KENDRIYA VIDYALAYA SANGATHAN HYDERABAD REGION

FIRST PRE-BOARD EXAMINATION 2024-25

CLASS: **XII**	TIME:**03 HOURS**
SUBJECT: **COMPUTER SCIENCE**	**M**AX. MARKS: **70**

MARKING SCHEME

	SECTION-A	
1	(D) str	1
2	(C) PYTHON#CKS	1
3	(A) 9	1
4	(A) EN	1
5	(A) 'aeeo'	1
6	(C) (10)	1
7	(A) d['autumn']	1
8	(B)ceieP0	1
9	(C) Foreign Key	1
10	(C) Seek()	1
11	(B) >=0	1
12	(C) def fun(a=1,b=1,c=2):	1
13	(B) DELETE	1
14	(C) SELECT name FROM employees WHERE salary > (SELECT AVG(salary) FROM employees);	1
15	(C) drop database Clients	1
16	(B) COUNT(DISTINCT Col Name)	1
17	(C) SMTP	1
18	(D) Gateway	1
19	(C) alter	1
20	(B) Both A and R are true and R is not the correct explanation for A	1
21	(A) Both A and R are true and R is the correct explanation for A	1
	SECTION-B	
22	a) LIST b) TUPLE (1 Mark for each Correct Answer)	2
23	A. Logical operators: and, or, not (1 mark for correct answer) B. Membership operators: in, not in (1 mark for correct answer)	2

24	PLACES={1: "Delhi", 2: "London"', 3: "Paris", 4: "New York",5: "Dubai "}
	def countNow (PLACES) :
	    for place in PLACES.values ():
		2

```
             if len (place) › 5:
                  print (place. upper ())
  countNow (PLACES)
```

(OR)

```
  def lenwords (STRING) :
        T=()
        L=STRING. split ()
             for word in L:
                 length=len (word)
                T=T+(length, )
return T
```

(1 mark for correct logic and 1 mark for usage of loops and functions)

25 (A) YELLOW # RED #   1 Mark
Possible values of k are 2 and 1 – ½ mark for each correct answer
2

26 1 Mark for definition of foreign key
1 mark for example
2

27 A) Satheesh has created a database “school” and table “student”.
i) Show databases;.
ii) Desc student;

OR

B)
i) Alter table student add phonenum integer:
ii) Slect count(*) from student;

2

28 2 Marks: for correct definition

OR

POP- Post Office Protocol
VoIP-Voice over internet Protocol
½ mark for each correct expansion
1 mark for mentioning correct use of protocal

2

SECTION-C

29 3

```
1.def count_words_in_article():
    try:
        with open("Article.txt", "r") as file:
            content = file.read()
            words = content.split()
            word_count = len(words)
            print(f"Number of words in the file: {word_count}")
    except FileNotFoundError:
        print("File 'Article.txt' not found.")

# Example usage:
# count_words_in_article()
```

(½ Mark for function definition , 1 mark for function open & reading, ½ mark for split()
½ mark for count, ½ mark for printing)

OR

```
def display_success_lines():
    try:
        with open("Logs.txt", "r") as file:
            lines = file.readlines()
        for line in lines:
            if "success" in line.lower():  # Case-insensitive search
                print(line.strip())
    except FileNotFoundError:
        print("File 'Logs.txt' not found.")

# Example usage:
# display_success_lines()
```

(½ Mark for function definition ,   1 mark for function open & reading, 1 mark for for loop and condition mark for split() , ½ mark for strip())

30

```
travel  = []
 def   Push_element(NList):
          for L in NList:
          if  L[1] !=  “India” and L[2]<3500:
               travel.append(L[0], L[1]])

  def  Pop_element():
        while len(travel):
               print(travel.pop())
        else:
              print(“Stack Empty”)
```

1 ½ for defining function, checking condition and appending values to list
11/2 marks for using while loop, printing the deleting value and printing stack empty if stack is empty

OR

1 mark for pushing values into the stack
1 mark for displaying topmost value in the list
1 mark for displaying odd numbers from the list without deleting them and displaying none if no elements are there

3

31

(a)

```
4*L
33*4
21*5
10*6
```

(OR)

(B)

```
1 #2 #3#
1 #2 #3 #
1 #
```

(1 mark each for each line of correct output(Maximum 3))

3

SECTION-D

32

i)

D_NAME
GUPTA
HANEEF

ii)

D_DEPT
ENT
MEDICINE
ORTHO
CARDIOLOGY

4

SKIN

iii)

