVGTEMP	INTEGER	
POLLUTIONRATE	INTEGER	
POPULATION	INTEGER	

Help her to complete the task by suggesting appropriate SQL commands.

**Section C**  
**Each question carries 4 marks**

11.

Write queries (a) to (d) based on the tables **EMPLOYEE** and **DEPARTMENT** given below:

(4)

**Table: EMPLOYEE**

EMPID	NAME	DOB	DEPTID	DESIG	SALARY
120	Alisha	23-Jan-1978	D001	Manager	75000
123	Nitin	10-Oct-1977	D002	AO	59000
129	Navjot	12-Jul-1971	D003	Supervisor	40000
130	Jimmy	30-Dec-1980	D004	Sales Rep	
131	Faiz	06-Apr-1984	D001	Dep Manager	65000

**Table: DEPARTMENT**

DEPTID	DEPTNAME	FLOORNO
D001	Personal	4
D002	Admin	10
D003	Production	1
D004	Sales	3

(a) To display the average salary of all employees, department wise.

(b) To display name and respective department name of each employee whose salary is more than 50000.

- (c) To display the names of employees whose salary is not known, in alphabetical order.
- (d) To display DEPTID from the table **EMPLOYEE** without repetition.

12. (i) Give two advantages and two disadvantages of star topology (2)

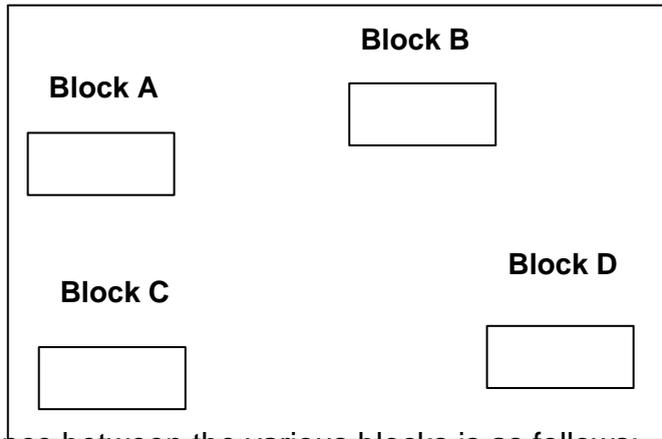
**OR**

Define the following terms:  
**www , web hosting**

(ii) How is packet switching different from circuit switching? (2)

13. BeHappy Corporation has set up its new centre at Noida, Uttar Pradesh for its office and web-based activities. It has 4 blocks of buildings.

**BeHappy Corporation**



Distance between the various blocks is as follows:

A to B	40 m	
B to C	120m	
C to D	100m	
A to D	170m	
B to D	150m	
A to C	70m	

Numbers of computers in each block  
Block A - 25

Block B - 50  
Block C - 125  
Block D - 10

- (a) Suggest and draw the cable layout to efficiently connect various blocks of buildings within the Noida centre for connecting the digital devices.
- (b) Suggest the placement of the following device with justification
  - i. Repeater
  - ii. Hub/Switch
- (c) Which kind of network (PAN/LAN/WAN) will be formed if the Noida office is connected to its head office in Mumbai?
- (d) Which fast and very effective wireless transmission medium should preferably be used to connect the head office at Mumbai with the centre at Noida?

## TERM-2 SAMPLE QUESTION PAPER

### MARKING SCHEME

#### COMPUTER SCIENCE (Code : 083)

**Maximum Marks: 35**

**Time: 2 hours**

#### General Instructions

- The question paper is divided into 3 sections – A, B and C
- Section A, consists of 7 questions (1-7). Each question carries 2 marks.
- Section B, consists of 3 questions (8-10). Each question carries 3 marks.
- Section C, consists of 3 questions( 11-13). Each question carries 4 marks.
- Internal choices have been given for question numbers – 7, 8 and 12

<b>Section -A</b>				
<b>Each question carries 2 marks</b>				
<b>Q. No</b>	<b>Part No.</b>	<b>Question</b>	<b>Marking Instructions</b>	<b>Marks</b>
1.		Characteristics of Stacks: <ul style="list-style-type: none"><li>• It is a LIFO data structure</li><li>• The insertion and deletion happens at one end i.e. from the top of the stack</li></ul>	1 mark for each point	(2)
2.	(i)	SMTP : Simple Mail Transfer Protocol XML: Extensible Mark Up Language	½ mark for each correct expansion	(1)
	(ii)	Wired- optical fibre Wireless – microwave	½ mark for each correct answer	(1)
3.		char(n): <ul style="list-style-type: none"><li>• stores a fixed length string between 1 and 255 characters</li><li>• if the value is of smaller length, adds blank spaces</li><li>• some space is wasted</li></ul> varchar(n) : <ul style="list-style-type: none"><li>• stores a variable length string</li><li>• no blanks are added even if value is of smaller length</li><li>• no wastage of space</li></ul>	1 mark for each correct difference ( minimum 2 differences to be given)	(2)

4.		(a) One record (b) tuple	1 mark for each correct answer	(2)					
5.		(a) 29 (b) 19-Jul-2021 (c) <table border="1" data-bbox="351 540 1028 620"> <tr> <td>T006</td> <td>Consol eTable</td> <td>17-Nov-2019</td> <td>15000</td> <td>12</td> </tr> </table> (d) 10-Mar- 2020 17-Nov-2019	T006	Consol eTable	17-Nov-2019	15000	12	½ mark for each correct output	(2)
T006	Consol eTable	17-Nov-2019	15000	12					
6.	(i)	SHOW TABLES;	1 mark for correct answer	(1)					
	(ii)	Equi- join: <ul style="list-style-type: none"> <li>• The join in which columns from two tables are compared for equality</li> <li>• Duplicate columns are shown</li> <li>Natural Join               <ul style="list-style-type: none"> <li>• The join in which only one of the identical columns existing in both tables is present</li> <li>• No duplication of columns</li> </ul> </li> </ul>	1 mark for correct difference (Any one point may be given)	(1)					
7.		(a) Degree: 5 Cardinality: 6  (b) MOVIEID should be made the primary key as it uniquely identifies each record of the table.	½ mark each for correct degree and cardinality  ½ mark for correct field and ½ mark for justification	(2)					

		<p style="text-align: center;">OR</p> <p>(a) MOVIEID and TITLE</p> <p>(b) MOVIEID</p>	<p>½ mark for each correctfield name</p> <p>1 mark forcorrect answer</p>	
		<b>SECTION – B</b> <b>Each question carries 3 marks</b>		
8.		<pre># Question No 8 (first option) R={"OM":76, "JAI":45, "BOB":89, "ALI":65, "ANU":90, "TOM":82} def PUSH(S,N):     S.append(N) def POP(S):     if S!=[]:         return S.pop()     else:         return None ST=[] for k in R:     if R[k]&gt;=75:         PUSH(ST,k) while True:     if ST!=[]:         print(POP(ST),end=" ")     else:         break</pre> <p style="text-align: center;">OR</p> <pre># Question No 8 (second option) N=[12, 13, 34, 56, 21, 79, 98, 22, 35, 38] def PUSH(S,N):</pre>	<p>1 mark for correct PUSH operation</p> <p>1 mark for correct POP operation</p> <p>1 mark for correct function callsand displaying the output</p> <p>1 mark for correct PUSH operation</p>	(3)

		<pre> S.append(N) def POP(S):     if S!=[]:         return S.pop()     else:         return None ST=[] for k in N:     if k%2==0:         PUSH(ST,k) while True:     if ST!=[]:         print(POP(ST),end=" ")     else:         break </pre>	<p>1 mark for correct POP operation</p> <p>1 mark for correct function calls and displaying the output</p> <p><b>Note:</b> <b>Marksto be awarded for any other correct logic given by the student</b></p>	
9.	(i)	<pre> ALTER TABLE Item ADD (Discount INT); </pre>	1 mark for correct command	(1)
	(ii)	<pre> DDL: DROP TABLE, ALTER TABLE DML: INSERT INTO, UPDATE...SET </pre>	½ mark for each correct command identified	(2)
10.		<pre> CREATE DATABASE MYEARTH;  CREATE TABLE CITY (     CITYCODE CHAR(5) PRIMARY KEY,     CITYNAME CHAR(30),     SIZE INT,     AVGTEMP INT,     POPULATIONRATE INT,     POPULATION INT, ); </pre>	<p>1 mark for correctly creating database</p> <p>2 marks for correctly creating the table.</p>	(3)
		<p><b>Section C</b> <b>Each question carries 4 marks</b></p>		
11.		(a) SELECT AVG(SALARY)		

