

Question Paper
2018-2019

Government arts and science college for women , Bargur

Department of Nutrition and Dietetics - 2018

CYCLIC TEST - 1

Class: III B.Sc, Nutrition & Dietetics

Subject: **FOOD SANITATION AND HYGIENE**

Answer all the questions:

Mark:25
[5 X 2 = 10]

1. Define Press plate Technique.
2. Define hygiene
3. What is sanitation.
4. List out microbial growth pattern.
5. Define dehydration

Answer all the questions:

[3 X 5 = 15]

6. Enumerate on osmotic pressure which affects the growth of microbes. (or)
7. Write a notes on dye reduction test.

Answer all the question.

(1x10=10)

8. Briefly explain the factors affecting microbial proliferation.

Subject in charge

HOD

Government Arts and Science College for Women, Bargur-635104

Department of Nutrition and Dietetics

II M.Sc.- Food and Nutrition

Cycle Test-II Medical Nutritional Therapy *Sep 2018*

Time: 2 Hours

Section-A (Answer any 4) (4*5=20 marks)

Marks: 50

1. Write a short note on chronic obstructive pulmonary disease.
2. Write briefly about the causes and pathology of pneumonia.
3. Elucidate the symptoms and treatment of gout.
4. Discuss the epidemiology and risk factors in stroke.
5. Describe the pathogenesis and clinical features of cardiac arrest.

Section-B (Answer any 3) (3*10=30 marks)

6. Discuss the causes, pathology and dietary management of tuberculosis.
 7. How do you differentiate osteo arthritis from rheumatoid arthritis? Suggest suitable dietary modifications for both.
 8. Describe the epidemiology, clinical features, diagnosis and dietary treatment of hyper tension.
 9. Write the causes, symptoms, development and preventive measures for atherosclerosis.
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2018

Government Arts and Science College for Women, Bargur-635104.
Department of Nutrition and Dietetics
Model Examination Oct -2018

Class : 1 M.Sc Food and Nutrition
Sub : Food Processing

Time : 3 Hrs
Marks : 75

Section - A (5×5=25 marks)

Answer all the Questions

1. a) Write the basic principles and Needs of food processing (or)
b) Enumerate the Low temperature in food processing.
2. a) write short notes on parboiling rice and its advantages (or)
b) Write short notes on by products of major milling processing.
3. a) Discuss about the techniques involved in oil extraction (or)
b) Write a short notes on preparation of meal concentrates and isolates
4. a) Write short notes on pasteurization of milk. (or)
b) Discuss about the manufacture of butter.
5. a) Write about the processing of fish (or)
b) Write short notes on manufacture of egg powder

Section-B (5×10=50 marks)

Answer all the Questions

6. a) Briefly explain the nutritional effect on food processing (or)
b) Explain the types of sugars and its function.
7. a) Discuss the steps in modern milling of wheat (or)
b) Write the processing of potato chips and powder.
8. a) Discuss briefly about the soya bean technology. (or)
b) Explain the extraction of oil and its byproducts.
9. a) Discuss the various products on milk substitutes homogenization and pasteurization.
(or)
b) Explain briefly about the manufacture of lassi and ice cream.
10. a) Explain briefly on the potato processing and its byproducts. (or)
b) Discuss about the processing of fish.


Subject Incharge


Signature of HOD

Government Arts and Science College for Women , Bargur

Department of Nutrition and Dietetics

Cycle test -I – Jan 2019

Paper Name-Research Methodology Date : 07 /01/19

I.M.Sc Food & Nutrition

I. Answer any three of the following: $3 \times 5 = 15$

Total:25 marks

1. Write about objectives of research.
2. Write briefly about significance of research.
3. Explain about research methods versus methodology.
4. Explain about research and scientific method.

II. Answer any one of the following: $1 \times 10 = 10$

1. Write briefly about types of research.
2. Write about research process.


Subject Incharge


Head of the Department


Subject Incharge


Head of the Department

Government Arts and Science College for Women , Bargur

Department of Nutrition and Dietetics

I- M.Sc Food and Nutrition

Cycle test -II- Jan 2019

Paper Name: Food Science II

Date : 7 /01/19

I Answer any three questions: (3×5 = 15)

1. Draw the structure of egg and explain their parts.(or)
2. Give the classification of poultry
3. Write short notes on determining the quality of egg
4. Write about the nutritive value of egg.

II Answer any one of the following: (1×10=10)

5. Describe about effect heat on egg protein and factors affecting coagulation of egg proteins.
6. Write briefly about processing and cooking of poultry.



Subject Incharge



Head of the Department

30 Copies

Government Arts and Science College for Women , Bargur
Department of Nutrition and Dietetics
Model examination – March' 2019

Class: III B.Sc, Nutrition & Dietetics
Sub: Community Nutrition

Time: 3 hrs
Marks:75
[10 X 2 = 20]

I . Answer all the questions:

1. Define community nutrition.
2. Define IMR.
3. What is MMR? .
4. What is BMI?
5. What is malnutrition?
6. What is meant by LBW?
7. Mention the methods of nutrition education.
8. Write the functions of CFTRI.
9. Write any four objectives of ICDS.
10. Expand NNMB

II . Answer all the questions:

[5 X 5 = 25]

- 11 a) Explain the ecology of malnutrition. (or)
b) Describe the vicious cycle of poverty.
- 12 a) Explain the clinical assessment of nutritional status of community.(or)
b) Write note on Dietary assessment method.
- 13 a) Explain the uses of any two teaching aids used in nutrition education.(or)
b) Write the merits of nutrition education.
- 14 a) Explain the role of FAO in preventing malnutrition.(or)
b) Explain the role of ICMR in improving nutritional status of community
- 15 a) Write a note on Vitamin A Prophylaxis programme. (or)
b) Explain briefly on Mid day meal program.

III . Answer any Three of the following:

[3 X 10 = 3]

16. Describe the socio –cultural factors responsible for mal nutrition .
17. How are Anthropometric measurements used in assessing the nutritional status?
18. Briefly explain the principles of planning ,execution and evaluation of nutrition education programme.
19. Describe the objectives and functions of WHO.
20. Explain the objectives and services of ICDS.


Sign of subject Incharge


sign of the HOD

(For the candidates admitted from 2017-2018 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2019.

Second and Fourth Semester

ALLIED CHEMISTRY - II

(Common for Bio-Chem./Bot./App. Geo./Geo/Maths/
Nut. Diet./Phy./Zoo.)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What is effective atomic number?
நினைவு அணு எண் என்றால் என்ன?
2. State any two limitations of Pauling's theory of coordination compounds.
அணுவின் கோடுகளின் பெயரின் கோடுகளில் உள்ள ஏதேனும் இரு வரம்புகளை கூறுக.

3. What is mutarotation?
மியூட்டா சுழற்சி என்றால் என்ன?
4. How is glycine prepared?
கிளைசின் எவ்வாறு தயாரிக்கப்படுகிறது?
5. How is sulphadiazine prepared?
சல்பாடையசின் எவ்வாறு தயாரிக்கப்படுகிறது?
6. Mention any two uses of penicillin.
பெனிசிலினின் ஏதேனும் இரு பயன்களை குறிப்பிடுக.
7. What is quantum yield?
குவாண்டம் விளைவு என்ன?
8. Write the reduced phase rule equation.
குறைக்கப்பட்ட நிலைமை விதி சமன்பாட்டை எழுதுக.
9. What is EMF?
EMF என்றால் என்ன?
10. Define Kohlrausch law.
வொல்ராஸ்ட் விதி.

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S.No. 1889

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Write the IUPAC names of following :
 - (i) $\text{Na}_2[\text{Co}(\text{CO})_4]$
 - (ii) $[\text{Ni}(\text{CN})_4]^{2-}$
 - (iii) $\text{K}[\text{Ag}(\text{CN})_2]$
 - (iv) $[\text{Cu}(\text{NH}_3)_4]^{2+}$
 - (v) $[\text{PtCl}_2(\text{NH}_3)_2]$கீழ்வரும் கோடுகளின் IUPAC பெயர்களை எழுதுக.
 - (i) $\text{Na}_2[\text{Co}(\text{CO})_4]$
 - (ii) $[\text{Ni}(\text{CN})_4]^{2-}$
 - (iii) $\text{K}[\text{Ag}(\text{CN})_2]$
 - (iv) $[\text{Cu}(\text{NH}_3)_4]^{2+}$
 - (v) $[\text{PtCl}_2(\text{NH}_3)_2]$

Or

- (b) What is Haemoglobin? Draw its structure and explain biological role.
ஹீமோகுளோபின் என்றால் என்ன? இதன் அமைப்பை வரைந்து அதன் உயிரியியல் பங்கை விளக்குக.

3

S.No. 1889

12. (a) Explain the interconversion of glucose to fructose and fructose to glucose.
குளுக்கோஸை பிரக்டோஸாகவும் மற்றும் பிரக்டோஸை குளுக்கோஸாகவும் மாற்றுவது பற்றி விளக்குக.

Or

- (b) Write the preparation and any three properties of alanine.
அலானின் தயாரிப்பு மற்றும் ஏதேனும் மூன்று பண்புகளை எழுதுக.
13. (a) Discuss the causes and treatment of AIDS.
எய்ட்ஸ்க்கான காரணங்களையும் அதன் சிகிச்சை முறைகளையும் விளக்குக.

Or

- (b) Explain the preparation, uses and mode of action of prontosil.
புரோண்டசில் தயாரிப்பு பயன்கள் மற்றும் செயல்படும் முறைகளை விளக்குக.

14. (a) With suitable example for each explain fluorescence and phosphorescence.
உடனடி ஒளித்தல் மற்றும் தாமத ஒளித்தல் ஒவ்வொன்று எடுத்துக்காட்டும் விளக்குக.

Or

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S.No. 1889
[P.T.O.]

- (b) Draw and explain the phase diagram of water system.
நீர் அமைப்பின் நிலைமை வரைபடத்தை வரைந்து விளக்குக.
15. (a) How is p^H of a solution determined? Explain.
கரைசலின் p^H எவ்வாறு அளவிடப்படுகிறது? விளக்குக.

Or

- (b) Write note on standard electrode potential and reference electrode.
நிட்ட மின்முனை அழுத்தம் மற்றும் ஒப்பீட்டு மின்முனை பற்றி குறிப்பு எழுதுக.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. (a) Write the postulates of valence bond theory of coordination compounds. (5)
(b) Discuss the classification of ligands based on denticity with suitable example for each. (5)
(அ) அளவைச் சேர்மங்களுக்கான இணைதிறன் பிணைப்பு சொல்வகையின் கருதுகொள்களை எழுதுக.
(ஆ) இணைப்பு திறன் அடிப்படையில் ஈனிகளை வகைப்படுத்தி ஒவ்வொரு உதாரணத்துடன் விளக்குக.

