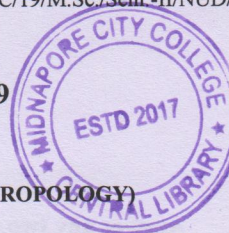


**PG (NEW) CBCS**  
**M.Sc. Semester-II Examination, 2019**  
**NUTRITION AND DIETETICS**  
**PAPER: NUD-203**  
**(FOOD MICROBIOLOGY AND NUTRITIONAL ANTHROPOLOGY)**



Full Marks: 40

Time: 2 Hours

**Use separate Answer-scripts for each unit**

UNIT- 17

Food Microbiology

Marks-20

1. Answer any two questions of the following: 2×2=4
  - a. Write any two primary sources of micro-organism. 2
  - b. Write the name any two prime micro-organisms which are responsible for meat spoilage. 2
  - c. What is batch fermentation? 2
  - d. What do you mean by pasteurization? 2
  - e. Define autotrophs with suitable example. 2
  
2. Answer any two questions of the following: 4×2=8
  - a. Discuss about the role of pH and water activity that affect the bacterial growth and survivability. 4
  - b. i) What do you mean by culture media? Write its common composition.  
ii) How does anti-microbial substance prevent bacterial growth? (1+1)+2=4
  - c. Discuss about the major causes of milk spoilage. 4
  - d. What do you mean by differential media with suitable example?
  
3. Answer any one question of the following: 8×1=8
  - a. i) What is agar?  
ii) How will you get a single colony from a mixed bacterial population?  
iii) What is botulism? 2+4+2=8
  - b. i) What do you mean by 'Afla-toxin'?  
ii) Write the mode of action of afla-toxin in human body.  
iii) State the nutritional significance of fermented food. 2+3+3=8

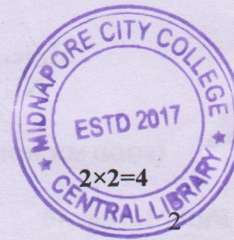


(2)

UNIT- 18

Nutritional Anthropology

Marks-20



4. Answer any two questions of the following:

- a. Write the relationship between BEE and REE.  $2 \times 2 = 4$
- b. Mention the landmark of measuring skin fold thickness at the site of –‘Triceps’. 2
- c. Write the full forms of MUAC and MAMC with their importance. 2
- d. Write the Duboi’s and Duboi’s formula for determining BSA. 2

5. Answer any two questions of the following:

 $4 \times 2 = 8$ 

- a. i) Mention the disadvantages in Nutritional status assessment by anthropometry technique.
- ii) What do you mean by ‘Z’ score? Mention its significance.  $2 + (1+1) = 4$
- b. i) What do you mean by ‘Nutritional Anthropometry’?
- ii) Classify weight for Age according to IAP.  $1 + 3 = 4$
- c. i) Write the sirils equation to determine percentage of body fat.
- ii) Write the formula for computing body density by using skin-fold thickness at three sites.  $1 + 3 = 4$
- d. i) Define BMR.
- ii) How can you determine BMR through anthropometric indices.  $1\frac{1}{2} + 2\frac{1}{2} = 4$

6. Answer any one question of the following:

 $8 \times 1 = 8$ 

- a. i) Define BMI.
- ii) Mention the significance of BMI in nutritional status assessment.
- iii) What are the limitations of BMI?
- iv) What do you mean by Obese-I?  $1 + 3 + 3 + 1 = 8$
- b. i) Mention the Cut of Point of PBF.
- ii) What do you mean by lean body mass?
- iii) Write the different types of somatic indicators of PEM and describe the classification and interpretation of somatic indicators.  $2 + 1 + (2 + 3) = 8$

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