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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
(TAKE HOME)  
SEMESTER II  
SESSION 2019/2020**

COURSE NAME : TRAFFIC AND TRANSPORTATION  
MANAGEMENT

COURSE CODE : BPF 31803

PROGRAMME CODE : BPC

EXAMINATION DATE : JULY 2020

DURATION : 24 HOURS

INSTRUCTION : ANSWER ALL QUESTIONS  
(OPEN BOOK EXAMINATION)

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

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**TERBUKA**

- Q1** Traffic engineering is a comparatively new branch of engineering and has grown with the increase in traffic in recent years. As vehicular traffic began to increase, the congestion on the streets began to hamper the safe and efficient movement on traffic. Hence, this congestion might lead to accidents and also cause serious parking's problem as well as environmental problem.

Nowadays, the ownership of private vehicles has increased many folds, which is causing difficulty in the management of urban traffic. Traffic management is the focus area for most urban dwellers and planners. Some of the main concerns for traffic management of big cities is traffic congestion and avoidance, as these issues can cause huge damages on both personal and environmental level if not properly established. Moreover, in many cities, traffic signal lights at crossing points are timer-based which an inefficient method of controlling traffic. Therefore, it is necessary to give attention to the operational characteristics of highway transportation and to study the need for better geometric design, capacity of intersection traffic regulations, signal traffic signs, street lighting, parking facilities, and roadway markings.

- (a) There has been a lot of complaints from the local community about traffic congestion and difficulty in getting parking in the Kluang town area.

Recommend with aid of sketches, the types of parking system that are suitable to tackle the problem.

(15 marks)

- (b) State the justification of all the suggestions you make as a transportation planning officer at a government organisation.

(10 marks)

**Q2 KL pedestrian zones: 'Resolve issues first'**

February 10, 2020, 12:03 PM MYT

**KUALA LUMPUR:** The move to convert 10 streets in the nation's capital here into pedestrian zones must be commended. However, various issues must be looked into and addressed by Kuala Lumpur City Hall first, said traffic experts.

Traffic engineering specialist Dr Law Teik Hua said they include the existing bicycle lanes, which are hardly used and often did not "connect" cyclists to various locations around the city.

"The bicycle lane is a good idea. However, there are comments from users that there is hardly a proper link to other parts of the city. Basically, the roads in the city are actually quite confusing for tourists and locals. Looking at the map, logically, the locations (in the

city) are just walking distance, but it is safer to use a car or motorcycle to reach the destination,” he said.

Law said the creation of pedestrian roads would require the authorities to take into account the volume of pedestrian traffic.

This would help them determine whether such areas would need improvements or not.

He said any plans to convert the designated 10 roads into pedestrian zones must be undertaken with proper and thorough consultation. It should also include a study with regard to traffic volume in the streets, as well as an environmental impact assessment, he said.

“There must be thorough research before the conversion (of streets) into pedestrian zones is done, including collecting data on pedestrian crossing volume (on specific roads), accident data and traffic for the roads.”

Law said converting major streets into pedestrian lanes would take time and that was not necessarily a bad thing, but it must be done in stages, followed by gathering feedback from users and stakeholders.

Associate Professor Dr Muhammad Zaly Shah Muhammad Hussein, director of Universiti Teknologi Malaysia Centre for Innovative Planning and Development, said bicycle lanes and other public facilities were often abused by motorcyclists.

He said motorcyclists often parked their machines on the designated pathway for pedestrians and cyclists, adding that despite the fact that the facilities in the city were almost world-class, the accessibility issue must nevertheless be properly addressed.

“It is not a place where you can park haphazardly and rules must be followed to ensure the safety of pedestrians, especially the elderly, those with special needs, tourists and schoolchildren”.

“There are a lots of roads in Kuala Lumpur where the volume of pedestrians is high. There is a need for City Hall to increase its effort in raising awareness and enforcement against those who abuse the lanes dedicated to bicycles or pedestrians,” he said.

Zaly said in converting existing vehicle roads into pedestrian zones, the move would be recognised as an effort to transform Kuala Lumpur into a low carbon city by 2030.

He cited the closure of Jalan Tuanku Abdul Rahman to vehicles on weekends to make way for pedestrians was a good move. However, the implementation was less than ideal as stakeholders were neither engaged nor informed on the move to close the iconic street to vehicles.



“The plan was good and the opportunity was there. It was the most suitable road to be fully ‘pedestrianised’. There were many pedestrians around the LRT stations and tourist spots.

“Implementation wise, it was not very successful and City Hall should learn from their experience before proceeding with the latest plan,” he said.

He added that the local authorities must engage stakeholders and address their scepticism.

In a report published by the New Straits Times yesterday, City Hall had announced a plan to turn 10 roads here into pedestrian stretches and make them off limits to private vehicles by 2025. Other major roads would be closed in stages over the next five years.

By the end of the year, at least five roads will be affected. They include Jalan Raja, where landmarks like Dataran Merdeka and the Sultan Abdul Samad Building are located, as well as Jalan Tuanku Abdul Rahman, which is popular for its food bazaars, fabric emporiums and markets.

Kuala Lumpur Mayor Datuk Nor Hisham Ahmad Dahlan said City Hall also planned to cordon off several stretches in Bangsar, Bukit Bintang and Brickfields to make them pedestrian-friendly and reduce carbon emissions.

*(Source: New Straits Times, February 10, 2020)*

The number of private automobiles in your city has been steadily increasing every year, causing major concern about congestion and accidents in the city. You as a traffic engineering consultant was contacted by your city council and asked to prepare a proposal to the city council board of directors on how to improve pedestrian safety.

Prepare a proposal on how to improve pedestrian safety that can be provided by the city council.

(25 marks)

**- END OF QUESTIONS -**