



UTHM

Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2021/2022**

COURSE NAME : TRAFFIC AND TRANSPORTATION
MANAGEMENT

COURSE CODE : BPF 31803

PROGRAMME CODE : BPC

EXAMINATION DATE : JULY 2022

DURATION : 3 HOURS

INSTRUCTION : 1. ANSWER **ALL** QUESTIONS
2. THIS FINAL EXAMINATION IS
CONDUCTED VIA **CLOSED BOOK**.
3. STUDENTS ARE **PROHIBITED** TO
CONSULT THEIR OWN MATERIAL
OR ANY EXTERNAL RESOURCES
DURING THE EXAMINATION
CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

TERBUKA

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Q1 Traffic management is the organisation, arrangement, guidance and control of both stationary and moving traffic, including pedestrians, bicyclist and all the types of vehicles.

(a) State **FIVE (5)** objectives of traffic management.

(5 marks)

(b) In general terms, good geometric design means providing the appropriate level of mobility and land use access for road users while maintaining a high degree of safety.

Outline **FIVE (5)** factors to be considered in designing a safe and efficient highway.

(15 marks)

Q2 Traffic control device is an essential element in accordance with the requirements of traffic for safety of road user. Road traffic control devices are markers, signs and signal devices used to inform, guide and control traffic, including pedestrians, motor vehicle drivers and cyclist. These devices are usually placed adjacent, over or along the highways, roads, traffic facilities and other public areas that require traffic control.

(a) Discuss **TWO (2)** requirements of traffic control devices.

(10 marks)

(b) Describe **TWO (2)** types of traffic control devices.

(10 marks)

Q3 "Traffic calming is a term that has emerged in Europe to describe a full range of methods to slow cars, but not necessarily ban them, as they move through commercial and residential neighborhoods. The benefit for pedestrians and bicyclists is that cars now drive at speeds that are safer and more compatible to walking and bicycling. There is, in fact, a kind of equilibrium among all of the uses of a street, so no one mode can dominate at the expense of another."

(Source: Guide to Traffic Calming by Hass Klau, 1990)

(a) Differentiate with the aid of sketches:

- (i) Horizontal deflections
- (ii) Vertical deflections

(10 marks)

(b) Outline with the aid of sketches, **FIVE (5)** types of traffic calming that are normally used in the urban areas.

(15 marks)

- Q4** The management of a shopping complex has decided to expand its parking area for its customers. Due to limited space, they have agreed to construct an off-street parking area.
- (a) Discuss **FIVE (5)** principles to be considered in the parking area design. (10 marks)
 - (b) Differentiate between off-street parking and on-street parking. (10 marks)
 - (c) Suggest the best layout to maximize the number of vehicles that can park at the area, if the suggested location area is 70 meter x 20 meter. (15 marks)

- END OF QUESTIONS -

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