Vivekanand College, Kolhapur (Autonomous)

Dept. of Computer Science

Continuous Internal Evaluation from 2020-21

Class	Examination	Subject Code	Internal Marks	Distribution	Marks
B.Sc. I	November , 2019	Problem Solving using Computers DSE-1006A		Test-I	10
				Assignment Python	5
				Assignment DBMS	5
				DBMS CIE Test	10
B.Sc. III	March, 2021	Internet Technologies -II		Test 1	10
				Test 2	5
				Assignments	5
				Test 3	10
	July, 2021	Data Science using Python		Online Test	10

VIVEKANAND COLLEGE, KOLHAPUR(Autonomous)
Dept. of Computer Science
B.Sc.I
Internal Marks Mar 2021 SEMESTER-II

Sr.No	Roll No	Python Test	DBMS Ass	Python assi	Total	Out of 20
1	7301	10	5	5	9.33	18.66667
2	7302	10	5	5	9.33	18.66667
3	7303	10	5	5	8.67	17.33333
4	7304	7	5	5	7.33	14.66667
5	7305	9	5	5	8.67	17.33333
6	7306	9	5	5	7.67	15.33333
7	7307	10	5	5	8.00	16
8	7309	9	5	5	7.67	15.33333
9	7310	10	5	5	8.33	16.66667
10	7312	9	5	5	9.33	18.66667
11	7313	10	5	5	8.33	16.66667
12	7315	10	5	5	9.33	18.66667
13	7316	10	5	5	7.67	15.33333
14	7317	10	5	5	7.67	15.33333
15	7318	10	5	5	9.00	18
16	7319	10	5	5	8.33	16.66667
17	7320	10	5	5	7.33	14.66667

18	7321	10	5	5	9.67	19.33333
19	7322	10	5	5	8.67	17.33333
20	7323	10	5	5	8.67	17.33333
21	7324	10	5	5	8.33	16.66667
22	7308	9	5	5	7.67	15.33333
23	7325	10	5	5	8.67	17.33333
24	7326	9	5	5	7.67	15.33333
25	7327	10	5		5.67	11.33333
26	7328	10	5	5	9.67	19.33333
27	7329	10	5	5	8.33	16.66667
28	7332	10	5	5	7.33	14.66667
29	7333	9	5	5	8.33	16.66667
30	7334	10	5	5	9.67	19.33333
31	7335	8	5	5	9.00	18
32	7336	10	5	5	8.33	16.66667
33	7337	9	5	5	9.00	18
34	7338	10	5	5	9.67	19.33333
35	7339	10	5	5	7.67	15.33333
36	7340	8	5	5	7.67	15.33333
37	7341	10	5	5	8.67	17.33333
38	7342	10	5	5	8.67	17.33333
39	7436	9	5	5	6.33	12.66667
40	7437	9	5	5	8.33	16.66667
41	7438	9	5	5	8.33	16.66667
42	7439	10	5	5	7.67	15.33333
43	7440	8	5	5	8.33	16.66667
44	7003	10	5	5	9.00	18

Vivekanand College, Kolhapur

Department of Computer Science

B.Sc.III

Internals Exam Report

Roll No	Test 1	Test 2	ASSIGNMENT	Test 3
8206	6	3	3	6
8207	7	3.5	2	5
8208	7	3.5	5	9
8209	8	4	5	9
8210	7	3.5	5	9
8211	7	3.5		5
8212	7	3.5	5	9
8213	7	3.5	5	9
8214	6	3	5	8
8215	7	3.5		6
8216	8	4	5	9
8217	8	4	5	9
8218	8	4	5	9
8219	8	4	5	9
8220	8	4	5	9
8221	7	3.5		6
8222	7	3.5		7
8223	8	4	5	9
8224	7	3.5	5	9
8225	7	3.5	5	9
8226	7	3.5	5	9
8227	7	3.5	5	9
8228	8	4	5	9
8229	8	4		5
8230	7	3.5		5
8231	9	4.5	5	10
8232		0		9
8233	7	3.5		9
8234		0		9
8235	7	3.5	5	9
8236	7	3.5	5	9
8237	7	3.5	5	9
8238	7	3.5		6
8239	7	3.5		5
8240		0	5	9
8241	8	4		5
8242	7	3.5	5	9

8243	8	4	5	9
8244	8	4	5	9
8245	8	4		5
8246	7	3.5	5	9
8247	8	4	5	9
8248	8	4	5	9
8249	8	4	5	9
8250	8	4	5	9
8251	7	3.5		5
8252	8	4	5	9

Vivekanand College, Kolhapur (Autonomous)		
Department of Computer Science		
B.Sc.-I		
Database Management System CIE Online Test		
Date- 16-08-2021		
Surname	**First name**	**Grade/10.00**
Shinde	Omkar	6
Borage	Samrudhi	6
Pendhari	Shoaib	5
Durugale	Shubham	7
Pandharapatte	Siddhi	4
Patil	Shweta	5
Dhavale	Pankaj	5
Ambardekar	Siddika	4
Vanarse	Sahil	10
Powar	Sayali	10
Hawale	Abhishek	6
Shintre	Isha	7
Pathan	Shifa	6
Vibhute	Vidira	5
Chougule	Madhura	10
Kamate	Sakshi	5
Patil	Apeksha	5
Bote	Prajkta	5
Chavan	Komal	8
Shinde	Sejal	6
Patil	Dnyaneshwari	5
Patil	Mithila	5
Tahsildar	Pratik	10
Kante	Gunjan	5
Ananda Patil	Gayatri	10
Gadave	Swarup	6
More	Onkar	9
Kale	Aditya	5
Kesarkar	Nikhil	10
Waghmare	Rutuja	6
Todkar	Shveta	9
Ingale	Shreyash	6
Chogule	Prathamesh	6
Ingale	Aditi	4
Shinde	Sanika	10
Jadhav	Parth	5
Ghumai	Dhiraj	3

Kore	Shubham	6
Shaikh	Aman	10
Nadale	Swapnali	10
Patil	Vrushali	10
Jasud	Atharva	6
Bhopale	Animesh	3
Chougule	Tejas	5
Yadav	Aishwarya	10

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-II

Operating System CIE Online Test

Date- 09-11-2020

Last name	First name	Grade/10.00
Powar	Prashant	9.36
Sutar	Vaishnavi	6.16
Kugaji	Bhargavi	9.2
ARADE	SAMADHAN	9.6
Kadwale	Ananya	9.6
Chavan	Pratik	9.2
Prabhavale	Uditanshu	9.12
Jadhav	Sayali	8.64
Chougale	Ketan	9.6
Khandare	Pankaj	10
Shinde	Kirti	9.2
Sankpal	Prajakta	10
Katyar	Kajal	10
Patil	Snehal	9.2
Mali	Karishmakumari	9.12
Patil	Sunil	9.01
Katyar	Preeti	10
Jamadar	Tasmiya	7.52
Nirmale	Snehal	9.6
Mulla	Ashraf	8.23
Dinde	Rutuja	10
Dabade	Shweta	8
Sutar	Harshada	9.01
Jadhav	Vaishnavi	9.2
Korde	Shreya	9.6
Powar	Saraswati	8
Giri	Poonam	8.93
Sagaonkar	Tejashree	10
Shintre	Pranjal	9.6
Mahadik	Akshata	6.4
Desai	Akanksha	4.35
Patil	Nikita	8.57
Magdum	Rajvardhan	9.6
Patil	Siddharth	4.4
Patil	Sakshi	8.8
Patil	Rohan	8.36
Patil	Aadesh	4.77

Shivane	Ashutosh	9.2
Patil	Santosh	8.4
Kharat	Komal	6.05
Ekal	Sanket	9.2
Patil	Shritej	9.33
Patil	Sujit	9.6
Khurandale	Vaishnavi	7.68
Patil	Sammed	7.11
Garadi	Sania	4
Dabade	Amruta	8.16
Chavan	Aishwarya	2.47
Patil	Abhishek	7.6
Pusalkar	Tanay	7.65
Overall average		8.33

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-II

Operating System CIE Online Test

Date- 29-05-2021

Last name	First name	Grade/10.00
Tashildar	Prathamesh	7
Dinde	Rutuja	10
ARADE	SAMADHAN	10
Korde	Shreya	10
Nirmale	Snehal	10
Kadwale	Ananya	10
Katyar	Preeti	9
Chavan	Pratik	10
Khandare	Pankaj	10
Chougale	Ketan	10
Sankpal	Prajakta	10
Jadhav	Sayali	9
Giri	Poonam	10
Prabhavale	Uditanshu	9
Patil	Sunil	9
Magdum	Rajvardhan	10
Patil	Santosh	10
Patil	Snehal	10
Patil	Shritej	10
Shinde	Kirti	10
Ekal	Sanket	9
Mulla	Ashraf	9
Pusalkar	Tanay	9
Jamadar	Tasmiya	8
Patil	Siddharth	7
Sutar	Harshada	10
Patil	Nikita	10
Patil	Sakshi	7
Jadhav	Vaishnavi	10
Patil	Rohan	10
Khurandale	Vaishnavi	9
Dabade	Shweta	10
Sutar	Vaishnavi	8
Katyar	Kajal	10
Mali	Karishmakumari	10
Shintre	Pranjal	10
Shivane	Ashutosh	10

