

2920/102A  
COMPUTER APPLICATIONS I (THEORY)  
Paper 1  
November 2017  
Time: 2 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL  
DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY  
MODULE I

COMPUTER APPLICATIONS I (THEORY)

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of SIX questions.*

*Answer any FOUR of the SIX questions in the answer booklet provided.*

*All questions carry equal marks.*

*Candidate should answer the questions in English.*

**This paper consists of 5 printed pages**

**Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

1. (a) State the full meaning of each of the following acronyms as used in desktop publishing:
    - (i) WMT;
    - (ii) EPS;
    - (iii) TIFF;
    - (iv) JPEG. (4 marks)
  - (b) Mercy intends to teach her class using a presentation program. Outline **three** ways she could run the slide show. (3 marks)
  - (c) Distinguish between hypertext and hypermedia as used in Internet programs. (4 marks)
  - (d) Joan has been advised to use macros to run various repetitive tasks in a word processing program. Outline **four** advantages of using this feature. (4 marks)
2. (a) Outline **three** applications of spreadsheet program in the banking sector. (3 marks)
  - (b) Differentiate between *form header* and *page header* as used in databases. (4 marks)
  - (c) Lucy set the printer settings as shown in Figure 1 while attempting to print a presentation document. Use it to answer the question that follows.

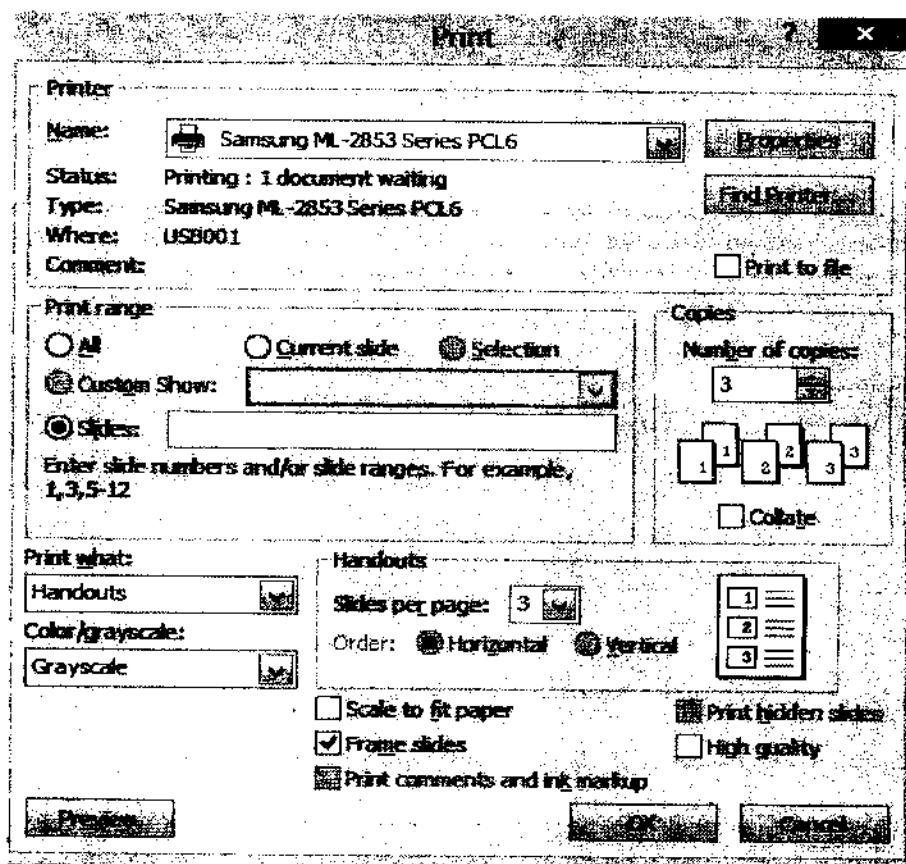


Figure 1

Describe the expected print output after she clicks the ok button. (4 marks)

- (d) Bitech Company intends to use *distributed operating systems* for their management information system in its various branches. Outline **four** benefits the company would get from this move. (4 marks)
3. (a) Explain the function of each of the following system utilities:
- (i) disk cleanup;
  - (ii) disk defragmenter. (4 marks)
- (b) Lydiah has been tasked to create a student magazine using a publishing program.
- (i) Outline **three** approaches she could use to create a new publication. (3 marks)
  - (ii) Assume she decided to use a master page for this publication. Explain **two** reasons for her decision. (4 marks)
- (c) Distinguish between the functions of *ruler guides* and *margin guides* as used in desktop publishing programs. (4 marks)
4. (a) Describe the *mail merge* feature as used in word processing programs. (5 marks)
- (b) Figure 2 shows a section of tool bar that help database users to navigate and utilise forms. Use it to answer the questions that follow.

