# ARMY PUBLIC SCHOOL, ASC C&C BANGALORE ANNUAL EXAMINATION 2020-21 CLASS XI – INFORMATICS PRACTICES (065)

Max Marks: 70 Time: 3 hrs

#### **General Instructions:**

- 1. This question paper contains two parts A and B. Each part is compulsory.
- 2. Both Part A and Part B have choices.
- 3. Part-A has 2 sections:
  - a. Section I is short answer questions, to be answered in one word or one line.
  - b. Section II has two case studies questions. Each case study has 4 case-based sub parts. An examinee is to attempt any 4 out of the 5 subparts.
- 4. Part B is Descriptive Paper.
- 5. Part- B has three sections
  - a. Section-I is short answer questions of 2 marks each in which two questions have internal options.
  - b. Section-II is long answer questions of 3 marks each in which two questions have internal options.
  - c. Section-III is very long answer questions of 5 marks each

#### Part - A

# Section - I Attempt any 15 questions from questions 1 to 20

1.

State whether True or False:

- I. FOSS is the software which is neither open nor freely available its use is regulated through license
- II. The system software which convert high level language/assembly language into machine code is called language translator
- 2. What are the two different modes of Python IDLE?
- 3. 1

What do you mean by a keyword? Give one example.

4.	Miletale and a state of all accions ha			1
	Which among the following ha	ave highest st	orage capacity	
		b) Cache d) HDD		
5.				1
	Which of the following is/are a	applications o	f block chain?	
6.	<ul><li>a) Digital Currency</li><li>b) Identity Manageme</li><li>c) Voting mechanism</li><li>d) All of the above</li></ul>	nt		1
0.		providers can offer different kinds of computing infrastructure, such as servers, virtual machines (VM), storage and backup facility, network components etc.		
	a) SaaS b) PaaS	c) laaS	d) TaaS	
7.	Which among the f	following is ma	ain component of 1 <sup>st</sup> Generation of	1
	<ul><li>a) Transistor</li><li>c) Micro Processor</li></ul>	•	cuum Tube ne of the above	
8.	Fill in the blanks:			1
	1024 = 1 MB and 1024	= 1 TB		
	a) KB & MB b) KB 8 c) MB & KB d) TB 8			
9.	are raw numbers	s or other find	ings which, by themselves, are of limited	1
		b) Information d) Output	า	
10.	Readymade application softw general, are called		d to cater to a bigger audience, in	1
11.	IDI E atanda for			1
10	IDLE stands for			
12.	List the name of two compone	ents of the CF	PU	1
13.				1

	Which among the following used for making comments in python a) # b) *** c) \$ d) \\	
14.	produces unintended or undesired output or other behaviour, although it may not immediately be recognized as such  a) Compile Time Error b) Syntax Error c) Logical Error d) Runtime Error	
15.	Which among the following mode give immediate output in python a) Editor b) Interactive c) Development d) Testing	1
16.	Write a SQL command to create a database named mydb	•
17. 18.	What do you mean by a primary key in SQL?  Which of the following is not a valid identifier  a. Am@I  b. ArUn69  c. Arjun_VP	1
19. 20.	d. Anshid  State one difference between DDL and DML commands	1
	Write any two features of python.  Section –II	
	Both the case study based questions (21 & 22) are compulsory. Attempt any four sub parts from each question. Each sub question carries 1 mark	
21.	Consider the following python string and answer any four from (i) to (v)	
	St="APS ASC Bangalore"	

- i. Which among the following option/s will give alternative characters from the given 1 string
  - a) St[0:2]
  - b) St[0::2]
  - c) St[::2]
  - d) St[::1]
- ii. Which among the following option/s will print number of characters from the given string
  - a) print(length(St))
  - b) print(count(St))
  - c) print(len(St))
  - d) print(size(St))
- iii. Which among the following statements will print 'Bangalore'

1

1

- a) print(St["Bangalore"])
- b) print(St[7:])
- c) print(St[8:])
- d) print(St[9:])
- iv. What will be the output of following statement print(St+"Karnataka")

1

- a) error
- b) empty string
- c) APS ASC Bangalore Karnataka
- d) StKarnataka
- v. Which among the following will print APSAPS

1

- a) print(St[0:2]\*2)
- b) print(St[0:3]\*2)
- c) print(St[0:2]\* St[0:2])
- d) print(St[0:3]\* St[0:3])
- 22 Consider the SQL table **BANK** given below:

CUST_ID	CUST_NAME	ACC_TYPE	EMI
101	KIRAN	CURRENT	9500
102	LATHA	SAVINGS	1000
103	CHOWHAN	SAVINGS	4980
104	KISHORE	SAVINGS	12300
105	RADHA	CURRENT	5500

i. 1

State the command that will give the output as:

**CUST NAME** 

KIRAN RADHA

- i. select CUST\_NAME from bank where ACC\_TYPE="CURRENT";
- ii. select \* from bank where ACC TYPE="CURRENT";
- iii. select CUST\_NAME from bank where EMI>9000
- iv. select CUST\_NAME from bank where CUST\_ID IN(101, 105);

#### Choose the correct option

- a. Both (i) and (ii).
- b. Both (i) and (iv).
- c. Any of the options (i), (iii) and (iv)
- d. Only (ii)
- ii. Which among the following command will show the given output

ACC\_TYPE
CURRENT
SAVINGS

- a) Select ACC\_TYPE from bank;
- b) Select TWO ACC\_TYPE from bank;
- c) Select DISTINCT ACC\_TYPE from bank;
- d) Select UNIQUE ACC\_TYPE from bank;
- iii. What will be the output of the following command? Select \* from BANK where cust name like '%A ';

a.

