



UNIVERSITI TEKNIKAL MALAYSIA MELAKA
PEPERIKSAAN PERTENGAHAN SEMESTER II
MID SEMESTER EXAMINATION SEMESTER II

SESI 2021/2022
SESSION 2021/2022

FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI

KOD KURSUS <i>COURSE CODE</i>	: BITS 2413
KURSUS <i>COURSE</i>	: INFRASTRUKTUR DAN REKABENTUK KESELAMATAN RANGKAIAN NETWORK SECURITY INFRASTRUCTURE AND DESIGN
PENYELARAS <i>COORDINATOR</i>	: KHADIJAH BINTI WAN MOHD GHAZALI
KURSUS <i>COURSE</i>	: BITZ
MASA <i>TIME</i>	: 12:00 a.m – 12:00 a.m.
TEMPOH <i>DURATION</i>	: 24 JAM 24 HOURS
TARIKH <i>DATE</i>	: 20 MAY 2022
TEMPAT <i>VENUE</i>	: ULEARN

ARAHAN KEPADA CALON:
INSTRUCTION TO CANDIDATES:

- Sila jawab SEMUA soalan.**
Please answer ALL questions.

KERTAS SOALAN INI TERDIRI DARIPADA (2) MUKA SURAT SAHAJA
(TERMASUK MUKA SURAT HADAPAN)
THIS QUESTION PAPER CONTAINS(2) PAGES ONLY
(INCLUSIVE OF FRONT PAGE)

Scenario:

A group of Computer Security students just started a new semester and are taking the Group Project subject. For the subject, students will build a small secure network which consists of four server computers running different operating systems, a router, two manageable switches, and a wireless router. Students need to design the network with appropriate security infrastructure to secure it.

You are assigned by your group to deploy IDS to secure the network. Choose an IDS that can be suitably implemented in the network that you design.

- a. Describe the IDS that you plan to implement. Your description should contain
 - i. The name of IDS and the provider.
 - ii. The platform in which the IDS is placed.
 - iii. How the IDS works to secure the network and devices.
 - iv. List of your references.

(10 marks)

- b. Draw a network design diagram using an appropriate drawing tool like Word, PowerPoint, Visio, Packet Tracer, or any online tool that is suitable. Your design should be:
 - i. Suitable with the IDS or IDS configuration of your choice.
 - ii. Labelled on the devices and connections.
 - iii. Showing the placement of the IDS and correspond with the description of how it works as in your answer in question 2a (iii).

(10 marks)

- END OF QUESTIONS –