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17. (a) How is fructose prepared? Write its any three important reactions. (5)
(b) Write note on cellulose. (5)
(அ) பிரக்டோஸ் எவ்வாறு தயாரிக்கப்படுகிறது? இதனின் ஏதேனும் மூன்று முக்கியமான வினைகளை எழுதுக.
(ஆ) செல்லுலோஸ் பற்றி குறிப்பு வரைக.
18. (a) Explain local anaesthetics and general anaesthetics. (5)
(b) Write the uses of chloramphenicol and streptomycin. (5)
(அ) தனி உறுப்பு மயக்கலாடிகள் மற்றும் பொது மயக்க லாடிகளை விளக்குக.
(ஆ) குளோரம்பெனிகோல் மற்றும் ஸ்ட்ரெப்டோமைசினின் பயன்களை எழுதுக.
19. (a) Explain the phase diagram of lead-silver system. (5)
(b) Write notes on freezing mixtures. (5)
(அ) காபியம் - வெள்ளி அமைப்பின் நிலைமை வரைபடத்தை விளக்குக.
(ஆ) உறை கலவைகள் பற்றி குறிப்புகள் எழுதுக.

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S.No. 1889

20. (a) What are conductometric titrations? Explain the conductometric titration between strong acid and strong base. (5)
(b) Mention any five methods of prevention of corrosion. (5)
(அ) மின்கடத்து தரம் பார்த்தல் என்றால் என்ன? வலிமை மிகு அமிலத்திற்கும் வலிமை மிகு காரத்திற்கும் இடையேயான மின்கடத்து தரம் பார்த்தலை விவரி.
(ஆ) அரிமானத்தை தடுக்கும் ஏதேனும் ஐந்து முறைகளை குறிப்பிடுக.

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S.No. 1889

Question Paper
2019-2020

2019-20

Ist cyclic Test - July - Aug - 2019

Government Arts and Science College for Women, Bargur

Department of Nutrition and Dietetics

Cycle test - I - "August 2019"

Class : I B.Sc.(N&D)

Paper Name : Human physiology

Time: 1 Hr

Marks: 25

I Choose the correct answer

(5×1 = 5)

1. The structure in a cell that controls the cell's activities is called the-----
a) Cell wall b) Cytoplasm c) Mitochondrion d) Nucleus.
2. The jelly like fluid substance present in cell is called. _____
a) Protoplasm b) Chromosome c) Chloroplast d) Cytoplasm.
3. Power house of the cell is _____
a) Golgai apparatus b) Mitochandria c) Lysosome d) DNA
4. -----forms the Nerve cells.
a). Gray matter b) Neuroglia c) White matter d) Axon.
5. Example of involuntary muscle.
a) Hand b) leg c) heart d) trunk

II Answer any one of the following (2×5 = 10)

6. Explain the functions of animal cell.
- 7 Draw a structure of neuron and explain.

III Answer any one of the following (1×10 = 10)

8. a) Draw and explain the organelles of an animal cell.(or)
b) Classify tissues and explain epithelial tissues in detail

M. r. k. vijayalakshmi
Subject Incharge


Head of the Department

Government Arts and Science College for Women, Barugur

Department of Nutrition and Dietetics

Cycle test - II - "September 2019"

Class : I M.Sc (F&N)
Paper Name : Nutrition Through Life Cycle

Time: 2 Hrs
Marks:50

I Choose the correct answer

(10×1=10)

1. The second trimester ends at week
a) 15 b) 20 c) 25 d) 30
2. A full term fetal body is made up of ----- g of calcium
a) 20 b) 25 c) 30 d) 35
3. ----- is an iron containing protein found both in colostrum and mature milk.
a) Immunoglobulin b) Lymphocytes c) Interferon d) Lactoferrin
4. At birth the hemoglobin level of a infant is -----g/ 100 ml
a) 17-20 b) 13-14 c) 10-12 d) 18-21
5. Healthy child doubles his /her birth weight by ----- months.
a) 3 b) 4 c) 5 d) 6
6. The milk that comes at the starts of a feed is called -----
a) Transition milk b) Colostrum c) Fore milk d) Hind milk
7. ----- is the first immunization to the infant
a) DPT vaccine b) Polio drops c) Colostrum d) Hepatitis A vaccine
8. Mashed food is started around the ----- or ----- month of life.
a) 4 or 5 b) 5 or 6 c) 6 or 7 d) 7 or
9. The peak prevalence of kwashiorkor is frequently seen in the age group of ----- years
a) 1-2 b) 2-3 c) 3-4 d) 4-5
10. Women with hemoglobin levels below -----g/dl are considered to be severely anemic
a) 5 b) 6 c) 7 d) 8

II Answer any four of the following (4×5=20)

11. Describe the complications of pregnancy.
12. Explain the gastro intestinal problems during pregnancy.
13. Explain the role of hormones in milk production.
14. Explain the factors affecting the quantity and quality of milk.
15. List the problems of weaning and explain any two in detail.

III Answer any two of the following (2×10=20)

16. Describe the nutritional requirement of PEM child and explain the dietary treatment.
17. Discuss the eating disorders of adolescent girls .
18. Write a note on packed lunch and plan a packed lunch for a 12 year old girl.


Subject Incharge


Head of the Department

8 copies

Government Arts and Science college for Women-Barugur

Department of Nutrition and Dietetics

Model Examination-Oct'19

Course Name: I B.Sc(Nutrition and Dietetics)

Marks:75

Paper Name: Human Physiology

Time :3 Hrs

I. Choose the correct answer (15x1=15 marks)

1. Blood is a specialized-----which is fluid in nature.
a)Adipose tissue b)Muscular tissue c)connective tissue d)Nervous tissue
2. -----is the amount of blood ejected per beat of the heart.
a)Blood volume b)Stroke volume c) Blood vessels d)None
3. The total lung capacity and residual volume is-----
a)5 liter b)10 liter c)15 liter d)20 liter
4. -----ml of Glomerular filtrate is formed per minute.
a)100 ml b)200 ml c)300 ml d)400ml
5. White blood cell is manufactured in-----
a)Bone marrow b)Nucleus c) Blood stream d) Lymphocytes.
6. How much gastric juice is secreted perday.
a)1 liter b)V2-3 liter c)3 liter d) 4 liter
7. Pepsinogen is activated by -----to form pepsin.
a)HCL b)Sodium c) Pottasium d)Choloride
8. The hepatic artery and the portal vein carries blood to-----
a)Liver b) Kidney c) Blood stream d) Lung
9. Islets of langerhans secrete hormone like-----
a) Insulin b)Glucogon c)Oxytoxin d)Insulin and Glucogon.
- 10.The cell wall measures approximately _____ in the thickness.
a)70 A b) 40 A c) 90 A d) 10 A
- 11.-----forms the nerve cells.
a)White matter b)Neurogila c) Axon d)Gray matter
- 12.-----tissue form the covering or lining to the free surface of the body.
a)Epithelial tissue b)Connective tissue c)Nervous tissue d)Muscular tissue.

13. In _____ phase menstrual bleeding occurs.
a) Follicular phase b) Destructive phase c) Luteal phase d) Menophase

14. Ovary in females synthesis-----
a) Growth hormone b) estrogen c) testosterone d) thyrotrophic hormone

15. ----- is Caused by the over production of growth hormone in children
a) Dwarfism b) Cretinism c) Gigantism d) Myxedema.

II. Answer any 2 of the following (2x5=10 marks)

16. Explain the functions of animal cell.

17. Write an essay on menstrual cycle.

18. What are the different blood group.

19. Explain the urine formation.

20. Write an essay on menstrual cycle.

III. Answer all the following (5x10=50 marks)

21. a) Draw and explain the organelles of an animal cells. (or) b) Write a note on the classification of tissue and explain epithelial tissue in details.

22. a) Briefly explain the coagulation of blood. (or)

b) Explain the composition of blood.

23. a) Explain the physiology and function of liver. (or)

b.) Explain the cardiac cycle.

24. a) Explain the factors affecting efficiency of respiration. (or)

b.) Discuss the structure and function of respiratory system.

25. a.) Briefly explain the structure and functions of thyroid gland. (or)

b.) Enumerate the female internal genital organs .

M. V. K. Vijayalakshmi
F.V.P

Sign of Subject Incharge

J. V. K.
Sign of HOD

(7 pages)

S.No. 368

19PFN02

(For the candidates admitted from 2019–2020 onwards)

M.Sc. DEGREE EXAMINATION,
NOVEMBER 2019,

First Semester

Food and Nutrition

NUTRITION THROUGH LIFE CYCLE

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

Choose the correct answer :

1. The fertility egg adheres to the wall of the uterus is known as _____.
(a) implantation
(b) conception
(c) preconception
(d) embryo

2. The sleepiness increase during the pregnancy is due to rising levels of _____ hormone.
(a) Oestrogen
(b) Progesterone
(c) FSH
(d) Human chorionic gonado tropin
3. _____ is the principle site for production of several hormones for regulation of foetal growth and development.
(a) uterus
(b) ovary
(c) placenta
(d) tissues
4. Iron requirement of lactating mother is _____.
(a) 35 mg (b) 32 mg
(c) 25 mg (d) 21 mg
5. The word Beikost refers to
(a) liquid
(b) semi liquid
(c) solid
(d) semi solid

12. Risk of developing eating disorders start at the age of _____.
- (a) 5-6 (b) 8-11
(c) 50 (d) 30
13. Progressive decline in water content is seen in _____.
- (a) pregnancy
(b) infancy
(c) old age
(d) adulthood
14. Osteoporosis in women in post-menopausal phase due to.
- (a) Progesterone deficiency
(b) Oestrogen deficiency
(c) Increased Oestrogen
(d) Increased Progesterone
15. Alzheimer disease is prevented by having _____ in blood.
- (a) ↓ DHA
(b) ↑ Fe
(c) ↑ DHA
(d) ↑ Vitamin B₆

PART B — (2 × 5 = 10 marks)

Answer any TWO questions.

16. Give the RDA of an pregnant mother of second trimester suffering from anemia.
17. List the advantages and disadvantages of breast feeding.
18. Mention the growth and development that occurs during pre school children.
19. Write a note on packed lunch.
20. Describe the nutritional problems that occur during old age.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

21. (a) Enumerate the complication that occur during pregnancy.
- Or
- (b) Draw the RDA table for the one-third trimester during pregnancy.

