SET	3

INDIAN SCHOOL MUSCAT
FIRST PRE BOARD EXAMINATION 2023
COMPUTER SCIENCE(083)

CLASS: XII Max.Marks: 70

MARKING SCHEME			
SET	QN.NO	VALUE POINTS	MARKS SPLIT UP
3		**SECTION A**	
	1.	True	1
	2.	(a) CREATE	1
	3.	(c) 18	1
	4.	(c) OASY	1
	5.	(b) Count (*)	1
	6.	(d) Optical Fibre Cable	1
	7.	(c)Book.update(Library)	1
	8.	(b) ['Comput', 'Science']	1
	9.	(a) tup1[2] = 20	1
	10.	(b) Rose*Jasmine*Sunflower*	1
	11.	(a) VoIP	1
	12.	(d) global y	1
	13.	True	1
	14.	(b) DISTINCT	1
	15.	(d) Gateway	1

	16.	(c) f.seek(20,1)	1
	17.	(b) Both A and R are true and R is not the correct explanation for A	1
	18.	(a) Both A and R are true and R is the correct explanation for A	1
		SECTION B	
	19.	(i) FTP- FILE TRANSFER PROTOCOL POP3- POST OFFICE PROTOCOL 3 - ½ Mark each (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 sensistive 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 -Any Correct difference – 1 Mark **OR** (i) Advantages of Bus topology • Easy to implement and extend • It is very cost-effective as compared to other network Advantages of Star topology • Ease of service • Centralized control • Easy to diagnose faults -Any one advantage of each – ½ Mark each (ii) Packet switching: • no dedicated path is established from the source to the destination. • message is divided into smaller parts, known as packets and then sent forward • tight upper limit on block size • Each data unit knows only the final receiver's address – 1 Mark	2
	20.	**def** SumOfDigits(num): s=0 while num>0**:** d **=** num % 10 s=s+d num //=10 **return s** print(SumOfDigits(1234)) -½ Mark each correction	2

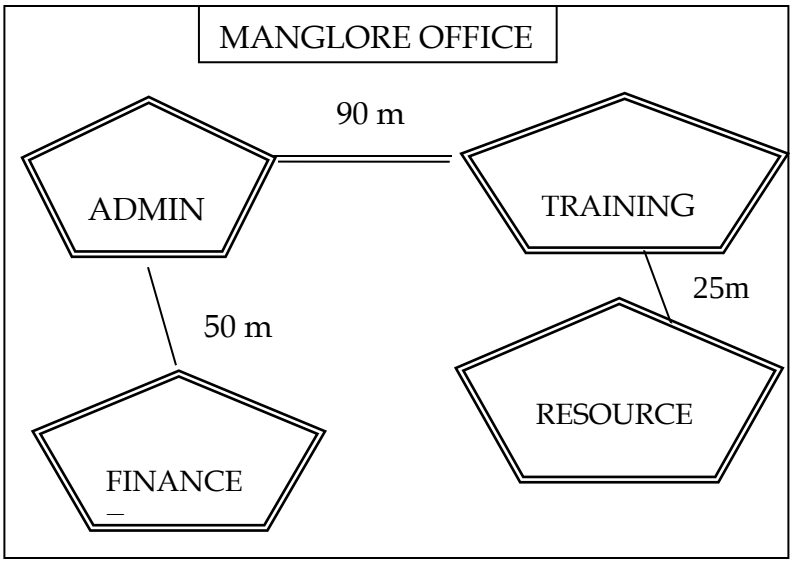
	21.	def VOWELS(STR):
		  c=0
		  for i in STR:
		  if i in "aeiouAEIOU":
		  c+=1
		  return c
		OR
		
		CITY={1:"Sydney",2:"Tokyo",3:"Pinkcity",4:"Beijing",5:"Suncity"}
		def countCity(CITY):
		  for ct in CITY.values():
		  if len(ct)>7:
		  print(ct.upper())
		countCity(CITY)
		Input – ½ Mark
		Correct Logic 1-Mark
		Print – ½ Mark
			2

	22.	['C', 'C++', 'Python', 'FORTRAN'] – ½ Mark each value	2
	23.	(i) LIST1.extend([10,60,90]) -1Mark (ii) len(STR1) -1Mark **OR** import statistics -1Mark print(statistics.median(Lstdata) -1Mark	2
	24.	(i) ALTER TABLE CAR ADD FUELTYPE VARCHAR(20). (ii) DESC CAR; **OR** (i) ALTER TABLE WORKER MODIFY NAME VARCHAR(20); (ii) DROP TABLE WORKER; -1Mark each	2
	25.	OUTPUT 120#24# -1Mark each value	2
		SECTION C	
	26.	OUTPUT A*GM**y* - Correct output 3 Marks	3
	27.	(i) DEPARTMENT COUNT(*) **- 1 Mark** --- ENT 3 (ii) SUM(CHARGES) **- 1 Mark** --- 1450	3

