MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

(2024 ADMISSION ONWARDS)

MG2DSCCND100 – FUNDAMENTALS OF FOOD SCIENCE

Duration: 2hrs Maximum Marks: 50

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

Each question is tagged with the appropriate Bloom's Revised Taxonomy level (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.) and the relevant course outcome (CO) number.
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S).

Part A

Multiple Choice Questions

Answer **All** Questions

Each question carries **1** mark

1. The process of transferring of energy from a heat source to food. [K] [2]
   a) Dicing b) Grinding c) Nutrient imbalance d) Specific deficiency
2. The science of physical, chemical and biological properties of food. [K] [1]
   a)Nutrition scienceb) Food chemistryc) Biochemistryd) Food science
3. An example of a combination of moist heat and dry heat cooking methods. [U] [2]
   a)Roasting b) Braising c) Stewing d) Grilling
4. A recipe which is tested and gives the same product every time when it is tried under the same circumstances is called……..[K] [3]
   a) Standardized recipe b) Recipe category c) Recipe yield d) Recipe Verification
5. Arrange the steps in standardization.
1.Quantity Adjustment2. Recipe verification3. Product Evaluation. [U] [3]
   a) 1,2,3b) 2,3,1c) 2,1,3 d) 3,2,1
6. Name the enzyme responsible for browning of enzymes. [K] [1]
   a) peroxidase b) polyphenol oxidase c) cellulose d) amylase [1 X 6 = 6]

Part B

Short Answer Type Questions

Answer **2** Questions

Each question carries **2**marks

7. Define food science. [K] [1]
8. List the advantages and disadvantages of poaching. [U] [2]
9. Define Standardization. [K] [3]
10. List out the chemical changes in food. [K] [1]

[2 X 2 = 4]

Part C

Short Essay Type Questions

Answer **4** Questions

Each question carries **5** marks

11. Comment on the advantages of solar cooking. [K] [2]
12. Discuss about the effect of cooking on digestibility and availability of nutrients. [U] [2]
13. Classify different cooking methods and explain any 5 methods in detail. [U] [2]
14. Discuss on the enzymatic and non-enzymatic changes in food. [U] [1]
15. Describe the benefits of recipe standardization [U] [3]
16. Discuss the types and properties of colloids. [U] [1]

[5 X 4 =20]

Part D

Essay Type Questions

Answer **2** Questions

Each question carries **10** marks

17. Discuss the importance of food science in modern society.[K] [1]
18. List out any five preliminary preparation methods of cooking. Discuss its advantages and disadvantages with suitable examples.[U] [2]
19. Explain the components and steps in standardization. [U] [3]
20. Explain the physio-chemical changes in food. [U] [1] [10 X 2 =20]

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

SECOND SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

MG2DSCHPY100 – PHYSIOLOGY OF HUMAN CONTROL SYSTEM

Duration: 2 hrs Maximum Marks: 50

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

Each question is tagged with the appropriate Bloom's Revised Taxonomy level (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.) and the relevant course outcome (CO) number.

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Part A

Multiple Choice Questions

Answer **All** Questions

Each question carries **1** mark

1. Abnormality in which there is increased or exaggerated sensitivity to odours [U] [1]

   a)Parosmia b) Hyposmia c) Hyperosmia d) Anosmia

2. The groove that divides the dorsal surface of the tongue into two symmetrical halves [U][1]

   a) Foramen Cecum b) Lingual Septum c) Median sulcus d) Lingual Tonsils

3. Melatonin is the hormone secreted by …….. [U] [3]

   a) Pituitary gland b) Pineal gland c) Parathyroid gland d) Thyroid gland

4. …….. is known as true skin[R] [1]

   a) Epidermis b) Dermis c) Stratum corneum d) Papillary layer

5. The pigment which gives brown colour to skin is …….[R] [1]

   a) Melanin b) Keratin c) Keratohyalin d) Eleidin

6. The microorganism which causes impetigo is …….[U] [1]

   a) Staphylococcus aureus b)Campylobacter c) Streptococcus d) Salmonella typhi

[1 X 6 = 6 marks]

Part B

Short Answer Type Questions

Answer **2** Questions

Each question carries **2** marks

7. Explain the term Anosmia [U] [1]
8. Describe the features of Hormones. [U] [3]
9. Explain dermis [U] [1]
10. Classify nervous system [R] [2]

[2 X 2 = 4 marks]

Part C

Short Essay Type Questions

Answer **4** Questions

Each question carries **5** marks

11. Explain the abnormalities of Olfactory senses. [U] [1]
12. Discuss the role of Taste buds. [U] [1]
13. Describe the secretions of Hypothalamus. [U] [3]
14. Explain synapse [U] [2]
15. Explain auditory defects [U] [2]
16. Differentiate between aqueous and vitreous humor [R] [1]

[5 X 4 =20 marks]

Part D

Essay Type Questions

Answer **2** Questions

Each question carries **10** marks

17. Explain the structure of tongue [U] [1]
18. Discuss the disorders of Pituitary gland [U] [3]
19. Explain the structure of skin [U] [1]
20. Explain the mechanism of impulse transmission [U] [2]

[10 X 2 =20 marks]

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

(2024 ADMISSION ONWARDS)

MG2DSCNBC100 – BIOCHEMISTRY OF ENERGY TRANSFORMATION

Duration: 2hrs Maximum Marks: 50

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

Each question is tagged with the appropriate Bloom's Revised Taxonomy level (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.) and the relevant course outcome (CO) number.
*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S).

