

Name:

Enrolment No:



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

Programme Name: B. Tech Civil Engineering
Course Name : Computer-Aided Civil Engineering Design
Course Code : CIVL2013
Nos. of page(s) : 02

Semester : III
Time : 03 hrs
Max. Marks : 100

SECTION A

1. Each Question carries 5 Marks
2. Instruction: Complete the statement / Select the correct answer(s)

S. No.		Marks	CO
Q 1	The five important basic AutoCAD commands used in this course are _____, _____, _____ and _____.	5	CO1
Q 2	Different types of part-bricks, which are used in brickwork, are _____, _____ and _____.	5	CO2
Q 3	The four types of shallow foundations are _____, _____ and _____.	5	CO2
Q 4	Five major parts of a staircase are _____, _____, _____, _____ and _____.	5	CO2
Q 5	The five major group of building drawings are _____, _____, _____, _____ and _____.	5	CO3
Q6	The bar bending schedule is mainly used by _____, _____, _____, _____ and _____.	5	CO4

SECTION B

1. Each question carries 10 marks.
2. Instruction: Write short / brief notes and draw neat diagrams using pencil and other drawing means. Colored pencil can also be used for enhancing the drawing.

Q 7	With the help of a flow-chart, explain the process of drawing, hatching and dimensioning of a trapezoid in AutoCAD.	10	CO1
Q 8	Draw the plan and section of different types of typical staircase layouts.	10	CO2
Q 9	Neatly draw and compare various types of shallow foundation based on their benefits and their applications.	10	CO2

Q 10	Mention the key components of a site plan of a building. Draw a site plan of a residential building, specially exhibiting major connections of the building and other adjoining features.	10	CO3
Q 11	Discuss the provision of using steel as a suitable reinforcing material. List down the advantages of the bar bending schedule in civil engineering construction. <u>OR</u> List various types of structural drawings. Differentiate between the General Arrangement Drawings (GAD) and Sanction drawings.	10	CO4
SECTION-C			
<p>1. Each question carries 20 marks</p> <p>2. Instruction: Write detailed notes and draw neat diagrams using pencil and other drawing means. Colored pencil can also be used to enhance the drawing.</p>			
Q 12	List and briefly explain various components of super-structure and sub-structure of a residential building during its construction. <u>OR</u> Compare at least seven types of buildings based on their function, architecture, major parts and components, and any specific civil engineering intervention required for that type of building.	20	CO3