



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2018/2019**

COURSE NAME : FUNDAMENTAL OF INFORMATION SECURITY
COURSE CODE : BIS 10103
PROGRAMME CODE : BIS
EXAMINATION DATE : JUNE / JULY 2019
DURATION : 3 HOURS
INSTRUCTION : ANSWERS ALL QUESTIONS

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

TERBUKA

CONFIDENTIAL

- Q1** (a) Describe **FOUR (4)** steps involves in the image processing within Iris Recognition System. (8 marks)
- (b) Outlines **TWO (2)** advantages of Iris Recognition System. (4 marks)
- (c) In your opinion, is Iris Recognition System suitable to be used for accessing confidential records in an organization server? Justify your answer. (8 marks)
- Q2** (a) States **SIX (6)** digital information assets for a Custom Department at International Airport which also handle central air cargo for South East Asia. (6 marks)
- (b) Outline **FOUR (4)** steps of risk analysis for this department. (4 marks)
- (c) Propose **FIVE (5)** information security policies suitable for this department. (10 marks)
- Q3** (a) Describe **FOUR (4)** characteristics of weak password. (4 marks)
- (b) Describe **FOUR (4)** characteristics of strong password. (4 marks)
- (c) Propose a suitable multi-factor authentication for ensuring secure transactions for an online banking. (12 marks)

- Q4** (a) What is the biggest reason to create and follow an information security policy?
(2 marks)
- (b) Outlines **FOUR (4)** mitigation strategies available for technology person to determine the countermeasures to be presented to the top management of an organization.
(5 marks)
- (c) Discuss **FOUR (4)** Malaysian Laws related to information security which can be used by any businesses or organizations to protect their digital assets from various attacks.
(12 marks)
- Q5** (a) Decrypt the following ciphertext: S vyFo wI wEw, wI Nkn kxn wI MKd.
(8 marks)
- (b) Find the encryption key that is used to encrypt the ciphertext in **Q5(a)**.
(2 marks)
- (c) Describe **FOUR (4)** important modules in Advanced Encryption Standard Algorithm (Rijndael).
(10 marks)

- END OF QUESTIONS -