Kugaji	Bhargavi	10
Sagaonkar	Tejashree	10
Desai	Akanksha	6
Powar	Saraswati	9
Dabade	Amruta	7
Chavan	Aishwarya	10
Garadi	Sania	8
Patil	Sujit	10
Powar	Prashant	6
Patil	Sammed	10
Patil	Aadesh	10
Patil	Abhishek	10
Mahadik	Akshata	10
Kharat	Komal	9
Sutar	Vishwajeet	10
Muthane	Vaishnavi	9
Chavan	Aishwarya	0
Overall average		9.13

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc.-III

Software Engineering CIE Online Test

Date- 19-07-2021

Last name	First name	Grade/10.00
Yamgarnikar	Snehal	10
Kamble	Prajakta	10
Salunkhe	Kalyani	10
Mahajan	Sakshi	10
Patil	Vinod	8.2
Shaikh	Muskan	10
Shete	Aditi	10
Shinde	Pratik	10
Patil	Vaishnavi	10
Karoshi	Spurthi	10
Patil	Shivam	10
Todkar	Sharvari	8.67
Chougale	Niranjanee	9
Patil	Snehal	10
Yadav	Rutuja	10
Kadam	Archiet	10
Patil	Amruta	8.67
Patil	Gautam	10
Sawant	Bhakti	10
kamble	Yash	9.8
Patil	Shivam	10
Valvi	Rajendra	9.83
Kamble	Shubhangi	8.17
Nille	Aishwarya	10
Momin	Misba	8.67
PATIL	PRANAV	9.83
Koundade	Shubham	10
Powar	Akash	9.83
Patil	Pooja	10
Kamble	Rahul	8.67
Pathare	Akshata	6.37
Kamble	Tejashri	9.2
Jangate	Ajit	8.67
Bagnikar	Sanket	10
Patil	Rohan	10
Sasne	Rutvik	7.33
Urane	Rachana	10

Mane	Prem	10
Bhosale	Shubham	9.03
Kharade	Nisha	10
Yadav	Saiprasad	10
Shetke	Atharva	9
Chougale	Shubham	10
RAJPUT	VISHWAJEET	8.67
Patil	Shubham	10
Pawar	Aishwarya	10
Nimbalkar	Manasi	10
Patil	Amruta	0
Overall average		9.33

Vivekanand College, Kolhapur (Autonomous)		
Department of Computer Science		
B.Sc.-III		
Data Science using Python CIE Online Test		
Date- 20-07-2021		
Surname	**First name**	**Grade/10.00**
Patil	Snehal	10
Sawant	Bhakti	10
Patil	Pooja	10
Patil	Vaishnavi	10
Kadam	Archiet	10
Chougale	Niranjanee	10
Patil	Shubham	9
Todkar	Sharvari	10
Patil	Amruta	9
Powar	Akash	10
Patil	Shivam	10
kamble	Yash	10
Mane	Prem	10
Kamble	Rahul	10
Valvi	Rajendra	10
Karoshi	Spurthi	10
PATIL	PRANAV	10
Shete	Aditi	10
Shinde	Pratik	10
Koundade	Shubham	10
Kamble	Prajakta	10
Patil	Shivam	10
Yadav	Saiprasad	10
Nille	Aishwarya	10
Salunkhe	Kalyani	10
Mahajan	Sakshi	10
Yamgarnikar	Snehal	10
Yadav	Rutuja	10
Patil	Vinod	9
Chougale	Shubham	10
Momin	Misba	10

Kamble	Shubhangi		10
Shaikh	Muskan		10
Shetke	Atharva		10
Patil	Gautam		10
Patil	Rohan		9
Sasne	Rutvik		10
Pawar	Aishwarya		10
Bagnikar	Sanket		10
Kamble	Tejashri		9
Jangate	Ajit		10
Urane	Rachana		10
Kharade	Nisha		10
Pathare	Akshata		10
Nimbalkar	Manasi		10
Bhosale	Shubham		10
Overall average			9.89

Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (Autonomous), KOLHAPUR

Class _____ Div _____ Roll No. 7977

Suppliment No. _____ Subject obj oriented Software Engeering

Test / Tutorial No. _____

Explain in detail UML Architecture

→ Q.3 UML Architecture: In real world system is used by diff. users. it may be developer, tester, soft. E, business people & many more. the software architecture when designed system he will made with diff prespe -ctive in her mind. which is easy to understand diff users. The most system is visulize by diff view.

The soft. architecture will help to achive quality in system to designed with software qulities like seperation & concern. easy to adar the system become many easy to maintain, reuse & adapt. the system is used by project manager, client & end users. they have their own views, & building agendas. it is easy by follow 5 views

UML Architecture:

functionality
vocablury

• Assembly
• configuration mangemen

```
Design View          Implimentation View

        Use-Case View

Process              Deployment view
view
```

• process
•

•Though put

• System topology
• Delivery
• Installation
• Distribution
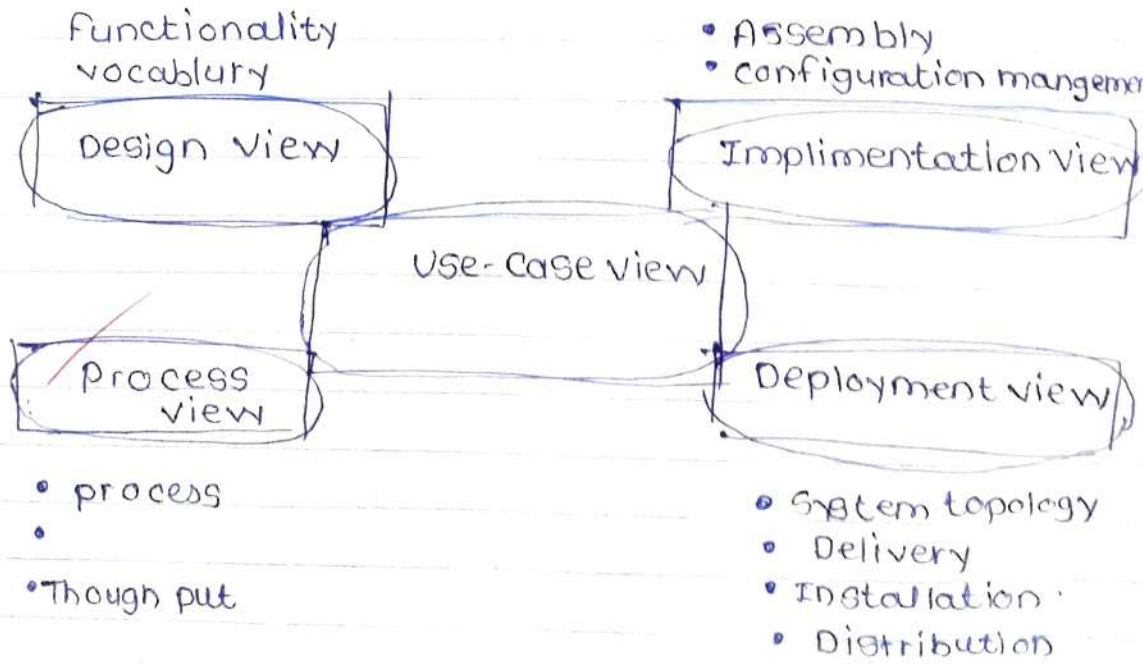
(1) Use-case view: (1) It is the view that shown functionality of system that prerecived from the external users (2) It relives the system requirement (3) It capture static UML. view of these view to for State-chart diag, activity diag. use-case dia.

(2) Design view: (1) It is the view that shows the how functionality is made in the system. (2) vocabalary accessed the problem space + soln space.

(3) Implimentation view : (1) It the view that orgunized core component & files

(4) Process view : (1) It demonstrate the concurret of the system it concurrent threats & process may sychronized mechanism.

(5) Deployment view (1) It demonstrate the view that demonstrate the deployment with physical architecture. (2) it include the node of software topology.& execute the system.

Q.4 Explain in detail conceptual Model of UML
→ conceptul of UML: conceptual model is concept of several interrelated ob components it is easy to understand & it related to of the obj. each other. this is the 1st step before drawing the UML.
following object are the objects of the UML which needed in.
(1) object: A object is ar real world entity one or
it may more present in single system.

(2) class : class is a software blueprint for

an object which is used to define variable &
methods common to all system.

(3) Abstraction: It is essential characteristics
of system that hiding irrelevent information
(users)

(4) Inheritance: It derived new class from
the existing class.

(5) polymorphism: It is the mechanism which
how diff forms for diff purpose.

(6) Encapsulation: It bind data & objects toge
-ther for using enabling tight coupling betn
them.