D_NAME	EXPERIENC E
DEEPTI	6
SUMAN	7
JOSEPH	10
GUPTA	12
HANEEF	12
VEENA	12

iv)

Count(*)
3

(1 Mark for Each Correct Answer)

OR

i) Select D_DEPT, count(*) from DOCTOR group by D_DEPT;
ii) Select D_NAME from DOCTOR where EXPERIENCE >10 ;
iii) Select * from DOCTOR where GENDER = “FEMALE” ;
iv) Update doctor set D_DEPT=”ENT” where D_NAME = “SUMAN”;

(1 Mark for Each Correct Answer)

33

```
import csv

i. def display_hot_cities(filename):
    with open(filename, mode='r') as file:
        reader = csv.reader(file)
        next(reader)
        hot_cities = [row for row in reader if float(row[1]) > 30]
        for row in hot_cities:
            print(row)

ii. def calculate_average_rainfall(filename):
    with open(filename, mode='r') as file:
        reader = csv.reader(file)
        next(reader)
        total_rainfall = 0
        count = 0
        for row in reader:
            total_rainfall += float(row[3])
            count += 1
        average_rainfall = total_rainfall / count if count != 0 else 0
        print(f"Average Rainfall across all records: {average_rainfall:.2f} mm")

filename = "WeatherData.csv"

display_hot_cities(filename)
calculate_average_rainfall(filename)
```

(½ importing csv , ½ csv reader, Temperature Filtering and Display (1 Mark) , Rainfall Calculation (1 Mark), Function Structure and Output (1 Mark))

4

34

i) SELECT CLASS,SEC,SNAME FROM STUDENT,ST-HOUSE WHERE STUDENT.House=ST-HOUSE.Hid and Hname=’NARMADA’
ii) select count(*) from student
iii) select sname from student order by name desc

4

iv)

a) delete from student where sec=’A’ ;

OR

b) ALTER TABLE ST-HOUSE ADD (HMEMBER VARCHAR (20));

(1 Mark each correct Answer)

35

```
import mysql.connector
mycon=mysql.connector.connect(host="localhost",user="root",passwd="KVR@321",database="SPORTS")
cursor=mycon.cursor()
cursor.execute("select * from nationalsports where venue=’Hyderabad’ “)
data=cursor.fetchall()
for row in data:
        print(row)
mycon.close()
```

(½ mark for correctly importing the connector object)
(½ mark for correctly creating the connection object & cursor object)
(1 mark for correct creation of correct query & Execute Function)
(1 mark for correctly fetching all records)
(1 mark for correctly displaying the data)

4

SECTION-E

36

(I)

```
import pickle

def append_customer_data(customers):
    file =  open('customers.dat', 'ab')
    n = int(input("Enter the number of candidates you want to add: "))
    for i in range(n):
          cust_id = int(input("Enter Candidate ID: "))
          cust_name = input("Enter Candidate Name: ")
          address = input("Enter Designation: ")
          receiptno = int(input("Enter receipt no: "))
          cust = [cust_id, cust_name, address,receiptno]
          pickle.dump(cust, file)
     print("Customer data appended successfully.")
     file.close()
```

(II)

```
import pickle
def update_secunderabad():
       file=open('customers.dat', 'rb+')
       while True:
                    try:
                          pos = file.tell()
                          customer = pickle.load(file)
                          if customer[3] == 101:
                               customer[2] = 'Secunderabad'
                               file.seek(pos)
                                pickle.dump(customer, file)
               except EOFError FileNotFoundError:
                     print("No candidate data found or reached end of file.")
                         break  # End of file reached except
     print("Customers updated where applicable.")
     file.close()
```

(III)

```
import pickle
```

1+2 +2

```
def display_non_sec():
    try:
        with open('customers.dat', 'rb') as file:
            while True:
                try:
                    candidate = pickle.load(file)
                    if candidate[2] != 'Secunderabad':
                        print(candidate)
                except EOFError:
                    break  # End of file reached except
    FileNotFoundError:
        print("No candidate data found. Please add candidates first.")
```

(1/2 mark of import pickle)
(1/2 mark for input)
(1/2 mark for opening file in append mode and 1/2 mark for using dump)
(1/2 mark for opening file in read mode and 1/2 mark for using load)
(1 mark for checking the condition and updating the value)
(1 mark for checking the condition and displaying data correctly)

37		
(i)	a)LAN	1
(ii)	bus or star layout	1
(iii)	block C, Because it has more no of computers.. Which reduces outgoing network traffic	1
(iv)	hub/switch in all block, repeater where distance is more than 100 meter	1
(v)	A) satellite OR B)Firewall	1
