

KENDRIYA VIDYALAYA
PRE BOARD EXAMINATION 2019-20
CLASS XII COMPUTER SCIENCE

Time Duration: 3 hours

Maximum Marks: 70

1. (a) Identify and write the name of the module to which the following functions belong: 1
(i) `ceil()` (ii) `findall()`
- (b) Which of the following can be used as valid variable identifier(s) in Python? 1
`sun@gmail`, `_incometax`, `For`, `2prize`, `4rthEmperor`, `Total`, `Number#`, `King1`
- (c) Find the output of the following code: 1
def INVOKE(n1=3, n2=5):
 n1=n1*n2
 n2+=2
 print(n1, n2)
INVOKE()
INVOKE(5,10)
INVOKE(4)
- (d) Find and write the output of the following Python code: 2
TXT = ["400", "200", "700", "90"]
CNT = 3
TOTAL = 0
for C in [3,5,7,9]:
 T = TXT[CNT]
 TOTAL = float(T) + C
 print(TOTAL)
 CNT -= 1
- (e) Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code. 3
STRING="HAPPY NEW YEAR"
for S in range[0,8]:
print STRING(S)
print S+STRING
- (f) What output will be generated when the following Python code is executed? 2
def ChangeList():
 L=[]
 L1=[]
 L2=[]
 for i in range(1, 10):
 L.append(i)
 for i in range(10,1,-2):
 L1.append(i)
 print(L1)
 for i in range(len(L1)):
 L2.append(L1[i]+L[i])
 L2.append(len(L)-len(L1))
 print(L2)

ChangeList()

- (g) What are the possible outcomes executed from the following code? Also, specify the maximum and minimum values that can be assigned to variable COUNT. 2

```
import random
TEXT = "PROGRAMMING"
COUNT = random.randint(0,3)
C=10
while TEXT[C] != 'M':
    print(TEXT[C]+TEXT[COUNT]+' * ',end='')
    COUNT= COUNT + 1
    C = C-1
```

- (i) GG * NR * IA*
- (ii) GP * NR * IO *
- (iii) OG * NG * IR *
- (iv) GR * NO * IG *

- (h) Write a function to calculate factorial of a number using Recursion. 3

2. (a) Write a program to read data from text file in read mode and count the particular word occurrences in the given file, number of times in Python. 4

for example : file contents are

An old man lived in the village.

He was one of the most unfortunate people in the world.

The whole village was tired of him; he was always gloomy,

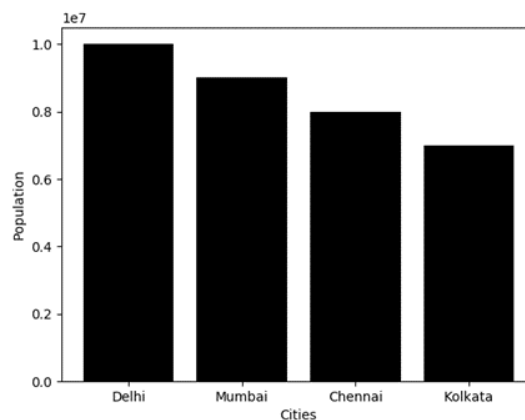
he constantly complained and was always in a bad mood.

Program output

Enter search string : was

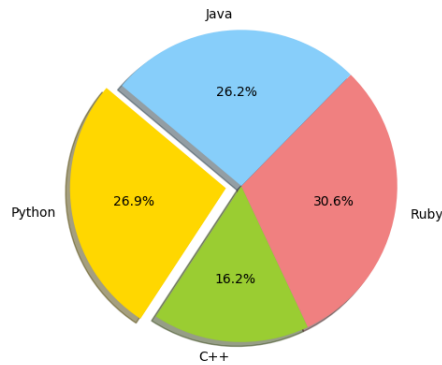
'was' occurred 4 times

- (b) Write codes to plot following bar chart showing black bars: 2



OR

Write code in python to create the following pie chart



- (c) Write a python function to sum all the numbers in a list
Sample List:[4,6,3,5,6] 2

Expected Output : Sum of all elements : 24

- (d) Write PUSH(book_name) and POP(book_name) methods in python to add book name and remove book name considering them to act as PUSH and POP operations in Stack 4

OR

Write program to add , remove and display the book details using list implementation as a Queue.