Q.1 Draw DFD & ERD for your system.
→ ERD for online Quiz:
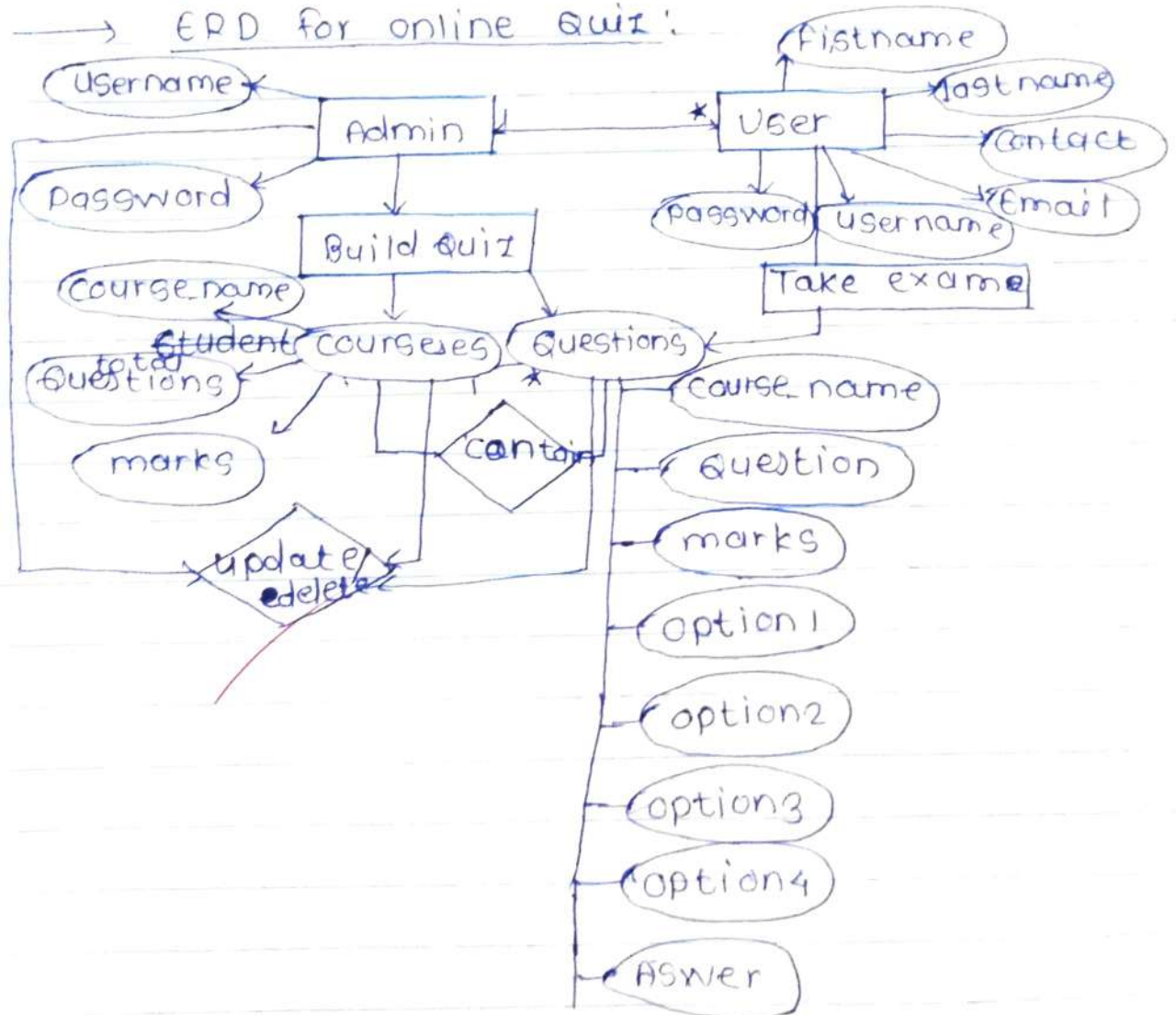
Q.6 Explain class, object & Inheritance in detail

→ (1) object: object is a real world entity which have diff. methods. the obj have more in a single system. it is instiated by class. thus it is instance of class.

(2) <u>Inheritance</u>: Inheritance is a ext. derived a new class by existing class. the existing class called as superclass, base class or parent class. of and new class is also called as child class or innerclass or subclass

In child class include attributes of the existing class it may also ~~have includ~~ there own attributes.

for e.g. mammal is a class of human object it have many

cow is mammal

in this ~~die~~ eg. cow is sub class.

VIVEKANAND COLLEGE,KOLHAPUR(Autonomous)
Department of Computer Science
CS-Internal Examination
Class : B.Sc. I   Subject : Computer Science

Date : 05/03/2021   Time: 1Hrs

Solve any 10:

1.In which language is Python written?
   a)English   b)PHP   c)C   d)All of the above

2.Which one of the following is the correct extension of the Python file?
   a).py   b).python   c).p   d)None of these

3.What do we use to define a block of code in Python language?
   a)Key   b)Brackets   c)Indentation   d)None of these

4.Which of the following functions is a built-in function in python language?
   a)val()   b)print()   c)input()   d)None of these

5.Which of the following is an invalid variable?
   a) mystring 1   b) 1st_string   c) foo   d) peri

6.Which one of these is modulus operator?
   a) /   b) //   c) %   d) None of the mentioned

7.What is the answer to this expression, 22 % 3 is?
   a) 7   b) 1   c) 0   d) 5

8.What will be the value of the following Python expression? 4+3%5
   a)4   b)7   c)2   d) 0

9.What is the putput of
   >>>x=15
   >>>print(x)
   a)20   b)15   c)40   d)10

10.What is the output of
   >>>x=5
   >>>y=67
   >>>print(y/xy," ",y%x)
   a)13 2   b)13,1   c)132   d)13 1

11._____ statement is used in python to take input from user.

    a)print()   b)input()   c)printf()   d)inutn()

12._____ is a python prompt.

    a.<<<   b.>>>   c.><>   d./

13._____ is used as a translator in python

    a)compiler   b)intepreter   c)translator   d)converter

14. PYTHON is a _____

    a)software   b)hardware   c)operating system   d)natural language

15.Every if ststement shoulb be followed by

    a):   b);   c)"   d)'

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VIVEKANAND COLLEGE, KOLHAUR(Autonomous)
Department of Computer Science
CS-Internal Examination
Class : B.Sc. I   Subject : Computer Science

Date : 05/03/2021   Time:

Solve any 10:

1. In which language is Python written?
   a) English   b) PHP   c) C   d) All of the above

2. Which one of the following is the correct extension of the Python file?
   a) .py   b) .python   c) .p   d) None of these

3. What do we use to define a block of code in Python language?
   a) Key   b) Brackets   c) Indentation d) None of these

4. Which of the following functions is a built-in function in python language?
   a) val()   b) print()   c) input()   d) None of these

5. Which of the following is an invalid variable?
   a) mystring 1   b) 1st_string   c) foo   d) peri

6. Which one of these is modulus operator?
   a) /   b) //   c) %   d) None of the mentioned

7. What is the answer to this expression, 22 % 3 is?
   a) 7   b) 1   c) 0   d) 5

8. What will be the value of the following Python expression?   4+3%5
   a) 4   b) 7   c) 2   d) 0

9. What is the putput of
   >>>x=15
   >>>print(x)
   a) 20   b) 15   c) 40   d) 10

10. What is the output of
    >>>x=5
    >>>y=67
    >>>print(y/xy," ",y%x)
    a) 13 2   b) 13,1   c) 132   d) 13 1

11._____ statement is used in python to take input from user.
a)print()   b)input()   c)printf()   d)inutn()

12._____ is a python prompt.
a.<<<   b.>>>   c.><>   d./

13._____ is used as a translator in python
a)compiler   b)intepreter   c)translator   d)converter

14. PYTHON is a _____
a)software   b)hardware   c)operating system   d)natural language

15.Every if ststement shoulb be followed by
a) :   b);   c)"   d)'

-*-*-*-*-

VIVEKANAND COLLEGE,KOLHAUR(Autonomous)
Department of Computer Science
CS-Internal Examination
Class : B.Sc. I   Subject : Computer Science

Date : 05/03/2021   Time: 1Hrs

Solve any 10:

1.In which language is Python written?
a)English   b)PHP   c)C   d)All of the above

2.Which one of the following is the correct extension of the Python file?
a).py   b).python   c).p   d)None of these

3.What do we use to define a block of code in Python language?
a)Key   b)Brackets   c)Indentation   d)None of these

4.Which of the following functions is a built-in function in python language?
a)val()   b)print()   c)input()   d)None of these

5.Which of the following is an invalid variable?
a)mystring 1   b) 1st_string   c) foo   d) peri

6.Which one of these is modulus operator?
a)/   b) //   c)%   d) None of the mentioned

7.What is the answer to this expression, 22 % 3 is?
a)7   b) 1   c) 0   d) 5

8.What will be the value of the following Python expression?   4+3%5
a)4   b)7   c)2   d)0

9.What is the putput of
```
>>>x=15
>>>print(x)
```
a)20   b)15   c)40   d)10

10.What is the output of
```
>>>x=5
>>>y=67
>>>print(y/xy," ",y%x)
```
a)13 2   b)13,1   c)132   d)13 1

P TO

11._____ statement is used in python to take input from user.

a)print( )   b)input( )   c)printf( )   d)inutn( )

12._____ is a python prompt.

a.<<<   b)>>>   c ><>   d.

