



2<sup>ND</sup> SEM. 2007/2008

PAGE 1 OF 7

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: B.SC. AG. ECON. & AGBMGT YEAR 1 (NEW PROG.)  
B.SC. AG. EDUC. & EXT. YEAR 1 (NEW PROG.)  
B.SC. ANI. SCI. YEAR 1 (NEW PROG.)  
B.SC. AGRON. YEAR 1 (NEW PROG.)  
B.SC. HORT. YEAR 1 (NEW PROG.)  
B.SC. LWM YEAR 1 (NEW PROG.)  
B.SC. HOME ECON YEAR 1 (NEW PROG.)  
B.SC. FSNT YEAR 1 (NEW PROG.)  
B.SC. TADM YEAR 1 (NEW PROG.)  
B.SC. HOME ECON ED. YEAR 1 (NEW PROG.)  
M.SC. IN AG. EDUC. & EXT. YEAR 1

COURSE CODE: AEM 105

TITLE OF PAPER: INTRODUCTION TO COMPUTERS

TIME ALLOWED: TWO (2) HOURS

- INSTRUCTIONS:
1. ANSWER ALL QUESTIONS IN ALL SECTIONS.
  2. ANSWER ALL QUESTIONS ON THE QUESTION PAPER. YOU DO NOT NEED AN EXAMINATION ANSWER FOLDER. SUBMIT THIS QUESTION PAPER. DO NOT REMOVE IT FROM THE EXAMINATION ROOM.
  3. QUESTIONS CARRY MARKS AS INDICATED IN THIS PAPER.

Candidate's Examination Number : \_\_\_\_\_.

Time of Examination : \_\_\_\_\_.

Date of Examination : \_\_\_\_\_.

Venue of Examination : \_\_\_\_\_.

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

**SECTION I: Multiple Choice:** For each item, circle the one letter corresponding to the choice that best completes/answers that item. Read all choices before you circle one.

(2 marks each) [50 marks total]

1. In contrast to early computers, today's computers are:
 

a. larger.	e. a and c.
b. available to fewer people.	f. b and c.
c. less expensive.	g. a, b, and c.
d. a and b.	
2. The FORMAT command in MSDOS:
 

a. divides each disk surface into "pie sections" called sectors.	e. a and c.
b. creates a sub-directory.	f. b and c.
c. creates a file allocation table.	g. a., b., and c.
d. a and b.	
3. In this course, symbols or facts that help us answer questions were referred to as:
 

a. data.	c. forms.	e. fonts.
b. information.	d. icons.	f. statistics.
4. The small permanent operating system:
 

a. checks the amount of internal memory.	
b. loads internal MSDOS into the internal memory.	
c. checks that the diskdrive(s) is/are functioning properly.	
d. a and b.	f. b and c.
e. a and c.	g. a., b., and c.
5. The "heart" or "brain" of the computer is the:
 

a. CPU	d. monitor.
b. keyboard.	e. RAM.
c. diskdrive.	
6. In handling diskettes, one must remember to:
 

a. store them away from magnets.	
b. store them at a temperature between 10°C and 60°C.	
c. insert them carefully.	
d. a and b.	f. b and c.
e. a and c.	g. a., b., and c.
7. When compared to a manual typewriter, a microcomputer used as a word-processor:
 

a. makes it easier to make corrections.	e. a and c.
b. makes it harder to number pages.	f. b and c.
c. makes it easier to number pages.	g. a., b., and c.
d. a and b.	h. none of the above.
8. If both files relate to the same large database, the disk space needed for a sorted file:
 

a. is less than that needed for an index file.	
b. is more than that needed for an index file.	
c. is the same as that needed for an index file.	
d. may be more or less than that needed for an index file.	
9. An Expert-system:
 

a. allows knowledge to be gained from data.	e. a and c.
b. is modular.	f. b and c.
c. can be extended dynamically.	g. a., b., and c.
d. a and b.	h. none of the above.

10. When compared to a manual typewriter, a microcomputer used as a word-processor:

- a. makes it easier to underline text.
- b. makes it harder to make corrections.
- c. makes it harder to number pages.
- d. a. and b.
- e. a. and c.
- f. b. and c.
- g. a., b., and c.
- h. none of the above.

11. COPY A:\*. \* B:

The MS-DOS command on the previous line will:

- a. not copy anything since it is not correctly stated.
- b. will copy all non-hidden files from the diskette in drive A: to the diskette in drive B:.
- c. will copy all non-hidden files from the diskette in drive B: to the diskette in drive A:.
- d. will copy only one file, with the name \*. \* from the diskette in drive B: to the diskette in drive A:.
- e. will copy only one file, with the name \*. \* from the diskette in drive A: to the diskette in drive B:.

