



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021**

COURSE NAME : SOFTWARE ENGINEERING
COURSE CODE : BIT 10103
PROGRAMME CODE : BIT
EXAMINATION DATE : JANUARY/FEBRUARY 2021
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

TERBUKA

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

Q1 Based on **FIGURE Q1**, answer the following questions.

Foodpanda is Malaysia's most convenient online food ordering site, connecting people with the best restaurants around them, in Kuala Lumpur, Petaling Jaya, Melaka, Ipoh, and many more Malaysian cities!

We believe food is a pleasure and food ordering should be fast and definitely fun experience. Ordering with foodpanda is as easy as a 4-step recipe:

1. Search
Find restaurants that deliver to you by entering your address
2. Choose
Browse hundreds of menus to find the food you like
3. Pay
Pay fast & secure online or on delivery
4. Enjoy
Food is prepared & delivered to your door

On your mobile, tablet, desktop or via our app, foodpanda is a delicious experience. Just try and see for yourselves.

Foodpanda.my

FIGURE Q1

- (a) Assume that the Foodpanda mobile application uses the model view controller (MVC) architecture. Illustrate the architecture and suggest the components in each model, view and controller element of the architecture. (10 marks)
- (b) Discuss **TWO (2)** advantages for the software developer if the FoodPanda mobile application applies the MVC architecture. (4 marks)
- (c) Assume that a bug is discovered when a user tried to apply a voucher code during payment. List and explain the elements from the MVC architecture that should be addressed by the software developer. (6 marks)

TERBUKA

Q2 Based on **FIGURE Q2**, answer the following questions.

Tetris games almost always have the same play mechanics: differently shaped blocks drop at varying speeds, and, as the blocks descend, the player must rotate and arrange them to create an uninterrupted horizontal row on the screen. When the player forms one or more solid rows, the completed rows disappear. The goal of the game is to prevent the blocks from stacking up to the top of the screen for as long as possible.

Britannica

FIGURE Q2

- (a) A local freelance software developer has developed a mobile version of the Tetris game with the gameplay described in **Figure Q2**. Describe **TWO (2)** example errors and faults that can occur in the mobile game. (8 marks)
- (b) Is acceptance testing useful for the Tetris mobile game? Provide **ONE (1)** justification. (3 marks)
- (c) Aside from acceptance testing, identify **THREE (3)** other types of testing that can be performed on the Tetris mobile game? (3 marks)
- (d) Demonstrate **FOUR (4)** types of maintenance that can be performed after the Tetris mobile game is deployed? (12 marks)
- (e) Explain **TWO (2)** most important real-world factors that may affect the maintenance cost of the Tetris mobile game? (4 marks)

TERBUKA

- END OF QUESTION -

CONFIDENTIAL