

# NALANDA COLLEGE – COLOMBO 10 G.C.E. (A/L) EXAMINATION – 2020

Unit Test Unit 1

### Information & Communication Technology

Index Number/ Name : .....

#### <u> Part - 1</u>

#### A - Select the most suitable answer for the following questions

- 1) Underline the characteristics of information
  - (i). Relevance, Timeliness, Accuracy, Completeness, Understandability
  - (ii). Relevance, Availability, Timeliness, Completeness, Understandability
  - (iii). Relevance, Completeness, Availability, Accessibility, Understandability
  - (iv). Relevance, Timeliness, Availability, Accuracy, Understandability
  - (v). Relevance, Availability, Accuracy, Completeness, Understandability

2) Select the correct set of input devices

- (i). Mouse, Keyboard, joystick, Printer
- (ii). Monitor, Projector, Printer, Speaker
- (iii). Microphone, Scanner, Mouse, Trackball
- (iv). Touch pad, Speaker, Microphone, Monitor
- (v). Mouse, Projector, Scanner, Joystick, Touchpad
- 3) Select the correct set of output devices
  - (i). Mouse, Keyboard, joystick, Printer
  - (ii). Monitor, Projector, Printer, Speaker
  - (iii). Microphone, Scanner, Mouse, Trackball
  - (iv). Touch pad, Speaker, Microphone, Monitor
  - (v). Mouse, Projector, Scanner, Joystick, Touchpad
- 4) "..... and ..... is **not** one of the three basic reference model on which cloud computing was based."
  - A. Infrastructure as a service (Iaas)
  - B. Platform as a service (Paas)

- C. Software as a service (Saas)
- D. Information as a service (Iaas)
- E. Storage as a service (Saas)

Select the correct answer from the following to fill the blanks in the above statement.

- (i).
   A & B
   (iii).
   B & D
   (v).
   A & C

   (ii).
   D & E
   (iv).
   C & E
   (iv).
   C & E
- 5) Sam purchased a software with proprietary license. His friend Nimal borrowed that software and copied it to a CD.

Consider the following statements:

- A. . Even though Sam paid for the software he had no right to let others have a copy.
- B. Nimal received the software through his best friend: so it's not considered software piracy.
- C. Copying down of the software by Nimal is considered illegal.

Which of the above statements are true?

(i).	A only	(iii).	C only	(v).	A and B only
(ii).	B only	(iv).	A & C only		

6) Which of the following statements is correct with respect to a scanner?

- (i). A scanner is software which scans a printed document and converts them into digital images.
- (ii). It is an output device.
- (iii). It is an Input device.
- (iv). The Optical character reader (OCR) is an essential software component of a scanner.
- (v). It is used to store moving images in digital form.
- 7) Select the correct example for a firmware.
  - (i). Device driver of a printer.
  - (ii). Word processing software of a computer.
  - (iii). OS of a computer
  - (iv). BIOS of a computer.
  - (v). Device driver of a pendrive.
- 8) Consider the following statements regarding information.
  - A. A system can be defined as an interrelated components work together to achieve a common objective..

- B. A system is made up of inputs, processing and output.
- C. Human Respiratory system cannot be considered as good example for a system.

Which of the above statements is/ are correct?

(i). A only	(iii).	C only	(v).	A & C only
(ii).B only	(iv).	A & B only		

9) Select the incorrect example for tools used in data gathering methods.

- (i). Sensors.
  (ii). Bar code reader
  (iii). Optical character reader (OCR).
  (iv). Magnetic strip reader
- (v). Liquid crystal displays

10) Consider the following statements regarding information.

- A. The value of information decesnot depend on its relevance.
- B. The highest value of information is considered to be at the creation time or the time information is released.
- C. The value of the information is reduced gradually with the time and become less valuable.

Which of the above statements is/ are correct?

(vi).	B only	(viii).A & C only	(x). All of the above
(vii).	C only	(ix). B & C only	

- 11) Select the correct example for an open source software.
  - (i). Microsoft Word
  - (ii). Ubuntu
  - (iii). Microsoft Powerpoint
  - (iv). Mac OS
  - (v). Auto CAD

12) Consider the following on computer processors

A - Speed

B - Capacity

C- Number of pins in the processor

Which of them is / are not considerable when purchasing a computer?

(i).	A only	(iii). B only	(v). A & B only
(ii).	C only	(iv). B & C only	

13) Select the correct order of data processing life cycle

(i). Data gathering ,Data validation ,Data processing ,Data output ,Data storage

(ii).Data gathering, Data processing ,Data output ,Data storage, Data validation

(iii). Data gathering, Data storage, Data processing ,Data output , Data validation

(iv). Data validation, Data gathering, Data storage, Data processing , Data output

(v). Data output, Data gathering, Data storage, Data processing, Data validation

14) Consider the following sentences,

A - An Operating system is needed to manage hardware and software

B - An operating system is an application software.

C- Fedora is an proprietary software

Which of the above can be considered correct regarding an operating system?

(i).	A only	(iii). B only	(v). A & B only

. ,	•	• • • • • •
(ii).	C only	(iv). B & C only

15) Consider the following sentences,

A - Firmware is a computer program that is "embedded" in a hardware device.

B - It is an essential part of the hardware .

C- In computers firmware is embedded in the ROM.

Which of the above can be considered correct regarding an operating system?

(i). A only	(iii). B only	(v). A & B only
(ii). B & C only	(iv). All A, B & C	

#### **B-** Provide suitable answers for the following questions.

1) Give three main advantages of processing data with computers compared to the manual system.

(i).	 
(ii).	 
(iii).	 

2) Briefly describe the Golden rule of information with 2 examples taken from day to day life.

3) Illustrate the abstract model of information.

4)	What are the four major components of a computer? (i) (ii) (iii) (iv)
5)	Give the three memory classifications and briefly explain them.
,	

6)	Give 5 examples for networking devices (i). (ii). (iii). (iv). (v).
7)	Give the two types of software and briefly explain them.
8)	Give 4 examples for application (instances) of automatic data processing (i). (ii). (iii).
9)	Briefly explain the following: (i). Open source software' and 'proprietary software'. (ii). Firmware and Liveware

(iii). Stealing / Phishing

(iv). Copyright / Intellectual Property laws

	(v).	Plagiarism
•••••	•••••	

(vi). Licensed / unlicensed software

•••••••	••••••••••••••••••••••••••••	 •	•••••••	••••••

10) Describe the different modes data input.


## <u>Part 2</u>

1.

1) Explain the difference between the following with suitable examples:

a)

- (i). Quantitative data
- (ii).Qualitative data
- b)
- (i). Data
- (ii).Information
- 2) Briefly illustrate the Lifecycle of Data with a suitable diagram and explain.
- 3) Write short notes on the following:
  - a) The internet
  - b) Cloud computing
  - c) Big Data analytics

2.

- 1) Give the five steps of data processing.
- 2) Explain how each of the above steps is conducted using suitable examples.
- 3.
- 1) "The applicability of ICT in the field of Law enforcement is vital in the modern society."

Can this statement be considered as true? give your opinion with an explanation.

- 2) Briefly explain the following:
  - a) Social and economic benefits of ICT
  - b) Environmental issues caused by ICT