The total fat content of colostrum is _____.

- (a) less than mature milk
- (b) higher than mature milk
- (c) there is no fat
- (d) equal to mature milk

Low birth weight babies having _____ amount of weight.

- (a) 2.5 kg
- (b) less than 2.5 kg
- (c) 2.5-3 kg
- (d) 3 kg

Children with pica are at increased risk for lead poisoning and _____.

- (a) Fluorine deficiency
- (b) Iron deficiency anemia
- (c) Vitamin B deficiency
- (d) Vitamin C deficiency

9. In the rapid replacement of lost tissue to catch up with growth, children need a high energy diet with _____.

- (a) Ample protein
- (b) CHO
- (c) Fat
- (d) Vitamin

10. The protein requirements are not met, infants suffers from _____.

- (a) Marasmus
- (b) Kwashiorkor
- (c) PEM
- (d) Anaemia

11. The energy requirement for 14 years old boy _____ k.cal.

- (a) 2750
- (b) 2330
- (c) 3020
- (d) 2440

22. (a) Discuss the physiological process of lactation.

Or

(b) Explain the composition of colostrum and mature milk.

23. (a) Mention the RDA for the preterm baby.

Or

(b) Describe the different types of PEM.

24. (a) Illustrate the common nutritional problem that occurs during adolescent age.

Or

(b) List and explain the feeding problem that occurs among school going children.

25. (a) Explain the dietary modification that occur during old age.

Or

(b) Discuss the nutritional changes needed for the Alzheimers disease.

Government Arts and Science college for women, Bargur
Department of Nutrition and Dietetics
Cycle test I "Jan-2020"

Class: I M.Sc Food and Nutrition
Paper Name: Advanced Human Physiology
I Choose the correct answer

Time: 2 hours
Marks: 50 marks
2X5=10 mark

1. The plasma protein is responsible for blood coagulation is _____.
a) Fibrinogen b) Globulin c) Serum amylase d) Albulin
2. What is the cell membrane composed of _____.
a) Long chain amino acid chains b) Phospholipid bilayer with many other organic compounds
c) Just a phospholipid bilayer d) Crystol and eukaryotes
3. When substances are too big to move across the cell membrane with carrier proteins, what assists them?
a) Phospholipids b) Vacuoles c) Proteins stored in the cell membrane d) Vesicles
4. Which one of the following is connective tissue?
a) Ligament b) Tendon c) Blood d) All of them
5. Cells that stored fat are called _____.
a) Fibroblasts b) Macrophages c) Adipose tissues d) Mast cells
6. What happens when we exhale during normal breathing?
a) The residual amount of air remains in lungs b) The diaphragm is flattened c) The lungs are contracted d) None
7. _____ is located between two pleural sacs and is the central compartment of the thoracic cavity?
a) Hilum b) Pleura c) Mediastinum d) Thoracic cage
8. The tiny air sacs present in human lungs is called _____.
a) Alveoli b) Bronchus c) Bronchioles d) Cilia
9. Effects of hypothyroidism includes all except _____.
a) Diarrhoea b) Lethargy c) Anorexia d) Weight gain
10. This is not an endocrine gland.
a) Adrenal b) Pituitary c) Lacrimal d) Thyroid

II. Answer any two of the following.

2X5=10 marks

11. Write about the structure and functions of nucleus.
12. Give short notes on stem cells and its types.
13. What is Dalton's law of partial pressure?
14. Define lung volume and lung capacities

III. Answer any three of the following

3X10=30 marks

15. a) Write briefly about structure and functions of cell and cell organelles.(Or)
b) Briefly write the structure and functions of tissues.
16. a) Define cell theory and cell cycle and write briefly the differences between meiotic and mitotic cell. (Or)
b) Briefly explain mechanism of respiration.
17. a) Define Innate and Acquired immunity and briefly explain its types.(Or)
b). Write in detail about functions and disorders of hormones secreted by pituitary hormone.


Subject Incharge

Head of the Department

Government Arts and Science college for women, Bargur
Department of Nutrition and Dietetics
Cycle test II "February 2020"

Class: I M.Sc. Food and Nutrition
Paper Name: Food processing and Technology

Time: 2 hours
Marks: 50 marks
1X10=10 marks

I. Choose the correct answer

1. What is pitting?
a) Impart scratches and cracks on hard seed coat b) Removing pits c) Remove of large particles by air bubbles d) None of the above
2. Which of the following is not a step in modern milling of wheat?
a) Stone grinding b) Wheat conditioning c) Wheat milling d) Cleaning
3. What is the soaking period of pulses?
a) 2 to 8 hours b) 2 to 4 hours c) 2 to 6 hours d) 2 to 3 hours
4. An oil press is called
a) Expresser b) Boiler c) Expeller d) All of the above
5. Which of the following products is a processed form of rice?
a) Suji b) Flakes c) Bread d) All of the above
6. In parboiling method paddy steeped at 65-70°C for ____ hours.
a) 3-4 b) 5-6 c) 1-2 d) 2-4
7. During milling ____ can be removed usually by magnetic separator.
a) Sticks b) Stones b) Metals c) Husk
8. ____ is the ancient technique that has been used to make the cereals more palatable.
a) Milling b) Parboiling c) Flaking d) Puffing
9. Soaking legumes is helpful in destroying 28 percent of ____.
a) Trypsin inhibitor b) Haemagglutinin c) Tannin d) Saponin
- ____ is the method of oil extraction used by pressing of fleshy fruits.
a) Rendering b) Pressing c) Solvent extraction d) Hydrogenation
10. Oil cakes obtained by pressing operations still retain ____ percent of residual oil.
a) 5-15 b) 3-5 c) 10-12 d) 1-2

II. Answer any two of the following.

2X5=10 marks

11. Explain enzymatic Browning
12. Write about effect of processing on nutritive value of pulses
13. Write short notes on cereal products
14. Give the methods of oil extraction

III. Answer any three of the following

3X10=30 marks

15. a) Explain primary, secondary and tertiary processing of food (or)
b) Elaborate the classification of enzymes
16. a) Explain processing and milling of wheat (or)
b) Write about oil extraction methods and refining process
17. a) Enumerate on effect of processing on nutritive value and its properties of pulses (or)
b) Explain briefly about the processed products of rice


Subject Incharge

Head of the Department

Government Arts and Science college for women, Bargur
Department of Nutrition and Dietetics
Model Examination March 2020

Class: I B.sc Nutrition and Dietetics
Paper Name: Food Science

Time: 3 hours
Marks: 75 marks

I Choose the correct answer

15X1=15 marks

1. Foods are generally _____ materials.
a) Complex b) Compound c) Simple d) Derived
2. A _____ is a homogeneous mixture of two or more different substances.
a) Colloid b) Solution c) Emulsion d) Buffer
3. In a solution the dissolved substances are called _____.
a) Solvent b) Acid c) Bases d) Solutes
4. Cereals gives _____ kcal per 100g.
a) 360 b) 340 c) 250 d) 100
5. Oils from cereal grains are rich in _____.
a) Vitamin A b) Vitamin B c) Vitamin C d) Vitamin E
6. Thiamine content of brown rice per 100 gram is _____ μ g.
a) 320 b) 100 c) 150 d) 250
7. The protein present in wheat is _____.
a) Glutelin and gliadin b) Albumin c) Globulin d) Avidin
8. Pulses contain 55 to 60 percent of _____.
a) Energy b) Starch c) Protein d) Fat
9. _____ leguminous seeds have the highest trypsin inhibitor content.
a) Chick peas b) Rajmah c) Groundnut d) Red gram dhal
10. DOPA present in lentils cause _____.
a) Lathyrism b) Goitrogens c) Favism d) Saponins
11. _____ increases protein quality by destroying anti nutritional factors in pulses.
a) Soaking b) Freezing c) Refrigerating d) Heating
12. _____ reduces the cooking time by 70 percent and increases digestibility in pulses.
a) Dehulling b) Soaking c) Storage condition d) Environment factors
13. What is the fat percentage of cow's milk?
a) 9 b) 10 c) 15 d) 4
14. Which of the following is whey protein?
a) α -lactalbumin b) β -lactalbumin c) κ -lactis d) α -lactalbumin and β -lactalbumin
15. Which of the following is fat soluble vitamins are present in milk?
a) A b) D c) A&D d) B

II. Answer any two of the following.


2X5=10 marks

16. Give the functional classification of food.
17. Write the importance of parboiling rice.
18. Write the classification of vegetables.
19. List out the points for selection of fish.
20. Write the classification of beverages.

III. Answer all of the following

5X10=50 marks

21. a) Classify the five food groups with example and food pyramid.
b) Explain the moist heat method of cooking.
22. a) Explain in detail about structure and nutritive composition of wheat.
b) Explain briefly factors affecting the gelatinization.
23. a) Describe in detail about ripening and changes during ripening. (Or)
b) Explain the composition and nutritive value of milk.
24. a) Explain in detail about structure and nutritive composition of egg. (Or)
b) Explain the medicinal uses and volatile compounds of different spices and condiments in Indian cookery.
25. a) Explain the stages of sugar cookery. (Or)
b) Briefly explain types of tea and its processing methods with flow chart.


Subject In charge

Head of the Department

APRIL/MAY-2020

(8 pages)
S.No. 426

191PN05

(For the candidates admitted from 2019-2020 onwards)

M.Sc. DEGREE EXAMINATION

Second Semester

Food and Nutrition

FOOD SCIENCE - II

Time : Three hours

Maximum : 75 marks

PART A - (15 x 1 = 15 marks)

Answer ALL questions.

1. The most abundant mineral present in yolk is
- (a) phosphorus (b) calcium
(c) magnesium (d) iron
2. Yolk index is
- (a) diameter / height of yolk
(b) height of yolk
(c) height / diameter of yolk
(d) diameter of yolk

3. The thickness of albumen is due to
- (a) ovalbumin (b) mercaptalbumin
(c) ovomucoid (d) ovomerion
4. Which meat is never aged?
- (a) beef (b) mutton
(c) pork (d) lamb
5. Which of the following has highest fat
- (a) beef (b) pork
(c) mutton (d) liver goat
6. Lean fishes have _____ fat.
- (a) <2% (b) 2-5%
(c) 5% (d) >10%
7. Pheophytin is _____ in colour.
- (a) red (b) brown
(c) purple (d) yellow
8. _____ which is present in chlorophyll when heated in the presence of organic acids yields pale greenish grey colour.
- (a) copper (b) zinc
(c) magnesium (d) sulphur

10. The following fruits are rich in anthocyanin except
 (a) pears (b) plums
 (c) cherries (d) grapes
11. _____ oil is most susceptible for flavour retention.
 (a) soya bean (b) rice
 (c) cotton (d) coconut
12. Which of the following is a non-crystalline candy?
 (a) luscious (b) luscious
 (c) fudges (d) fudges
13. Which is the richest source of iron?
 (a) Almond
 (b) Gingelly seeds
 (c) Garden cress
 (d) Wal nut
14. Toxic component in nutmeg is
 (a) allicin
 (b) myristicin
 (c) allyl propyl sulphide
 (d) crocin

15. Caffeine is rich in
 (a) milk drinks
 (b) instant coffee
 (c) tea
 (d) brewed coffee
16. _____ increases the level of detoxification enzymes in the body.
 (a) bay leaves (b) caraway seeds
 (c) Anabotida (d) aniseed

PART B — (2 × 5 = 10 marks)

Answer any TWO questions.