		<p>FROM EMPLOYEE GROUP BY DEPTID;</p> <p>(b) SELECT NAME, DEPTNAME FROM EMPLOYEE, DEPARTMENT WHERE EMPLOYEE.DEPTID= DEPARTMENT.DEPTID AND SALARY&gt;50000;</p> <p>(c) SELECT NAME FROM EMPLOYEE WHERE SALARY IS NULL ORDER BY NAME;</p> <p>(d) SELECT DISTINCT DEPTID FROM EMPLOYEE;</p>	1 mark for each correct query	(4)
12.	(i)	<p>Advantages</p> <ul style="list-style-type: none"> <li>• Ease of service</li> <li>• Centralized control</li> <li>• Easy to diagnose faults</li> <li>• One device per connection</li> </ul> <p>Disadvantages</p> <ul style="list-style-type: none"> <li>• long cable length</li> <li>• difficult to expand</li> <li>• central node dependency</li> </ul> <p style="text-align: center;">OR</p> <p><b>www:</b> a set of protocols that allow you to access any document on the internet through the naming systems based on URLs <b>Web hosting:</b> Web hosting is a service that allows organizations and individuals to post a website or web page onto the server, which can be viewed by everyone on the Internet.</p>	<p>½ mark for each correct advantage / disadvantage</p> <p>1 mark for each correct definition</p>	(2)
	(ii)	<p>Packet switching:</p> <ul style="list-style-type: none"> <li>• uses store and forward concept to send messages</li> <li>• no physical path is actually established</li> <li>• message is divided into smaller parts, known as packets and then sent forward</li> <li>• tight upper limit on block size</li> <li>• Each data unit knows only the final receiver's address</li> </ul>	<p>1 mark for each correct difference</p> <p>(minimum two points should be given)</p>	(2)

		<p>Circuit switching</p> <ul style="list-style-type: none"> <li>• physical connection is established between sender and receiver</li> <li>• Each data unit knows the entire path from sender to receiver</li> <li>• It does not follow store and forward concept</li> </ul>		
13.		<p>(a)</p> <div data-bbox="357 696 995 1137" style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;"><b>BeHappy Corporation</b></p> <pre> graph TD     A[Block A] --- B[Block B]     A --- C[Block C]     C --- D[Block D] </pre> </div> <p>(b)  Repeater : between C and D as the distance between them is 100 mts.  Hub/ Switch : in each block as they help to share data packets within the devices of the network in each block</p> <p>(c) WAN.  (d) Satellite</p>	<p>1 mark for each correct answer</p>	(4)

**CHAPTER-WISE  
WORKSHEETS  
FOR  
TERM-1  
&  
TERM-2**

**NAVY CHILDREN SCHOOL**  
**CHAPTER - REVISION TOUR**  
**CLASS TEST – I**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

---

1. Which of these is not a core data type?
  - a) Lists
  - b) Dictionary
  - c) Tuples
  - d) Class
2. Given a function that does not return any value, What value is thrown by default when executed in shell.
  - a) int
  - b) bool
  - c) void
  - d) None
3. Following set of commands are executed in shell, what will be the output?

```
>>>str="hello"
>>>str[:2]
>>>
```

  - a) he
  - b) lo
  - c) olleh
  - d) hello
4. Which of the following will run without errors?
  - a) round(45.8)
  - b) round(6352.898,2,5)
  - c) round()
  - d) round(7463.123,2,1)
5. What is the return type of function id ?
  - a) int
  - b) float
  - c) bool
  - d) dict
6. In python we do not specify types, it is directly interpreted by the compiler, so consider the following operation to be performed.

```
>>>x = 13 / 2
```

objective is to make sure x has a integer value, select all that apply (python 3.xx)
  - a) x = 13 // 2
  - b) x = int(13 / 2)
  - c) x = 13 % 2
  - d) All of the mentioned
7. What error occurs when you execute?

```
apple = mango
```

  - a) SyntaxError
  - b) NameError
  - c) ValueError
  - d) TypeError

8. Carefully observe the code and give the answer.

```
def example(a):
```

```
    a = a + '2'
```

```
    a = a*2
```

```
    return a
```

```
>>>example("hello")
```

a) indentation Error

b) cannot perform mathematical operation on strings

c) hello2

d) hello2hello2

9. What data type is the object below ?

```
L = [1, 23, 'hello', 1].
```

a) list

b) dictionary

c) array

d) tuple

10. In order to store values in terms of key and value we use what core data type.

a) list

b) tuple

c) class

d) dictionary

11. Which of the following results in a SyntaxError ?

a) "Once upon a time...", she said.'

b) "He said, 'Yes!'"

c) '3\'

d) "'That's okay'"

12. What is the average value of the code that is executed below ?

```
>>>grade1 = 80
```

```
>>>grade2 = 90
```

```
>>>average = (grade1 + grade2) / 2
```

a) 85

b) 85.1

c) 95

d) 95.1

13. Select all options that print

```
hello-how-are-you
```

a) print('hello', 'how', 'are', 'you')

b) print('hello', 'how', 'are', 'you' + '-' \* 4)

c) print('hello-' + 'how-are-you')

d) print('hello' + '-' + 'how' + '-' + 'are' + 'you')

14. What is the return value of trunc() ?

a) int

b) bool

- c) float
- d) None

15. What is the output of print 0.1 + 0.2 == 0.3?

- a) True
- b) False
- c) Machine dependent
- d) Error

16. Which of the following is not a complex number?

- a)  $k = 2 + 3j$
- b)  $k = \text{complex}(2, 3)$
- c)  $k = 2 + 3I$
- d)  $k = 2 + 3J$

17. What is the type of inf?

- a) Boolean
- b) Integer
- c) Float
- d) Complex

18. What does ~4 evaluate to?

- a) -5
- b) -4
- c) -3
- d) +3

19. What does ~~~~~~5 evaluate to?

- a) +5
- b) -11
- c) +11
- d) -5

20. Which of the following is incorrect?

- a)  $x = 0b101$
- b)  $x = 0x4f5$
- c)  $x = 19023$
- d)  $x = 03964$

**CHAPTER - REVISION TOUR**  
**CLASS TEST – II**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

---

1. What is the output of the following?

```
x = ['ab', 'cd']  
for i in x:  
    i.upper()
```

```
print(x)
```

- a) ['ab', 'cd'].
- b) ['AB', 'CD'].
- c) [None, None].
- d) none of the mentioned

2. What is the output of the following?

```
x = ['ab', 'cd']  
for i in x:  
    x.append(i.upper())
```

```
print(x)
```

- a) ['AB', 'CD'].
- b) ['ab', 'cd', 'AB', 'CD'].
- c) ['ab', 'cd'].
- d) none of the mentioned

3. What is the output of the following?

```
i = 1  
while True:  
    if i%3 == 0:  
        break  
    print(i)
```

```
    i += 1
```

- a) 1 2
- b) 1 2 3
- c) error
- d) none of the mentioned

4. What is the output of the following?

```
i = 1  
while True:  
    if i%007 == 0:  
        break  
    print(i)  
    i += 1
```

- a) 1 2 3 4 5 6
- b) 1 2 3 4 5 6 7
- c) error
- d) none of the mentioned

5. What is the output of the following?

```
i = 5
while True:
    if i%11 == 0:
        break
    print(i)
    i += 1
```

- a) 5 6 7 8 9 10
- b) 5 6 7 8
- c) 5 6
- d) error

6. What is the output of the following?

```
i = 5
while True:
    if i%9 == 0:
        break
    print(i)
    i += 1
```

- a) 5 6 7 8
- b) 5 6 7 8 9
- c) 5 6 7 8 9 10 11 12 13 14 15 ....
- d) error

7. What is the output of the following?

```
i = 1
while True:
    if i%2 == 0:
        break
    print(i)
    i += 2
```

- a) 1
- b) 1 2
- c) 1 2 3 4 5 6 ...
- d) 1 3 5 7 9 11 ...