		(iii) PNO NAME **- 1 Mark** ---------- P101 Kavita P103 Sunil P106 Varun	

	28.	def DISPLAY():
		file=open('Diary.txt','r')
		lines = file.readlines()
		for w in lines:
		if w[0] =='D':
		print(w)
		file.close() (½ Mark for correctly opening and closing the file
		2 Marks for correct logic
		½ Mark for displaying the correct output)
		
		OR
		def countUpper():
		count = 0
		file=open('Notes.txt','r')
		data = file.read()
		for i in data:
		if i.isupper():
		count+=1
		print("Number of uppercase characters",count)
		file.close()
		(½ Mark for correctly opening and closing the file
		2 Marks for correct logic
		½ Mark for displaying the correct output)
			3

	29.	(i) New degree – 2 and new cardinality- 7 -½ Mark each (ii) UPDATE GRADUATE set STIPEND=STIPEND-0.05*STIPEND WHERE NAME LIKE '%A'; -1Mark (iii)INSERT INTO GRADUATE VALUES(5,"SHYAM",700) -1Mark	3
	30.	(i) Push_Cust(CList) – correct logic -1 ½ marks (ii) Pop_Cust( ) – correct logic -1 ½ marks	3
		SECTION D	
	31.	(i) SELECT INAME,PRICE,COMPANY FROM ITEMS ORDER BY INAME; (ii) SELECT INAME,PRICE FROM ITEMS WHERE PRICE BETWEEN 10000 AND 40000; (iii) . SELECT INAME, TNAME,CITY FROM ITEMS,TRADERS WHERE ITEMS.TCODE=TRADERS.TCODE;	4

		(iv) SELECT TCODE,COUNT(*) FROM ITEMS GROUP BY TCODE; -1Mark each	
	32.	(i) addrec( ) – defines and calls ½ mark for accepting data correctly ½ mark for opening and closing file 1 mark correct logic (ii) searchrec( )-defines and calls ½ mark for opening and closing file ½ mark for reader object 1 mark correct logic	4
		SECTION E	
	33.	(i) Layout: (Bus Topology)  DELHI HEAD (i) Total cable length = 165 m may be considered as cable length is short. -1 Mark for the correct layout (ii) The most suitable place to house the server is the TRAINING building. In the TRAINING building we have the maximum number of computers installed (150 no's), so as per the 80 - 20 network design rule the server should be placed in that building where the network traffic is maximum localized which reduces the cabling cost and increases the efficiency. - 1 Mark (iii) • Repeater is needed in bus layout between ADMIN and TRAINING building because according to this layout the distance between buildings ADMIN and TRAINING is 90mts. - ½ Mark • Switch is to be installed in each building as it gives connectivity to all computers in the network with dedicated band width. -½ Mark (iv) Microwave -(1 Mark) (v) WAN – as the network is spread across different geographical locations of the country. -1 Mark	5

	34.	(i) r+ (read and write)- File must exist, otherwise error is raised. The file pointer placed at the beginning of the file a+(append and read)- File is created if does not exist. If file exist new data is added after old data of file. – 1 Mark each (ii) Opening and closing file – ½ Mark Correct try and except block – ½ Mark Correct loop and correct copying data – 1½ Marks Correct return statement – ½ Mark **OR** (i) Text file ● can be viewed in the text editor ● No specific module required to be imported Binary file: • Extension is .dat • Not human readable • Stores data in the form of 0s and 1s Correct difference – 1 Mark each (ii) (½ Mark for correctly opening and closing the file 2 Marks for correct logic ½ Mark for displaying the correct output)	2+3=5
	35.	(i) Cartesian product It return all possible concatenation of all rows from both table i.e. one row of First table is joined with all the rows of second table. -1 Mark (ii) ½ mark for importing correct module 1 mark for correct connect() ½ mark for correctly accepting the input 1 ½ mark for correctly ½ mark for correctly using commit() **OR** (i) Domain is a set of values from which an attribute can take value in each row. Primary key refers to a set of one or more attributes that can uniquely identify tuples within the relation. – ½ Mark each (ii) 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 for displaying data.	1+4=5