

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, **July 2020** (ONLINE MODE - Chance-II)

Course: Traffic Engineering

Semester: VIII

Program: B Tech Civil Engineering

Time 03 hrs.

Course Code: CEEG 467

Max. Marks: 100

Instructions:

SECTION A (6 X 5 Marks = 30 Marks)

S. No.		Marks	CO
Q 1	Fill in the blanks: a. _____ is defined as _____ vehicles that can be passed in a given time point in a unit time. b. HCM suggested _____ levels, the value of which ranges from _____ c. Ground clearance is a type of _____ vehicular characteristics.	5	CO1
Q 2	Fill in the blanks: a. Right hand curve is a type of _____ signages. b. Traffic Signage should be made of _____ material to get visibility during nighttime. c. Solid lines in road marking depicts _____. d. Commonly used colors in road marking is _____ and _____.	5	CO2
Q 3	Fill in the blanks: a. Two phases of traffic regulations are _____ and _____. b. Most advanced type of signal is called _____. c. Lost time can be explained as sum of two elements called _____ & _____.	5	CO3
Q 4	Fill in the blanks: a. At-grade intersection are of two types _____ & _____ . b. Weaving movement of traffic happens when _____.	5	CO4

	c. Two types of traffic movements taken place at at-grade junction are _____ & _____ movement.		
Q 5	Fill the blanks: a. Peak hour factor is defined as ratio of (_____) and (_____). b. Spot speed is also known as _____ speed. c. Floating car method is process for _____ survey. d. Desire line diagram depicts _____.	5	CO1
Q 6	Fill the blanks: a. Traffic signages shall be designed according to _____ of the road. b. Stop Line is a type of _____ marking and Kerb Marking is a type of _____ marking. c. The standardization of signages is because _____.	5	CO2
SECTION B (5 X 10 Marks = 50 Marks)			
Q 7	Outline various aspects to be investigated during Origin-Destination studies in an urban area. Mention the various formats in which OD survey data be presented.	10	CO1
Q 8	Explain key benefits of Intelligent Transport System in traffic management of a city. List down various examples of ITS in Indian context.	10	CO2
Q 9	Mention basic objectives and benefits of Traffic signals coordination. Highlight some of the limitation of the signal coordination systems.	10	CO3
Q 10	Explain the various categories of grade-separated intersections. Compare the advantages and disadvantages of any two type of grade-separated intersections.	10	CO4
Q 11	Explain why we need legal provisions in vehicular traffic regulation and control. List down key provisions of motor Vehicle (amendment) act 2019. (OR) Explain the importance of Traffic signal in traffic regulation in an urban area. Mention and briefly describe principles of signal design.	10	CO3
SECTION-C (1 X 20 Marks = 20 Marks)			
Q 12	Examine the problem associated with vehicular parking in Indian cities. Discuss and compare various patterns of on-street parking. Mention the solution of parking in urban area. Explain of importance of conducting parking surveys and key information collected through these surveys. <u>OR</u> Write Short Notes on following: A. Purpose of accident studies and preparation of accident records (8)	20	CO4

- | | | | |
|--|---|--|--|
| | <p>B. Importance of Highway Lighting and factors affecting visibility. (6 Marks)</p> <p>C. Advantages, disadvantages and design parameters of a Traffic Rotary. (6 Marks)</p> | | |
|--|---|--|--|