UNIVERSITI TEKNOLOGI MALAYSIA

BRIDGING EXEMPTION TEST
SEMESTER I, SESSION 2020/2021

COURSE	:	INFORMATION AND COMMUNICATION TECHNOLOGY
PROGRAMME	:	FACULTY FOUNDATION UTM (BRIDGING)
DURATION	:	2 HOURS
DATE	:	OCTOBER 2020

INSTRUCTIONS TO CANDIDATE:

1. Answer all the questions.
2. All answers must be written in the answer booklet provided. Use a new page for each question.
3. The full marks for each question or section are shown in the bracket at the end of the question.
4. You are not permitted to take the exam paper and the answer booklet(s) out of the exam hall.

PART A : **MULTIPLE ANSWER QUESTIONS**
20 MARKS

INSTRUCTION : **ANSWER ALL QUESTIONS.**
Please write your answer (A/B/C/D) in the answer booklet

1. Three ways to improve the performance of a hard disk include
   A. disk caching, RAID, and file expansion
   B. file compression, disk caching, and file encryption
   C. RAID, file compression and disk expansion
   D. disk caching, RAID, and file compression

2. Which of the following best explain about the Cloud Computing?
   A. An application that provides a product rather than a service
   B. Internet acts as a 'cloud' of servers
   C. An enterprise storage system that ensures efficient use of data
   D. Secondary storage that can analyse user's need

3. USB drives are a type of what kind of secondary storage?
   A. Optical disks
   B. Hard drives
   C. High-definition disks
   D. Solid-state storage

4. Which of the following is a Desktop OS criteria?
   A. An embedded operating system
   B. A software environment that commonly used by a group or company
   C. A powerful and easy to use
   D. A stand-alone or client operating system

5. What utility program reduces a file size by as much as 80 percent by substituting short codes for lengthy data patterns?
   A. Clean-up
   B. Defragmentation
   C. Compression
   D. Interrupt

6. What are the two major software types?
   A. System analysis software and data warehousing software
   B. Operating system software and utilities software
   C. System software and application software
   D. Database management software and application software

7. Which OS is specially designed for smartphones and PDAs?
   A. Windows XP
   B. Windows Vista
   C. Mac OS X
   D. Windows Mobile

8. Which of these suites include a variety of programs designed to make computing safer?
   A. Norton Internet Security Suite
   B. Google Docs
   C. IBM Lotus Symphony
   D. AppleWorks

9. What phase of the systems life cycle that used structured programming techniques?
   A. Program design
   B. Program maintenance
   C. Program development
   D. Program analysis

10. CASE tools are
    A. A Set of rules to be used during system analysis and design
    B. Program, packages used during system analysis and design
    C. A set of tools used by analysts
    D. Needed for use case development

11. In this generation Time sharing, Real time, Networks, Distributed Operating System was used
    A. 1st
    B. 2nd
    C. 4h
    D. 5th

12. Which of the following is **NOT** a data type?
    A. Symbolic Data
    B. Alphanumeric Data
    C. Numeric Data
    D. Alphabetic Data

13. Which of the following is **NOT** a valid data organisation?
    A. Character
    B. Field
    C. Database
    D. Column

14. A relational database consists of a collection of
    A. Tables
    B. Fields
    C. Records
    D. Keys

15. This level of management is involved with tactical planning and implementing the long-term goals within an organization.
    A. Top management
    B. Middle management
    C. Supervisors
    D. Stockholders

16. Which is **NOT** a hardware device used to attach a device to a wireless network?
    A. PC card
    B. Network Interface card (NIC)
    C. USB Adapter
    D. PCI card

17. Bluetooth is an example of
    A. personal area network
    B. none of the mentioned
    C. virtual private network
    D. local area network

18. Which of the following is **NOT** a top-level domain name?
    A. .car
    B. .com
    C. .gov
    D. .net

19. _____ is the practice and precautions taken to protect valuable information from unauthorised access, recording, disclosure or destruction.
    A. Network Security
    B. Database Security
    C. Information Security
    D. Physical Security

20. Point out the **WRONG** statement:
    A. The massive scale of cloud computing systems was enabled by the popularization of the Internet
    B. Soft computing represents a real paradigm shift in the way in which systems are deployed
    C. Cloud computing makes the long-held dream of utility computing possible with a pay-as-you-go, infinitely scalable, universally available system
    D. All of the mentioned

PART B : **TRUE/FALSE QUESTIONS**
20 MARKS

INSTRUCTION : **ANSWER ALL QUESTIONS.**
Please write your answer (True or False) in the answer booklet.

1. System software is designed for controlling the operations of a computer system.

TRUE/FALSE

2. Concatenation structure is a program design that using structured techniques

TRUE/FALSE

3. For each attribute of a relation, there is a set of permitted values, called the schema of that attribute

TRUE/FALSE

4. A relational database consists of a collection of tables

TRUE/FALSE

5. A fields is a property of the entire relation, rather than of the individual data structure in which each data structure is unique.

TRUE/FALSE

6. Elite Hackers is a types of hackers that are the most skilled hackers in the hackers' community

TRUE/FALSE

7. Accessibility issues involve the authenticity and fidelity of information that is collected and processed

TRUE/FALSE

8. Wireless attacks are malicious attacks done in wireless systems, networks or devices

TRUE/FALSE

9. Ethical hacking is the legal form of hacking based on which jobs are provided in IT industries and firms

TRUE/FALSE

10. Management information systems (MIS) produces reports that includes periodic, exception and demand reports

TRUE/FALSE

11. Decision support systems (DSS) use data from the TPS to support supervisors

TRUE/FALSE

12. Program that allow you to surf the internet and provide access to Web resources known as URLs

TRUE/FALSE

13. Wireless networks are more vulnerable to attack than wired networks

TRUE/FALSE

14. Web directories, content evaluation, and search engines are examples of the Communication Channel

TRUE/FALSE

15. A printer connected to a wireless network is considered to be a node on that network

TRUE/FALSE

16. The Extranet is a private network within an organisation that works like the internet

TRUE/FALSE

17. The Internet affect the way you purchase your textbooks by decreases your bargaining power

TRUE/FALSE

18. Filters is a program that block access to selected sites and can set times limits

TRUE/FALSE

19. Internet communications include e-mail, instant messaging, social networking, blogs, and wikis

TRUE/FALSE

20. Keyword and Directory Search are specialised programs to assist in location information

TRUE/FALSE

PART C : **STRUCTURED QUESTIONS**
60 MARKS

INSTRUCTION : **ANSWER ALL QUESTIONS.**
Please write your answer in the answer booklet.

QUESTION 1:

i.   What is Organisational Information Flow?

(5 marks)

ii.   Illustrate the five (5) functions of an Organisation

(5 marks)

iii.   What is the function of each management levels in an organisation?

(5 marks)

QUESTION 2:

i.   What is the three (3) advantages and three (3) disadvantages of networking?

(5 marks)

ii.   Discuss about the following Network types

b.   Local area network (LAN)
c.   Wide area network (WAN)

(10 marks)

QUESTION 3:

i.   What is cloud computing?

(5 marks)

ii.   Describe each of the following Web utilities:
a.   plug-ins,
b.   filters,
c.   file transfer utilities, and
d.   Internet security suites

(10 marks)

QUESTION 4:

i.   What is the function of information technology to an organisation?

(5 marks)

ii.   Technology change is another challenge to an organisation.
a)   What your future organisation can do to keep computer competency up to date?

(5 marks)

b)   Explain how you can do in becoming proactive to the changed?

(5 marks)