COMPUTER SCIENCE (083)
SAMPLE PAPER 1
MARKING SCHEME
(2019-20)

Q.No.	Answers	Marks
1		
(a)	(ii) ==	1
(b)	(i) None -> Special Literal (ii) break -> Keyword	1
(c)	import math def area(radius): return math.pi * radius**2	1
(d)	TypeError: Object of type 'int' has no len() Solution: The given code is not creating a tuple in 't' but an integer, on which len() cannot be applied. To create a tuple in 't' with single element, the code should be modified as >>>t=(6,) >>>len(t)	2
(e)	GMAILbbCOM	2
(f)	a:3 b:7 c:10 a:25 b:5 c:24 a:100 b:5 c:50	3
(g)	(ii) and (iv) Least value=30 Highest value=34	2
2		
(a)	List Slice is an extracted part of a list. It is a list in itself.	1
(b)	(ii)	1
(c)	(ii)	1
(d)	L=[x for x in range(20) if x%2==0]	1
(e)	2	1
(f)	Operator overloading is a feature in Python that allows the same operator to have a different meaning according to the context. Example: operator + is used to add two integers as well as join two strings and merge two lists. print(5+10) will result in 15. print("hello " +"friends") will result in: hello friends	2
(g)	import matplotlib.pyplot as plt con=[23.4,17.8,25,34,40] zones=['East','West','North','South','Central'] plt.axis("equal") plt.pie(con,labels=zones, explode=[0,0,0.2,0,0], autopct="%1.2f%%") plt.show()	2

(h)	def filter(oldfile, newfile):
	fin=open(oldfile,"r")
	fout=open(newfile,"w")
	while True:
	text=fin.readline()	

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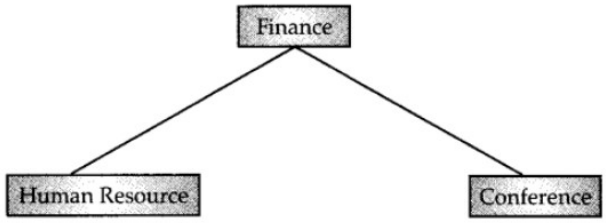
	if len(text)==0:
	break
	if text[0]=="#":
	continue
	fout.write(text)
	fin.close()
	fout.close()
	filter("source.txt,"target.txt")
	
	def countthe():
	f=open("Data.txt","r")
	count=0
	x=f.read()
	word=
		2

(i)	Any workable method that employs recursion. 1 mark for non-recursion methods	3
(j)	½ marks for declaring function definition for each function ½ marks for checking empty stack or queue in each function 1 marks for append or delete node in each function	4
3		
(a)	Internetwork	1
(b)	Default Gateway	1
(c)	Optical Fibre	1
(d)	ipconfig	1
(e)	CDMA: Code Division Multiple Access DHCP: Dynamic Host Configuration Protocol SIM: Subscriber Identity Module MAC: Media Access Control	2
(f)	Internet of Things technology can include any sensor, electronic devices or software which are connected to the internet and can be utilized remotely and can exchange data. Here devices works themselves without human intervention for the welfare of humans. Applications: • Disaster warning- Sensors can collect critical information about the environment, allowing for early detection of environmental disasters like earthquakes, tsunamis, etc., thus saving lives. • Delivery Drones – drones being used to deliver item with the help of smart grid/geospatial data.	2
(g)	• Identity Theft • Hacking • Scam	3
(h)	1. Finance block because it has maximum number of computers.  2. 3.Satellite Link 4.Switch	4

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<table>
<tr><td>4</td><td></td><td></td></tr>
<tr><td>(a)</td><td>Select</td><td>1</td></tr>
<tr><td>(b)</td><td>Foreign key maintains referential integrity by enforcing a link between the data in two tables.</td><td>1</td></tr>
<tr><td>(c)</td><td>Order by command is used to sort in ascending or descending order.</td><td>1</td></tr>
<tr><td>(d)</td><td>Distinct</td><td>1</td></tr>
<tr><td>(e)</td><td>
<table>
<tr><th>PRIMARY KEY</th><th>UNIQUE KEY</th></tr>
<tr><td>It is used to serve as a unique identifier for each row in a table.</td><td>It also uniquely determines a row, that is not defined as a primary key.</td></tr>
<tr><td>Primary key will not accept NULL values.</td><td>Unique will accept a NULL value.</td></tr>
</table>
Or
<table>
<tr><th>WHERE</th><th>HAVING</th></tr>
<tr><td>Apart from SELECT queries, you can use WHERE clause with UPDATE and DELETE clause</td><td>HAVING clause can only be used with SELECT query.</td></tr>
<tr><td>WHERE clause is used for filtering rows and it applies on each and every row.</td><td>HAVING clause is used to filter groups in SQL.</td></tr>
<tr><td>Used before Group By clause.</td><td>Used after Group By clause.</td></tr>
</table>
</td><td>2</td></tr>
<tr><td>(f)</td><td><u>To install Django:</u>
pip install Django
<u>To check whether server is running successfully or not:</u>
python manage.py startserver</td><td>2</td></tr>
<tr><td>(h)</td><td><u>(i)</u> Agra
Delhi
Dubai
Moscow
Mumbai
(ii) MAX(DOB) : 08.12.1995
MIN(DOB) : 07.05.1993
(iii)
<table>
<tr><th><u>Name</u></th><th><u>Gender</u></th></tr>
<tr><td>Sanal</td><td>F</td></tr>
<tr><td>Store</td><td>M</td></tr>
</table>
(iv) Select * from student order by Name;
(v) Select class, DOB, City from student where Marks between 450 and 551;
(vi) select Name, Class from student where marks>450 order by class;
(vii) update student set marks=marks + 20 where class='XII';</td><td>7</td></tr>
<tr><td>5</td><td></td><td></td></tr>
<tr><td>(a)</td><td>email</td><td>1</td></tr>
<tr><td>(b)</td><td>1 mark for any suitable advice.</td><td>1</td></tr>
<tr><td>(c)</td><td>1 mark for each way</td><td>2</td></tr>
<tr><td>(d)</td><td>1 mark for each part</td><td>2</td></tr>
<tr><td>(e)</td><td>Steps immediate after identity theft
1. Contact our lender, notify them of the fraud. If it's a credit card account, freeze your card immediately.
2. Register an FIR with the police.
3. Follow up with the lender to ensure that the fraudulent transaction (if it appears) the FIR is removed</td><td>2</td></tr>
<tr><td>(f)</td><td>Gender Issues (any one)</td><td></td></tr>
</table>

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	1. Preconceived notions – Notions like "boys are better at technical and girls are good at humanities. 2. Lack of interest 3. Lack of motivation 4. Lack of role models 5. Lack of encouragement in class 6. Not girl friendly work culture **Disability Issues (any one)** 1. Unavailability of teaching materials/aids 2. Lack of special needs teachers 3. Lack of supporting curriculum Or any other suitable issue.	2

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