13._____ is used as a translator in python

a)compiler   b)intepreter   c)translator   d)converter

14. PYTHON is a _____

a)software   b)hardware   c)operating system   d)natural language

15.Every if ststement shoulb be followed by

a) .   b) :   c)"   d)`

.*.*.*.*.

Instructions:
1. Attempt all Questions
2. Each question carries 1 mark

1) A _____ means "an organized relationship among functioning units or components".

    a) Software   b) System   c) Application   d) Function

2) _____ characteristics of a system refer to the manner in which each component functions with other components of the system.

    a) Interdependence   b) Integration

    c) Interaction   d) Organization

3) _____ is a document that captures complete description about how the system is expected to perform.

    a) SDS   b) SRS   c) SMS   d) None of these

4) In Waterfall Model _____ phase checks that the software is running efficiently and with minimum errors.

    a) Design   b) Coding   c) Maintenance   d) Testing

5) The practical extent to which a project can be performed successfully is termed as _____.

    a) FFT   b) ERD   c) Feasibility   d) None of these

6) Accurate information can be collected with help of specific methods to get correct information is termed as _____.

    a) System Design   b) System Testing   c) Feedback   d) Fact Finding

7) For object-oriented software _____ object modelling language is used.

    a) Unifield Modeling Language   b) Union Modeling Language

    c) Unified Modeling Language   d) Undefined Modeling Language

8) _____ is the process of extracting, structuring and organizing knowledge from one source, usually human experts.

    a) Knowledge Development b) Knowledge gain

    c) Knowledge acquisition   d) None of these

9) The reasoning and justification behind human decisions, opinions and beliefs is considered in _____

    a) Rationale   b) Software Design   c) SDLC   d) None of these

10) The coding (internal logic) of the software is checked in _____ testing

    a) Black Box testing   b) White box testing

    c) Alpha Testing   d) All of these

***

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc. III (Sem V) Internal Examination March-2021
Subject: Software Engineering

Date: 19/03/2021

Duration: 30mins

Instructions:

1. Attempt all Questions
2. Each question carries 1 mark

1) A _____ means "an organized relationship among functioning units or components".

   a) Software   b) System   c) Application   d) Function

2) _____ characteristics of a system refer to the manner in which each component functions with other components of the system.

   a) Interdependence   b) Integration

   c) Interaction   d) Organization

3) _____ is a document that captures complete description about how the system is expected to perform.

   a) SDS   b) SRS   c) SMS   d) None of these

4) In Waterfall Model _____ phase checks that the software is running efficiently and with minimum errors.

   a) Design   b) Coding   c) Maintenance   d) Testing

5) The practical extent to which a project can be performed successfully is termed as _____.

   a) FFT   b) ERD   c) Feasibility   d) None of these

6) Accurate information can be collected with help of specific methods to get correct information is termed as _____.

   a) System Design   b) System Testing   c) Feedback   d) Fact Finding

7) For object-oriented software _____ object modelling language is used.

   a) Unifield Modeling Language   b) Union Modeling Language

   c) Unified Modeling Language   d) Undefined Modeling Language

8) _____ is the process of extracting, structuring and organizing knowledge from one source, usually human experts.

   a) Knowledge Development   b) Knowledge gain

   c) Knowledge acquisition   d) None of these

9) The reasoning and justification behind human decisions, opinions and beliefs is considered in _____.

a) Rationale   b) Software Design   c) SDLC   d) None of these

10) The coding (internal logic) of the software is checked in _____ testing.

a) Black Box testing   b) White box testing

c) Alpha Testing   d) All of these

***

Roll No. 8241

Date: 19/03/2021

Duration: 30mins

Instructions:
1. Attempt all Questions
2. Each question carries 1 mark

1) In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is _____
   a) Application layer   b) Transport layer   c) Link layer   d) Session layer

2) Bluetooth is an example of _____
   a) personal area network   b) local area network
   c) virtual private network   d) wide area network

3) When collection of various computers seems a single coherent system to its client, then it is called _____.
   a) computer network   b) distributed system
   c) networking system   d) mail system

4) How many layers are present in the Internet protocol stack (TCP/IP model)?
   a) 5   b) 7   c) 6   d) 10

5) Which of the following networks extends a private network across public networks?
   a) local area network   b) virtual private network
   c) enterprise private network d) storage area network

6) Which of the following are transport layer protocols used in networking?
   a) TCP and FTP   b) UDP and HTTP
   c) TCP and UDP   d) HTTP and FTP

7) Transport layer is implemented in _____.
   a) End system   b) NIC   c) Ethernet   d) Signal transmission

8) A _____ is a device that forwards packets between networks by processing the routing information included in the packet.
   a) bridge   b) firewall   c) router   d) hub

9) The number of layers in ISO OSI reference model is _____.
   a) 5   b) 7   c) 6   d) 10

10) _____ topology requires a multipoint connection.
   a) Star   b) Mesh   c) Ring   d) Bus

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc. III (Sem V) Internal Examination March-2021
Subject: Computer Network

Date: 19/03/2021

Duration: 30mins

Instructions:

1. *Attempt all Questions*
2. *Each question carries 1 mark*

1) In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is _____

    a) Application layer   b) Transport layer   c) Link layer   d) Session layer

2) Bluetooth is an example of _____

    a) personal area network   b) local area network
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    a) computer network   b) distributed system
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5) Which of the following networks extends a private network across public networks?

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    c) enterprise private network   d) storage area network

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7) Transport layer is implemented in _____ .

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    a) bridge   b) firewall   c) router   d) hub

9) The number of layers in ISO OSI reference model is _____ .

    a) 5   b) 7   c) 6   d) 10

10) _____ topology requires a multipoint connection.

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Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

B.Sc. III (Sem V) Internal Examination March-2021
Subject: Computer Network

Date: 19/03/2021

Duration: 30mins

Instructions:
1. Attempt all Questions
2. Each question carries 1 mark

1) In OSI model, when data is sent from device A to device B, the 5th layer to receive data at B is _____
    a) Application layer   b) Transport layer   c) Link layer   d) Session layer ✓

2) Bluetooth is an example of _____.
    a) personal area network ✓   b) local area network
    c) virtual private network   d) wide area network

3) When collection of various computers seems a single coherent system to its client, then it is called _____.
    a) computer network   b) distributed system ✓
    c) networking system   d) mail system

4) How many layers are present in the Internet protocol stack (TCP/IP model)?
    a) 5 ✓   b) 7   c) 6   d) 10

5) Which of the following networks extends a private network across public networks?
    a) local area network   b) virtual private network ✓
    c) enterprise private network   d) storage area network

6) Which of the following are transport layer protocols used in networking?
    a) TCP and FTP   b) UDP and HTTP
    c) TCP and UDP ✓   d) HTTP and FTP

7) Transport layer is implemented in _____.
    a) End system   b) NIC   c) Ethernet   d) Signal transmission

8) A _____ is a device that forwards packets between networks by processing the routing information included in the packet.
    a) bridge   b) firewall   c) router ✓   d) hub

9) The number of layers in ISO OSI reference model is _____.
    a) 5   b) 7 ✓   c) 6   d) 10

10) _____ topology requires a multipoint connection.
    a) Star   b) Mesh ✓   c) Ring   d) Bus

***

8263

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

Internal Examination 2021

Subject: Java Programming

Class: T.Y.B.Sc. (Sem-V)

Roll Number:

Time: 30 minutes

Total Marks: 10

Q.1. Select correct alternative and put it into box given.

i) The keyword _____ allows main() to be called without creating any

a) public, instances

b) void, objects

c) static, objects

d) static, classes

> c

ii) Which of the following is correct syntax for compiling java program?

a) java prname 1 2

b) java prname.java

c) javac prname.java 1 2

d) javac prname.java

> d

iii) Which of the following is valid header for main() method?

i.   public static void main(String a[])
ii. public static void main(String[] a)
iii. static public void main(String a[])
iv. static public void main(String a[])

a) only i   b) only i, ii   c) i, ii, iii   d) i, ii, iii, iv

> b

iv) Select the odd pair of data types from the following:

byte, short, int, long, float, double

a) byte, short   b) int, long
c) float, double   d) int, float

> ~~a~~ c

v) Name the operators: <, &, ||, *=

a. Conditional, Bitwise, Relational, Assignment
b. Relational, Logical, Bitwise, Compound Assignment
c. Relational, Bitwise, Logical, Compound Assignment
d. Relational, Bitwise, Bitwise, Assignment

> c

1

vi) Which of the following is true for Array in Java?

    i. It is an Object in Java
    ii. It is collection of same type elements
    iii. Array variables may be of non-primitive types
    iv. Element of array is accessed by subscript

    a) only i   b) only i, ii   c) i, ii, iii   d) i, ii, iii, iv   `d` ✓

vii) What is the output of following Java Statement?

    System.out.println((4&5)|(4|5));

    a) 2   b) 3   c) 4   d) 5   `d` ✓

viii) What is the output of following Java Statemente?

