

F.Y.B.Sc. (Nursing) 2007 Course: Winter-2018

SUBJECT: NUTRITION AND BIOCHEMISTRY

Day: Monday
Date: 08-10-2018

Time: —
Max Marks: 15

W-2018-4017

N.B. :

- 1) All questions are **COMPULSORY**.
- 2) Put a tick mark in appropriate box.
- 3) Use **BLACK/BLUE** ball pen only.
- 4) Section-I should be completed within 15 minutes.
- 5) Each question carry **ONE** mark.
- 6) Students will not be allotted marks if he/she overwrites strikes or put ink or cross marked.

Seat No. _____

Total Marks Obtained: _____

Jr. Supervisor's Signature: _____

Examiners Signature: _____

M C Q.

SECTION-I

Q.1 Chemically fats and oils are

- | | |
|-------------|--------------------------|
| a) Acids | <input type="checkbox"/> |
| b) Alcohols | <input type="checkbox"/> |
| c) Esters | <input type="checkbox"/> |
| d) Alkenes | <input type="checkbox"/> |

Q.2 A disease kwashiorkor is caused by deficiency of

- | | |
|------------------|--------------------------|
| a) Vitamins | <input type="checkbox"/> |
| b) Fats | <input type="checkbox"/> |
| c) Proteins | <input type="checkbox"/> |
| d) Carbohydrates | <input type="checkbox"/> |

Q.3 Biological method of food preservation is

- | | |
|-----------------|--------------------------|
| a) Freezing | <input type="checkbox"/> |
| b) Drying | <input type="checkbox"/> |
| c) Fermentation | <input type="checkbox"/> |
| d) Adding salt | <input type="checkbox"/> |

Q.4 Cooking food uncovered without liquid or fat

- | | |
|-----------------------|--------------------------|
| a) Moist heat cooking | <input type="checkbox"/> |
| b) Deep frying | <input type="checkbox"/> |
| c) Dry heat cooking | <input type="checkbox"/> |
| d) Pressure cooking | <input type="checkbox"/> |

P.T.O.

Q.5 Keratomalacia deficiency disease caused by

- a) Vitamin A
- b) Vitamin C
- c) Vitamin D
- d) Vitamin E

Q.6 1 gram fat yield _____ calories

- a) 4 Calories
- b) 9 Calories
- c) 2 Calories
- d) 5 Calories

Q.7 Eggs, milk and meat are good source of

- a) Carbohydrates
- b) Mineral
- c) Protein
- d) Fat

Q.8 Vitamin needed to prevent a birth defect called spina bifida

- a) Vitamin D
- b) Vitamin A
- c) Folate
- d) Vitamin E

Q.9 Body need vitamins and minerals for

- a) Energy
- b) Metabolic reactions
- c) Insulate body organs
- d) Withdraw heat from body

Q.10 Amylases in saliva begins breakdown of carbohydrates into

- a) Fatty acids
- b) Polypeptides
- c) Amino acids
- d) Simple sugars

- Q.11** Activation or inactivation of certain key regulatory enzymes is accomplished by covalent modification of the amino acids
- a) Tyrosine
 - b) Phenylalanine
 - c) Lysine
 - d) Serine
- Q.12** Which of the following vitamins would most likely become deficient in a person who developed a completely vegetarian lifestyles
- a) Vitamin C
 - b) Niacin
 - c) Cobalamin
 - d) Vitamin E
- Q.13** In alkaptonuria, which of the following accumulates abnormally in the urine?
- a) Phenylalanine
 - b) Acetoacetate
 - c) Homogentisate
 - d) Fumarate
- Q.14** Which of the following glycolipids is known to be the receptor in human intestine for cholera toxin?
- a) GM1
 - b) GM3
 - c) Globoside
 - d) Cerebroside
- Q.15** People with diabetes mellitus are prone to be develop cataract because their elevated blood glucose concentration
- a) Inhibit gluconeogenesis
 - b) Increase glycosylate haemoglobin
 - c) Increase glycogen synthesis within the lens
 - d) Allow aldose reductase to reduce glucose to sorbitol

F.Y. B.SC. (NURSING) (2007 COURSE) : WINTER- 2018

SUBJECT: NUTRITION AND BIOCHEMISTRY

Day: Monday
Date: 08/10/2018

Time: 10.00 A.M. TO 01.00 P.M.
Max Marks. 60

W-2018-4017

N.B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-II (NUTRITION)

- Q.1** Answer **ANY FIVE** of the following: **(15)**
- a) Write a note on grilling as a cooking method?
 - b) Classify nutrients with examples
 - c) Classify minerals with examples
 - d) Explain food pyramid with diagram
 - e) Oral rehydration therapy
 - f) Functions of carbohydrates
 - g) Explain sources and deficiency diseases of iron
- Q.2** Answer **ANY TWO** of the following:
- a) Protein
 - i) Classify protein under different aspects **(06)**
 - ii) List down animal and plant sources of protein **(04)**
 - b) Vitamin C
 - i) Functions **(03)**
 - ii) Dietary sources **(04)**
 - iii) Deficiency symptoms **(03)**
 - c) Food storage
 - i) Explain guidelines for food storage **(05)**
 - ii) Describe recommended storage for various foods **(05)**
 - d) Therapeutic diet
 - i) Definition **(02)**
 - ii) Objectives of therapeutic diet **(02)**
 - iii) Explain any two therapeutic diet in detail **(06)**

SECTION-III (BIOCHEMISTRY)

- Q.3** Answer **ANY FIVE** of the following: **(15)**
- a) Fluid mosaic model
 - b) Factors affecting all enzyme activity
 - c) Gluconeogenesis
 - d) Lipoproteins
 - e) Deamination
 - f) Structure and function of tRNA
 - g) Role of vitamin D in calcium metabolism
- Q.4** Answer **ANY ONE** of the following: **(10)**
- a) What is β – oxidation of fatty acids? Explain the β – oxidation of palmitic acid with its energetic?
 - b) i) Explain urea cycle **(05)**
ii) Explain dehydration **(05)**