8. What is the output of the following?

```
i = 2
while True:
    if i%3 == 0:
        break
    print(i)
    i += 2
```

- a) 2 4 6 8 10 ...
- b) 2 4
- c) 2 3
- d) error

9. What is the output of the following?

```
i = 1
```

```
while False:
    if i%2 == 0:
        break
    print(i)
    i += 2
```

- a) 1
- b) 1 3 5 7 ...
- c) 1 2 3 4 ...
- d) none of the mentioned

10. What is the output of the following?

```
True = False
while True:
    print(True)
    break
```

- a) True
- b) False
- c) None
- d) none of the mentioned

11. What is the output of the following?

```
i = 0
while i < 5:
    print(i)
    i += 1
    if i == 3:
        break
```

- ```
else:
    print(0)
```
- a) 0 1 2 0
  - b) 0 1 2
  - c) error
  - d) none of the mentioned

12. What is the output of the following?

```
i = 0
while i < 3:
    print(i)
    i += 1
```

- ```
else:
    print(0)
```
- a) 0 1 2 3 0
  - b) 0 1 2 0
  - c) 0 1 2
  - d) error

13. What is the output of the following?

```
x = "abcdef"
while i in x:
    print(i, end=" ")
```

- a) a b c d e f
- b) abcdef
- c) i i i i i ...
- d) error

14. What is the output of the following?

```
x = "abcdef"
i = "i"
while i in x:
    print(i, end=" ")
a) no output
b) i i i i i ...
c) a b c d e f
d) abcdef
```

15. What is the output of the following?

```
x = 'abcd'
for i in x:
    print(i.upper())
a) a b c d
b) A B C D
c) a B C D
d) error
```

16. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    i.upper()
print(x)
a) a b c d
b) 0 1 2 3
c) error
d) none of the mentioned
```

17. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    x = 'a'
    print(x)
a) a
b) abcd abcd abcd
c) a a a a
d) none of the mentioned
```

18. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    print(x)
    x = 'a'
a) a
b) abcd abcd abcd abcd
c) a a a a
d) none of the mentioned
```

19. What is the output of the following?

```
x = 123
```

```
for i in x:
```

```
    print(i)
```

a) 1 2 3

b) 123

c) error

d) none of the mentioned

20 . What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
```

```
for i in d:
```

```
    print(i)
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

Answer 1: a

Explanation: The function upper() does not modify a string in place, it returns a new string which isn't being stored anywhere

Answer 2: d

Explanation: The loop does not terminate as new elements are being added to the list in each iteration.

Answer 3: c

Explanation: SyntaxError, there shouldn't be a space between + and = in +=.

Answer 4: a

Explanation: Control exits the loop when i become

Answer 5: b

Explanation: 0011 is an octal number.

Answer6: d

Explanation: 9 isn't allowed in an octal number.

Answer 7: d

Explanation: The loop does not terminate since i is never an even number.

Answer 8: b

Explanation: The numbers 2 and 4 are printed. The next value of i is 6 which is divisible by 3 and hence control exits the loop

Answer 9: d

Explanation: Control does not enter the loop because of False..

Answer 10 : d

Explanation: SyntaxError, True is a keyword and it's value cannot be changed.

Answer 11: b

Explanation: The else part is not executed if control breaks out of the loop.

Answer 12: b

Explanation: The else part is executed when the condition in the while statement is false.

Answer 13: d

Explanation: NameError, i is not defined.

Answer 14: a

Explanation: "i" is not in "abcdef".

Answer 15: b

Explanation: The instance of the string returned by upper() is being printed.

Answer 16 : c

Explanation: Objects of type int have no attribute upper().

Answer 17: c

Explanation: range() is computed only at the time of entering the loop.

Answer 18 : d

Explanation: abcd a a a is the output as x is modified only after 'abcd' has been printed once.

Answer 19: c

Explanation: Objects of type int are not iterable.

Answer 20: a

Explanation: Loops over the keys of the dictionary.

**NAVY CHILDREN SCHOOL**  
**CHAPTER - REVISION TOUR**  
**CLASS TEST – III**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

---

1. What is the output when following statement is executed ?

```
>>>"a"+"bc"
```

- a) a
- b) bc
- c) bca
- d) abc

2. What is the output when following statement is executed ?

```
>>>"abcd"[2:]
```

- a) a
- b) ab
- c) cd
- d) dc

3. The output of executing `string.ascii_letters` can also be achieved by:

- a) `string.ascii_lowercase_string.digits`
- b) `string.ascii_lowercase+string.ascii_uppercase`
- c) `string.letters`
- d) `string.lowercase_string.uppercase`

4. What is the output when following code is executed ?

```
>>> str1 = 'hello'  
>>> str2 = ','  
>>> str3 = 'world'  
>>> str1[-1:]
```

- a) olleh
- b) hello
- c) h
- d) o

5. What arithmetic operators cannot be used with strings ?

- a) +
- b) \*
- c) -
- d) All of the mentioned

6. What is the output when following code is executed ?

```
>>>print r"\nhello"
```

The output is

- a) a new line and hello
- b) \nhello
- c) the letter r and then hello
- d) error

7. What is the output when following statement is executed ?

>>>print('new' 'line')

- a) Error
- b) Output equivalent to print 'new\nline'
- c) newline
- d) new line

8. What is the output when following statement is executed ?

>>> print('x\97\x98')

- a) Error
- b) 97  
98
- c) x\97
- d) \x97\x98

9. What is the output when following code is executed ?

>>>str1="helloworld"

>>>str1[::-1]

- a) dlrowolleh
- b) hello
- c) world
- d) helloworld

10. print(0xA + 0xB + 0xC) :

- a) 0xA0xB0xC
- b) Error
- c) 0x22
- d) 33

11. What is the output of the following?

print("xyzxyzxzyy".count('yy'))

- a) 2
- b) 0
- c) error
- d) none of the mentioned

12. What is the output of the following?

print("xyzxyzxzyy".count('yy', 1))

- a) 2
- b) 0
- c) 1
- d) none of the mentioned

13. What is the output of the following?

print("xyzxyzxzyy".count('yy', 2))

- a) 2
- b) 0
- c) 1
- d) none of the mentioned

14. What is the output of the following?

print("xyzxyzxzyy".count('xyy', 0, 100))

- a) 2
- b) 0
- c) 1
- d) error

15. What is the output of the following?

```
print("xyyzxyzxzyy".count('xyy', 2, 11))
```

- a) 2
- b) 0
- c) 1
- d) error

16. What is the output of the following?

