About Us Website: https://www.learnpython4cbse.com/ Feedback 8076665624
Learnpython4cbse Inspiring Success
Youtube Channel: SuperNova-learnpython
Online Classes are Available for Clases 9 to 12- Comp. Sc., IP, AI & IT
PYTHON | ONLINE CLASSES | COMPUTER SC. | INFORMATICS PRAC. | SAMPLE PAPERS | PYTHON MCQs

SAMPLE PAPER - 4

SUBJECT: COMPUTER SCIENCE (083)

MARKING SCHEME

Time allowed: 3 Hours Maximum Marks: 70

Ques No	Question	Marks
	SECTION A	
1	True	1
2	(A)hAPPY#HOUR1122#33	1
3	(b) False	1
4	(a)['Question paper ', '0', '', '-', '3']	1
5	True	1
6	(d) ("f","o","obar")	1
7	True	1
8	(a)[1,2]	1
9	(c) (10)	1
10	(b) It returns the byte position of the file pointer as an integer.	1
11	b. Error	1
12	c. global b	1
13	(b) DELETE	1
14	b. distinct	1
15	b. 10 digits	1
16	(b) aggregate functions	1
17	(b) POP-POST OFFICE PROTOCOL	1
18	a. PAN	1
19	message	1
20	(A)	1
21	(A)	1
	SECTION - B	
22	**Mutable**: Can be changed (e.g., lists, dictionary). **Immutable**: Cannot be changed (e.g., tuples, string).	2
23	(18, 36, 54)	2
24	Write the Python statement for each of the following tasks using BUILT-IN functions/methods only: (i) L1.insert(3,400) (ii) message.endswith('.') OR import statistics print(statistics.mode(employeesalary))	2
25	a) 10#20# or b) 10#20#30#40#50# or c) 10#20#30#	2
26	**Primary Key**: A unique identifier for a table, ensuring no duplicate or `NULL` values. (Example: `StudentID`) **Candidate Key**: A set of columns that can uniquely identify records, from which the primary key is selected. (Example: `StudentID`, aadhar no, admission no. etc)	2
27	Alter table customer add custid integer primary key;	2

WWW.LEARNPYTHON4CBSE.COM

	Insert into customer values('Nandini','Management',45600,555); OR Alter table dance drop category; Alter table dance add typecca varchar(10) not null;	
28	(i) eXtensible Markup Language, Simple Mail Transfer Protocol (ii) HTML(Hyper text mark Up language) □ We use pre-defined tags □ Static web development language – only focuses on how data looks □ It use for only displaying data, cannot transport data □ Not case sensitive XML (Extensible Markup Language) □ we can define our own tags and use them □ Dynamic web development language – as it is used for transporting and storing data □ Case sensitive OR (i) Baud is the number bits carrying in one second. (ii) https (Hyper Text Transfer Protocol Secure) is the protocol that uses SSL (Secure Socket Layer) to encrypt data being transmitted over the Internet. Therefore, https helps in secure browsing while http does not.	1+1=2
	SECTION - C	

29	def countH():
	f=open('Para.txt','r')
	rec=f.readlines()
	count=0
	for line in rec:
	if line[0]=='H':
	count+=1
	print('The line count =',count)
	f.close()
	(½ mark for correctly opening and closing the file
	½ for correct loop
	1 for correct condition
	½ for correct if statement
	½ for correctly incrementing count
	)
	
	Note: Any other relevant and correct code may be marked
	OR
	def countmy():
	f=open('DATA.TXT','r')
	rec=f.read()
	words=rec.split()
	for w in words:
	if w=='my':
	count+=1
	print('my occurs',count,'times')
	f.close()
	(½ mark for correctly opening and closing the file
	½ for correct loop
	1 for correct condition
	½ for correct if statement
	½ for correctly incrementing count
		3

30	def PUSH(S):	3

WWW.LEARNPYTHON4CBSE.COM

	for i in L:
	if i%2! =0:
	S.append(i)
	return(S)
	def POP ():
	num=len(S)
	while len(S)!=0:
	dele=S.pop()
	print(dele)
	num=num-1
	else:
	print("empty")	

31	Based on the given table, write SQL queries for the following: (i) Select * from activity where prizemoney >=9000; (ii) Update activity set prizemoney=prizemoney*1.05 where scheduledate>'2004-03-01'; (iii) Delete from activity where participantsnum<12	
	SECTION-D	

32	import math
	try:
	result = math.pow(2, 3, 4, 5) # pow() expects 2 arguments,
	# but 4 are provided
	except TypeError:
	print("TypeError occurred with math.pow()")
	else:
	print("Result:", result)
	try:
	result = math.sqrt(9, 2) # sqrt() expects 1 argument,
	# but 2 are provided
	except TypeError:
	print("TypeError occurred with math.sqrt()")
	else:
	print("Result:", result)
		4

