THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education

451/2 – COMPUTER STUDIES – Paper 2

(PRACTICAL)

Apr. 2021 – 2½ hours

Instructions to candidates

(a) *Write your name and index number at the top right hand corner of each of the papers provided for printing.*
(b) *Write your name and index number on the CD/Removable storage medium provided.*
(c) *Write the name and version of the software used for each question attempted in the printouts used.*
(d) *Answer **all** the questions.*
(e) *All questions carry equal marks.*
(f) *Passwords **should not be used** while saving files.*
(g) *All files must be transferred to the CD/Removable storage medium.*
(h) *Make printouts of your answers on the papers provided for printing.*
(i) *Arrange your printouts and tie/staple them together.*
(j) *Hand in all the printouts and the CD/Removable storage medium used.*
(k) ***This paper consists of 5 printed pages.***
(l) ***Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.***
(m) ***Candidates should answer the questions in English.***

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1. The management of a company owning a chain of hotels intends to use a spreadsheet program to compute the revenues in thousands of Kenya shillings for the hotels during the 1st, 2nd, 3rd and 4th quarters. The hotels are rated as 2 star, 3 star, 4 star and 5 star. **Figure 1** shows an extract of the worksheet.

	A	B	C	D	E	F	G
1	**HOTEL**	**STAR CATEGORY**	**1ST**	**2ND**	**3RD**	**4TH**	**TOTAL REVENUE**
2	City Inn	4	174,400	177,400	127,900	180,800	
3	Forkland	2	173,700	111,300	194,900	103,700	
4	Highway	4	182,900	136,300	143,900	144,600	
5	Hiltop	5	188,500	124,700	173,500	171,200	
6	Membley	5	187,800	118,700	115,900	195,500	
7	Voyager	3	139,100	178,400	109,600	179,700	
8	Eden	2	200,000	112,200	109,100	117,200	
9	Palm tree	4	169,800	163,000	173,000	148,300	
10	The Shaza	5	163,900	106,800	107,100	150,500	
11							
12							
13							
14	Total Quarterly Revenue						
15	Administrative cost						
16	***Percentage*** 30%						

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Figure 1

(a) Open a spreadsheet program and create the worksheet extract as it appears in **Figure 1**. Save the workbook as **Task 1**. (11 marks)

(b) Use a function and cell addresses to calculate:

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(i) total revenue for each quarter; (2 marks)

(ii) total revenue for each hotel. (2 marks)

(c) (i) Insert two rows above row 1 and type the title "MBALAMBALA GROUP HOTELS" in cell A1. (2 marks)

(ii) Merge the cells in the range A1:G1. (1 mark)

(iii) Apply bold and font size 15 to the title. (1 mark)

(d) Using cell addresses only, compute the administrative cost for each quarter given that the cost is a percentage of total revenue and the percentage rate is in cell B18. (3 marks)

(e) Apply thick outside borders and regular inside borders to cells in the range A3: G18. (2 marks)

(f) (i) Copy all the contents of the current worksheet to a new worksheet. (2 marks)

(ii) Rename the old worksheet as **original** and the new worksheet as **formatted**. (2 marks)

(g) (i) Change the page layout orientation of the formatted worksheet to landscape and the page size scaled to 80%. (2 marks)

(ii) Enter the values 2, 3, 4 and 5 in the cell range B20 : B23 respectively representing the hotel star category ratings. (1 mark)

(iii) Using a function and cell references:

I. compute the total revenue for each hotel references;

II. compute the total revenue for each hotel category in the 1st quarter using reference values in the range B20 : B23 in cells C20 : C23. (5 marks)

(iv) Sort the revenues from the hotels in descending order of hotels. (2 marks)

(h) (i) Create a column chart that compares the revenues of the hotels in star category 4 for the 1st and 2nd quarter. (4 marks)

(ii) Format the chart created as follows:

I. Chart title : "FIRST AND SECOND QUARTER REVENUES" (2 marks)

II. Move the chart to a new sheet and rename the sheet as **FourStar Revenues**. (2 marks)

(i) Save the changes and print later each of the following:

(i) **original** worksheet showing the column and row headings; (2 marks)

(ii) **formatted** worksheet; (1 mark)

(iii) **FourStar Revenues** chart. (1 mark)

2. Popo City planners intend to use a Desktop Publishing program to draw a plan for a section of a city. Assume you have been given the task.