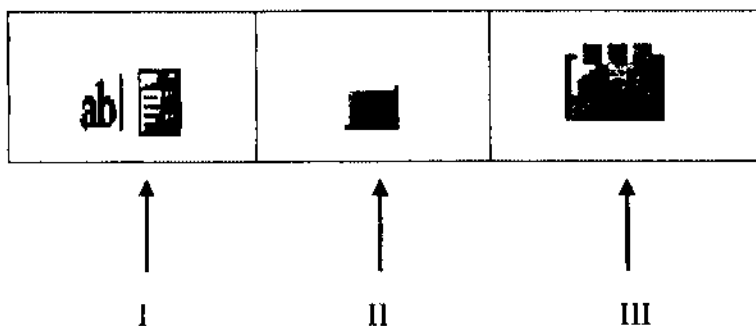


Figure 2

- (i) Identify the tools labelled I, II and III. (3 marks)
  - (ii) Classify the tools as bound, unbound or calculated. (3 marks)
- (c) Explain the function of each of the following features as used in presentation programs.
- (i) record narration;
  - (ii) rehearse timings. (4 marks)
5. (a) Explain the function of each of the following views as used in presentation programs:
- (i) outline ;
  - (ii) notes page. (4 marks)
- (b) Data integrity ensures the correctness and completeness of the data in the database. Explain **three** types of integrity constraints that could be enforced during the creation of databases. (6 marks)

- (c) Table 1 is a section of a worksheet showing cash expenditure in Kenya shillings by departments for a certain organization. Use it to answer the questions that follow.

Department	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	Average Expenditure	Remarks
Accounts	83,000	72,000	79,000		
Human Resource	77,000	78,000	88,000		
Sales and marketing	52,000	64,000	84,000		
Procurement	60,000	67,000	50,000		

Table 1

- (i) Using a function and cell addresses only, write a formula that would be used to calculate the Average expenditure for Accounts department. (2 marks)
- (ii) Using the IF function, write a formula that would be used to enter a remark for Accounts department as "Excess Expenditure" when the average expenditure is over 80,000 and "Optimal Expenditure" when its less than 80,000. (3 marks)
6. (a) State **four** examples of items that could be used as header and footer on the *notes* and *hand out* page of a Presentation. (2 marks)
- (b) Table 2 is a worksheet extract showing total sales in Kenya shillings made by salesmen of a certain company. Use it to answer the questions that follow.

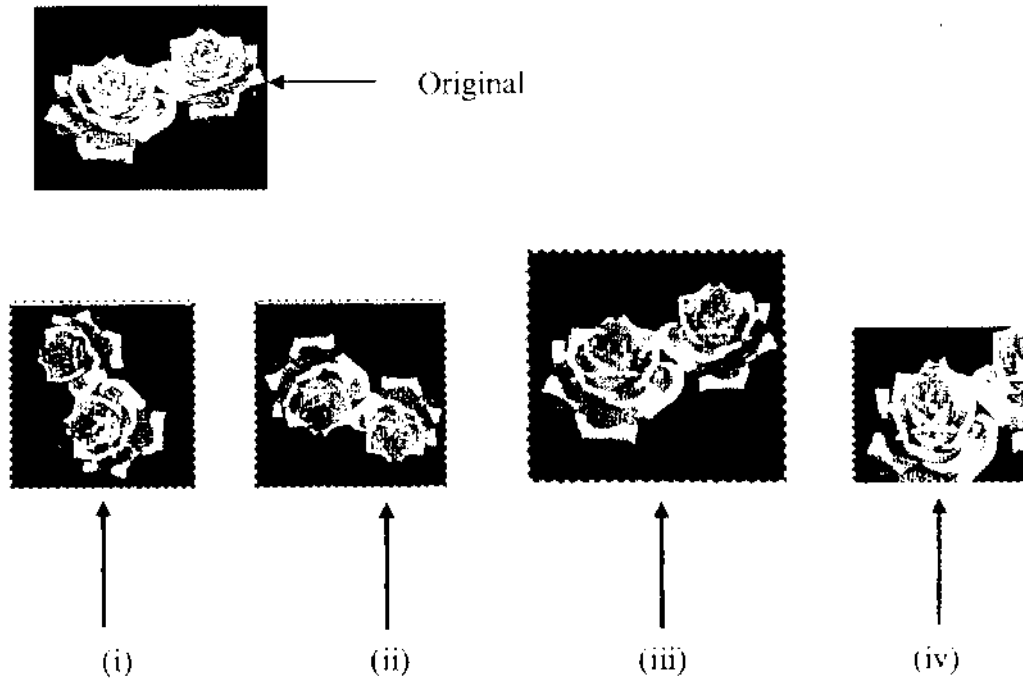
Salesman	REGION			Average sales
	Western	Eastern	Central	
Sarah	830,000	572,000	279,000	560,333
Martin	790,000	718,000	688,000	732,000
Jane	523,000	654,000	984,000	720,333
Jonathan	360,000	467,000	450,000	425,667

Table 2

With the aid of an illustration, write the expected results from the worksheet after performing each of the following commands on the data:

- (i) sorting the data using the salesman column. (3 marks)
- (ii) filtering data with average sales greater or equal to 700,000. (2 marks)
- (c) The principal of VIBS College intends to extract the following information from the college's database. State the criteria that could be used to achieve this.
- (i) details of students admitted from 1/07/2015 to 31/12/2015;
- (ii) all students whose names begin with letter *M*. (4 marks)

- (d) Mike created a birthday card using a publication program and inserted the picture labelled "Original". He applied different formats on the original picture each time to achieve the images labelled (i), (ii), (iii) and (iv).



State the picture formats that he applied to achieve each of the images.

(4 marks)

**THIS IS THE LAST PRINTED PAGE**