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| Name: |  |
| Enrolment No: | |

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, December 2020

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| Course Name: Geospatial Programming | Semester: III |
| Programme Name: B. Tech, GIE | Time: 03 hrs |
| Course Code: PEGS 2014 | 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 |
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| Q 1 | <p>A What is a correct syntax to output "Hello World" in Python?</p> <p style="margin-left: 20px;">I. print("Hello World") II. echo("Hello World"); III. prints("Hello World") IV. echo "Hello World"</p> | 05 (5x1) | CO3 |
| | <p>B Which one is NOT a legal variable name?</p> <p style="margin-left: 20px;">I. _myvar II. my-var III. Myvar IV. my var</p> | | |
| | <p>C What is the correct way to create a function in Python?</p> <p style="margin-left: 20px;">I. def myFunction(): II. create myFunction(): III. function myfunction():</p> | | |
| | <p>D Which method can be used to remove any whitespace from both the beginning and the end of a string?</p> <p style="margin-left: 20px;">I. strip() II. trim() III. ptrim() IV. len()</p> | | |
| | <p>E Which method can be used to return a string in upper case letters in python?</p> <p style="margin-left: 20px;">I. upper() II. toUpperCase() III. upperCase() IV. uppercase()</p> | | |
| Q 2 | <p>A Which of these collections defines a LIST in python?</p> <p style="margin-left: 20px;">I. ["apple", "banana", "cherry"] II. {"apple", "banana", "cherry"} III. {"name": "apple", "color": "green"}</p> | 05 (5x1) | CO1 |

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| | <p>B How do you start writing an if statement in Python?</p> <ol style="list-style-type: none"> I. if x > y: II. if (x > y) III. if x > y then: <hr/> <p>C How do you start writing a while loop in Python?</p> <ol style="list-style-type: none"> I. while x > y: II. while x > y { III. while (x > y) IV. x > y while { <hr/> <p>D Which statement is used to stop a loop in python?</p> <ol style="list-style-type: none"> I. break II. exit III. stop IV. return <hr/> <p>E Inside which HTML element do we put the JavaScript?</p> <ol style="list-style-type: none"> I. <script> II. <scripting> III. <javascript> IV. <js> | | |
| Q 3 | <p>Write True/ False</p> <ol style="list-style-type: none"> 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) Google-map is example of ‘Thin client architecture (T/F) | 05 (5x1) | CO1 |
| Q 4 | <p>A How do you create a function in JavaScript?</p> <ol style="list-style-type: none"> I. function:myFunction() II. function myFunction() III. function = myFunction() <hr/> <p>B How to write an IF statement in JavaScript?</p> <ol style="list-style-type: none"> I. if (i == 5) II. if i = 5 III. if i = 5 then IV. if i == 5 then <hr/> <p>C How to write an IF statement for executing some code if "i" is NOT equal to 5?</p> <ol style="list-style-type: none"> I. if (i != 5) II. if i <> 5 III. if i != 5 then IV. if (i <> 5) <hr/> <p>D How does a FOR loop start in JavaScript?</p> <ol style="list-style-type: none"> I. for (i = 0; i <= 5; i++) II. for i = 1 to 5 III. for (i = 0; i <= 5) IV. for (i <= 5; i++) | 05 (5x1) | CO2 |

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| | <p>E What is the correct way to write a JavaScript array?</p> <ol style="list-style-type: none"> I. <code>var colors = ["red", "green", "blue"]</code> II. <code>var colors = "red", "green", "blue"</code> III. <code>var colors = 1 = ("red"), 2 = ("green"), 3 = ("blue")</code> IV. <code>var colors = (1:"red", 2:"green", 3:"blue")</code> | | |
| Q 5 | <p>A JavaScript is the same as Java.</p> <ol style="list-style-type: none"> I. False II. True <hr/> <p>B How do you declare a JavaScript variable?</p> <ol style="list-style-type: none"> I. <code>var carName;</code> II. <code>variable carName;</code> III. <code>v carName;</code> <hr/> <p>C PHP server scripts are surrounded by delimiters, which?</p> <ol style="list-style-type: none"> I. <code><?php>...</?></code> II. <code><?php...?></code> III. <code><script>...</script></code> IV. <code><&>...</&></code> <hr/> <p>D How do you write "Hello World" in PHP</p> <ol style="list-style-type: none"> I. <code>echo "Hello World";</code> II. <code>Document.Write("Hello World");</code> III. <code>"Hello World";</code> <hr/> <p>E What is the correct way to add 1 to the \$count variable?</p> <ol style="list-style-type: none"> I. <code>count++;</code> II. <code>++count</code> III. <code>\$count++;</code> IV. <code>\$count =+1</code> | 05 (5x1) | CO2 |
| Q6 | <p>A Which one of these variables has an illegal name?</p> <ol style="list-style-type: none"> I. <code>\$my-Var</code> II. <code>\$my_Var</code> III. <code>\$myVar</code> <hr/> <p>B How do you create an array in PHP?</p> <ol style="list-style-type: none"> I. <code>\$cars = array["Volvo", "BMW", "Toyota"];</code> II. <code>\$cars = array("Volvo", "BMW", "Toyota");</code> III. <code>\$cars = "Volvo", "BMW", "Toyota";</code> <hr/> <p>C How do you insert COMMENTS in Python code?</p> <ol style="list-style-type: none"> I. <code>#This is a comment</code> II. <code>/*This is a comment*/</code> III. <code>//This is a comment</code> <hr/> <p>D Which operator can be used to compare two values?</p> <ol style="list-style-type: none"> I. <code>==</code> II. <code>><</code> III. <code><></code> IV. <code>=</code> <hr/> <p>E How do you start writing a for loop in Python?</p> <ol style="list-style-type: none"> I. <code>for x in y:</code> II. <code>for x > y:</code> III. <code>for each x in y:</code> | 05 (5x1) | CO2 |

SECTION B (50 M)

1. Each question will carry 10 Marks

2. Instruction: Write short note

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| Q 7 | Evaluate a basic concept various 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 <p style="text-align: center;">OR</p> 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

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| Q 12 | Demonstrate the role of Remote Sensing and GIS in Geospatial modelling of real world problem with a case study <p style="text-align: center;">OR</p> Demonstrate the role of Geospatial programming in Geo-Informatics Engineering. How database are managed in WEB GIS? | 20 | CO4 |
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