17. Describe the factors determining the quality of egg.
18. Brief about the selection of fresh fish.
19. Write about the loss of nutrients during cooking of vegetables.
20. Outline about the toxins present in nuts.
21. Classify beverages with suitable examples.

PART C -- (5 x 10 = 50 marks)

Answer ALL questions.

21. (a) Discuss the role of egg in cooking.
Or
(b) Give the classification of poultry and beef on its nutrient composition.
22. (a) Describe the methods of tenderizing and curing meat.
Or
(b) Elaborate on the changes in meat during cooking.
23. (a) Discuss about the effects of heat, acid, alkali and metals on chlorophyll pigment.
Or
(b) Explain the post harvest changes and changes during ripening of fruits.
24. (a) Write about the types of rancidity and its prevention.
Or
(b) Describe the stages of sugar cooking.

25. (a) List the general functions of spices and discuss the points to be considered in preparing beverages.
Or
(b) Bring out the role of any five spices in cooking.

Question Paper

2020-2021

Government Arts and Science College for Women, Bargur

Department of Nutrition and Dietetics

Cycle test -I – November - 2020

Class: III B.Sc.N&D

Time: 2 Hrs

Paper Name: Nutrition For Fitness and Sports

Mark: 50

- I. Answer all the questions: (5X2 = 10)
1. Define physical fitness.
 2. What are actin and myosin?
 3. List the sources of energy for athletes.
 4. Write the nutritional assessment methods used for athletes.
 5. List the sources of proteins for athletes..
- II. Answer any two of the following: (2X 5 =10)
6. Write the physiology of exercise.
 7. Explain the Nutritional benefits for athletes.
 8. Write notes on nutritional counseling for athletes.
 9. Explain the nutritional sources of fat for athletes.
- III. Answer any three of the following: (3X10 =30)
10. Briefly explain energy sources for muscle uses for ATP and phosphocreatine.. (or)
Explain the nutritional assessment for athletes..
11. Explain the glucose and fat as an energy sources of muscles.(or)
Briefly explain the effect of excessive physical exercise on cardiovascular system..
3. Explain the adaptation of muscle and body physiology to exercise . (or)
Elaborate the anaerobic metabolism involved on high intensity bursts and power.

J.P.P.
Subject Incharge

J.M.
Head of the department

Government Arts and Science College for Women , Barugur

Department of Nutrition and Dietetics

Cycle test II - "November - 2020"

Class : I (B.SC) (N&D)
Paper Name : Value Education

Time:2 Hr
Mark:50 marks

I. Choose the correct answer

(10×1 = 10)

1. Development of a country can generally be determined by its-----
a) percapita income b) average literacy level c) health status of its people d) none
2. ----- process help in slowing ageing process
a) kayakalpa b) worries c) death d) philosophy
3. countries with higher income are ----- others
a) less stronger b) more organized C) less develop d) more develop
4. Guidelines on how you live: your belief about right and wrong-----
a) values b) goals c) short-term goals d) long-term goals
5. Which of the following disease/disorder are real medical illnesses-----
a) Anxiety b) Diabetes b) high blood pressure c) all of the above
6. To enjoy birth right and freedom ----- is the only safeguard.
a) love and compassion b) morality c) friendship d) all the above
7. All human beings wants-----
a) Individual fulfilling b) mutual fulfilling c) partially fulfilling d) None
8. These are ----- wisdom of perfection stages.
a) 5 b) 6 c) 3 d) 10
9. These are ----- stages of mind
a) 6 b) 10 c) 12 d) 8
10. Analysis of thought is called-----
a) introsection b) analysis c) thought d) all of above

II Answer any two of the following: (2×5 =10)

6. Write the eight special function of the mind.
7. Explain the deathlessness
8. Discuss three forms of protection.
9. Explain the special features of thought.

III Answer any THREE of the following: (3×10 =30)

10. Explain the aims techniques and benefits of kayakalpa.
11. Explain the ways to moralise the desire to achieve success.
12. Explain six roots of thoughts.
13. Briefly explain the ten stages of mind.
14. Describe the philosophy of life.


Subject Incharge


Head of the Department

Government Arts and Science College for Women, Bargur-635104.

Department of Nutrition and Dietetics

Model Examination –December-2020

Class : II M.Sc Food and Nutrition

Time : 3 Hrs

Sub : Micro Nutrients

Marks : 75

I. Choose the correct answer

1X15=15 marks

1. Sodium is excreted mainly through _____
a) Liver b) Skin c) Kidney d) Sweat
2. Magnesium is essential for _____
a) Intracellular enzyme b) Metabolism of Carbohydrate
c) Structure of DNA&RNA d) All of these
3. Phosphate level is increased in _____
a) Rickets b) Osteomalacia c) Hyper parathyroidism d) Renal failure
4. Absorption of calcium depends on the vitamin _____
a) Vitamin A b) Vitamin D c) Vitamin E d) Vitamin K
5. The absorption of potassium is mainly from
a) Stomach b) Small intestine c) Large intestine d) Duodenum
6. The excess or deficiency of certain nutrients affects requirements of other nutrient is
a) Interrelationship of nutrients b) Metabolism c) Catabolism d) Biosynthesis
7. The riboflavin requirement is found to be proportional to the _____ content of the diet
a) Protein b) Fibre c) Calcium d) Vitamin C
8. The requirement of _____ are influenced by quantity and quality of dietary protein and fats
a) Vitamin B2 b) Vitamin B1 c) Vitamin B6 d) Vitamin B12
9. The provitamin A(alpha beta and gamma carotene) absorption in liver requires _____
a) Protein b) Carbohydrates c) Fats d) Vitamin B6
10. Tryptophan present in protein is converted into _____ in the body
a) niacin b) pyridoxine c) Vitamin E d) Vitamin C
11. Which vitamin is water soluble?
a) Vitamin A b) Vitamin C c) Vitamin D d) Vitamin K
12. Deficiency of Vitamin A in children causes
a) Goiter b) Poor cognitive development
c) Poor bone growth d) Increased risk of mortality
13. Which one of the following foods does not contain retinol?
a) Liver b) Milk c) Eggs d) Carrots
14. Beriberi is caused due to the deficiency of
a) Vitamin B12 b) Vitamin B2 c) Vitamin B6 d) Vitamin B1

15. The enzyme transketolase part of the pentose phosphate pathway requires which B vitamin for optimal function?

- a) Biotin b) Pantothenic acid c) folate d) thiamine

II. Answer any two of the following Questions

(2×5=10 marks)


16. Discuss the deficiency of vitamin D
17. Write the effects of niacin deficiency.
18. Explain excretion and deficiency of sodium.
19. Write about the functions of iron.
20. Discuss about protein-energy interrelationship.

III. Answer all the Questions

(5×10=50 marks)

21. a) Brief on the function and deficiency of vitamin A (or)
b) Elaborate on the absorption, requirement and functions of vitamin E
22. a) Enumerate on the functions, RDA and deficiency of ascorbic acid. (or)
b) Discuss the functions, absorption, RDA and sources of thiamine.
23. a) Explain the functions, absorption and sources of phosphorus. (or)
b) Explain the function, absorption and RDA of calcium.
24. a) Write briefly about the food sources, RDA and functions of Zinc. (or)
b) Write in detail about the functions, absorption, RDA and sources of Iodine.
25. a) Write the effect of carbohydrates, fats and protein on vitamin requirements. (or)
b) Enumerate mineral – mineral interrelationship.

V. T. S.
Subject Incharge


Signature of HOD

S.No. 2467

17UND06

(For the candidates admitted from 2017–2018 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2020.

Fifth Semester

Nutrition and Dietetics

Core VI — DIETETICS AND COUNSELLING

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define Diet Therapy.
2. What is Tube Feeding?
3. Write about Chronic Bronchitis.
4. Define Emphyrema.
5. Give the code of Ethics of a Dietitian.
6. What is Atherosclerosis?
7. Write short note on Nutrition Counselling.

8. List the objectives of Diet Counselling.
9. What is undernutrition?
10. Write about Nutritional Assessment.

PART B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Explain the Clear-Fluid Diet.
Or
(b) Give an account on parental feeding Nutrition.
12. (a) Give the causes of Underweight.
Or
(b) Describe the causes of Constipation.
13. (a) Classify the types of Dietitian.
Or
(b) Write a note on Diet Chart.
14. (a) Write the requirements of Diet Counselling.
Or
(b) Give a note on motivation through Diet Counselling.

15. (a) Describe the advantages of Anthropometric measurements.