CUST_ID	CUST_NAME	ACC_TYPE	EMI
101	KIRAN	CURRENT	5500

b.

CUST_NAME
KIRAN
CHOWHAN

c.

CUST_NAME	
KIRAN	

d.

<del>v.</del>			
CUST_ID	CUST_NAME	ACC_TYPE	EMI
101	KIRAN	CURRENT	5500
103	CHOWHAN	SAVINGS	4980

1

iv. Which statement will give the following output

CUST\_NAME RADHA

- a) Select \* from bank where cust\_name="radha;
- b) Select cust\_name from bank where acc\_type="CURRENT";
- c) Select cust\_name from bank where cust\_id=105;
- d) Select cust\_name from bank where acc\_type="CURRENT" OR cust\_id=105;
- v. What will be the output of the following command? Select cust\_name, cust\_id from bank where acc\_type="savings";

a.

CUST_ID	CUST_NAME	ACC_TYPE
102	LATHA	SAVINGS
103	CHOWHAN	SAVINGS
104	KISHORE	SAVINGS

b.

CUST_NAME	CUST_ID
LATHA	102
CHOWHAN	103
KISHORE	104

c.

CUST_ID	CUST_NAME
102	LATHA
103	CHOWHAN
104	KISHORE

d.

CUST_NAME	ACC_TYPE
LATHA	SAVINGS
CHOWHAN	SAVINGS
KISHORE	SAVINGS

1

# Part - B

# Section - I

23	What will be the output produced by the following code fragments- w, x, y, z = 22, 2, 5, 27 print(w/4) print(w//4) print(x**y) print(z%y)	2
24	Write a program to find simple interest using principal, rate and time.	2
	Accept data from user. (SI = PxRxT/100)	
25	Predict output of the following code:	2
	<pre>d1 = {'a': 'apple', 'b': 'boy', 'c': 'cat', 'd': 'dog'} d2= {'c': 'cow', 'd': 'donkey','e':'elephant','f':'fox'} d1.update(d2) print(d1) del d1["f"] print(d1)</pre>	
26	a) Varun is confused between append() and extend() list functions. Help him to understand the difference with examples	2
	OR	
	b) Discuss and Differentiate between pop() and remove() functions with examples	
27	Compare between char and varchar data types of SQL	2
28	a) Write a program to check whether the entered number by user is even or odd.	2
	OR	
	b) Write a program to input age of a person and print message "Eligible to Vote" if age is more than 18 otherwise print message "not eligible to Vote".	
29	What do you mean by DBMS? What do you mean by degree and cardinality of a table	2
30	Briefly discuss about system software classification	2
31	Differentiate between public cloud and private cloud. List a few characteristics of both	2
32	How primary memory is different from secondary memory of computer?	2

#### Section - II

**a)** Accept inputs from user and create a dictionary to store employee details. Print the key-value pairs.

#### **OR**

- b) Discuss any 3 built-in dictionary functions with the help of examples
- a) Write a program to find maximum of 3 numbers using nested if..else statement.

3

#### OR

- b) Write a program to accept a list from user. Create 2 separate lists for odd and even numbers from it.
- 35 Explain functional units of a computer system with the help of a block diagram?
- 36 Discuss different cloud service models with examples?

3

3

#### Section -III

37 Consider the given table IT:

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E_No	Name	Desg	Salary
21	Arun E D	Tester	28000
22	Anu M N	Developer	35000
23	Benit Anto	Designer	32000
34	Cilona David	Administrator	25000
35	Vincent Gomas	Administrator	25000

Perform the following operations in SQL:

- 1) Display all the records
- 2) Display Salary and designation of Anu M N
- 3) Display names of persons whose salary in range 30000-40000
- 4) Display details of students whose name start with alphabet A
- 5) Display different job roles without duplication
- Consider the list given below and write the outputs :- Nlist = ['p','y','t','h','o','n"]

- Nlist.remove('p') print(Nlist)
- 2) print(Nlist.pop(3))
- 3) print(Nlist.pop())
- 4) print(Nlist[-2:-5])

# 5) print(Nlist\*2)

# 39 Create SQL table **student** with following columns and RollNo as primary key

Column Name	Data Type	Size
RollNo	Integer	3
Sname	Character	25
DOB	Date	
Gender	Character	1
Fee	Decimal	5

Write SQL queries to perform the following operations in SQL:

- 1) Insert 3 records to students
- 2) Display details of students who born after 2000
- 3) Display details of all boys whose roll number is between 10 and 20