```
print("xyyzxyzxzyy".count('xyy', -10, -1))
```

- a) 2
- b) 0
- c) 1
- d) error

- 1 Answer: d
- 2 Answer: c
- 3 Answer: b
- 4 Answer: d
- 5 Answer: c
- 6 Answer: b
- 7 Answer: c
- 8 Answer: c
- 9 Answer: a
- 10 Answer: d
- 11 Answer: a
- 12 Answer: a
- 13 Answer: c
- 14 Answer: a
- 15 Answer: b
- 16 Answer: b

**NAVY CHILDREN SCHOOL**  
**CHAPTER - REVISION TOUR**  
**CLASS TEST – IV**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

---

1. Process of removing errors called
  - a) Error Free
  - b) Debug
  - c) Syntax Error
  - d) Exception
2. Which of the following commands will create a list?
  - a) list1 = list()
  - b) list1 = [].
  - c) list1 = list([1, 2, 3])
  - d) all of the mentioned
3. What is the output when we execute list("hello")?
  - a) ['h', 'e', 'l', 'l', 'o'].
  - b) ['hello'].
  - c) ['llo'].
  - d) ['olleh'].
4. Suppose list Example is ['h','e','l','l','o'], what is len(list Example)?
  - a) 5
  - b) 4
  - c) None
  - d) Error
5. Suppose list1 is [2445, 133, 12454, 123], what is max(list1) ?
  - a) 2445
  - b) 133
  - c) 12454
  - d) 123
6. Suppose list1 is [3, 5, 25, 1, 3], what is min(list1) ?
  - a) 3
  - b) 5
  - c) 25
  - d) 1
7. Suppose list1 is [1, 5, 9], what is sum(list1) ?
  - a) 1
  - b) 9
  - c) 15
  - d) Error
8. To shuffle the list(say list1) what function do we use ?
  - a) list1.shuffle ()
  - b) shuffle(list1)
  - c) random.shuffle(list1)
  - d) random.shuffleList(list1)
9. Suppose list1 is [4, 2, 2, 4, 5, 2, 1, 0], which of the following is correct syntax for slicing operation?
  - a) print(list1[0])
  - b) print(list1[:2])

- c) `print(list1[:-2])`  
 d) all of the mentioned
10. Suppose list1 is [2, 33, 222, 14, 25], What is list1[-1] ?  
 a) Error  
 b) None  
 c) 25  
 d) 2
11. Suppose list1 is [2, 33, 222, 14, 25], What is list1[:-1] ?  
 a) [2, 33, 222, 14].  
 b) Error  
 c) 25  
 d) [25, 14, 222, 33, 2].

12. What is the output when following code is executed ?  
`>>>names = ['Amir', 'Bear', 'Charlton', 'Daman']`  
`>>>print(names[-1][-1])`  
 a) A  
 b) Daman  
 c) Error  
 d) n

13. What is the output when following code is executed ?  
`names1 = ['Amir', 'Bear', 'Charlton', 'Daman']`  
`names2 = names1`  
`names3 = names1[:]`  
`names2[0] = 'Alice'`  
`names3[1] = 'Bob'`  
`sum = 0`  
`for ls in (names1, names2, names3):`  
 `if ls[0] == 'Alice':`  
 `sum += 1`  
 `if ls[1] == 'Bob':`  
 `sum += 10`  
`print sum`  
 a) 11  
 b) 12  
 c) 21  
 d) 22

14. Suppose list1 is [1, 3, 2], What is list1 \* 2 ?  
 a) [2, 6, 4].  
 b) [1, 3, 2, 1, 3].  
 c) [1, 3, 2, 1, 3, 2] .  
 D) [1, 3, 2, 3, 2, 1].

15. Suppose list1 = [0.5 \* x for x in range(0, 4)], list1 is :  
 a) [0, 1, 2, 3].  
 b) [0, 1, 2, 3, 4].  
 c) [0.0, 0.5, 1.0, 1.5].  
 d) [0.0, 0.5, 1.0, 1.5, 2.0].

16. What is the output when following code is executed ?

```
>>>list1 = [11, 2, 23]
```

```
>>>list2 = [11, 2, 2]
```

```
>>>list1 < list2 is
```

- a) True
- b) False
- c) Error
- d) None

17. To add a new element to a list we use which command ?

- a) list1.add(5)
- b) list1.append(5)
- c) list1.addLast(5)
- d) list1.addEnd(5)

18. To insert 5 to the third position in list1, we use which command ?

- a) list1.insert(3, 5)
- b) list1.insert(2, 5)
- c) list1.add(3, 5)
- d) list1.append(3, 5)

19. To remove string "hello" from list1, we use which command ?

- a) list1.remove("hello")
- b) list1.remove(hello)
- c) list1.removeAll("hello")
- d) list1.removeOne("hello")

20. Suppose list1 is [3, 4, 5, 20, 5], what is list1.index(5) ?

- a) 0
- b) 1
- c) 4
- d) 2

Answers

1 – b 2 – d, 3-a,4-a,5-c,6-d,7-c,8c,9-d,10-c,11-a,12-d,13-b,14-c,15-c,16-b,17-b,18-a,19-a,20-d

**NAVY CHILDREN SCHOOL**  
**CHAPTER - REVISION TOUR**  
**CLASS TEST -V**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

---

1. Which of the following is a Python tuple?

- a) [1, 2, 3].
- b) (1, 2, 3)
- c) {1, 2, 3}
- d) {}

2. Suppose t = (1, 2, 4, 3), which of the following is incorrect?

- a) print(t[3])
- b) t[3] = 45
- c) print(max(t))
- d) print(len(t))

3. What will be the output?

```
>>>t=(1,2,4,3)
>>>t[1:3]
a) (1, 2)
b) (1, 2, 4)
c) (2, 4)
d) (2, 4, 3)
```

4. What will be the output?

```
>>>t=(1,2,4,3)
>>>t[1:-1]
a) (1, 2)
b) (1, 2, 4)
c) (2, 4)
d) (2, 4, 3)
```

5. What will be the output?

```
>>>t = (1, 2, 4, 3, 8, 9)
>>>[t[i] for i in range(0, len(t), 2)]
a) [2, 3, 9].
b) [1, 2, 4, 3, 8, 9].
c) [1, 4, 8].
d) (1, 4, 8)
```

6. What will be the output?

```
d = {"john":40, "peter":45}
d["john"]
a) 40
b) 45
c) "john"
d) "peter"
```

7. What will be the output?

```
>>>t = (1, 2)
>>>2 * t
a) (1, 2, 1, 2)
b) [1, 2, 1, 2].
c) (1, 1, 2, 2)
d) [1, 1, 2, 2].
```

8. What will be the output?

```
>>>t1 = (1, 2, 4, 3)
>>>t2 = (1, 2, 3, 4)
>>>t1 < t2
a) True
b) False
c) Error
d) None
```

9. What will be the output?

```
>>>my_tuple = (1, 2, 3, 4)
>>>my_tuple.append( (5, 6, 7) )
>>>print len(my_tuple)
a) 1
b) 2
c) 5
d) Error
```

10. What will be the output?

```
numberGames = {}
numberGames[(1,2,4)] = 8
numberGames[(4,2,1)] = 10
numberGames[(1,2)] = 12
sum = 0
for k in numberGames:
    sum += numberGames[k]
print len(numberGames) + sum
a) 30
b) 24
c) 33
d) 12
```

11. What is the data type of (1)?

a) Tuple  
b) Integer  
c) List  
d) Both tuple and integer

12. If a=(1,2,3,4), a[1:-1] is

a) Error, tuple slicing doesn't exist  
b) [2,3].  
c) (2,3,4)  
d) (2,3)

13. What is the output of the following code?

```
>>> a=(1,2,(4,5))
```

```
>>> b=(1,2,(3,4))
```

```
>>> a<b
```

- a) False
- b) True
- c) Error, < operator is not valid for tuples
- d) Error, < operator is valid for tuples but not if there are sub-tuples

14. What is the output of the following piece of code when executed in Python shell?

```
>>> a=("Check")*3
```

```
>>> a
```

- a) ('Check','Check','Check')
- b) \* Operator not valid for tuples
- c) ('CheckCheckCheck')
- d) Syntax error

15. What is the output of the following code?

```
>>> a=(1,2,3,4)
```

```
>>> del(a[2])
```

- a) Now, a=(1,2,4)
- b) Now, a=(1,3,4)
- c) Now a=(3,4)
- d) Error as tuple is immutable

16. What is the output of the following code?

```
>>> a=(2,3,4)
```

```
>>> sum(a,3)
```

- a) Too many arguments for sum() method
- b) The method sum() doesn't exist for tuples
- c) 12
- d) 9

17. Is the following piece of code valid?

```
>>> a=(1,2,3,4)
```

```
>>> del a
```

- a) No because tuple is immutable
- b) Yes, first element in the tuple is deleted
- c) Yes, the entire tuple is deleted
- d) No, invalid syntax for del method

18. What type of data is: a=[(1,1),(2,4),(3,9)]?

- a) Array of tuples
- b) List of tuples
- c) Tuples of lists
- d) Invalid type

19. What is the output of the following piece of code?

```
>>> a=(0,1,2,3,4)
```

```
>>> b=slice(0,2)
```

```
>>> a[b]
```

- a) Invalid syntax for slicing
- b) [0,2].
- c) (0,1)

d) (0,2)

20. Is the following piece of code valid?

```
>>> a=(1,2,3)
```

```
>>> b=('A','B','C')
```

```
>>> c=zip(a,b)
```

a) Yes, c will be ((1,2,3),('A','B','C'))

b) Yes, c will be ((1,2,3),('A','B','C'))

c) No because tuples are immutable

d) No because the syntax for zip function isn't valid

**Answers**

1 – b 2 – b, 3-c,4-c,5-c,6-a,7-a,8-b,9-d,10-c,11-b,12-d,13-a,14-c,15-d,16-c,17-c,18-b,19-c,20-a

**NAVY CHILDREN SCHOOL**  
**CHAPTER - FUNCTIONS**  
**CLASS TEST –VI**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

---

1. Which of the following is the use of function in python?
- a) Functions are reusable pieces of programs
  - b) Functions don't provide better modularity for your application
  - c) you can't also create your own functions
  - d) All of the mentioned

Answer: a

Explanation: Functions are reusable pieces of programs. They allow you to give a name to a block of statements, allowing you to run that block using the specified name anywhere in your program and any number of times.

2. Which keyword is use for function?

- a) Fun
- b) Define
- c) Def
- d) Function

Answer: c

3. What is the output of the below program?