Part A

Multiple Choice Questions

Answer **All** Questions

Each question carries **1** mark

1. Give an example of Transferases [K] [3]
   a) Transaminase b) Lipase c) Oxidase d) Isomerase
2. Which of the following components primarily make up the cell membrane? [K] [1]
   a) Proteins & CHOb) Proteins & Lipidsc) Lipids &CHO d) CHO & Nucleic acids
3. Name the nitrogenous base present in RNA but absent in DNA [U] [3]
   a)Thymine b) Uracil c) Cytosine d) Adenine
4. Which type of carrier transports multiple molecules in both directions across the membrane? [K] [1]
   a)Uniport b) Symport c) Antiport d) Channel proteins
5. ……is a process in which RNA is synthesized from DNA. [U] [3]
   a) Translationb) Transcriptionc) Replication d) Phosphorylation
6. Transport that doesnot require energy is ……. [K] [1]
   a) Active transportb) Endocytosis c) Passive transport d) Vesicular transport

[1 X 6 = 6]

Part B

Short Answer Type Questions

Answer **2** Questions

Each question carries **2**marks

7. Define osmosis [K] [1]
8. Discuss the classification of high energy compounds. [U] [2]
9. Define Replication [K] [3]
10. Explain the IUB classification of enzymes. [U] [3]

[2 X 2 = 4]

Part C

Short Essay Type Questions

Answer **4** Questions

Each question carries **5** marks

11. Explain the components of ETC[U] [2]
12. Explain DNA recombination technology. [U] [3]
13. Discuss the Watson crick model of DNA.[U] [3]
14. Explain the ping pong mechanism of facilitated diffusion?[U] [1]
15. Discuss on carrier proteins.[U] [1]
16. Compare active and passive transport.[U] [1]

[5 X 4 =20]

Part D

Essay Type Questions

Answer **2** Questions

Each question carries **10** marks

17. Recall the factors affecting diffusion rate. [K] [1]
18. Explain Electron Transport Chain. [U] [2]
19. Explain Protein Biosynthesis. [U] [3]
20. Explain the different types of transport systems. [U][1]

[10 X 2 =20]

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

SECOND SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

MG2MDCCND100 – ADOLESCENT NUTRITION

Duration: 1 ½ hrs Maximum Marks: 35

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

Each question is tagged with the appropriate Bloom's Revised Taxonomy level (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.) and the relevant course outcome (CO) number.

* Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S).

Part A

Objective Type Questions

Answer **any 35** Questions

Each question carries **1** mark

1. Anthropometry is also known as…….. [U] [2]
2. ……. is an indicator of chronic malnutrition [U] [2]
3. Expand BMI [K] [2]
4. ……. is a symptom of iron deficiency in nails [K] [2]
5. Skinfold thickness is measured using …… [K] [2]
6. ……. is an example of indirect assessment [K] [2]
7. Brittle hair is due to the deficiency of…… [U] [2]
8. The eating disorder in which the person uses laxatives to purge out is …….. [U] [2]
9. The person is highly underweight and emaciated in ……. [U] [2]
10. Normal value of serum vitamin A is …… [K] [2]
11. The test used in estimation of vitamin D is …… [K] [2]
12. The instrument used for assessment of weight [U] [2]

13. Mid upper arm circumference is measured using……. [U] [2]
14. Normal range of BMI is ……. [U] [2]
15. Development of fine hair on arms and leg is …….[U] [2]
16. Glossitis is due to deficiency of…….[U] [2]
17. Normal range of haemoglobin in girls is ……. [K] [2]
18. Expand MUAC [K] [2]
19. …….. is a record of food consumed by an individual for over a week [U] [2]
20. The low level of serum ferritin is due to deficiency of…… [U] [2]
21. The age group between 10- 13 years is known as……. [U] [1]
22. The average age of onset of puberty for girls……. [K] [1]
23. The ……influence the growth and maturation of sex organs.[U] [1]
24. If BMI is >95th percentile the adolescent is considered to be ……. [U] [1]
25. Girls who experience …… begins to menstruate at later stage. [U] [1]
26. Tanner stage is also known as…… [K] [1]
27. Name the female sex hormones…… [K] [1]
28. Expand EER…….. [K] [2]
29. Intake of ……helps to reduce menstrual cramps. [K] [2]
30. Elemental Ca: P ratio in adolescents …….. [R] [2]
31. Name the mineral needed for the increase in RBC volume. [U] [2]
32. RDA for Vitamin D in adolescents. [K] [2]
33. The mineral which helps in the absorption of calcium and phosphorus. [K] [2]
34. ……..is referred to as the most important meal of the day.[U] [2]
35. Junk foods is also known as…….. [K] [2]
36. Name the hormone known as happy hormone. [K] [2]
37. ……. is a precursor of type 2 diabetes mellitus. [U] [2]
38. Expand LDL. [K] [2]
39. An excessive intake of calorie and lack of physical activity leads to…….. [U] [2]
40. With the practice of early marriage, the adolescent girls are at risk of …… [U] [2]