    System.out.println(!(! (10<20 && 10<30 || !(5>6))));

    a) 0   b) 1   c) true   d) false   `c` ✓

ix) Which is/are of the following not true for 'this' keyword?

    a) It is used create ambiguity between local and instance variable
    b) It is used create constructor within another constructor
    c) Both a and b
    d) None of these   `c` ✓

x) _____ method exists even when there is no object created, it can be

invoked using the _____ name and it belongs to the _____.

    a) Public, object, class
    b) Private, object, object
    c) User defined, object, class
    d) Static, class, class   `d` ✓

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

Internal Examination 2021

Subject: Java Programming

Class: T.Y.B.Sc. (Sem-V)   Roll Number: 8213

Time: 30 minutes   Total Marks: 10   08/10

Q.1. Select correct alternative and put it into box given.

i) The keyword _____ allows main() to be called without creating any _____.

    a) public, instances   b) void, objects

    c) static, objects   d) static, classes

    [c]

ii) Which of the following is correct syntax for compiling java program?

    a) java prname 1 2   b) java prname.java
    c) javac prname.java 1 2   d) javac prname.java

    [d]

iii) Which of the following is valid header for main() method?

    i.   public static void main(String a[])
    ii. public static void main(String[] a)
    iii. static public void main(String a[])
    iv. static public void main(String a[])

    a) only i   b) only i, ii   c) i, ii, iii   d) i, ii, iii, iv

    [a]

iv) Select the odd pair of data types from the following:

    byte, short, int, long, float, double

    a) byte, short   b) int, long
    c) float, double   d) int, float

    [c]

v) Name the operators: <, &, ||, *=

    a. Conditional, Bitwise, Relational, Assignment
    b. Relational, Logical, Bitwise, Compound Assignment
    c. Relational, Bitwise, Logical, Compound Assignment
    d. Relational, Bitwise, Bitwise, Assignment

    [c]

1

vi) Which of the following is true for Array in Java?

    i. It is an Object in Java
    ii. It is collection of same type elements
    iii. Array variables may be of non-primitive types
    iv. Element of array is accessed by subscript

    a) only i   b) only i, ii   c) i, ii, iii   d) i, ii, iii, iv   <u>b</u>

vii) What is the output of following Java Statement?

    System.out.println((4&5)|(4|5));

    a) 2   b) 3   c) 4   d) 5   <u>d</u>

viii) What is the output of following Java Statemente?

    System.out.println(!(! (10<20 && 10<30 || !(5>6))));

    a) 0   b) 1   c) true   d) false   <u>C</u>

ix) Which is/are of the following not true for 'this' keyword?

    a) It is used create ambiguity between local and instance variable
    b) It is used create constructor within another constructor
    c) Both a and b
    d) None of these   <u>C</u>

x) _____ method exists even when there is no object created, it can be

invoked using the _____ name and it belongs to the _____.

    a) Public, object, class
    b) Private, object, object
    c) User defined, object, class
    d) Static, class, class   <u>d</u>

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

Internal Examination 2021

Subject: Java Programming

Class: T.Y.B.Sc. (Sem-V)

Time: 30 minutes

Roll Number:

Total Marks: 10   08/10

Q.1. Select correct alternative and put it into box given.

i) The keyword _____ allows main() to be called without creating any _____.

a) public, instances

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ᴄ) static, objects

d) static, classes

[C]

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[d]

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i.   public static void main(String a[])
ii. public static void main(String[] a)
iii. static public void main(String a[])
iv. static public void main(String a[])

a) only i   b) only i, ii   c) i, ii, iii   d) i, ii, iii, iv

[a]

iv) Select the odd pair of data types from the following:

byte, short, int, long, float, double

a) byte, short

b) int, long

ᴄ) float, double

d) int, float

[C]

v) Name the operators: <, &, ||, *=

a. Conditional, Bitwise, Relational, Assignment
b. Relational, Logical, Bitwise, Compound Assignment
c. Relational, Bitwise, Logical, Compound Assignment
d. Relational, Bitwise, Bitwise, Assignment

[C]

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

Internal Examination 2021

<u>Subject: Computer Science (Part-II)</u>

Class: F.Y.B.Sc. (Sem-1)   Date: 6/03/2021   Roll Number: 7335

Time: 30 minutes   Total Marks: 10   Marks obtained:

Q.1. Select correct alternative and put it into box given.

i) The following are functions of a DBMS except_____

    a) creating and processing forms   b) creating databases

    c) processing data   d) administrating database | a |

ii) The ability to modify a schema definition in one level without affecting a schema definition in the next higher level is called_____

    a) data abstraction   b) data independence

    c) both a and b   d) none of the above | d |

iii) USE keyword is used to select a_____.

    a) table   b) column   c) database   d) all of the above | c |

iv) _____ is not a data type of MySQL.

    a) float   b) date   c) double   d)string | d |

v) ____ is used as default SQL statement delimiter.

    a) ;   b) ,   c) :   d) . | a |

1

vi) Which of the following is/are the component/s of DBMS?

     a) hardware   b) software   c) data   d) All of these | d |

vii) _____ language is a simple language designed to communicate with database environment.

     a) Database Access   b) Communication

     c) both a and b   d) None of these | a |

viii) Centralized control of database is exerted by a person or group of persons is referred as _____ and a person or group of persons doing such task is known as_____ .

     a) Database administration, Database administrator
     b) Database Observation, Database Observer
     c) Database monitoring, Database monitor
     d) None of these | a |

ix) Which is/are of the following disadvantages of file system?

     a) Data redundancy
     b) Data inconsistency
     c) Data isolation
     d) All of these | d |

x) Which is not true about DBMS from the following?

     a) These are large systems
     b) These are single user systems
     c) These systems provides better security
     d) These systems provides better data access | b |

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

Internal Examination 2021

Subject: Computer Science (Part-II)

Class: F.Y.B.Sc. (Sem-I)   Date: 6/03/2021   Roll Number: 7312

Time: 30 minutes   Total Marks: 10   Marks obtained: 9 /₆

Q.1. Select correct alternative and put it into box given.

i) The following are functions of a DBMS except_____

    a) creating and processing forms   b) creating databases

    c) processing data   d) administrating database   a

ii) The ability to modify a schema definition in one level without affecting a schema definition in the next higher level is called_____

    a) data abstraction   b) data independence

    c) both a and b   d) none of the above   b

iii) USE keyword is used to select a_____.

    a) table   b) column   c) database   d) all of the above   d

iv) _____ is not a data type of MySQL.

    a) float   b) date   c) double   d)string   d

v) ____ is used as default SQL statement delimiter.

    a) ;   b) ,   c) :   d) .   a

1

vi) Which of the following is/are the component/s of DBMS?

    a) hardware   b) software   c) data   d) All of these   d

vii) _____ language is a simple language designed to communicate with database environment.

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    a) Database administration, Database administrator
    b) Database Observation, Database Observer
    c) Database monitoring, Database monitor
    d) None of these   a

ix) Which is/are of the following disadvantages of file system?

    a) Data redundancy
    b) Data inconsistency
    c) Data isolation
    d) All of these   d

x) Which is not true about DBMS from the following?

    a) These are large systems
    b) These are single user systems
    c) These systems provides better security
    d) These systems provides better data access   b

Vivekanand College, Kolhapur (Autonomous)

Department of Computer Science

Internal Examination 2021

Subject: Computer Science (Part-II)

Class: F.Y.B.Sc. (Sem-I)   Date: 6/03/2021   Roll Number: 7328

Time: 30 minutes   Total Marks: 10   Marks obtained:

Q.1. Select correct alternative and put it into box given.

i) The following are functions of a DBMS except_____

    a) creating and processing forms   b) creating databases

    c) processing data   d) administrating database   a

ii) The ability to modify a schema definition in one level without affecting a schema definition in the next higher level is called_____

    a) data abstraction   b) data independence

    c) both a and b   d) none of the above   a

iii) USE keyword is used to select a_____.

    a) table   b) column   c) database   d) all of the above   c

iv) _____ is not a data type of MySQL.

    a) float   b) date   c) double   d)string   d

v) _____ is used as default SQL statement delimiter.

    a) ;   b) ,   c) :   d) .   a

vi) Which of the following is/are the component/s of DBMS?

    a) hardware   b) software   c) data   d) All of these | d |

vii) _____ language is a simple language designed to communicate with database environment.

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    c) both a and b   d) None of these | a . |

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    c) Data isolation
    d) All of these | d |

x) Which is not true about DBMS from the following?

    a) These are large systems
    b) These are single user systems
    c) These systems provides better security
    d) These systems provides better data access | b |

20-21

Algorithm

Assignment No. 1

Q 1 What is algorithm ? Explain it.

<u>Defination</u> : An algorithm is a finite sequence of well-defined, computer-implementable instructions, typically to solve a class of problems or to perform a computation.

The term finite means that the algorithm reach an end point and cannot run forever.

An algorithm is step by step procedure to solve a given problem.

You can find algorithm everywhere in your life, not just in computer science.

Eg. The process to make a sandwich.

The process to make a cup of tea.

Q 2] Write advantages and disadvantages of algorithm.