```
def sayHello():  
    print('Hello World!')
```

```
sayHello()
```

```
sayHello()
```

- a) Hello World!

```
Hello World!
```

- b) 'Hello World!'

```
'Hello World!'
```

- c) Hello

```
Hello
```

- d) None of the mentioned

Answer: a

Explanation: Functions are defined using the def keyword. After this keyword comes an identifier name for the function, followed by a pair of parentheses which may enclose some names of variables, and by the final colon that ends the line. Next follows the block of statements that are part of this function.

```
def sayHello():
```

```
    print('Hello World!') # block belonging to the function
```

```
# End of function #
```

```
sayHello() # call the function
```

```
sayHello() # call the function again
```

4. What is the output of the below program?

```
def printMax(a, b):
```

```
    if a > b:
```

```
        print(a, 'is maximum')
```

```
    elif a == b:
```

```
        print(a, 'is equal to', b)
```

```
    else:
```

```
print(b, 'is maximum')
printMax(3, 4)
a) 3
b) 4
c) 4 is maximum
d) None of the mentioned
```

Answer: c

Explanation: Here, we define a function called printMax that uses two parameters called a and b. We find out the greater number using a simple if..else statement and then print the bigger number.

5. What is the output of the below program ?

```
x = 50
def func(x):
    print('x is', x)
    x = 2
    print('Changed local x to', x)
func(x)
print('x is now', x)
a) x is now 50
b) x is now 2
c) x is now 100
d) None of the mentioned
```

Answer: a

Explanation: The first time that we print the value of the name x with the first line in the function's body, Python uses the value of the parameter declared in the main block, above the function definition.

Next, we assign the value 2 to x. The name x is local to our function. So, when we change the value of x in the function, the x defined in the main block remains unaffected.

With the last print function call, we display the value of x as defined in the main block, thereby confirming that it is actually unaffected by the local assignment within the previously called function.

6. What is the output of the below program?

```
x = 50
def func():
    global x
    print('x is', x)
    x = 2
    print('Changed global x to', x)
func()
print('Value of x is', x)
a) x is 50
Changed global x to 2
Value of x is 50
b) x is 50
Changed global x to 2
Value of x is 2
c) x is 50
Changed global x to 50
Value of x is 50
d) None of the mentioned
```

Answer: b

Explanation: The global statement is used to declare that x is a global variable – hence, when we assign a value to x inside the function, that change is reflected when we use the value of x in the main block.

7. What is the output of below program?

```
def say(message, times = 1):  
    print(message * times)
```

```
say('Hello')
```

```
say('World', 5)
```

a) Hello

WorldWorldWorldWorldWorld

b) Hello

World 5

c) Hello

World,World,World,World,World

d) Hello

HelloHelloHelloHelloHello

Answer: a

Explanation: For some functions, you may want to make some parameters optional and use default values in case the user does not want to provide values for them. This is done with the help of default argument values. You can specify default argument values for parameters by appending to the parameter name in the function definition the assignment operator (=) followed by the default value.

The function named say is used to print a string as many times as specified. If we don't supply a value, then by default, the string is printed just once. We achieve this by specifying a default argument value of 1 to the parameter times.

In the first usage of say, we supply only the string and it prints the string once. In the second usage of say, we supply both the string and an argument 5 stating that we want to say the string message 5 times.

8. What is the output of the below program?

```
def func(a, b=5, c=10):
```

```
    print('a is', a, 'and b is', b, 'and c is', c)
```

```
func(3, 7)
```

```
func(25, c = 24)
```

```
func(c = 50, a = 100)
```

a) a is 7 and b is 3 and c is 10

a is 25 and b is 5 and c is 24

a is 5 and b is 100 and c is 50

b) a is 3 and b is 7 and c is 10

a is 5 and b is 25 and c is 24

a is 50 and b is 100 and c is 5

c) a is 3 and b is 7 and c is 10

a is 25 and b is 5 and c is 24

a is 100 and b is 5 and c is 50

d) None of the mentioned

Answer: c

Explanation: If you have some functions with many parameters and you want to specify only some of them, then you can give values for such parameters by naming them – this is called keyword arguments – we use the name (keyword) instead of the position (which we have been using all along) to specify the arguments to the function. The function named func has one parameter without a default argument value, followed by two parameters with default argument values.

In the first usage, `func(3, 7)`, the parameter `a` gets the value 3, the parameter `b` gets the value 7 and `c` gets the default value of 10.

In the second usage `func(25, c=24)`, the variable `a` gets the value of 25 due to the position of the argument. Then, the parameter `c` gets the value of 24 due to naming i.e. keyword arguments. The variable `b` gets the default value of 5.

In the third usage `func(c=50, a=100)`, we use keyword arguments for all specified values. Notice that we are specifying the value for parameter `c` before that for `a` even though `a` is defined before `c` in the function definition.

9. What is the output of below program?

```
def maximum(x, y):
    if x > y:
        return x
    elif x == y:
        return 'The numbers are equal'
    else:
        return y
print(maximum(2, 3))
```

- a) 2
- b) 3
- c) The numbers are equal
- d) None of the mentioned

Answer: b

Explanation: The maximum function returns the maximum of the parameters, in this case the numbers supplied to the function. It uses a simple `if..else` statement to find the greater value and then returns that value.

10. Which of the following is a features of DocString?

- a) Provide a convenient way of associating documentation with Python modules, functions, classes, and methods
- b) All functions should have a docstring
- c) Docstrings can be accessed by the `__doc__` attribute on objects
- d) All of the mentioned

Answer: d

Explanation: Python has a nifty feature called documentation strings, usually referred to by its shorter name docstrings. DocStrings are an important tool that you should make use of since it helps to document the program better and makes it easier to understand

11. Which are the advantages of functions in python?

- a) Reducing duplication of code
- b) Decomposing complex problems into simpler pieces
- c) Improving clarity of the code
- d) All of the mentioned

Answer: d

12. What are the two main types of functions?

- a) Custom function
- b) Built-in function & User defined function
- c) User function
- d) System function

Answer: b

Explanation: Built-in functions and user defined ones. The built-in functions are part of the Python language. Examples are: dir(), len() or abs(). The user defined functions are functions created with the def keyword.

13. Where is function defined?

- a) Module
- b) Class
- c) Another function
- d) All of the mentioned

Answer: d

Explanation: Functions can be defined inside a module, a class or another function.

14. What is called when a function is defined inside a class?

- a) Module
- b) Class
- c) Another function
- d) Method

Answer: d

Explanation: None.

15. Which of the following is the use of id() function in python?

- a) Id returns the identity of the object
- b) Every object doesn't have a unique id
- c) All of the mentioned
- d) None of the mentioned

Answer: a

Explanation: Each object in Python has a unique id. The id() function returns the object's id.

16. Which of the following refers to mathematical function?

- a) sqrt
- b) rhombus
- c) add
- d) rhombus

Answer: a

Explanation: Functions that are always available for usage, functions that are contained within external modules, which must be imported and functions defined by a programmer with the def keyword.

Eg: math import sqrt

A sqrt() function is imported from the math module.

17. What is the output of below program?

```
def cube(x):  
    return x * x * x  
x = cube(3)
```

print x

- a) 9
- b) 3
- c) 27
- d) 30

Answer: c

Explanation: A function is created to do a specific task. Often there is a result from such a task. The return keyword is used to return values from a function. A function may or may not return a value. If a function does not have a return keyword, it will send a none value.

18. What is the output of the below program?

```
def C2F(c):  
    return c * 9/5 + 32
```

```
print C2F(100)
```

```
print C2F(0)
```

a) 212

32

b) 314

24

c) 567

98

d) None of the mentioned

Answer: a

Explanation: The code shown above is used to convert a temperature in degree celsius to fahrenheit.

19. What is the output of the below program?

