UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, May 2021

Course Name: Geospatial Programming **Semester: VI**
Programme Name: B. Tech, GIE **Time: 03 hrs**
Course Code: PEGS 3023 **Max. Marks: 100**

SECTION A (30 M)
1. **Each question will carry 5 Marks**
2. **Instruction: This section comprises MCQ and T/F only**

S.No.	Questions		Marks	CO
Q 1	A	In JavaScript, the output of expression; var x = "GSE" +20+21 I. GSE+31 II. GSE31 III. GSE2021 IV. 31GSE		
	B	Create a variable called x, assign the value 10 to it in JavaScript. I. x= 10 II. x=10; III. var x = 10;		
	C	What is the correct way to create a function in Python? I. def myFunction(): II. create myFunction(): III. function myfunction():	**05 (5x1)**	**CO3**
	D	Which one is composite data type? I. Numbers II. Strings III. Boolean IV. Arrays		
	E	In JavaScripting, x=10; y=x++ and x = 10; z= ++x, values of y and z are I. 10 and 11 respectively II. 11 and 11 respectively III. 11 and 10 respectively IV. 10 and 10 respectively		
Q 2	A	Which of these collections defines a LIST in python? I. ["apple", "banana", "cherry"] II. {"apple", "banana", "cherry"} III. {"name": "apple", "color": "green"}	**05 (5x1)**	**CO1**

	B	How do you start writing an **IF** statement in Python?
		  I. if x > y:
		  II. if (x > y)
		  III. if x > y then:		

	C	How do you start writing a while loop in Python?
		  I. while x > y:
		  II. while x > y {
		  III. while (x > y)
		  IV. x > y while {		

	D	Which statement is used to stop a loop in python?
		  I. break
		  II. exit
		  III. stop
		  IV. return		

	E	JavaScript can
		  I. Change HTML Content
		  II. Change HTML Attribute Values
		  III. Hide HTML Elements
		  IV. Do all above		

Q 3		Write True/ False i) In web services, WPS stands for ''word professional services' **(T/F)** ii) PHP is server based scripting language **(T/F)** iii) JavaScript is server based language **(T/F)** iv) PostgreSQL is object oriented database system **(T/F)** v) JavaScript and Java are same **(T/F)**	05 (5x1)	CO1

Q 4	A	Which one is case sensitive in PHP
		  I. keywords
		  II. variables
		  III. classes
		  IV. functions		

	B	How to write an IF statement in JavaScript?
		  I. if (i == 5)
		  II. if i = 5
		  III. if i = 5 then
		  IV. if i == 5 then
			05
			(5x1)
				CO2

	C	How to write an IF statement for executing some code if "i" is NOT equal to 5?
		  I. if i != 5:
		  II. if i = 5
		  III. if i =! 5 then
		  IV. if (i != 5)		

	D	How does a FOR loop start in JavaScript?
		  I. for (i = 0; i <= 5; i++)
		  II. for i = 1 to 5
		  III. for (i = 0; i <= 5)
		  IV. for (i <= 5; i++)		

	E	What is the correct way to write a JavaScript array? 　I.　var colors = ["red", "green", "blue"] 　II.　var colors = "red", "green", "blue" 　III.　var colors = 1 = ("red"), 2 = ("green"), 3 = ("blue") 　IV.　var colors = (1:"red", 2:"green", 3:"blue")		
Q 5	A	Google map is example of thin client architecture 　I.　False 　II.　True	05 (5x1)	CO2
	B	Which function is use to removes all the elements from the list 　I.　append() 　II.　clear() 　III.　remove() 　IV.　sort()		
	C	PHP server scripts are surrounded by which delimiters? 　I.　<?php>...</?> 　II.　<?php...?> 　III.　<script>...</script>		
	D	Which statement is not correct about 'Tuple' 　I.　Items are ordered 　II.　Items are changeable 　III.　Duplicating of items are allowed		
	E	What is the correct way to add 1 to the $count variable? 　I.　count++; 　II.　++count 　III.　$count++; 　IV.　$count =+1		
Q6	A	Which one of these variables has an illegal name? 　I.　$my-Var 　II.　$my_Var 　III.　$myVar	05 (5x1)	CO2
	B	How do you create an array in PHP? 　I.　$progs = array["gse", "gie", "ape"]; 　II.　$progs = array("gse", "gie", "ape"); 　III.　$progs = "gse", "gie", "ape";		
	C	How do you insert COMMENTS in Python code? 　I.　#This is a comment 　II.　/*This is a comment*/ 　III.　//This is a comment		
	D	Which operator is not a comparison operator? 　I.　== 　II.　>= 　III.　< 　IV.　=		
	E	How do you start writing a '**for**' loop in Python? 　I.　for x in y: 　II.　for x > y: 　III.　for each x in y:		

SCETION B (50 M)		
1. Each question will carry 10 Marks		
2. Instruction: Write short note		
Q 7 Evaluate a basic concept of Geoprocessing tools with example	**10**	**CO4**
Q 8 Discuss the various component of Web GIS with brief overview of data server and web server	**10**	**CO4**
Q 9 Explain the terms, WMS, WPS, WCS, WFS, Restful web services	**10**	**CO1**
Q 10 Demonstrate the basic concept of Object oriented Programming language with example from Python programming language	**10**	**CO1**
Q 11 Give an overview of client based scripting language **OR** Evaluate the merits/demerits of client based scripting language over server based scripting language	**10**	**CO3**
Section C (20 Marks)		
1. Each question will carry 20 Marks		
2. Instruction: Write long answer		
Q 12 Explain in Detail on MySQL database structure with example. How MySQL is different from PostgreSQL? **OR** Demonstrate the role of Geospatial programming in Geo-Informatics Engineering. How databases have been managed in WEB GIS?	**20**	**CO4**