

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FOURTH YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR
OF SCIENCE IN CATERING AND HOTEL MANAGEMENT**

BCHM 452: QUALITY BREWING AND FINE BEER

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 11/12/2019

8.30 A.M – 10.30 A.M

INSTRUCTIONS

**Answer all questions in section A and any two questions in section B
No use of mobile phones in the examination room**

SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. A beer's full potential to the customer depends on the proper glassware and service. With this in mind briefly discuss the following;
 - (a) Beer pouring [4 marks]
 - (b) Beer's temperature [3 marks]
 - (c) Use of a glass [3 marks]
2. A good understanding of different styles is important while working in the hospitality industry. Based on the knowledge you have gained;
 - (a) Describe the Guinness type of beer? [3 marks]
 - (b) Differentiate between steam beer and wheat beer. [6 marks]
3. Bottles have long been used to package beers. However cans, have in the recent past gained popularity. What are the advantages of packaging beer in a can over a bottle?
[5 marks]
4. Complete the table below for the release parameters for lager beer to the market.
[6marks]

Parameter	Target value	Permitted range
ABV (%)		
pH		
Colour (EBC)		
Haze(EBC)		
Favour score (1-9)		

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

5. With respect to fermentation describe the following;
- (a) Properties of *Saccharomyces* strains that make them suitable in alcoholic fermentation. [8 marks]
 - (b) Bottom fermentation [6 marks]
 - (c) Top fermentation [6 marks]
6. You have been invited for an interview at an upcoming brewery in East Africa and one of the panelists has asked you to show your understanding of beer making. Prove that you are competent for the job by responding to the panelists under the following subsections;
- (a) Why barley is the preferred cereal in malting of beer. [6 marks]
 - (b) Enzymes that are involved in the germination step of malting. [4 marks]
 - (c) Importance of mashing and the methods of mashing. [6 marks]
 - (d) What is achieved in the wort boiling and hopping stage. [4 marks]
7. As a manager in charge of drinks in a reputable hotel, you will be concerned with quality attributes of all the drinks that are offered at the hotel. With respect to beer;
- (a) What would be the foam parameters of concern? Briefly describe parameters. [10 marks]
 - (b) What are the causes of the following tastes in beer/
 - (i) Sweetness [2 marks]
 - (ii) Sourness [2 marks]
 - (iii) Saltiness [3 marks]
 - (iv) Bitterness [2 marks]