```
def power(x, y=2):
```

```
    r = 1
```

```
    for i in range(y):
```

```
        r = r * x
```

```
    return r
```

```
print power(3)
```

```
print power(3, 3)
```

a) 212

32

b) 9

27

c) 567

98

d) None of the mentioned

Answer: b

Explanation: The arguments in Python functions may have implicit values. An implicit value is used, if no value is provided. Here we created a power function. The function has one argument with an implicit value. We can call the function with one or two arguments.

20. What is the output of the below program?

```
def sum(*args):
```

```
    """Function returns the sum
```

```
    of all values"""
```

```
    r = 0
```

```
    for i in args:
```

```
        r += i
```

```
    return r
```

```
print sum.__doc
```

```
print sum(1, 2, 3)
```

```
print sum(1, 2, 3, 4, 5)
```

a) 6

15

b) 6

100

c) 123

12345

d) None of the mentioned

Answer: a

Explanation: We use the \* operator to indicate, that the function will accept arbitrary number of arguments. The sum() function will return the sum of all arguments. The first string in the function body is called the function documentation string. It is used to document the function. The string must be in triple quotes.

**CHAPTER - FILE HANDLING:**  
**CLASS TEST -VII**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1. To open a file c:\scores.txt for reading, we use

- a) infile = open("c:\scores.txt", "r")
- b) infile = open("c:\\scores.txt", "r")
- c) infile = open(file = "c:\scores.txt", "r")
- d) infile = open(file = "c:\\scores.txt", "r")

Answer: b

Explanation: Execute help(open) to get more details.

2. To open a file c:\scores.txt for writing, we use

- a) outfile = open("c:\scores.txt", "w")
- b) outfile = open("c:\\scores.txt", "w")
- c) outfile = open(file = "c:\scores.txt", "w")
- d) outfile = open(file = "c:\\scores.txt", "w")

Answer: b

Explanation: w is used to indicate that file is to be written to.

3. To open a file c:\scores.txt for appending data, we use

- a) outfile = open("c:\\scores.txt", "a")
- b) outfile = open("c:\\scores.txt", "rw")
- c) outfile = open(file = "c:\scores.txt", "w")
- d) outfile = open(file = "c:\\scores.txt", "w")

4. Which of the following statements are true?

- a) When you open a file for reading, if the file does not exist, an error occurs
- b) When you open a file for writing, if the file does not exist, a new file is created
- c) When you open a file for writing, if the file exists, the existing file is overwritten with the new file
- d) All of the mentioned

Answer: d

Explanation: The program will throw an error.

5. To read two characters from a file object infile, we use

- a) infile.read(2)
- b) infile.read()
- c) infile.readline()
- d) infile.readlines()

Answer: a

Explanation: Execute in the shell to verify.

6. To read the entire remaining contents of the file as a string from a file object infile, we use

- a) infile.read(2)
- b) infile.read()
- c) infile.readline()
- d) infile.readlines()

Answer: b

Explanation: read function is used to read all the lines in a file.

7. What is the output?

```
f = None
```

```
for i in range (5):
```

```
    with open("data.txt", "w") as f:
```

```
        if i > 2:
```

```
            break
```

```
print(f.closed)
```

a) True

b) False

c) None

d) Error

Answer: a

Explanation: The WITH statement when used with open file guarantees that the file object is closed when the with block exits.

8. To read the next line of the file from a file object infile, we use

a) infile.read(2)

b) infile.read()

c) infile.readline()

d) infile.readlines()

Answer: c

Explanation: Execute in the shell to verify.

9. To read the remaining lines of the file from a file object infile, we use

a) infile.read(2)

b) infile.read()

C) infile.readline()

d) infile.readlines()

Answer: d

Explanation: Execute in the shell to verify.

10. The readlines() method returns

a) str

b) a list of lines

c) a list of single characters

d) a list of integers

Answer: b

Explanation: Every line is stored in a list and returned.

**CHAPTER PYTHON LIBRARIES – SYS MODULE**  
**CLASS TEST – VIII**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1. Which of the following functions can help us to find the version of python that we are currently working on?

- a) sys.version
- b) sys.version()
- c) sys.version(0)
- d) sys.version(1)

Answer: a

Explanation: The function sys.version can help us to find the version of python that we are currently working on. For example, 3.5.2, 2.7.3 etc. this function also returns the current date, time, bits etc along with the version.

2. Which of the following functions is not defined under the sys module?

- a) sys.platform
- b) sys.path
- c) sys.readline
- d) sys.argv

Answer: c

Explanation: The functions sys.platform, sys.path and sys.argv are defined under the sys module. The function sys.readline is not defined. However, sys.stdin.readline is defined.

3. The output of the functions len("abc") and sys.getsizeof("abc") will be the same. State whether true or false.

- a) True
- b) False

Answer: b

Explanation: The function len returns the length of the string passed, and hence its output will be 3. The function getsizeof, present under the sys module returns the size of the object passed. Its output will be a value much larger than 3. Hence the above statement is false.

4. What is the output of the code shown below, if the code is run on Windows operating system?

```
import sys
if sys.platform[:2]== 'wi':
    print("Hello")
```

- a) Error
- b) Hello
- c) No output
- d) Junk value

Answer: b

Explanation: The output of the function `sys.platform[:2]` is equal to 'wi', when this code is run on windows operating system. Hence the output printed is 'hello'.

5. What is the output of the following line of code, if the `sys` module has already been imported?

```
sys.stdout.write("hello world")
```

- a) helloworld
- b) hello world10
- c) hello world11
- d) error

Answer: c

Explanation: The function shown above prints the given string along with the length of the string. Hence the output of the function shown above will be hello world11.

6. What is the output of the code shown below?

```
import sys
sys.stdin.readline()
Sanfoundry
```

- a) 'Sanfoundry\n'
- b) 'Sanfoundry'
- c) 'Sanfoundry10'
- d) Error

Answer: a

Explanation: The function shown above works just like `raw_input`. Hence it automatically adds a '\n' character to the input string. Therefore, the output of the function shown above will be: Sanfoundry\n.

7. What is the output of this code?

```
import sys
eval(sys.stdin.readline())
"India"
```

- a) India5
- b) India
- c) 'India\n'
- d) 'India'

Answer: d

Explanation: The function shown above evaluates the input into a string. Hence if the input entered is enclosed in double quotes, the output will be enclosed in single quotes. Therefore, the output of this code is 'India'.

8. What is the output of the code shown below?

```
import sys
eval(sys.stdin.readline())
Computer
```

- a) Error

- b) 'Computer\n'
- c) Computer8
- d) Computer

Answer: a

Explanation: The code shown above will result in an error. This is because this particular function accepts only strings enclosed in single or double inverted quotes, or numbers. Since the string entered above is not enclosed in single or double inverted quotes, an error will be thrown.

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9. What is the output of the code shown below?

```
import sys
sys.argv[0]
```

- a) Junk value
- b) ' '
- c) No output
- d) Error

Answer: b

Explanation: The output of the function shown above will be a blank space enclosed in single quotes. Hence the output of the code shown above is ' '.

10. What is the output of the code shown below is:

```
import sys
sys.stderr.write("hello")
```

- a) 'hello'
- b) 'hello\n'
- c) hello
- d) hello5

Answer: d

Explanation: The code shown above returns the string, followed by the length of the string. Hence the output of the code shown above is hello5.

11. What is the output of the code shown below?