Or

- (b) Give an account on Biochemical Test.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elucidate the Enteral Nutrition.
17. Explain the causes, symptoms and dietary management of obesity.
18. Enumerate the responsibilities of a dietitian.
19. Briefly describe the purposes of Nutrition Counselling.
20. Elucidate the behavioral modification obtained through Nutrition Counselling.
-

Government Arts and Science College for Women, Bargur
Department of Nutrition and Dietetics
Cycle test -I – April-2021

Class : I M.Sc Food and Nutrition
Paper Name: Research methodology

Time: 2 Hrs
Mark: 50

I. Answer all the questions

(10X1=10)

1. Research is

(A) Searching again and again (B) Finding solution to any problem (C) Working in a scientific way to search for truth of any problem (D) None of the above

2. Which of the following is the first step in starting the research process?

(A) Searching sources of information to locate problem. (B) Survey of related literature
(C) Identification of problem (D) Searching for solutions to the problem

3. A common test in research demands much priority on

(A) Reliability (B) Usability (C) Objectivity (D) All of the above

4. Action research means

(A) A longitudinal research (B) An applied research (C) A research initiated to solve an immediate problem (D) A research with socioeconomic objective

5. Which of the following variables cannot be expressed in quantitative terms?

(A) Socio-economic Status (B) Marital Status (C) Numerical Aptitude (D) Professional Attitude

6. The essential qualities of a researcher are

(A) Spirit of free enquiry (B) Reliance on observation and evidence (C) Systematization or theorizing of knowledge (D) All the above

7. In the process of conducting research 'Formulation of Hypothesis' is followed by

(A) Statement of Objectives (B) Analysis of Data (C) Selection of Research Tools
(D) Collection of Data

8. A research paper is a brief report of research work based on

(A) Primary Data only (B) Secondary Data only (C) Both Primary and Secondary Data
(D) None of the above

9. Mean, Median and Mode are :

(A) Measures of deviation (B) Ways of sampling (C) Measures of control tendency (D) None of the above

10. Identify from the following, the class interval which is considered appropriate in a frequency distribution

A) 1-10 B) 11-20 C) 21-30 D) 31-40

2. Answer any two of the following

(2X5=10)

11. Give the objectives of research

12. Write short notes on research process

13. Write the techniques involved in defining the research problem

14. Calculate the mean from the following data

Mark 10-25 25-40 40-55 55-70 70-85 85-100

Frequency 6 20 44 26 3 1

3. Answer all of the following

(3X10=30)

15. a) Discuss in detail about the research process. (Or)

b) Discuss briefly about the types of research

16. a) Briefly discuss about the research design (Or)

b) Briefly explain the types of Sampling units

17. a) Enumerate the types of data collection (Or)

b) Calculate the mean, median, mode

Mark 11-20 21-30 31-40 41-50 51-60 61-70 71-80

Frequency 42 38 120 84 48 36 31

Government Arts and Science College for Women, Bargur.
Department of Nutrition and Dietetics
Cyclic test – II -2021

Class : I M.Sc Food and Nutrition

Time : 2 Hrs

Sub : Research Methodology

Marks : 50

I. Answer all the Questions (10×1=10 marks)

1. Data originally collected in the process of investigation are known as
a) Foreign data b) Primary data c) Third data d) Secondary data
2. An enquiry in which each unit of the universe is studied is called _____.
a) Sample b) Population c) Incomplete enumeration d) Complete enumeration
3. What is Secondary data?
a) Data collected in the process of investigation b) None c) Both d) Data collected from some other agency
4. Data collected by research institutions, scholars, trade associations but not published is
a) Personal Data b) Published Data c) Unpublished Data d) Collective data
5. Statistical enquiry means
a) It is science for knowledge b) Search for knowledge c) Collection of anything d) Search for knowledge with the help of statistical methods
6. Under stratified sampling population is divided into a number of sub-populations is called
a) Sample b) Random c) System d) Strata
7. Data processing involves the following steps:
a) Editing b) Coding c) Tabulation d) All of the above
8. After the data has been processed and analyzed, the research process requires:
a) Interpretation of data b) Presentation of data c) Reporting of data d) Testing of data
9. _____ establishes the technical report.
a) Logical conclusion b) Illogical Conclusion c) Personal prejudice d) Misplaced learning
10. Reports that provide data or findings, analyses, and conclusions are
a) informational reports b) progress reports. c) Summaries. d) analytical reports.

II. Answer any two of the followings (2×5=10 marks)

11. Write short notes on questionnaire and schedule
12. Give the types of classification
13. Write about graphical representation of data.
14. Give about meaning of interpretation techniques

III. Answer all of the following Questions (3×10=30 marks)

15. a) Write in detail about the secondary data collection (or)
b) Discuss about methods of collecting primary data.
16. a) Write in detail about the editing, coding and organization of data. (or)
b) Write in detail about the diagrammatic representation of data
- 17 a) Discuss about the types of research report (or)
b) Write in detail about the mechanism and precaution of writing report.


Subject Incharge

Signature of HOD

Government Arts and Science College for Women, Bargur.
Department of Nutrition and Dietetics
Model Examination July -2021

Class : I M.Sc Food and Nutrition Time : 3 Hrs

Sub : Research Methodology Marks : 75

I. Answer all the Questions (15×1=15 marks)

1. Research is

(a) Searching again and again (b) Finding solution to any problem (c) Working in a scientific way to search for truth of any problem

(d) None of the above

2. Which of the following is the first step in starting the research process?

(a) Searching sources of information to locate problem. (b) Survey of related literature (c) Identification of problem

(d) Searching for solutions to the problem

3. A common test in research demands much priority on

a) Reliability b) Usability c) Objectivity d) All of the above

4. Action research means

a) A longitudinal research b) An applied research c) A research initiated to solve an immediate problem

d) A research with socioeconomic objective

5. A reasoning where we start with certain particular statements and conclude with a universal statement is called

a) Deductive Reasoning b) Inductive Reasoning c) Abnormal Reasoning d) Transcendental Reasoning

6. Open-ended questions provide primarily _____ data.

a) Confirmatory data b) Qualitative data c) Predictive data d) None of the above

7. Which of the following variables cannot be expressed in quantitative terms?

a) Socio-economic Status (B) Marital Status (C) Numerical Aptitude (D) Professional Attitude

8. Questionnaire is a :

a) Research method b) Measurement technique c) Tool for data collection d) Data analysis technique

9. Which of the following is not a "Graphic representation" ?

a) Pie Chart b) Bar Chart c) Table d) Histogram

10. The introduction of a report should state which of the following:

a) Nature of the study b) Sources of information c) Scope of the study d) All of the above

11. The algebraic sum of deviations of a set from their arithmetic mean is _____

a) 0 b) 1 c) 2 d) none

12. The set which has only one mode is _____

a) Bimodal b) unimodal c) multimodal d) none

13. Correlation co-efficient indicates the direction is _____

a) Variations b) covariations c) Regression d) Equation

14. An possible outcome of a random experiment is _____

a) Sample space b) Event c) Random d) Trial

15. The shape of the normal distribution is _____

a) spherical b) Round c) Ball-shaped d) plane

II. Answer any two of the followings (2×5=10 marks)

16. Write about the important concepts of research designs.

17. Write short notes on editing and coding of data..

18. Write about precaution of writing report.

19. Find the arithmetic mean of the following frequency distribution.

X : 1 2 3 4 5 6 7

Y: 5 9 12 17 14 10 6

20. Two coins are tossed simultaneously. What is the probability of getting a head and a tail.

III. Answer all of the following Questions (5×10=50 marks)

21.a) Write in detail about the types of research.(or)

b) Discuss about the sampling design.

22.a) Write in detail about the methods of data collection(or)

b) Write in detail about the organization of data

23. a) briefly explain about the types of diagram. (or)

b) Write in detail about the mechanism and precaution of writing report.

24.a) Write the merits and demerits of mean deviations.

b) Calculate the co-efficient of variation of the following;

40,41,45,50,51,55,59,60,60

25.a)A bag contains 7 red ,12 White and a 4 green balls,what is the probability that.

i) 3 balls drawn are all white and

ii) 3 balls are drawn are one of each colour?

b) 12 coins are tossed. What are the probability in a single toss getting.

i) 9(or) more heads.

ii)less than 3 heads

iii) at least 8 heads

if the 12 coins are tossed 4096 times



Subject Incharge

Signature of HOD

S.No. 4186

17PFN08

(For the candidates admitted from 2017-2018 onwards)

M.Sc. DEGREE EXAMINATION, APRIL/MAY 2021

Third Semester

Food and Nutrition

MICRONUTRIENTS

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL the questions

Answer ALL the questions

1. (a) Explain the deficiency and absorption of vitamin A.

Or

(b) Enumerate the functions and sources of vitamin D.

2. (a) Outline the functions and deficiency of Thiamine.

Or

(b) Interpret the functions and requirement of pantothenic acid.

3. (a) Enlist the functions and deficiency of phosphorus.

Or

(b) Sketch out the importance of magnesium in the diet.

4. (a) Explicate the absorption and transport of iron.

Or

(b) Summarize the functions, requirement and toxicity of copper.

5. (a) Compose the inter-relationship between protein and energy.

Or

(b) Design the importance of carbohydrate on vitamin requirements.

PART B — (5 × 10 = 50 marks)

Answer any THREE questions.

6. (a) Explain the sources, functions and requirement of vitamin E.

Or

(b) Sketch on the functions, deficiency and sources of vitamin K.

7. (a) Elaborate the sources, functions and requirement of niacin.

Or

- (b) Discuss the functions and deficiency of pyridoxine.
8. (a) Explain the functions and deficiency of calcium.

Or

- (b) Examine the functions, deficiency and sources of sodium.
9. (a) Elaborate the sources, functions and metabolism of selenium.

Or

- (b) Discuss the functions, metabolism and toxicity of fluoride.
10. (a) Describe the effects of proteins and fats on vitamin requirements.

Or

- (b) Recommend the importance of mineral-mineral interrelationship.

Government Arts and Science College for Women, Barugur
Department of Nutrition and Dietetics
I Cycle test - "September - 2021"

Class: III B.Sc N&D
Paper Name: Bakery Science

Time: 2 Hr
Mark: 50 marks
(10×1 = 10)

I. Choose the correct answer

1. Baking is the process of cooking food at temperature from _____
a) 250-450°C b) 100-250°C c) 400-500 °C d) 50-100°C
2. _____ are stored in chiller at temperature of 0 -3°C.
a) Cakes & Pastry b) Desserts c) Bread d) Ice cream
3. _____ has a high speed centrifugation fan which circulates the hot air with in the oven.
a) Deck oven b) Convection oven c) Rotatory oven d) Juicer
4. _____ determines the gluten strength of the flour.
a) Protein b) Fat c) Vitamin d) Carbohydrates
5. The oven temperature for warming foods is _____.
a) 93-121°C b) 250-274°C c) 200-225°C d) 121-133°C
6. Shortening is another word for _____ used in baking.
a) Protein b) Fat c) Water d) Air
7. _____ is responsible for the attractive brown colour of baked products.
a) Flour b) Sugar c) Fat d) Water
8. _____ sugar is also called baker's special.
a) Granulated sugar b) Ultrafine sugar c) Powdered sugar d) Brown sugar
9. Which leavening agent is a single celled plant that feed on starch and sugar?
a) Baking powder b) Baking soda c) Yeast d) Air
10. Triticum aestivum is also called _____.
a) Duram wheat b) Soft wheat c) Hard wheat d) Red wheat

II Answer any two of the following

(5×2 =10)

11. Define baking and write the scientific principles involved in baking..
12. Give basic plan and layout of a bakery unit.
13. Write about the types of oven used in baking.
14. Write the different types of flour in baking.
15. What are the characteristics of a good quality flour.

