Thuto360 Revision Bank

Free practice for every learner in Botswana

MOCK PAPER

BGCSE Computer Studies — Thuto360 mock paper

Computer Studies · Form 5 · BGCSE

QUESTIONS	TOTAL MARKS	TIME ALLOWED
22	**33**	**90 minutes**

Name _____

Class / school _____

Date _____

Score _____ / 33

Instructions

A Thuto360 practice paper in the style of the national examination — not an official BEC paper.

Section A is multiple choice and is marked as soon as you hand in. Section B is written: your teacher marks it, or, if you are practising on your own, you mark it yourself against the marking guide.

Multiple choice: circle the letter of the right answer. Where it says "tick every correct answer", more than one is right. Written questions: answer on the lines given; the marks for each part are in brackets. The answers are on the last page.

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Section A — multiple choice

1. Which validation check makes sure a value lies between 1 and 100?

- (A) Length check
- (B) Type check
- (C) Presence check
- (D) Range check

2. Which search method requires the list to be sorted first?

- (A) Bubble search
- (B) Binary search
- (C) Linear search
- (D) Random search

3. A loop that repeats while a condition is true and checks it first is a…

- (A) IF statement
- (B) WHILE loop
- (C) REPEAT…UNTIL loop
- (D) FOR loop with fixed count

4. Which protocol is used to send web pages securely?

- (A) SMTP
- (B) HTTP
- (C) HTTPS
- (D) FTP

5. An IP address is used to…

- (A) identify a device on a network
- (B) store passwords
- (C) speed up a CPU
- (D) print documents

6. Encryption is…

- (A) deleting data
- (B) scrambling data so only authorised people can read it
- (C) compressing images
- (D) copying data

7. Copying software without a licence is…

- (A) software piracy
- (B) open source
- (C) freeware
- (D) encryption

8. Botswana's Data Protection Act protects…

- (A) people's personal information
- (B) computer hardware
- (C) internet speeds
- (D) phone prices

9. Which of these is an input device?

- (A) Speaker
- (B) Keyboard
- (C) Monitor
- (D) Printer

10. Which of these is an output device?

- (A) Mouse
- (B) Microphone
- (C) Printer
- (D) Scanner

11. CPU stands for…

- (A) Central Program Utility
- (B) Computer Personal Unit
- (C) Central Processing Unit
- (D) Control Power Unit

12. Which memory loses its contents when the power is switched off?

- (A) ROM
- (B) RAM
- (C) Flash drive
- (D) Hard disk

13. Which is an operating system?

- (A) Microsoft Word
- (B) Excel
- (C) Google Chrome
- (D) Windows

14. Software used to type letters is a…

- (A) database
- (B) web browser
- (C) spreadsheet
- (D) word processor

15. How many bits are there in a byte?

- (A) 4
- (B) 1 024
- (C) 16
- (D) 8

16. What is the binary number 1011 in denary?

- (A) 10
- (B) 13
- (C) 11
- (D) 9

17. What is denary 25 in binary?

- (A) 11010
- (B) 10011
- (C) 10101
- (D) 11001

18. LAN stands for…

- (A) Large Access Network
- (B) Long Area Network
- (C) Linked Application Node
- (D) Local Area Network

19. A device that connects a home network to the internet is a…

- (A) monitor
- (B) scanner
- (C) keyboard
- (D) router

20. Which is a strong password?

- (A) 123456
- (B) your name
- (C) password
- (D) T#u7o!360rb

Section B — structured questions

21. Write an algorithm that inputs the marks of 30 learners and outputs the highest mark and the average.

(a) Initialise variables correctly. [2]

(b) Loop 30 times, input each mark and update the total and the highest. [3]

(c) Calculate and output the results. [2]

22. A clinic is moving its patient records onto a computer system.

(a) Give two ways the clinic can protect the records from unauthorised access. [2]

(b) Explain why regular backups are needed. [2]

(c) Describe one responsibility the clinic has under data protection law. [2]

Answers

Check your work after you finish. Multiple-choice questions score only when every right answer is chosen.

1	D	**2**	B	**3**	B	**4**	C	**5**	A
6	B	**7**	A	**8**	A	**9**	B	**10**	C
11	C	**12**	B	**13**	D	**14**	D	**15**	D
16	C	**17**	D	**18**	D	**19**	D	**20**	D
21	See below	**22**	See below						

Marking guide for written questions

Question 21

(a) [2] highest ← 0 (or the first mark) (1); total ← 0 (1)

(b) [3] FOR 1 to 30 (1); total ← total + mark (1); IF mark > highest THEN highest ← mark (1)

(c) [2] average ← total / 30 (1); OUTPUT highest and average (1)

Question 22

(a) [2] Any two: passwords, user access levels, encryption, firewall, physical security (1 each)

(b) [2] Data could be lost through hardware failure, theft or malware (1); backups allow it to be restored (1)

(c) [2] Keep personal data accurate and secure / use it only for its purpose / tell patients how it is used (2)