```
import sys
sys.argv
```

- a) ' '
- b) [ ]
- c) [ ' ]
- d) Error

Answer: c

Explanation: The output of the code shown above is a blank space inserted in single quotes, which is enclosed by square brackets. Hence the output will be [ ' ' ].

12. To obtain a list of all the functions defined under sys module, which of the following functions can be used?

- a) print(sys)
- b) print(dir.sys)
- c) print(dir[sys])
- d) print(dir(sys))

Answer: d

Explanation: The function print(dir(sys)) helps us to obtain a list of all the functions defined under the sys module. The function can be used to obtain the list of functions under any given module in Python.

13. The output of the function len(sys.argv) is \_\_\_\_\_

- a) Error
- b) 1
- c) 0
- d) Junk value

Answer: b

Explanation: The output of the function sys.argv is [' ']. When we execute the function len([' ']), the output is 1. Hence the output of the function len(sys.argv) is also 1.

## CHAPTER PYTHON LIBRARIES – RANDOM MODULE

### CLASS TEST – IX

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1. What the does random.seed(3) return?
- a) True
  - b) None
  - c) 3
  - d) 1

Answer: b

Explanation: The function random.seed() always returns a None.

2. Which of the following cannot be returned by random.randrange(4)?
- a) 0
  - b) 3
  - c) 2.3
  - d) none of the mentioned

Answer: c

Explanation: Only integers can be returned.

3. Which of the following is equivalent to random.randrange(3)?
- a) range(3)
  - b) random.choice(range(0, 3))
  - c) random.shuffle(range(3))
  - d) random.select(range(3))

Answer: b

Explanation: It returns one number from the given range.

4. The function random.randint(4) can return only one of the following values. Which?
- a) 4
  - b) 3.4
  - c) error
  - d) 5

Answer: c

Explanation: Error, the function takes two arguments.

5. Which of the following is equivalent to random.randint(3, 6)?
- a) random.choice([3, 6])
  - b) random.randrange(3, 6)
  - c) 3 + random.randrange(3)
  - d) 3 + random.randrange(4)

Answer: d

Explanation: random.randint(3, 6) can return any one of 3, 4, 5 and 6.

6. Which of the following will not be returned by random.choice("1 ,")?

- a) 1
- b) (space)
- c) ,
- d) none of the mentioned

Answer: d

Explanation: Any of the characters present in the string may be returned.

7. Which of the following will never be displayed on executing `print(random.choice({0: 1, 2: 3}))`?

- a) 0
- b) 1
- c) KeyError: 1
- d) none of the mentioned

Answer: a

Explanation: It will not print 0 but `dict[0]` i.e. 1 may be printed.

8. What does `random.shuffle(x)` do when `x = [1, 2, 3]`?

- a) error
- b) do nothing, it is a placeholder for a function that is yet to be implemented
- c) shuffle the elements of the list in-place
- d) none of the mentioned

Answer: c

Explanation: The elements of the list passed to it are shuffled in-place.

9. Which type of elements are accepted by `random.shuffle()`?

- a) strings
- b) lists
- c) tuples
- d) integers

Answer: b

Explanation: Strings and tuples are immutable and an integer has no `len()`.

10. What is the range of values that `random.random()` can return?

- a) `[0.0, 1.0]`.
- b) `(0.0, 1.0]`.
- c) `(0.0, 1.0)`
- d) `[0.0, 1.0)`

Answer: d

Explanation: Any number that is greater than or equal to 0.0 and lesser than 1.0 can be returned.

**NAVY CHILDREN SCHOOL CHAPTER -**  
**DATA STRUCTURES**

**CLASS TEST – XII**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1. Process of inserting an element in stack is called \_\_\_\_\_

- a) Create
- b) Push
- c) Evaluation
- d) Pop

Answer: b

2. Process of removing an element from stack is called \_\_\_\_\_

- a) Create
- b) Push
- c) Evaluation
- d) Pod

Answer: d

3. In a stack, if a user tries to remove an element from empty stack it is called

- a) Underflow
- b) Empty collection
- c) Overflow
- d) Garbage Collection

Answer: a

4. Pushing an element into stack already having five elements and stack size of 5 , then stack becomes

- a) Overflow
- b) Crash
- c) Underflow
- d) User flow

Answer: a

5. Entries in a stack are “ordered”. What is the meaning of this statement?

- a) A collection of stacks is sortable
- b) Stack entries may be compared with the '<' operation
- c) The entries are stored in a linked list
- d) There is a Sequential entry that is one by one

Answer : d

6. Which of the following applications may use a stack?

- a) A parentheses balancing program
- b) Tracking of local variables at run time
- c) Compiler Syntax Analyzer
- d) All of the mentioned

Answer: d

7. Consider the usual algorithm for determining whether a sequence of parentheses is balanced.

The maximum number of parentheses that appear on the stack AT ANY ONE TIME when the algorithm analyzes:  $((()())())$  are:

- a) 1
- b) 2
- c) 3
- d) 4 or more

Answer: c

Explanation: Applying the postfix expression evaluation.

8. Consider the usual algorithm for determining whether a sequence of parentheses is balanced.

Suppose that you run the algorithm on a sequence that contains 2 left parentheses and 3 right parentheses (in some order).

The maximum number of parentheses that appear on the stack AT ANY ONE TIME during the computation?

- a) 1
- b) 2
- c) 3
- d) 4 or more

Answer: b

Explanation: Applying the postfix expression evaluation.

9. What is the value of the postfix expression  $6\ 3\ 2\ 4\ +\ -\ *$ :

- a) Something between -5 and -15
- b) Something between 5 and -5
- c) Something between 5 and 15
- d) Something between 15 and 100

Answer: d

Explanation: On solving the postfix expression the answer comes out to 18.

10. Here is an infix expression:  $4 + 3*(6*3-12)$ . Suppose that we are using the usual stack algorithm to convert the expression from infix to postfix notation.

The maximum number of symbols that will appear on the stack AT ONE TIME during the conversion of this expression?

- a) 1
- b) 2
- c) 3
- d) 4

Answer: d

Explanation: None

10. A linear list of elements in which deletion can be done from one end (front) and insertion can take place only at the other end (rear) is known as a ?

- a) Queue
- b) Stack
- c) Tree

d) Linked list

Answer: a

Explanation: None.

11. The data structure required for Breadth First Traversal on a graph is?

- a) Stack
- b) Array
- c) Queue
- d) Tree

Answer: c

Explanation: None.

12. A queue is a ?

- a) FIFO (First In First Out) list
- b) LIFO (Last In First Out) list
- c) Ordered array
- d) Linear tree

Answer: a

Explanation: None.

13. In Breadth First Search of Graph, which of the following data structure is used?

- a) Stack
- b) Queue
- c) Linked list
- d) None of the mentioned

Answer: b

Explanation: None.

14. If the elements "A", "B", "C" and "D" are placed in a queue and are deleted one at a time, in what order will they be removed?

- a) ABCD
- b) DCBA
- c) DCAB
- d) ABDC

Answer: a

Explanation: Queue follows FIFO approach.

15. A data structure in which elements can be inserted or deleted at/from both the ends but not in the middle is?

- a) Queue

- b) Circular queue
- c) Dequeue
- d) Priority queue

Answer: c

Explanation: None.

16. A normal queue, if implemented using an array of size MAX\_SIZE, gets full when

- a)  $\text{Rear} = \text{MAX\_SIZE} - 1$
- b)  $\text{Front} = (\text{rear} + 1) \bmod \text{MAX\_SIZE}$
- c)  $\text{Front} = \text{rear} + 1$
- d)  $\text{Rear} = \text{front}$

Answer: a

Explanation: Condition for size of queue.

17. Queues serve major role in

- a) Simulation of recursion
- b) Simulation of arbitrary linked list
- c) Simulation of limited resource allocation
- d) All of the mentioned

Answer: c

Explanation: Rest all are implemented using other data structures.

18. Which of the following is not the type of queue?

- a) Ordinary queue
- b) Single ended queue
- c) Circular queue
- d) Priority queue

Answer: b

Explanation: Queue always has two ends.

**NAVY CHILDREN SCHOOL**  
**CHAPTER - COMPUTER NETWORKS**  
**CLASS TEST – XIII**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1 Computer Network is

- A. Collection of hardware components and computers
- B. Interconnected by communication channels
- C. Sharing of resources and information
- D. All of the Above

2 What is a Firewall in Computer Network?

- A. The physical boundary of Network
- B. An operating System of Computer Network
- C. A system designed to prevent unauthorized access
- D. A web browsing Software

3 How many layers does OSI Reference Model has?

- A. 4
- B. 5
- C. 6
- D. 7

4 DHCP is the abbreviation of