Advantages of algorithm :

1] It is a step wise representation of a solution to given problem, which makes it easy to understand.

2] An algorithm uses a definite procedure.

3] It is not dependent on any programming language so it is easy understand for anyone even without any programming language.

4] Every step in algorithm has its own logical sequence So it is easy to debug.

5] By using algorithm, the problem is broken down into smaller pieces or steps hence it is easiar for programmer to convert it into actual programmer.

Disadvantages of algorithm :
1] Algorithm is time consuming.
2] Difficult to show branching and looping in algorithm
3] Big tasks are difficult to put in Algorithms.

Q3 Write features of algorithm.
The Following are the features of a good algorithm

1] Precision : a good algorithm must have certain outlir
steps. The steps should be exact enough, and not
varying.

2] Uniqueness : each step taken the algorithm should
give definite result as stated by the writer of the
algorithm. The results should not Fluctuate by
any means.

3] Feasibility : The algorithm should be possible and
practicable in real life. it should not be abstract or
imaginary.

4] Input : a good algorithm must be able to accept
a set of defined input.

5] Output : a good algorithm should have be able to
produce results as output, preferably solutions.

6] Finiteness : the algorithm should have a stop
after a certain number of instructions.

Assignment No. 2

g1 What is constant ? Give five examples

<u>Defination</u> : Data values that stay the same every time a program is executed are known as constants. constants are not expected to change.

Ex. 10, 20, 30, 40, 50 etc.

g2] What is variable ? Give two examples.

<u>Defination</u> : Variables are data values that can change When the user is asked a question. variables may change during program execution.

ex.

i) 'Marks' would need to be variable to change through-out a year.

ii) 'Age' would need to be variable as change day by day.

g3 Write an algorithm to print multiplication of 4 Nos. 5, 10, 20, 30

Algorithm to print multiplication of 4 nos. 5, 10, 20, 30. :

Step 1 : Start

Step 2 : no1 = 10

Step 3 : no2 = 5

Step 4 : no3 = 15

Step 5 : no4 = 20

Step 6 : no5 = 30

Step 7 : ans = no1* no2* no3* no4*no5

Step 8 : print ans

Step 9 : End.

Q4 Write an algorithm to print multiplication of 3 nos inputted by user.

Algorithm to print multiplication of 3 nos. inputted by use

Step 1 : Start
Step 2 : Input no 1, no 2, no 3
Step 3 : ans = no 1 * no 2 * no 3
Step 4 : print ans
Step 5 : End.

If Input 10, 20, 30
Output 6000
If Input 3, 2, 5
Output 30

Q.1 Write an algorithm to find area and perimeter of rectangle. Length and breadth should be entered by user. Algorithm to find area of rectangle, length and breadth entered by user :

Step 1 : Start
Step 2 : Input length
Step 3 : Input breadth
Step 4 : area = length * breadth
Step 5 : perimeter = 2*(length + breadth)
Step 6 : print area.
Step 7 : print perimeter
Step 8 : End

IF Input : 4 5
output : 20   18
Input : 6   8
output : 48   28

Q.2 Write an algorithm to find area and perimeter of square
Algorithm to find area and perimeter of square.

Step 1 : Start
Step 2 : Input Side
Step 3 : area = Side * Side
Step 4 : perimeter = 4 * Side.
Step 5 : print area.
Step 6 : print perimeter

Q 1 Write an algorithm to enter any number and check whether the number is greater than 10 or not. (eg Input 2 output "No is not greater than 10")

An algorithm to check whether the number is greater than 10 or not.

Step 1 : Start
Step 2 : Input number
Step 3 : if number $> = 10$
      Yes goto 4
      No goto 6
Step 4 : print "No. is greater than or equal to 10"
Step 5 : goto end
Step 6 : print "No is less than 10"
Step 7 : End

Input - 12
output - 12 is greater than 10.

Input - 4
output - 4 is less than 10.

Q 2 Write an algorithm to enter a year in numeric form and check the inputted year is leap year or not. (eg Input 2000 output "leap year")

An algorithm to check the inputted year is leap year or not.

Step 1 : Start
Step 2 : Input year
Step 3 : If year % 4 == 0
            Yes goto 4
            No goto 6
Step 4 : print ("leap year")
Step 5 : goto end
Step 6 : print (" year is not leap")
Step 7 : End

Input - 2021
output - year is not leap

Input - 2012
output - leap year.

Q 1 Write an algorithm to print Numbers from 1 to 80.

Step 1 : Start

Step 2 : no = 1

Step 3 : Test if no <= 80

        Yes goto 4

        No goto 7

Step 4 : print no

Step 5 : no = no + 1

Step 6 : goto 3

Step 7 : End.

output

1 2 3 4 5 6 7 ...... 80.

Q 2 Write an algorithm to print Numbers from 50 to 25 in descending order.

Step 1 : Start

Step 2 : no = 50

Step 3 : Test if no >= 25

        Yes goto 4

        No goto 7

Step 4 : print no

Step 5 : no = no - 1

Step 6 : goto 3

Step 7 : End

output

50   49 48 47 46 45 25

Q3 Write an algorithm to print all even numbers from 10 to 50

Method I :

Step 1 : Start

Step 2 : no = 10

Step 3 : Test if no <= 50

          Yes goto 4

          No goto 7

Step 4 : print no

Step 5 : no = no + 2

Step 6 : goto 3

Step 7 : End

output

10, 12, 14, 16, 18 _____ 50

Method II

Step 1 : Start

Step 2 : no = 10

Step 3 : Test if no <= 50

          Yes goto 4

          No goto 8

Step 4 : Test if no % 2 == 0

          Yes goto 5

          No goto 6

Step 5 : print no

Step 6 : no = no + 1

Step 7 : goto 3

Step 8 : End

output   10 12 14 16 _____ 50

Python

Assignment no. 6

Q1 Print your full name using print statement.
```
>>> fname = "Sayali"
>>> mname = "Shrikant"
>>> lname = "Powar"
>>> print (fname, mname, lname)
Sayali Shrikant Powar.
```

Q2 Store your name to variable name. store address to variable address, birth date to variable bdate and display it with print statement.
```
>>> name = "Sayali Shrikant Powar"
>>> address = "AP Akiwat, ta. shirol, dist. kolhapur"
>>> bdate = "3rd april 2002"
>>> print ("Name =", name,
           "\naddress=", address,
           "\nbdate=", bdate)
Name = Sayali Shrikant Powar
address = AP Akiwat, ta. shirol, dist. kolhapur
bdate = 3rd april 2002.
```

Assignment No. 7

q1 Write python script to enter 4 sides of quadrilateral and find out perimeter.

```
>>> S1 = input ("enter first side ")
enter first side  8
>>> S2 = input ("enter second side ")
enter second side  4
>>> S3 = input ("enter third side ")
enter third side  10
>>> S4 = input ("enter fourth side ")
enter fourth side  6
>>> peri = S1 + S2 + S3 + S4
>>> print (" Perimeter of Quadrilateral=", peri )
Perimeter of Quadrilateral= 28
```

q2 Write a script to enter item_no, name, quantity and rate. Calculate net_price.

```
>>> item_no = input ("enter item no= ")
enter item no= 2
>>> name = raw_input (" enter name of item")
enter name of item  pencil
>>> quantity = input ("enter quantity of item =")
enter quantity of item= 15
>>> rate = input ("enter rate of item =")
enter rate of item = 5
>>> net_price = quantity * rate
>>> print (" net price =", net_price )
net price = 75
```

3] Write a script to enter four numbers. Find out sum of 1st two numbers. store it to sum1. Find sum of last two numbers. store it to sum2. Find difference between sum1 and sum2.

```
>>> no1 = input ("enter 1st no")
enter 1st no   30
>>> no2 = input ("enter 2nd no")
enter 2nd no   25
>>> no3 = input ("enter 3rd no")
enter 3rd no   40
>>> no4 = input ("enter 4th no")
enter 4th no   50
>>> Sum1 = no1 + no2
>>> Sum2 = no3 + no4
>>> d = Sum2 - Sum1
>>> print ("difference between", sam1, "and", sum2, "is", d)
difference between 55 and 90 is 35
```

Assignment No 8

Q1 Input any number and check whether number is greater than 100 or not.

```
>>> no = int (input ("enter any no"))
enter any no  102
>>> if (no >= 100):
          print (no, " is greater than 100")
elif (no < 100):
          print (no, " is less than 100")
else:
          print (no, "is equal to 100")

102 is greater than 100.
```

Q2 Input marks in 3 subjects calculate total and percentage and display grade as follows.

```
>>> m1 = int (input (" marks in 1st subject ="))
marks in 1st subject = 96
>>> m2 = int (input ("marks in 2nd subject ="))
marks in 2nd subject = 88
>>> m3 = int (input (" marks in 3rd subject ="))
marks in 3rd subject = 92
>>> t = m1 + m2 + m3
>>> per = t / 3
>>> print ("percentage =", Per)
percentage = 92.0
```

```
>>> if (per > 40):
        print ("Grade = pass")
else:
        print ("Grade = Fail")

Grade = pass
```

Q3 Input number of books and find out discount as follows :

if books > 20 Discount = 100 else Discount = 50.

```
>>> books = int (input (" enter no of books"))
enter no of books   45
>>> if (books > 20):
        print ("Discount = 100")
else:
        print ("Discount = 50")

Discount = 100
```

Assignment No. 1

1. What is algorithm? Explain it.
   → An algorithm is a finite sequence of well defined, computer - implementable instructions typically to solve a class of problems or to perform a computation.

