Universiti Tun Hussein Onn Malaysia

# UNIVERSITI TUN HUSSEIN ONN MALAYSIA

## FINAL EXAMINATION
## SEMESTER I
## SESSION 2018/2019

| | | |
|---|---|---|
| COURSE NAME | : | DECISION SUPPORT SYSTEM |
| COURSE CODE | : | BIT 30303 |
| PROGRAMME CODE | : | BIT |
| EXAMINATION DATE | : | DECEMBER 2018 / JANUARY 2019 |
| DURATION | : | 3 HOURS |
| INSTRUCTION | : | ANSWER **ALL** QUESTIONS |



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

**Q1** (a) Define the Decision Support System (DSS).

(4 marks)

(b) Describe **TWO (2)** common types of model in DSS analysis.

(4 marks)

**Q2** (a) Describe each phase of Simon's model.

(8 marks)

(b) Given the following scenario:

```
You are about to buy a second-hand car. What are the factors that
you need to be considered.
```

From the above scenario, describe your decision making process using Simon's model.

(12 marks)

**Q3** (a) Define user interface.

(2 marks)

(b) Describe **TWO (2)** types of user interface.

(4 marks)

(c) Explain **THREE (3)** risk factors that may affect the DSS implementation process.

(6 marks)

**Q4** (a) Define the Group Decision Support System (GDSS).

(4 marks)

(b) Describe **TWO (2)** disadvantages of working in group.

(4 marks)

(c) Explain how collaborative computing support technologies using Time/Place Communication framework.

(12 marks)

**Q5** Given scenario in **Figure Q5**, answer **Q5(a)** to **Q5(c)**.

Jenny is a writer of romance novels. A movie company and a TV network both want exclusive rights to one of her most popular works. If she signs with the network, she will receive a single lump sum, but if she signs with the movie company, the amount she will receive depends on the market response to her movie. What should she do?

The information of payouts and probabilities as follows;

- Movie company Payouts
  - Small box office - $200,000
  - Medium box office - $1,000,000
  - Large box office - $3,000,000
- TV Network Payout
  - Flat rate - $900,000
- Probabilities
  - P(Small Box Office) = 0.3
  - P(Medium Box Office) = 0.6
  - P(Large Box Office) = 0.1

**Figure Q5**

(a) Identify the decisions (objectives), uncertain events (criteria), and alternatives (choices).

(6 marks)

(b) Construct the decision table for Jenny.

(6 marks)

(c) Draw a decision tree based on the answer in **Q5(b)**.

(8 marks)

**- END OF QUESTION -**