


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022			
Course: Civil engineering social and global impact Program: B Tech Civil Engineering Course Code: CIVL 4026 Instructions:		Semester: VII Time : 03 hrs. Max. Marks: 100	
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Describe the role of civil engineering in achieving SDGs.	4	CO1
Q 2	Explain how transportation played a role in human development.	4	CO2
Q 3	Define 3 Rs of sustainability.	4	CO3
Q 4	List four major break throughs in civil engineering recently.	4	CO1
Q 5	Explain about environmental metrics.	4	CO2
SECTION B (4Qx10M= 40 Marks)			
Q 6	Describe the key aspects of pre-industrial revolution.	10	CO1
Q 7	Explain the role of smart cities in the development of the country.	10	CO2
Q 8	Explain the difference between ASP and trickling filter with neat sketches.	10	CO3
Q 9	Explain the impact of second industrial revolution on civil engineering.	10	CO1
SECTION-C (2Qx20M=40 Marks)			
Q 10	a. Discuss the various steps involved in water purification process. [10] b. Describe the different types of pollution that effect the environment. [10]	20	CO2
Q 11	Discuss the various innovations and methodologies developed to ensure sustainability of modern structures. (OR) Explain the measures to ensure the building is energy efficient. Also describe LEED ratings for the same.	20	CO3