   An algorithm is a step by step procedure to solve a given problem.

   The term finite means that the algorithm should reach and end point and cannot run forever.

   You can find algorithms everywhere in your life, not just a computer science

2. What advanteges and disadvantages of algorithm
   → Advantages of algorithm i-
   i) algorithm is a stepwise representation of a solution to given problem.
   2) it is easy to understand
   3) An algorithm uses a definite procedure
   4) Every step in algorithm has its own logical sequences so it is easy to debug.
   5) By using algorithm, the problem is broken down into smaller piece or steps hence it is easy

for programmer to convert it into actual programmer

* disadvanteges of algorithms :-
1) Algorithm is time consuming
2) Big tasks are difficult to put in Algorithm
3) Difficult to show branching and looping in algorithm

3. Write features of algorithm.
→ The features of algorithm They are as following:-

1) Precision — a good algorithm must have certain outlined steps. The step shuld be exact enough and not varying.

2) uniquness — each step taken in the algorithm should give a definite result as Stated by the writer of the algorithm. the results should not fluctuate by any means

3) fesibility — the algorithm should be possible & Preacticable in real life. It should not be abstract or Imagin

4) Input — a good algorithm must be able to accept a set of defined input

Assignment No - 2

Q 1. What is a constant? Give five example.

→ Data values that stay the same every time a programe is exacuted are known as Constant.

E.g - 1) Algorithum to add 2 nos 100 & 200.

100	+	200	=	300
X		Y		Z
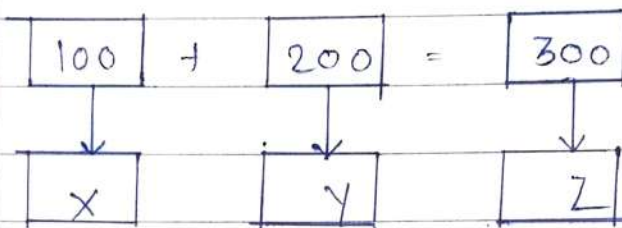
Step 1 : Start
Step 2 : $X = 100$
Step 3 : $Y = 200$
Step 4 : $Z = X + Y$
Step 5 : Print Z

2)

Algorithm to add 2 nos 50 & 100.

50	+	100	=	150
X		Y		Z
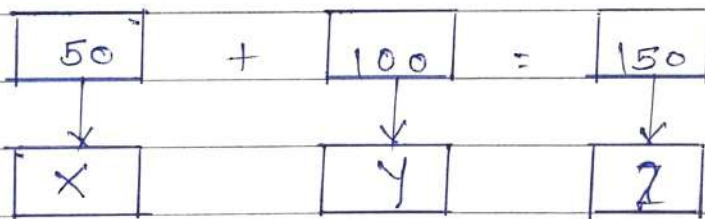
Step 1 : start
Step 2 : $X = 50$
Step 3 : $Y = 100$
Step 4 : $Z = X + Y$
Step 5 : Print Z

3) Algorithm to add 2 inputed values

?	+	?	=	?
X		Y		?
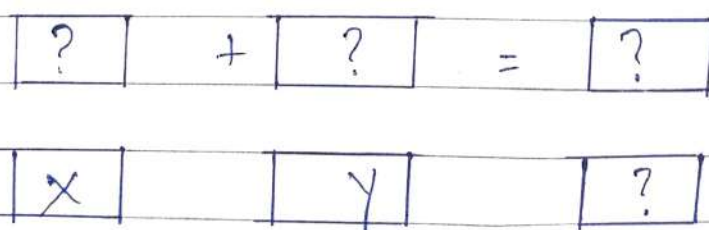
Step 1 : Start
Step 2 : Input X
Step 3 : Input Y
Step 4 : $Z = X + Y$
Step 5 : Print Z

4) Algorithm to add inputed values

| ? | + | ? | = | ? |

| $\times$P | + | q | . | ? |

Step 1 : Start
Step 2 : input P
Step 3 : input q
Step 4 : ~~m~~ ~~R~~ R = P + q
Step 5 : Print R =

Assignment no - 3.

Q 1. Write an algorithm to find area and perimeter of Rectangle. Length & breadth Should be entred by user.

→

Step 1 : Start
Step 2 : Input length
Step 3 : Input breadth
Step 4 : area = length x breadth
Step 5 : Perimeter = 2x (length + breadth)
Step 6 : Print area, Perimeter
Step 7 : End.

Q2. Write an algorithm to find area and perimeter of square

→

Step 1 : Start
Step 2 : Input Side
Step 3 : area = Side x Side
Step 4 : perimeter = 4 x side
Step 5 : Print area & Perimeter
Step 6 : End.

Assignment No - 4.

Q 1. Write an algorithm to entre any number and check whether the number is greater than 10 or not.

→

Step 1 : Start

Step 2 : Input number 10

Step 3 : If number >= 10

                         YES Goto 4

                         No Goto 6

Step 4 : Print "No is greater than or equal to 10"

Step 5 : Goto end

Step 6 : Print No is less than 10

Step 7 : End

Q2. Write an algorithm to entre a year in numeric form & check the inputed year is leap year or not

→

Step 1 : Start

Step 2 : Input year

Step 3 : If year $\% 4 == 0$

             Yes goto 4

             No goto 6

Step 4 : Print "year is leap"

Step 5 : goto end

Assignment No - 5

Q 1. Write an algorithum to print number from 1 to 80

→
Step 1 : Start
Step 2 : no = 1
step 3 : Test if no <= 80
       yes goto 4
       No goto 7
Step 4 : Print no = no + 1
Step 6 : goto 3
Step 7 : End.

Q2) Write an algorithm to print number from 50 to 25 in descending order

→
step 1 : start
Step 2 : Te no = 50
Step 3 : Test In number >= 25
       yes goto 4
       No goto 7
Step 4 : no = no-1   Print NO
Step 5 : goto 3   no = no - 1
Step 6 : goto 3
Step 7 : End

Python assignment No - 1

Q 1) Peint your full name using Peint statement

→

```
>>>  fname=("shubham")
>>>  mname=" shashikant"
>>>  lname = " koee"
>>>  Print = ( fname, mname, lname)
     Shubham shashikant  koee.
```

Q 2) store your name to variable name, store address
      to variable address, birth date .. to variable
      bdate & display it with Print statement.

→

```
>>>  name = "shubham" koee"
>>>  address = " A.P kasaba  sangaon,  tal - kay?
                  dist kolhapur"
>>>  bdate =   11th Jully  2002

>>>  Print (name , address, bdate)
```

Python   assignment   No - 1

Q 1) Peint youe full name using Peint statement

→

>>>   fname = ("shubham")
>>>   mname = "shashikant"
>>>   lname = "koee"
>>>   Print = (fname, mname, lname)
      Shubham Shashikant koee.

Q 2) stoze your name to vaniable name, stoze addres
to vaniable address, bixth date to vaniable
bdate. & display it with Print statement.

→

>>> name = "shubham" koee"
>>> address = "A.P kasaby sangaon, tal-kay?
                  dist kolhapur"
>>> bdate =   11th Jully 2002

>>> Print (name, address, bdate)

Python- assignment - 2.

Ce 1. write Python script to enter 4 sides of quadrilateral & find out perimeter

→ >>> S1 = int (input ("Enter 1st side"))
   Enter 1st side ·8
   >>> S2 = int (input ("Enter 2nd side"))
   Enter 2nd side 4
   >>> S3 = int (input (" Enter 3rd side"))
   Enter 3rd side 6
   >>> S4 = int (input (" Enter 4th side"))
   Enter 4th side 5
   >>> Print (" Perimeter of quadrilateral':
           S1 + S2 + S3 + S4)
   Perimeter of · quadrilateral = 23

Q 2. Write script to enter item_no, name, qty f
      Rate , calculate net price.
→   >>> I = int ("input item no")
      >>> I = int (input ("Enter item no"))
      Enter item no · 7
      >>> N = int (input (" Enter name of item"))
      Enter Name of item   bulb
      >>> q = int (input (" Enter quantity")
      Enter quantity   10
      >>> R = int (input (" Enter Rate")
      Enter Rate 30

Python assignment 3.

1. Input any number and check whether num is greater then 100 or not

→
```
>>> x = int (input (" Enter number"))
Enter number 98
>>> if (x > 100);
    Print (x, "is greater than 100")
elif (x < 100):
    Print (x, "is not greater than 100")
elif
    Print (x, "is 100")

98 is not greater than 100
```

2. Input marks in 3 subject. Calculate tota and percentage & display grades as follo
if per < 40 Grade = "FAll" else Grade =
"PASS"

→
```
>>> MI = int (input ("Enter marks in 1st subject"
Enter marks in 1st subject 40
>>> m2 = int (input ("Enter marks in 2nd subject"))
Enter marks in 2nd subject 70
```

Assignment 1

Q.1 What is algorithm? Explain it.