- (e) Find the output of following: 2
- ```
passout=["preeti", "pariniti", "priya", "priyanka", "pratibha", "prashansa", "pragya"]
del passout[4]
passout.remove("priya")
passout.pop(3)
print(passout)
```

- (f) Convert the following for loop into a while loop: 1
- ```
for number in range (10, 22, 4):
    print(number)
```

3. (a) Multiple choice questions. Write the correct option (1 to 5) in your answer sheet.
1. Computer Network is 1
 - A. Collection of hardware components and computers
 - B. Interconnected by communication channels
 - C. Sharing of resources and information
 - D. All of the Above
 2. Which of the following is not the Networking Devices? 1
 - A. Gateways
 - B. Linux
 - C. Routers
 - D. Firewalls
 3. DNS is the abbreviation of 1
 - A. Dynamic Name System
 - B. Dynamic Network System
 - C. Domain Name System
 - D. Domain Network Service
 4. IPV4 Address is 1
 - A. 8 bit

- B. 16 bit
C. 32 bit
D. 64 bit
5. What is the use of Ping command? 1
 A. To test a device on the network is reachable
 B. To test a hard disk fault
 C. To test a bug in a Application
 D. To test a Pinter Quality
- (b) Expand the following 2
 1. HTTP 2. SMTP 3. MAC 4. FTP
- (c) Write the purpose of following commands: 3
 (i) whois
 (ii) ipconfig
 (iii) nslookup
- (d) Differentiate between the following 3
 (i) Public Cloud and Private Cloud
 (ii) Wired and Wireless Networks
 (iii) HTTP and HTTPS
- (e) Write short notes on remote desktop and remote login. 2
4. (a) What is the Django command to start a new app named 'users' in an existing project? 1
 A. manage.py –newapp users
 B. manage.py newapp users
 C. manage.py –startapp users
 D. manage.py startapp users
- (b) What are the features available in Django web framework? 1
 A. Admin Interface (CRUD)
 B. Templating
 C. Form handling
 D. All of the above
- (c) What are two types of HTTP requests in Django Web Framework? 1
- (d) Write command to start a new project in django web framework. 1
- (e) Write command to run django server. 1
- (f)

Consider the following table **EMPLOYEE** and write answer of the following queries(i to vi)

EmployeeID	EmployeeName	EmployeeCity	DeptName	Salary
127323	Amit Sharma	Bhopal	STORE	12000
526689	Deepak Tiwari	Indore	ACCOUNTS	15000
843795	Monika Baranwal	Indore	PURCHASE	25000
328717	Joseph Mathew	Jabalpur	PURCHASE	30000
444527	Kadar Khan	Balaghat	STORE	16000
659831	Shirish Jain	Balaghat	STORE	16000
847674	Sunita Gupta	Balaghat	STORE	10000
748681	Kamlesh Singh	Jabalpur	ACCOUNTS	17000
555935	Hemant Thakur	Jabalpur	ACCOUNTS	32000
539569	Manoj Tamrakar	Indore	ACCOUNTS	5000
733843	Shailendra Borker	Bhopal	COMPUTER	18000
631548	Pradeep Namdeo	Bhopal	COMPUTER	20000
839139	Sarita Mishra	Indore	STORE	6000

1. Write SQL command to show the details of all employees in ascending order of their name 1

2. Write SQL command to show total number of employees in each department 1
3. Write SQL command to show City wise total salary where total salary is more than 50000 1
4. Write output for 1
SELECT EmployeeCity, COUNT(*) "Total Employees"
FROM EMPLOYEE
GROUP BY EmployeeCity
5. Write output for 1
SELECT MAX(Salary), DeptName
FROM EMPLOYEE
GROUP BY DeptName
HAVING SUM(Salary)>50000
- (g) Write python code to connect MySQL with Python and fetch records from the table 'STUDENT' present in the database 'SCHOOL'. The program should show records on the screen. 3

OR

Write database connectivity program to connect Python with MySQL and insert records in the table 'STUDENT' having attributes RollNo, Name, Marks

- (h) Consider the following lists in python, write python code to create csv file with these records 2
fields=['Name', 'Branch', 'Year', 'CGPA']
rows=[['Amit', 'IT', '2', '9.2'],
['Sumit', 'EL', '2', '9.4'],
['Naveen', 'CV', '1', '9.6']
]
5. (a) Mention any one social and economic benefit of technology. 2
- (b) What is meant by the term Cyber Forensics? 2
- (c) Mention the sources from where phishing activities can happen. 1
- (d) What are the environmental issues of e-waste? 1
- (e) What do you understand by the term Plagiarism? 1
- (f) What is the full form of ITA-2000? 1
A) Information Tech Act -2000
B) Indian Technology Act -2000
C) International Technology Act -2000
D) Information Technology Act -2000
- (g) It is stealing ideas or creations of others 1
A) Plagiarism
B) Intellectual Property Rights
C) Piracy
D) Pornography
- (h) When a person is harassed repeatedly by being followed, called or be written to he / she is a target of 1
A) Bullying
B) Identity theft
C) Stalking
D) Phishing