- A. Dynamic Host Control Protocol
- B. Dynamic Host Configuration Protocol
- C. Dynamic Hyper Control Protocol
- D. Dynamic Hyper Configuration Protocol

5 IPV4 Address is

- A. 8 bit
- B. 16 bit
- C. 32 bit
- D. 64 bit

6 DNS is the abbreviation of

- A. Dynamic Name System
- B. Dynamic Network System
- C. Domain Name System
- D. Domain Network Service

7 What is the meaning of Bandwidth in Network?

- A. Transmission capacity of a communication channels
- B. Connected Computers in the Network
- C. Class of IP used in Network
- D. None of Above

8 ADSL is the abbreviation of

- A. Asymmetric Dual Subscriber Line
- B. Asymmetric Digital System Line
- C. Asymmetric Dual System Line

D. Asymmetric Digital Subscriber Line

9 What is the use of Bridge in Network?

- A. to connect LANs
- B. to separate LANs
- C. to control Network Speed
- D. All of the above

10 Router operates in which layer of OSI Reference Model?

- A. Layer 1 (Physical Layer)
- B. Layer 3 (Network Layer)
- C. Layer 4 (Transport Layer)
- D. Layer 7 (Application Layer)

11 Each IP packet must contain

- A. Only Source address
- B. Only Destination address
- C. Source and Destination address
- D. Source or Destination address

12 Bridge works in which layer of the OSI model?

- A. Appliation layer
- B. Transport layer
- C. Network layer
- D. Datalink layer

13 \_\_\_\_\_provides a connection-oriented reliable service for sending messages

- A. TCP
- B. IP
- C. UDP
- D. All of the above

14 Which layers of the OSI model are host-to-host layers?

- A. Transport, Session, Persentation, Application
- B. Network, Transport, Session, Presentation
- C. Datalink, Network, Transport, Session
- D. Physical, Datalink, Network, Transport

15 Which of the following IP address class is Multicast

- A. Class A
- B. Class B
- C. Class C
- D. Class D

16 Which of the following is correct regarding Class B Address of IP address

- A. Network bit – 14, Host bit – 16
- B. Network bit – 16, Host bit – 14
- C. Network bit – 18, Host bit – 16
- D. Network bit – 12, Host bit – 14

17 The last address of IP address represents

- A. Unicast address
- B. Network address
- C. Broadcast address
- D. None of above

18 How many bits are there in the Ethernet address?

- A. 64 bits
- B. 48 bits
- C. 32 bits
- D. 16 bits

19 How many layers are in the TCP/IP model?

- A. 4 layers
- B. 5 layers
- C. 6 layers
- D. 7 layers

20 Which of the following layer of OSI model also called end-to-end layer?

- A. Presentation layer
- B. Network layer
- C. Session layer
- D. Transport layer

### Answers

1 – D / 2 – C / 3 – D / 4 – B / 5 – C / 6 – C / 7 – A / 8 – D / 9 – A / 10 – B

11 – C / 12 – D / 13 – A / 14 – A / 15 – D / 16 – A / 17 – C / 18 – B / 19 – A / 20 – D

**NAVY CHILDREN SCHOOL**  
**CHAPTER - SIMPLE QUERIES IN SQL.**  
**CLASS TEST XV**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1. The statement in SQL which allows to change the definition of a table is
- (A) Alter.                      (B) Update.  
(C) Create.                      (D) select.

Ans: A

2. The statement in SQL which allows to change the definition of a table is
- (A) Alter.                      (B) Update.  
(C) Create.                      (D) select.

Ans: A

3. Key to represent relationship between tables is called
- (A) Primary key      (B) Secondary Key  
(C) Foreign Key      (D) None of these

Ans: C

4. \_\_\_\_\_produces the relation that has attributes of R1 and R2
- (A) Cartesian product      (B) Difference  
(C) Intersection              (D) Product

Ans: A

5. It is better to use files than a DBMS when there are
- (A) Stringent real-time requirements.  
(B) Multiple users wish to access the data.  
(C) Complex relationships among data.  
(D) All of the above.

Ans: B

6. The conceptual model is
- (A) dependent on hardware.

(B) dependent on software.

(C) dependent on both hardware and software .

(D) independent of both hardware and software.

Ans: D

7. What is a relationship called when it is maintained between two entities?

(A) Unary (B) Binary

(C) Ternary (D) Quaternary

Ans: B

8. Which of the following operation is used if we are interested in only certain columns of a table?

(A) PROJECTION (B) SELECTION

(C) UNION (D) JOIN

Ans: A

9. Which of the following is a valid SQL type?

(A) CHARACTER (B) NUMERIC

(C) FLOAT (D) All of the above

Ans: D

10. The RDBMS terminology for a row is

(A) tuple. (B) relation.

(C) attribute. (D) degree.

Ans: A

**NAVY CHILDREN SCHOOL**  
**CHAPTER - INTELLECTUAL PROPERTY RIGHTS**  
**CLASS TEST – XVI**

Class XII  
Time: 40 Min

Sub : CS (083)  
Max Marks: 20

1. Trademark can be used as domain name

**(a) Yes**

(b) No

(c) Yes in some cases

(d) None of the above

2. Who administer UDRP?

(a) WTO

**(b) WIPO**

(c) Supreme Court

(d) High court

3. Geographical Indication is

(a) Private right

(b) Community right

(c) Intellectual property right

**(d) both (b) and (c)**

4. Who can register Geographical Indication?

(a) Individual

(b) Company

**(c) Producers**

(d) No one of the above

5. Certification mark indicates

(a) Source

**(b) Quality**

(c) both (a) and (b)

(d) None of the above

6. Certification mark can be registered in

**(a) Trademark Registry**

**(b) Certification Board**

(c ) Quality Control Board

(d) MHRD

7. Collective Mark is registered by

(a) Partnership firm

**(b) Association of person**

**(c) Individual**

(d) Company

8. Hall Mark is

(a) Trademark

**(b) Certification Mark**

(c ) Collective Mark

(d) Both (a) and (b)

9. Khadi is

(a) Trademark

(b) Certification Mark

**(c ) Collective Mark**

(d) Both (a) and (b)

10. Geographical Indication can be licensed

(a) Yes

**(b) No**

(c ) Yes in some cases

(d) Yes with stringent quality control

**NAVY CHILDREN SCHOOL**  
**CHAPTER – CYBER SECURITY**

1. What are computer ethics?

- A. An honest, moral code that should be followed when on the computer
- B. A computer program about honesty
- C. A computer that fits on or under a desk
- D. A list of commandments in the Bible

2. What is NOT an example of cyberbullying?

- A. Creating an embarrassing picture of your classmate and forwarding it to your friend's email addresses
- B. Sending someone a mean text
- C. Bullying someone in the hallway
- D. Threatening someone in an instant message

3. Which is an example of plagiarism?

- A. Reading a paragraph online and retyping it in your own words.
- B. Copying and pasting someone else's work into your paper using quotation marks and citing the author
- C. Typing a paper in your own words
- D. Copying and pasting a sentence from the Internet into your paper.

4. Which is NOT a consequence of copying or distributing copyrighted software?

- A. Community Service
- B. Imprisonment
- C. Up to \$10,000 in legal fees
- D. Up to \$50,000 in civil fees

5. Which is not a type of cyberbully?

- A. "Mean Girls"
- B. Power Hungry or Revenge of the Nerds
- C. Big, Bad Bully
- D. The Vengeful Angel
- E. The Inadvertent Cyberbully "Because I Can"

6. Check TWO ways to prevent or stop cyberbullying?

- A. Forward a mean message about a bully to your friends
- B. Tell a parent, teacher, or administrator
- C. Not forwarding mean texts sent you about a classmate
- D. Use instant messenger to talk to your friends about someone's outfit you did not like that day at school

7. Which is NOT a consequence of plagiarism?

- A. You can get kicked out of college.
- B. You can make a zero on your assignment.
- C. You can get fired from your job.
- D. You could get a warning from your college professor.

8. Which of the following is NOT a rule listed in Computer Discovery's Ten Commandments of Computer Ethics?

- A. Thou shalt not use a computer to email.
- B. Thou shalt not use a computer to cyberbully.
- C. Thou shalt not use a computer to interfere with other people's computer work.
- D. Thou shalt not use a computer to be nosy or snoop into other people's computer files.
- E. Thou shalt not use a computer to steal.

9. Which of the following is NOT a rule listed in Computer Discovery's Ten Commandments of Computer Ethics?

- A. Thou Shalt not use a computer to lie.
- B. Thou shalt not copy copyrighted software and materials.
- C. Thou shalt not let others borrow your computer.
- D. Thou shalt not use a computer to plagiarize.
- E. Thou shalt respect other at all times when using the computer.

10. Thou shalt not create \_\_\_\_\_ software or games.

- A. Difficult
- B. Copyrighted
- C. Easy
- D. Harmful