III Answer all of the following

(3×10 =10)

16. a) Explain briefly about types of equipments and tools in bakery. (Or)
b) Explain briefly about baking ingredients and their functions.
17. a) Briefly explain nutritive composition of flour and its types. (Or)
b) Explain in detail about types of commercially available sugars and its uses.
18. a) Explain the types of fats used as shortening agents in baking. (Or)
b) Write in detail about mayonnaise preparation and its nutritive composition.


Subject Incharge


Head of the Department

Government Arts and Science College for Women, Barugur
Department of Nutrition and Dietetics
II Cycle test - "October - 2021"

Class: III B.Sc N&D
Paper Name: Sports Nutrition

Time: 2 Hr
Mark: 50 marks

I. Choose the correct answer

(10×1 = 10)

1. Glucose, fructose, Galactose, maltose and all examples of-----
a) complex carbohydrate b) protein c) simple carbohydrate d) None of the above
2. The amount of the protein required to maintain ideal body weight is _____
a) 72gms b) 36gms c) 90gms d) 13gms
3. How many amino acids must be available in diet _____
a) 23 amino acid b) 9 amino acid c) 17 amino acid d) none of the above
4. Which one of the following micro minerals helps us in blood clotting _____
a) potassium b) calcium c) sodium d) phosphorous.
5. Liver, meat, egg and dry fruits are the main sources of _____
a) copper b) iron c) chromium d) None of the above
6. All the succeeding are the nutrients found in our diet except _____
a) protein b) water c) protein d) fat
7. Which nutrients are essential for supplying the body with energy-----
a) protein b) carbohydrate c) fat d) all of them
8. Which of the following macronutrient helps build and repair muscle _____
a) carbohydrate b) protein c) fat d) water
9. How long do players have after exercise to consume carbohydrate and protein _____
a) 10-20mins b) 20-25mins c) 30-45mins d) 60-90mins
10. DOMS stands for _____
a) Delayed onset of muscle stiffness b) Delayed onset of muscle spasm c) Delayed onset of muscle soreness d) Delayed onset of muscle spleen.

II Answer any two of the following

(2×5 = 10)

11. Give short notes on importance of timing of the nutrient intake for an athlete.
12. Write a fluid requirement of an athlete per day.
13. Write short notes on any four foods to a power athlete during an event.
14. Write short notes on any four foods to a marathon runner after exercise.

III Answer all of the following

(3×10 = 10)

15. a) Explain the effect of differential intake of protein on athletic endeavor. (Or)
b) Enumerate the timing of fluid intake is important for athlete.
16. a) Explain the nutrition plan for a weight lifter during training. (Or)
b) Briefly explain the hydration strategies to be followed to optimize physical activity..
17. a) Enumerate the nutrition plan for before exercise on athletes (Or)
b) Briefly explain the carbohydrate, protein requirement for an athlete.


Subject Incharge


Head of the Department

GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN,
BARGUR
DEPARTMENT OF COMPUTER SCIENCE
II CYCLIC TEST - OCTOBER 2022

11 B.Sc (E&C) & 11 B.Sc(N&D)
Computer Applications for Office Automation

MAX. HOURS: 2
MAX. MARKS: 50

Department

ANSWER ALL QUESTIONS

SECTION - A (10 X 1 = 10)

- Name the application under MS Office software bundle, that we use to create audio visual presentation.
(A) MS Word (B) MS Excel (C) MS PowerPoint (D) MS Access
- Which one is the spreadsheet application that comes with MS Office software group?
(A) MS Word (B) MS Excel (C) MS PowerPoint (D) MS Access
- _____ is the intersection of a row with a column.
(A) Cell (B) Row (C) Column (D) All of these
- When you enter text in a cell in Excel, it also appears in the
(A) Status bar (B) Formula bar (C) Row heading (D) Name box
- Shortcut to Cuts the selected cells
(A) Ctrl + X (B) Ctrl + C (C) Ctrl + V (D) Ctrl + B
- Press _____ to select all rows and columns in the worksheet.
(A) Ctrl + A (B) Ctrl + B (C) Ctrl + C (D) Ctrl + D
- Which of the following tool enables you to add text to a slide without using the standard placeholders?
(A) Text tool box (B) Line tool (C) Drawing tool (D) Auto shapes tool
- What is a set of unified design elements that provides a look for your document by using color, fonts and graphics?
(A) Font face (B) Theme (C) Line spacing (D) Hyperlink
- Which dialog box is for setting the page size?
(A) Paragraph dialog box (B) Page Setting dialog box
(C) Setting Page dialog box (D) Page Setup dialog box
- What PowerPoint feature will you use to apply motion effects to different objects of a slide?
(A) Slide transition (B) Animation objects (C) Animation scheme (D) Slide design

SECTION - B (2 X 5 = 10)

ANSWER ANY TWO QUESTIONS.


- Write short notes on Do's and Don'ts of Excel
What is Row, Column and Cell address in Excel?
Describe in short about Powerpoint and its uses
Which shortcut key is used to open powerpoint, create new slide start and exit from the slideshow?

SECTION - C (3 X 10 = 30)

ANSWER ANY THREE QUESTIONS.

- Discuss in detail about the Excel Workbook window
Explain the Menus in Powerpoint
Explain the toolbars and icons in Excel
How to Navigate Within a Microsoft PowerPoint Slide Show.


SUBJECT INCHARGE


HEAD OF THE DEPARTMENT

(6 pages)
S.No. 2807

19UND08

(For the candidates admitted from 2019-2020 onwards)

B.Sc. DEGREE EXAMINATION, JUNE 2022

Sixth Semester

Nutrition and Dietetics

ADVANCED DIETETICS

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

1. "Icterus" is a technical term of _____
(a) Liver cirrhosis (b) Jaundice
(c) Pancreatitis (d) Peptic ulcer
2. The formation of stones in the absence of infection in the gall bladder is known as _____
(a) Cholelithiasis (b) Cholecystitis
(c) Cholangitis (d) Gangrene
3. Burns can be classified based on degree into _____ types.
(a) 3 (b) 4
(c) 2 (d) 5

4. The Hormone that converts glucose in the blood to ATP is _____
(a) Glucagon (b) Adrenalin
(c) Thyroxin (d) Insulin
5. Which one of the following diagnosis methods provides the average blood glucose level for the last seven days?
(a) Post prandial sugar test
(b) Urine test
(c) HbA1C
(d) Fasting blood sugar test
6. Which among the following is not an allergen?
(a) Milk (b) Wheat
(c) Egg (d) Cabbage
7. Infarction is a disease condition which represents _____
(a) Damaged tissue
(b) Necrosis of tissue
(c) Excessive growth of tissue
(d) Blockage of arteries

Which one of the following dietary fatty acids plays a significant role in positive health status in CVD?

- (a) n-3 and n-6 PUFA
- (b) MUFA
- (c) Saturated Fatty acids and Transfats
- (d) Both (a) and (b)

The lipoprotein component which transports dietary fats from the intestine to the bloodstream is known as _____.

- (a) Low-Density Lipoproteins
- (b) High-Density Lipoprotein
- (c) Chylomicrons
- (d) Very Low - Density Lipoproteins

Which among the following component called pass through the Glomerulus?

- (a) Leukocytes
- (b) Globulin
- (c) Prothrombin
- (d) Ketoacids

What is the normal GFR range?

- (a) 100 - 125 ml/min
- (b) 120 - 130 ml/min
- (c) 60 - 100 ml/min
- (d) 110 - 140 ml/min

- 12. _____ is the dialysis method in which the blood is cleaned within the body.
(a) Hemodialysis (b) Peritoneal dialysis
(c) Both (a) and (b) (d) None of the above
- 13. Accumulation of phenylalanine in the blood due to the impaired activity of phenylalanine hydroxylase is known as
(a) Tyrosinemia (b) Phenyl ketonuria
(c) MSUD (d) Homocystinuria
- 14. The eating disorder characterized by extreme food restriction and fear of getting weight is known as
(a) Anorexia nervosa (b) Bulimia Nervosa
(c) Both (a) and (b) (d) None of the above
- 15. The deficient functioning of _____ enzyme could cause galactosemia.
(a) Galactokinase
(b) UDP-galactose-4-epimerase
(c) Galactose-1-phosphate uridyl transferase
(d) All of the above

PART B — (2 × 5 = 10 marks)

Answer any TWO questions out of Five.

- 16. Discuss the symptoms, causes and dietary modifications for Jaundice.
- 17. Describe the etiology and types of Diabetes mellitus.

Government Arts and Science College for Women, Barugur
Department of Nutrition and Dietetics
Cycle test I - "Febrary - 2021"

Class: II M.Sc Food and Nutrition
Paper Name: Nutraceuticals

Time: 2 Hours
Mark: 50 marks

PART-A

I. Choose the correct answer

(10×1 = 10 marks)

1. Which of the following is defined as food, or parts of food, that provide medical or health benefits, including the prevention and treatment of disease?
a) Nutraceuticals b) Functional Foods c) Dietary supplements d) Pharmaceuticals
2. Which of the following is Prebiotic?
a) Fructo-oligosaccharide b) Galacto-oligosaccharide c) Xylo-oligosaccharide d) All of the above
3. Alpha linoleic acid is written as 18:3, which means
a) 18 carbon atoms and double bond at C-3 b) 18 hydrogen atoms and 3 carbon atoms c) 18 carbon atoms and 3 double bonds d) 18 single bonds and 3 double bonds
4. Omega-3 fatty acids are naturally high in salmon. Therefore, salmon can be classified as this type of food?
a) Fortified food b) Functional Food c) Dietary supplement d) Nutraceutical
5. Bioactive peptides are known for their ability to inhibit -----interactions.
a) protein-protein b) protein-carbohydrate c) protein-fat d) protein-minerals
6. The good sources of medium chain fatty acid is -----.
a) coconut meal b) oats meal c) sunflower oil d) cottonseed meal
7. Lowering low density lipoprotein cholesterol (LDL-c) is a central target in the prevention of-----
a) diabetes b) CVD c) kidney diseases d) Cancer
8. Antioxidant peptides are extracted from _____ precursor protein
a) Antioxidant b) non antioxidant c) Both a&b d) None of these
9. Phenolic compounds and phytosterols are antioxidant related to risk reduction of -----diseases.
a) non-communicable diseases b) communicable diseases c) both a&b d) none of these
10. The gelatinous and mucilage type of polysaccharides are found in _____
a) seeds b) stem c) roots d) all of these

PART-B

II Answer any TWO of the following

(5×2 =10 marks)

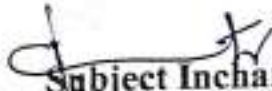
11. Define Nutraceuticals and functional foods.
12. Define prebiotics and its importance in nutraceuticals.
13. Give the classification of nutraceuticals.
14. Write short notes on properties of conjugated linoleic acid.
15. Write short notes on properties of bioactive peptides.