⇒ An algorithm is a finite sequence of well-defined, computer-implementable instructions, typically to solve a class of problems or to perform a computation.

The term finite means that the algorithm should reach an end point and cannot run forever.

An algorithm is a step by step procedure to solve a given problem

eg., The process to make a sandwich.

Q.2 Write advantage and disadvantage of algorithm.

⇒ <u>Advantage of algorithm</u> –

1. It is step wise representation of a solution to given problem., which makes it easy to understand.
2. An algorithm uses a definite procedure
3. It is not dependent on any programming language so it is easy to understand for anyone even without any programing language.
4. Every step in algorithm has its own logical sequence so it is easy to debug.
5. By using algorithm, the problem is broken down into smaller pieces or steps hence, it is easir for programmer to convert it into actual programmer.

<u>Disadvantages of algorithm</u> –
1. Algorithm is time consuming.
2. Difficult to show branching and looping in algorithm.
3. Big tasks are difficult to put in algorithms.

Q.3 Write features of algorithm
⇒ The following are the features of a good algorithm.
1) Precision - a good algorithm must have a certain outlined steps. The steps should be exact enough & not varying.

2. Uniqueness - each step taken in the algorithm should give a definite result as stated by the writer of the algorithm. The result should not fluctuate by any means.

3. Feasibility - the algorithm should be posible & practicable in real life. It should not be abstract or imaginary.

4. Input - a good algorithm must be able to accept a set of defined input.

5. Output - a good algorithm should be able to produce result as output, preferably solutions.

6. Finiteness - the algorithm should have a stop after a certain number of instructions.

7. Generality - the algorithm must apply to a set of defined inputs.

Q.4 Write an algorithm to make a pizza.

⇒ algorithm to make a pizza —

step 1 - start

Step 2 - Take the dough out & roll it into a circle.

step 3 - Puff out the edge of the dough so the crust is thicker at the edge.

step 4 - Pre-heat oven to 250-260 °C

Step 5 - Put on the pizza sauce cheese, & toppings

step 6 - Put the pizza on the pizza stone in the oven.

step 7 - Bake for 30 minutes or until pizza is crispy & golden brown.

step 8 - Eat it!

step 9 - End.

Assignment - 2

Q.1. What is constant? Give five examples.

⇒ Data values that stay the same every time a program is executed are known as constant. Constants are not expected to change.

In computer programming, a constant is a value that cannot be altered by the program during normal execution.

eg., 1. The data value "hello world" has been fixed into the code.
2. The unit of gravity
3. The value of π
4. The amount of time allowed for a level in a game.
5. Suppose addition of two no.s i.e addition of 20 & 40 in this the no.s 20 & 40 are the constant.

Q.2 What is variable? Give two examples.

⇒ Variables are data values that can change when the user is asked a question. Variable may change during program execution.

A variable is a memory location. It has a name that is associated with that location. The memory loction is used to hold data

eg., 1. The 'age'
2. 'marks' would need to be varriable to change throughout a year.
3. The salary goes on changing

Q.3 Write an algorithm to print multiplication of 4 nos. 5, 10, 20, 30

⟹ Step 1 - Start
Step 2 - no1 = 5
Step 3 - no2 = 10
Step 4 - no3 = 20
Step 5 - no4 = 30
Step 6 - ans = 5*10*20*30
Step 7 - Print ans
Step 8 - End

Output - 30,000

Q.4 Write an algorithm to print multiplication of 3 nos. inputted by user.

⟹ Algorithm to print multiplication of 3 nos. inputted by user.
Step 1 - Start
Step 2 - Input no1, no2, no3
Step 3 - ans = no1* no2 * no3
Step 4 - Print ans
Step 5 - End

If input 5, 15, 20
output is 1500

If input is 27, 18, 9
output is 4374

Q.1 Write an algorithm to find area & perimeter of rectangle. Length & breadth should be entered by user.

⇒ Algorithm to calculate area & perimeter of rectangle inputed by user.

Step 1 - start

Step 2 - input length, breadth

Step 3 - area = length * breadth

Step 4 - perimeter = 2 (length + breadth)

Step 5 - Print area, perimeter

Step 6 - End.

If input is $l = 38$, $b = 12$
then output area = 456 & perimeter = 100

If input is $l = 23$, $b = 11$
then output area = 253 & perimeter = 68

Q.2 Write an algorithm to find area and perimeter of square.

⇒ Algorithm to find area and perimeter of squre.

Step 1 - Start

Step 2 - Input side

Step 3 - Area = side * side

Step 4 - Perimeter = 4 * side

Step 5 - Print area, perimeter

Step 6 - End.

Q.1 Write an algorithm to enter any number and check wheather the number is greater then 10 or not (eg Input 2 out put " No. is not greater than 10")

⟹ Step 1 : Start

Step 2 : input no

Step 3 : if number >= 10

            yes goto 4

            No goto 6

Step 4 : Print "No is greater equal to 10"

step 5 : goto end

step 6 : Print "No is smaller than 10"

Step 7 : end

input no = 12

output - 12 is greater than 10.

Q.2 Write an algorithm to enter a year in numeric form & check the inputted year is leap year or not.

⟹ Step 1 : Start

step 2 : Input year

step 3 : If year % 4 = 0

            yes goto 4

            no goto 6

step 4 : Print " leap year"

step 5 : Goto end

step 6 : Print "year is not leap"

step 7 : end.

Input : 2021   Output : year is not leap.

Assignment - 5

Q1 Write an algorithm to print number from 1 to 80

$\Rightarrow$ step 1 : start

Step 2 : no = 1

step 3 : test if no < 80

        yes goto 4

        no goto 7

Step 4 : Print no

Step 5 : no = no + 1

step 6 : goto 3

Step 7 : end

Input : 1, 2, 3, ... 80.

Q2 Write an algorithm to print no. from 50 to 25 in decresing order.

$\Rightarrow$ step 1 : start

Step 2 : no = 50

Step 3 : test if no >= 25

        yes goto 4

        no goto 7

Step 4 : print no

Step 5 : no = no - 1

Step 6 : goto 3

Step 7 : end

Output : 50, 49, 48, ..., 25.

Assignment -6

Q.1 Print your full name using print statment.

⟹
```
>>> fname = "Gayatri"
>>> mname = "Ananda"
>>> lname = " Patil"
>>> Print (fname, mname, lname)
Gayatri Ananda  Patil
```

Q.2. Store your name to variable name store address birthdate to variable bdate & display it with print statment

⟹
```
>>> name = " Gayatri Patil"
>>> address = " Bapuram Nagar kalamba Road, kolhapp
>>> bdate  = " 27-6-2002"
>>> print ("Name :-", name,
          "\n Address :-", address,
          "\n Birthdate :-", bdate)
```

Output
```
Name :- Gayatri Patil.
Address:- Bapuram Nagar kalamba Road , kolhapur.
Birthdate:- 27-6-2002
```

Q.1 Write Python script to enter 4 sides of quadrilateral
& find out perimeter.

⟹
```
>>> S₁ = int(input("enter 1st side"))
enter 1st side 8
>>> S₂ = int(input("enter 2nd side"))
enter 2nd side 4
>>> S₃ = int(input("enter 3rd side"))
enter 3rd side 3
>>> S₄ = int(input("enter 4th side"))
enter 4th side 6
>>> Print(" Perimeter of quadrilateral = ', S₁+S₂+S₃+S₄)
perimeter of quadrilateral = 21
```

Q.2. Write Script to enter item-no, name, qty & rate,
cal net price

⟹
```
>>> I = int(input("enter item-no"))
enter item no. 2
>>> N = int(input("enter name of item"))
enter name of item Notebook
>>> Q = int(input("enter quantity"))
enter quantity 4
>>> R = int(input("enter rate of item")
enter rate of item 35
>>> Print("Net price =", Q*R)
Net price = 140
```

Assignment - 8

Q1 Input any no. & check wheather no. is greater than 100 or not.

⇒
```
>>> x = int (input ("enter no="))
enter no = 98
>>> if (x > 100)
print (x," is greater than 100")
if (x < 100)
print (x,"is not greater than 100")
else x=100
print (x," is 100")
```

98 is not greater than 100.

Q2. Input markes in 3 subject cal. total & percentage & display grade as follows --

If per < 40 Grade = " FAIL " else Grade = "Pass "

⇒
```
>>> M1 = int (input ("enter marks in 1st subject"))
enter marks in 1st subject 80
>>> M₂ = int (input ("enter marks in 2nd subject "))
enter marks in 2nd subject 90
>>> M₃ = int(input ("enter marks in 3rd subject"))
enter marks in 3rd subject 85
>>> print (" Total =" , M₁+M₂+ M₃ )
Total = 255
>>> print ("percentage =" ,(M₁+M₂+M₃ )/3)
percentage = 85 %
>>> if (percentage < 40)
    print ("Grade = FAIL")
else (percentage >= 40)
    print ( " Grade = Pass")
```

Grade = Pass