12. Which of the following Microsoft Access database objects displays, in tabular form, existing records that satisfy a given condition:

- a. Query
- b. Macro
- c. Page
- d. Module
- e. Form
- f. Report
- g. Table

13. DISKCOPY A: B:

Assuming the diskettes in drive A: and drive B: are of the same capacity, the MSDOS command at the start of the question will:

- a. not have any effect, because DISKCOPY is not an MSDOS command.
- b. not have any effect, because this is not the way DISKCOPY should be stated.
- c. copy all files and blank spaces from the diskette in drive A: to the diskette in drive B:
- d. copy all files and blank spaces from the diskette in drive B: to the diskette in drive A:
- e. copy only non-hidden files from the diskette in drive B: to the diskette in drive A:
- f. copy only non-hidden files from the diskette in drive A: to the diskette in drive B:
- g. copy only hidden files from the diskette in drive B: to the diskette in drive A:
- h. copy only hidden files from the diskette in drive A: to the diskette in drive B:

14. Translators of computer languages that translate the program line by line are:

- a. compilers.
- b. interpreters.
- d. both compilers and translators.
- e. neither compilers nor translators.

15. Checks the internal memory of the computer when it is first turned on:

- a. OS-2..
- b. UNIX
- c. small permanent operating system.
- d. MS-DOS.
- e. CPM.
- f. none of the above.

16. A group of eight binary digits is referred to as a/an:

- a. bit.
- b. byte.
- c. address.
- d. access.
- e. byt.

17. Using a model to help choose which method to use to control a disease is an example of using simulation in the area of:

- a. Training/Teaching.
- b. Research.
- c. Exploring Alternatives/Planning.
- d. Predicting events.
- e. Games.

18. In using a computer to regulate the temperature in the greenhouse, the device(s) activated could include:
- a. a thermometer.
  - b. a fan.
  - c. a window opener.
  - d. a. and b.
  - e. a. and c.
  - f. b. and c.
  - g. a., b., and c.
  - h. none of the above.
19. A bar code on a product contains information on:
- a. the identity of the product.
  - b. the manufacturer of the product.
  - c. the store where the product is being sold.
  - d. a. and b.
  - e. a. and c.
  - f. b. and c.
  - g. a., b., and c.
  - h. none of the above.
20. A computer virus:
- a. is made of RNA and DNA and protein.
  - b. can change data in files.
  - c. can not hide itself.
  - d. a. and b.
  - e. a. and c.
  - f. b. and c.
  - g. a., b., and c.
21. Which of the following types of computer languages is (are) machine independent?
- a. assembly language.
  - b. high level language.
  - c. machine code.
  - d. a and b.
  - e. a and c.
  - f. b and c.
  - g. a, b, and c.
22. In the input/output model for computer process control, the fifth device in the model is the:
- a. D/A converter.
  - b. Computer.
  - c. Activator.
  - d. Sensor.
  - e. A/D converter.
  - f. Device activated.
23. In image processing, synthesis:
- a. is harder than analysis.
  - b. requires image input.
  - c. requires image output.
  - d. a. and b.
  - e. a. and c.
  - f. b. and c.
  - g. a., b., and c.
  - h. none of the above.
24. In the central processing unit, the part responsible for storing the present instruction is the:
- a. program counter.
  - b. instruction register.
  - c. control unit.
  - d. arithmetic and logic unit.
25. What program that we have used in class is in control of the computer when the main part of the screen looks like a table, with marked rows and columns?
- a. PASCAL.
  - b. LOGO.
  - c. Microsoft Excel.
  - d. BASIC.
  - e. Microsoft Word.
  - f. none of the above.

**SECTION II: B. MATCHING:** In the blank next to each item on the left, place the letter of the one step in system analysis/development on the right in which that item fits. Read all listed steps before you start to answer. You may need to use some letters more than once. (N.B.: The steps are listed in alphabetical order, not necessarily in the order in which they are done.)

(2 marks each)

[10 marks total]

- |   |                               |
|---|-------------------------------|
| _____ 1. Get quotations of costs of possible new options. | a. Choosing the right system. |
| _____ 2. How could the present system be improved?        | b. Feasibility study          |
| _____ 3. Purchase equipment.                              | c. Implemen-tation            |
| _____ 4. Adapt the new system.                            | d. System definition.         |
| _____ 5. What are the costs of changing?                  | e. System maintenance.        |

**SECTION II: A. FILL IN THE BLANK:** In each blank, write the one word that best completes the sentence. (1 mark each blank) [10 marks total]

- The major limitation of simulation is that it is only as good as the \_\_\_\_\_ that underlie it.
- A network with relatively few users within a radius of about 10 km, with private lines is referred to as a/an \_\_\_\_\_.
- A binary digit is referred to as a/an \_\_\_\_\_, a group of eight of these as a/an \_\_\_\_\_, and the location of the group of eight in the memory as a/an \_\_\_\_\_.
- The bar code contain information about the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_, in addition to the control number.

**SECTION III: SHORT ANSWER:** Answer each question in the space provided.

1. List the general tasks of the operating system found in ROM. [10 marks]

2. Distinguish between a compiler and an interpreter and list one advantage of each compared with the other. [10 marks]

3. Distinguish between ANALYSIS and SYNTHESIS in image processing and compare their difficulty.

**FOR EXAMINERS' USE ONLY :**

Section	Internal Examiner		External Examiner	
	Mark	Signature	Mark	Signature
I.				
II.A				
III.1				
III.2				
III.3				
TOTAL				