PART-C

III Answer ALL the questions

(3×10 =30 marks)

16. a) Discuss about the functional food versus pharmaceuticals. (Or)
b) Briefly discuss about the role of proactive carbohydrates in colon cancer
17. a) Briefly explain the role of prebiotics act as a nutraceuticals. (Or)
b) Discuss the nutraceutical properties of bioactive peptides.
18. a) Describe the nutraceutical properties of bioactive lipids (Or)
b) Briefly explain the immune modulating peptides.


Subject Incharge


Head of the Department

Government Arts and Science College for Women, Barugur
Department of Nutrition and Dietetics
Cycle test I - "February - 2021"

Class: II M.Sc Food and Nutrition
Paper Name: Food Preservation

Time: 2 Hours
Mark: 50 marks

PART-A

I. Choose the correct answer

(10×1 = 10 marks)

1. Prevention or delay of microbial decomposition by removal of micro organism is -----
a) asepsis b) filtration c) irradiation d) heating
2. Which of the following is an example for natural preservative?
a) citric acid b) oil c) KMS d) acetic acid
3. An example for high acid food is -----
a) tomato b) pumpkin c) beans d) sauerkraut
4. TDT curve indicates that the ----- the initial microbial population in a food, the ----- is the heat treatment required for its destruction.
a) greater, lesser b) greater, greater c) lesser, greater d) lesser, lesser
5. Thermal death point is the ----- necessary to kill all the microorganisms in a fixed time.
a) moisture b) pH c) air d) temperature
6. Heat resistance of microorganisms ----- with ----- in moisture, water activity and humidity.
a) increases, decrease b) increases, increase c) decreases, decrease d) decreases, increase
7. Refrigerators usually operate at ----- ° C.
a) 10 to 15 b) -10 to 10 c) 0 d) 4 to 7
8. In quick freezing, ----- ice crystals are formed.
a) fine b) large c) no d) none of these
9. Dehydration of food results in increase in -----.
a) moisture b) temperature c) osmotic pressure d) nutritive value
10. Dried food does not taste the same as fresh food.
a) true b) false c) partially true d) none of these

PART-B

II Answer any TWO of the following

(2×5 =10 marks)


11. How spoilage of food caused by insects and rodents can be prevented?
12. Explain the principle involved in drying of food.
13. Enumerate the role of pasteurization in milk preservation.
14. What is low temperature preservation? How is it used in everyday life?
15. Bring out 12D concept in food preservation.

PART-C

III Answer ALL the questions

(3×10 =30 marks)

16. a) Explain briefly about the principles of food preservation (Or)
b) Explain the factors affecting heat resistance of microorganisms.
17. a) Elaborate the heat treatments employed in processing of foods. (Or)
b) Discuss the types of freezing.
18. a) Explain different types of drying used in food preservation. (Or)
b) Explain the preparation of any one food preserved at home using drying method.


Subject Incharge


Head of the Department

Government Arts and Science college for women, Bargur
Department of Nutrition and Dietetics
Model Examination "June 2022"

Class: I M.sc Food and Nutrition
Paper Name: Food Science

Time: 3 hours
Marks: 75 marks

I Choose the correct answer

15X1=15 marks

1. Foods are generally _____ materials.
a) Complex b)Compound c)Simple d) Derived
2. A _____ is a homogenous mixture of two or more different substances.
a) Colloid b)Solution c) Emulsion d)Buffer
3. In a solution the dissolved substances are called _____.
a) Solvent b)Acid c)Bases d)Solutes
4. Cereals gives _____ kcals per 100g.
a) 360 b) 340 c)250 d)100
5. Which of the following is not a source of infection in milk _____.
a) Litter b) Milker and cow c)Heat d) Ambient air
6. Thiamine content of brown rice per 100 gram is _____ µg.
a) 320 b) 100 c)150 d)250
7. The protein present in wheat is _____.
a) Glutelin and gliadin b)Albumin c)Globulin d) Avidin
8. Pulses contain 55 to 60 percent of _____.
a) Energy b) Starch c)Protein d)Fat
9. _____ leguminous seeds have the highest trypsin inhibitor content.
a) Chick peas b) Rajmah c) Groundnut d) Red gram dhal
10. DOPA present in cotyledon cause _____.
a) Lathyrism b) Goitrogens c)Favism d)Saponins
11. _____ increases protein quality by destroying anti nutritional factors in pulses.
a)Soaking b)Freezing c) Refrigerating d) Heating
12. _____ reduces the cooking time by 70 percent and increases digestibility in pulses.
a)Dehulling b) Soaking c)Storage condition d)Environment factors
13. What is the drying temperature of pulses-----
a) 26-48°C b) 60-100°C C) 80-135°C d) 100-120°C
14. Which of the following is whey protein?
a) α-lactalbumin b) β- lactalbumin c)κ-lactis d) α-lactalbumin and β- lactalbumin
15. Which of the following is fat soluble vitamins are present in milk?
a) A b) D c) A&D d) B

II. Answer any two of the following.

2X5=10 marks

16. Write a importance of parboiling rice.
17. Write a short notes on skimmed milk.
18. Describe the decortications processing of legumes.
19. Explain the factors influencing gel formation.
20. Write shors on anti foaming agents.

5X10=50 marks

III. Answer all of the following

21. a) Briefly explain the physical properties of food.
b) Explain the moist heat method.
22. a) Explain in detail about structure and nutritive composition of wheat.
b) Explain briefly factors affecting the gelatinization.
23. a) Briefly explain the breakfast cereals foods (Or)
b) Explain the fermented milk products.
24. a) Explain the toxic constituents in pulses (Or)
b) Write a role of pulses in cookery and pulses in human nutrition.
25. a) Explain the types of milk (Or)
b) Briefly explain the effect of dry heat method.



Subject In charge



Head of the Department

(6 pages)

S.No. 86

19PFNE04

(For the candidates admitted from 2019-2020 onwards)

M.Sc. DEGREE EXAMINATION, JUNE 2022

Fourth Semester

Food and Nutrition

Elective - NUTRACEUTICALS

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

1. The function of insoluble fiber only is _____.

- (a) Regulating blood sugar
- (b) Regulating pH of the body
- (c) Adding bulk to stool
- (d) Lowering cholesterol

The type of resistant starch _____ is formed during the cooling of gelatinized starch.

- (a) resistant granules
- (b) glucosidase
- (c) retrograded amylose
- (d) physically inaccessible starch

3. Probiotics are _____.

- (a) synthetic nutraceuticals
- (b) vitamin supplements
- (c) helpful bacteria
- (d) digestive enzyme

4. The primary source of Omega-3 fatty acid is _____.

- (a) Vegetable oil
- (b) Fish and marine
- (c) Flax seed
- (d) Cereal grains

5. Which of the following is a low molecular weight, calcium binding protein involved in smooth muscle contraction?

- (a) troponin
- (b) myosin
- (c) calmodulin
- (d) pepsin

6. The peptides which have the ability to modulate the activity of the enzymes and receptors that regulate human blood pressure is _____.

- (a) bioactive peptides
- (b) opioid peptides
- (c) anticancer peptides
- (d) antihypertensive peptides

Carotenoid found in tomatoes, watermelon and
pepper is _____

- (a) lutein
(b) xanthophylls
(c) lycopene
(d) β -carotene

Richest source of phytoestrogen is _____

- (a) spinach
(b) soya bean
(c) cabbage
(d) potatoes

_____ polyphenolic compound that fight against
aging is _____

- (a) Resveratrol
(b) Curcumin
(c) Lignans
(d) Coumestans

Which forms of flavonoids are also known as
phyto-estrogens?

- (a) Flavonols
(b) Flavones
(c) Isoflavones
(d) Anthocyanidins

_____ phytochemical thiosulfonates is present in

- (a) Chillies
(b) Greens
(c) Peper
(d) Garlic and onions

3

S.No. 86

12. Broccoli and Cauliflower contain a chemical
component called _____ that can combat
breast cancer.

- (a) Allicin
(b) Indole-3-carbinol
(c) Tocopherols
(d) Betaine

13. Food sources of fructo oligosaccharides is

- (a) honey
(b) onion
(c) oats
(d) all the above

14. A live bacteria that can be consumed in foods like
yogurt is _____

- (a) probiotics
(b) prebiotics
(c) microbes
(d) synbiotics

15. Chillies contain _____ which possibly reduces
the risk of heart and artery diseases.

- (a) Curcumin
(b) Crocerin
(c) Capsaicin
(d) Papin

PART B — (2 × 5 = 10 marks)

Answer any TWO questions.

16. Write a note on resistant starch.

17. Explain about antihypertensive peptides.

18. Discuss about bioactive component resveratrol.

4

S.No. 86
[P.T.O.]

Government Arts and Science College for Women, Barugur
Department of Nutrition and Dietetics
Cycle test I – August 2023

Class: II B.Sc Nutrition and Dietetics
Paper Name: Food Processing and Preservation

Time: 2 Hrs
Mark:50

I Choose the correct answer.

1. Benzoic acid is an examples of _____. (1 X 10 = 10)
a) Antioxidant b) Salt c) Chelating agent d) Preservative
2. Heating of cans can be done _____.
a) In boiling water bath b) Using a steamer c) In Oven heat d) All of them
3. Which of the following is the process of converting sugar into alcohol?
a) Oxidation b) Pasteurization c) Bleaching d) Fermentation
4. What is the most common preservation method?
a) Freezing b) Fermentation c) Heating d) Freeze drying
5. Pasteurization is the process of heating milk _____.
a) Above 121°C b) Above the boiling point c) Below boiling point d) Above 150°C
6. Cold sterilization refers to the preservation of food by _____.
a) Refrigeration b) Radiation c) Dehydration d) Lyophilisation
7. What is marmalade?
a) Fruit preservative product b) Vegetable preservative product c) Thickening agent d) None
8. Which of the following is not an advantage under controlled conditions over sun drying?
a) Cost b) Time of drying c) Quality of drying d) Recycling
9. In dehydration of fruits the temperature is increased up to _____.
a) 60-66°C b) 50-56°C c) 66-71°C d) 75-81°C
10. Compounds evaporating easily and giving off smell are?
a) Ionic compounds b) Covalent bonds c) Metallic bonds d) Double bonds

II. Answer any two questions

(2 x 5 = 10)

11. Define food preservation and give scope of food preservation.
12. Write short notes on blanching.
13. Define drying and its types.
14. Write about the types of driers.

