BINDURA UNIVERSITY OF SCIENCEEDUCATION

FACULTY OF SCIENCEAND ENGINEERING

DEPARTMENT OF EDUCATIONAL TECHNOLOGY
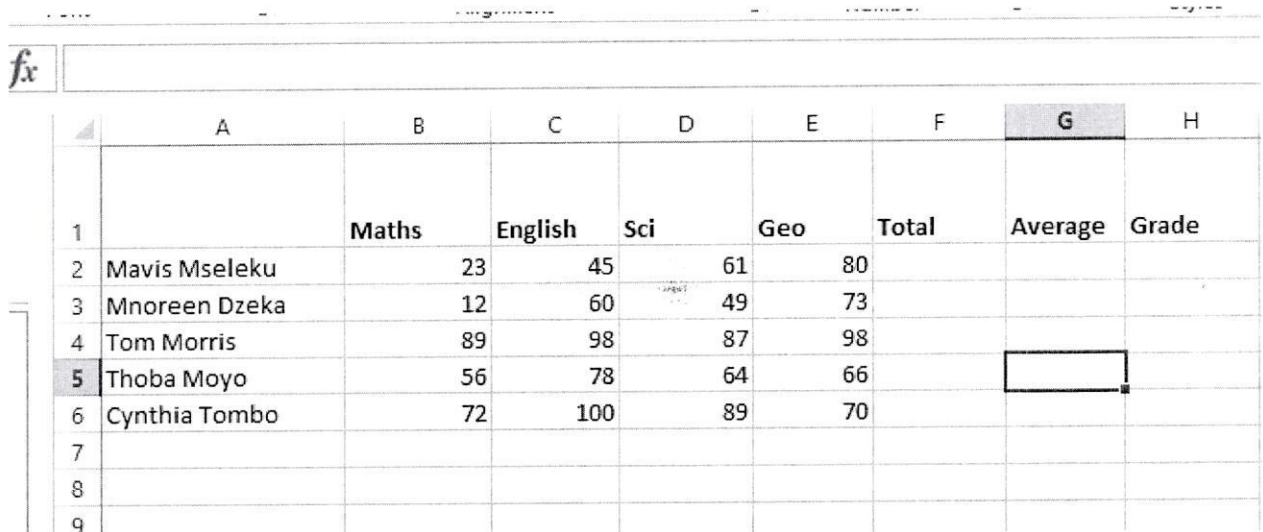
CS020 Computer Skills

Time 3 hours

Instruction to candidates

Answer all questions, each question carries 20 marks

Question 1

a. Given the screenshot below, answer the questions that follow¿

	A	B	C	D	E	F	G	H
1		Maths	English	Sci	Geo	Total	Average	Grade
2	Mavis Mseleku	23	45	61	80			
3	Mnoreen Dzeka	12	60	49	73			
4	Tom Morris	89	98	87	98			
5	Thoba Moyo	56	78	64	66			
6	Cynthia Tombo	72	100	89	70			
7								
8								
9								

i. Write a formula that you would enter in cell F5 which when dragged down will give you the totals for each students. **[3]**

ii. Write a formula that you would enter in cell G5 that when dragged down will give the averages for each student making reference to column F.**[2]**

iii. Given that the student with marks less than 50 gets grade F, from 50 to 60% gets D, from 61% to 70% gets a C from 71 to 80% gets a B and from 81% to 100 gets an A, write a formula that you enter in cell H5 to give you the symbols of the students when bragged down. **[5]**

b. Give the advantages of using a presentation slide over the traditional methods in teaching. **[10]**

Question 2

a. Convert the following number systems: **[10]**

    i. 10111_2 to hexadecimal

    ii. 567_{10} to binary

    iii. 1001_2 to decimal

    iv. 10111_2 to octal

    v. DD_{16} to decimal

c. Outline any three ways viruses may spread from one computer to another. **[10]**

Question 3

b. Explain the following topologies: [10]

    i. Star topology

    ii. Ring topology

c. Define the following terms: [10]

    i. Client

    ii. Browser

    iii. E-mail

    iv. topology

Question 4

d. Draw a block diagram to illustrate the basic organization of a computer system and explain the function of the various units. [10]

e. Discuss any 5 characteristics of a computer [10]

Question 5

a. Define the following types of Malware describing how they work:

    i. Worm [4]

    ii. Trojan Horses [4]

    iii. Virus [4]

b. Explain the following terms

    i. Network card [4]

    ii. Router [4]