(a) (i) Open a desktop publishing program and set the page layout orientation to portrait and paper size to A4. (2 marks)

(ii) Save the publication as **Task 2**. (1 mark)

(b) Create the city plan as it appears in **Figure 2** ensuring that the design covers the entire printable area of the page. (46 marks)

(c) Save the changes and print the publication later. (1 mark)

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POPO CITY PLAN

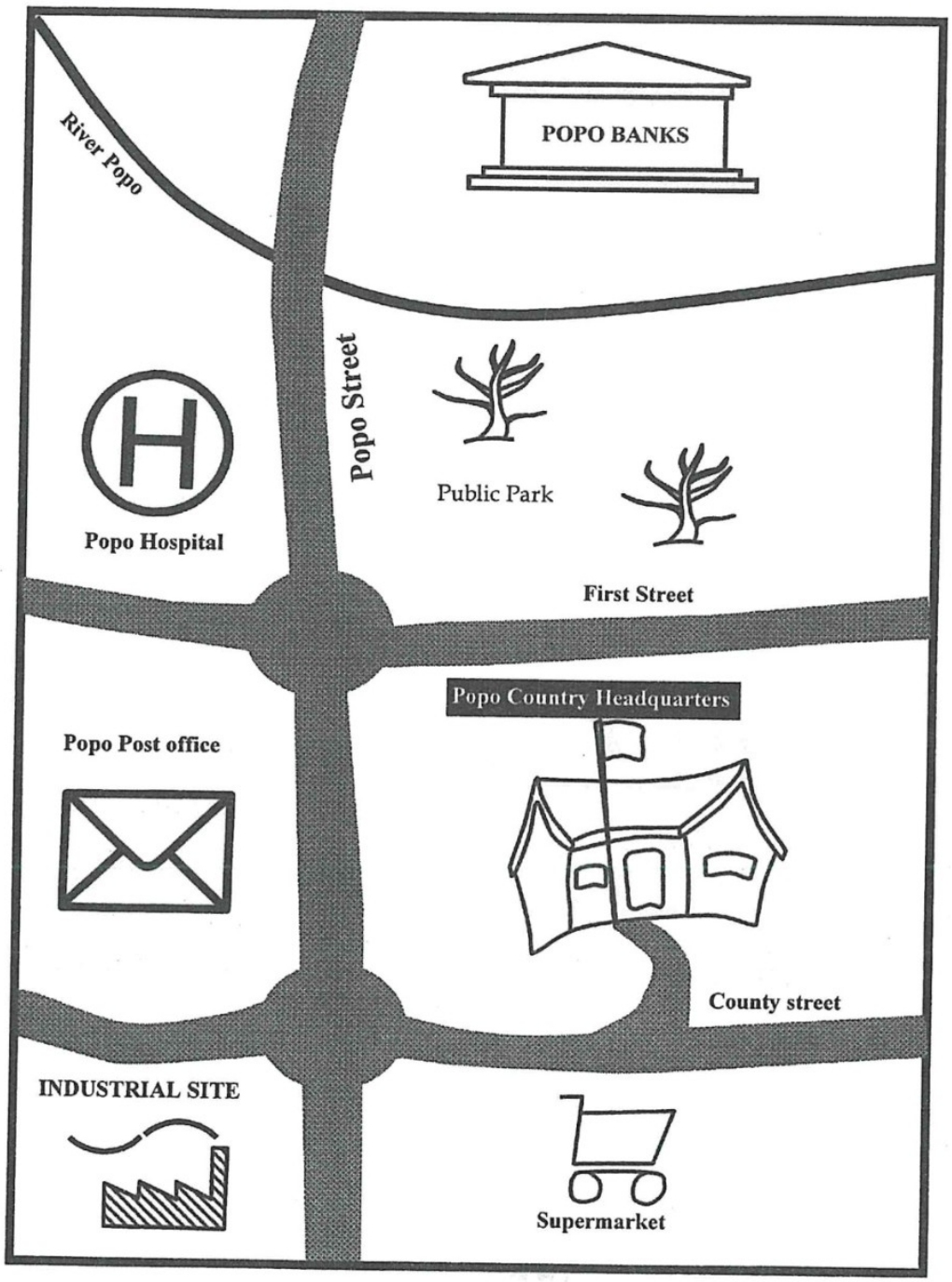

Figure 2

THIS IS THE LAST PRINTED PAGE.