A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 59105

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2019

Elective

Civil Engineering

15UCE905 - Traffic Engineering and Management

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer All Questions

PART A - (10x 1 = 10 Marks)

1. The branch of engineering that deals with improvement of traffic performance, traffic studies and traffic network is called CO1- R

   (a)Highway engineering (b)Railway engineering

   (c) Traffic engineering (d)Traffic management

2. The distance between two consecutive vehicles is called CO1- U

   (a) Space Headway (b) Time Headway (c) Jam Density (d) Traffic flow

3. Coordinated Signal System is CO2- R

   (a) 3-phase system (b) Linking adjacent signals

   (c) 2-phase system (d) None of these

4. The study of traffic engineering is divided into how many major categories CO2- U

   (a) Five (b) Six (c) Seven (d) Eight

5. The most important objective of Traffic Engineering is CO3- R

   (a) consider pedestrians as obstruction (b) Reduce accidents

   (c) Increase traffic (d) Provide high speed road

6. In traffic engineering the elements are classified into how many categories CO3- R

   (a) One (b) Two (c) Three (d) Four

7. The most likely cause of accidents is CO4- U

(a) Impatient driving (b) Slow speed

(c) pedestrians crossing road (d) Cattle crossing road

8. Which of the following roads are congested during peak hours? CO4- R

(a) Rural roads (b) Urban roads

(c) Highways (d) Express Ways

9. Traffic System Management is CO5- U

(a) Short term measures to use transport facilities (b) Long term demand

(c) Trip assignment method (d) None of these

10. Design of road intersections is a part of CO5- R

(a) Highway engineering (b) Railway engineering

(c) Traffic engineering (d) Harbour engineering

PART – B (5 x 2= 10Marks)

11. What are the classifications of Vehicle Characteristics? CO1- U

12. Define Pedestrian Signal. CO2- U

13. What are the advantages of traffic signals? CO3- U

14. What are the types of accidents? CO4- U

15. What is the Scope of Traffic Management Measures? CO5- U

PART – C (5 x 16= 80Marks)

16. (a) Enlighten in detail the human factor governing road user behaviour CO1-U (16)

Or

(b) Discuss the applications of queuing theory to traffic engineering problems. CO1 -Ana (16)

17. (a) Define Traffic Signals. What are the types of traffic signals? List out its advantages and disadvantages. CO2 -U (16)

Or

(b) Discuss the objectives and methods of Area Traffic Control. CO2 -Ana (16)

18. (a) Explain the various methods available for Traffic Surveys. CO3- App (16)

Or

(b) Explain Rotary Intersection Design. CO3- U (16)

19. (a) Update the analysis and preventive measures of road accidents. CO4-U (16)

Or

(b) Bring out the factors that cause accidents and skid resistance. CO4 -Ana (16)

20. (a) Explain the various scopes and types of traffic management measures. CO5- Ana (16)

Or

(b) Explain the factors affecting Capacity and Level of Service. Also add a note on the different Levels of Service. CO5- U (16)

59105