33	import csv
	f=open("pl.csv","w")
	cw=csv.writer(f)
	ch="Y"
	while ch=="Y":
	l=[]
	pi=int(input("enter dvd id "))
	pnm=input("enter dvd name ")
	sp=int(input("enter qty ")) p=int(input("enter price(in rupees)"))
	l.append(pi)
	l.append(pnm)
	l.append(sp)
	l.append(p)
	cw.writerow(l)
	ch=input("do you want to enter more rec(Y/N): ").upper()
	if ch=="Y":
	continue
	else:
	break
	f.close()
		4

WWW.LEARNCBSE.COM

	f=open("pl.csv","r+")
	cw=list(csv.reader(f))
	for i in cw:
	if l[3]>25:
	print(i)
	f.close()	

34	i. SELECT DISTINCT Qty FROM garment;
	ii. SELECT SUM(Qty) FROM garment GROUP BY CCode HAVING COUNT(*)>1;
	iii. SELECT GNAME, CNAME, RATE from garment g, cloth c WHERE g.ccode=c.ccode AND Qty>100;
	iv. Select AVG(Rate) FROM garment WHERE rate BETWEEN 1000 AND 2000;	

35	(i) import mysql.connector mycon=mysql.connector.connect(host='localhost', user='root', passwd='KVS@123',databse='KV') mycur=mycon.cursor() fn=input("Enter flight number") s=input("Enter source') d=input("Enter Destination") f=int(input("Enter fare of flight")) query="insert into flight values('{}','{}', '{}',{}).format(fn,s,d,f) mycur.execute(query) mycon.commit() print("Data added successfully") mycon.close() ½ mark for importing correct module 1 mark for correct connect() ½ mark for correctly accepting the input 1 ½ mark for correctly executing the query ½ mark for correctly using commit()) OR (i) import mysql.connector mycon=mysql.connector.connect(host='localhost', user='root', passwd='KVS@123',databse='Sports') mycur=mycon.cursor() query="select * from game where No_of_Participants>{}".format(10) mycur.execute(query) data=mycur.fetchall() for rec in data: print(rec) mycon.close() (½ mark for importing correct module 1 mark for correct connect() 1 mark for correctly executing the query ½ mark for correctly using fetchall() 1 mark for correctly [15] displaying data)	4
	SECTION - E	

36	def Insert():
	L=[]
	while True:
	ClockID = input("Enter Clock ID = ")
	ClockName = input("Enter Clock Name = ")
	YearofManf = int(input("Enter Year of Manufacture = "))
	price = float(input("Enter Price = "))
	R = [ClockID, ClockName, YearofManf, price]
	L.append(R)
	ans = input("Do you want to enter more records (Y/N)=")
		5

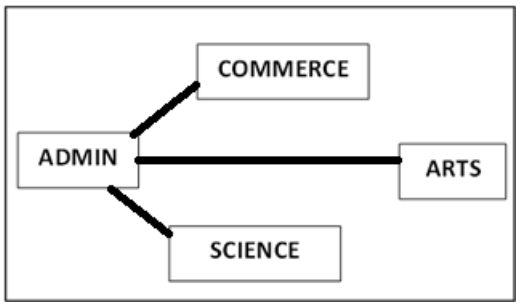
WWW.LEARNPYTHON4CBSE.COM

	if ans.upper()=='N':
	break
	import csv
	fout = open('watch.csv','a',newline='')
	W = csv.writer(fout)
	W.writerows(L)
	fout.close()
	print("Records successfully saved")
	def Delete():
	ClockID = input("Enter Clock ID to be removed = ")
	found = False
	
	import csv
	fin = open('watch.csv','r')
	R = csv.reader(fin)
	L = list(R)
	fin.close()
	for i in L:
	If i[0]==ClockID:
	found=True
	print("Record to be removed is:")
	print(i)
	Remove(i)
	break
	if found==False:
	print("Record not found")
	else:
	fout = open('watch.csv','w',newline='')
	W = csv.writer(fout)
	W.writerows(L)
	fout.close()
	print("Record Successfully Removed")
	
	Insert() function
	½ mark for correct data input and making list
	½ mark for correctly opening file
	1½ mark for correctly writing
	record Delete() function
	½ mark for correctly copying data in list
	½ mark for correctly identifying record and removing it from the list
	½ mark for correctly showing not found message
	1 mark for correctly re-writing remaining records	

37	**a.** The most suitable building to house the server is ADMIN building because it has maximum number of computers and as per 80:20 rule this building will have the maximum amount of network traffic. ½ mark for correct answer ½ mark for correct justification	1*5=5

WWW.LEARNPYTHON4CBSE.COM

NAGPUR CAMPUS



b.

1 mark for correct diagram

c. iii. Video Conferencing

1 mark for correct diagram

d.

i. Switch/Hub will be placed in every building to provide network connectivity to all devices inside the building.

ii. Repeater will not be required as there is not cable running for more than 100 meters.

½ mark each for each correct reason

e. The device/software that can be installed for data security and to protect unauthorized access is Firewall.

Or

WAN

1 mark for correct answer

WWW.LEARNPYTHON4CBSE.COM