III. Answer all the questions

(3 x 10 = 10)

15. a) Write in detail about principles of food preservation. (Or)
b) Briefly explain about pasteurization and sterilization.
16. a) Explain in detail about canning. (Or)
b) Write in detail about evaporators and its types.
17. a) Describe about (i) dehydration and rehydration (ii) give the differences between drying and dehydration. (Or)
b) Briefly write about factors affecting evaporation.


Staff Incharge


HOD signature

Government Arts and Science College for Women, Barugur
Department of Nutrition and Dietetics
II Cycle test - "September - 2023"

Class: III B.Sc Nutrition and Dietetics
Paper Name: Public Health Nutrition

Time: 2 Hr
Mark: 50 marks

I. Choose the correct answer

(10×1 = 10)

1. For assessment of nutritional status of the population which method is used-----
a) Anthropometric measurement b) Clinical examination c) Vital statistics d) All of them
2. According to new guidelines of ICMR what amount of iron is required daily for a pregnant women per day-----
a) 20mg/day b) 30mg/day c) 35mg/day d) 40mg/day
3. A deficiency in which nutrient may cause macrocytic anemia-----
a) Biotin b) Iron c) Folate d) Zinc
4. Protein deficiency occurs in a child more than one year results in _____
a) Marasmus b) Kwashiorkor c) Proteinemia d) Deficiency disorder.
5. Which population is most at risk for malnutrition -----
a) Rural residents b) Urban residents c) Children under the age of 5 d) Elderly adults
6. How can malnutrition be prevented-----
a) Increasing access to nutrition food b) Improving sanitation and access to clean c) Providing education about nutrition d) all of the above
7. Who was the prime minister to launch the ICDS _____
a) Indira Gandhi b) Rajiv Gandhi c) Morarji Desai d) V P Singh
8. DDM commonly occurs at the age of -----
a) 40 b) 30 c) 20 d) childhood
9. The most noticeable feature on a infants face which are approximately 3/4th of normal adult eyes are _____
a) Eyes b) Nose c) Forehead d) Mouth
10. A process of change which is relatively independent of experiences-----
a) Maturity b) Cognitive development c) Learning d) Motor development

Answer any two of the following

(5×2 = 10)

1. Write short notes on FAO.

2. Write short notes on objective of nutritional assessment.

3. Give the advantages and disadvantages of direct and indirect assessment parameters.

(3×10 = 30)

Answer all of the following

1. Briefly explain the classification of nutritional assessment method. (Or)

2. Explain the mortality and morbidity rate.

3. Nutritional Assessment a) Vital statistics b) Economic factors of income, population

city (Or)

4. Discuss about the Mid-Day Meal program and ICDS.

5. Briefly explain the international agencies in combating malnutrition a) WHO b) UNICEF

6. Briefly explain the aim and function of CFTRI, ICMR and NIN.

Subject Incharge

Head of the Department

15 copies

Government Arts and Science college for women, Bargar
Department of Nutrition and Dietetics

Model Examination October 2023

Class: II M.Sc. Food and Nutrition

Subject: Community Nutrition

Marks: 75

Time: 3 hours

I. Answer all the questions (15×1=15marks)

1. The birth rate of India (2023) is ----- /1000 population.
a) 10.6 b) 60 c) 23 d) 16.1
2. Literacy rate of total Indian population (2011) is ----- %.
a) 53.8 b) 74.04 c) 85 d) 34
3. Infection causes increased ----- excretion in urine leading to negative nitrogen balance.
a) Protein b) nitrogen c) glucose d) lipids
4. In ABCD of nutritional assessment, "C" stands for -----.
a) Chemical b) calories c) clinical d) countable
5. Spooning of nails is seen in ----- deficiency.
a) Calcium b) phosphorus c) copper d) iron
6. Generalised accumulation of excess ----- in the body is known as obesity.
a) Fat b) protein c) calories d) iron
7. ----- is a tool to keep a watch on the nutritional status of communities over a period of time.
a) Nutrition monitoring b) nutritional status c) nutrition education d) recall
8. Diet and nutrition surveys are conducted by
a) NNMB b) NSSO c) FNB d) NFHS
9. ----- is the total number of live births for a given area and time period divided by total population at the midpoint of the time period.
a) crude birth rate b) total birth rate c) infant birth rate d) all of the above
10. ----- is the pre requisite for people to have an adequate and balanced food intake.
a) Availability b) knowledge c) cooked food d) household food security
11. Conventional strategies of nutrition education are focused on ----- with the patient.
a) Face to face contact b) group contact c) mass contact d) group discussion
12. Measurement of overall impact of the communication program is included in -----.
a) Planning b) training c) monitoring & evaluation d) implementation
13. Food ---- is the combination of food availability, food access and food utilization.
a) Security b) scarcity c) cultivation d) distribution
14. A short term and temporary condition of food insecurity is ----- food insecurity.
a) Chronic b) transitory c) seasonal d) all
15. Name the institution which has completed its 100 years of existence had its origin in Coonur.
a) ICMR b) ICAR c) NIN d) CFTRI

II. Answer any two of the following (2 × 5 = 10 marks)

16. Give a brief note on literacy and education trend of Indian population.
17. Explain the implication of fluorosis in the society.
18. Write about MMR and under 5 mortality rate.
19. Write the monitoring and evaluation of nutrition education program.
20. Discuss SNP and PMAY.

(P.T.O)

III. Answer all of the following (5 × 10 = 50 marks)

- 21. a. Explain the demographic profile of India in terms of population trends and life expectancy (Or) b. Explain family size and population density.
- 22. a. Explain obesity and anemia in community perspective. (Or)
b. Explain the bone disorders occurring due to nutritional deficiencies.
- 23. a. Explain about the objectives of nutrition monitoring and agencies involved in it. (Or)
b. Explain briefly about strategies used to combat malnutrition.
- 24. a. Discuss about the methods of imparting nutrition education program. (Or)
b. How will you plan and execute a nutrition education program for anemic adolescent girls.
- 25. a. Explain the aims, objectives and activities of ICDS. (Or)
b. Explain the aims, objectives and activities of FAO.

Jm

Subject In charge

Jm

Head of the Department

(6 pages)

S.No. 2431

21UND01

(For the candidates admitted from 2021-2022 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

First Semester

Nutrition and Dietetics

HUMAN PHYSIOLOGY

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

1. The term cell was given by
(a) Robert Hooke (b) Tatum
(c) Showann (d) De Bary
2. Microfilaments are composed of
(a) Tubulin (b) Actin
(c) Myosin (d) Chitin
3. "Lysosomes" are known as suicidal bags because
(a) Parasitic activity
(b) Presence of food vacuole
(c) Hydrolytic activity
(d) Catalytic activity
4. Which of the following blood cells play an important role in blood clotting?
(a) Thrombocytes (b) Neutrophils
(c) Leucocytes (d) Erythrocytes
5. In the ABO system, blood group 'O' is characterized by the:
(a) Presence of antigen O
(b) Presence of both antigen A and antigen B
(c) Absence of both antigen A and antigen B
(d) Presence of antigen A and absence of antigen B
6. The enzymes present in pancreatic juice are
(a) Amylase, trypsinogen, peptidase, rennin
(b) Trypsinogen, Lipase, Amylase, Procarboxypeptidase
(c) Peptidase, pepsin, amylase, rennin
(d) Maltase, Amylase, Trypsinogen, Pepsin

and monocytes

- (a) Physical barrier
 - (b) Cellular barrier
 - (c) Cytokine barrier
 - (d) Physiological barrier
- B - cells and T - Cells are two types of cells involved in

- (a) Innate immunity
- (b) Active immunity
- (c) passive immunity
- (d) Acquired immunity

_____ carrier deoxygenated blood to the lungs from the right ventricle.

- (a) Pulmonary artery
- (b) Pulmonary vein
- (c) Aorta
- (d) All of the above

In which part of respiratory system, gaseous exchange takes place.

- (a) Alveoli
- (b) Pharynx
- (c) Larynx
- (d) Trachea

Which of the following functions by filtering and keeping the mucus and dirt away from our lungs?

- (a) Cilia
- (b) Bronchioles
- (c) Hairs in lungs
- (d) All of the above

- 12. This artery passes blood to kidney.
 - (a) Common iliac
 - (b) Celiac
 - (c) Renal
 - (d) Coeliac
- 13. How does human sperm locomote?
 - (a) Flagella
 - (b) Cilia
 - (c) Neutrophils
 - (d) None of the above
- 14. The hormone that is released from testes is
 - (a) Progesterone
 - (b) Sacropresin
 - (c) Testosterone
 - (d) None
- 15. This is not an endocrine gland
 - (a) Adrenal
 - (b) Pituitary
 - (c) Lacrimal
 - (d) Thyroid

PART B — (2 × 5 = 10 marks)

Answer any TWO questions.

- 16. Detail on nervous tissue.
- 17. Discuss the blood grouping of human.
- 18. Differentiate innate and acquired immunity.
- 19. Explain the mechanism of urine formation.
- 20. Draw the female Reproductive system and explain.

Class: III B.Sc., Nutrition and dietetics
Paper Name: Physical Fitness and Sports Nutrition

Time: 2 Hrs
Mark:50

Choose the correct answer.

(1 X 10 = 10)

1. The ability of muscle to exert force on an object is _____
a) strength b) power c) speed d) Endurance
2. The muscle ability to work over a long period of time is _____
a) Flexibility b) body composition c) Intensity d) Muscular endurance
3. Cardiorespiratory endurance is _____
a) The body's ability to push b) The ability to move a joint through its full range of motion. c) The ability of the heart and lungs to supply oxygen to the body. d) None of them
4. _____ Attaches muscle to bone.
a) Tendon b) Ligament c) Both and them d) None
5. How many bones are in the human body _____
a) 200 b) 206 c) 205 d) 204
6. Why is it important to warm up before and after strength exercise _____
a) Prevents injury and avoid stiffness b) Increase blood flow and speeds recovery c) Makes ligaments and tendons stronger d) none of them.
7. The amount of force that a muscle can produce is _____
a) Muscular strength endurance b) Muscular strength c) power d) speed
8. The ability of joints to move beyond its nominal range is _____
a) speed b) Agility c) Endurance d) power
9. The amount of time it takes to make a physical response is _____
a) Speed b) Cardio-respiratory endurance c) Agility d) Reaction time
10. The ability to move from one point to another in furthest time is _____
a) Agility b) speed c) Endurance d) power

Section B (2 x 5 = 10)

II. Answer any two questions .

11. Write the energy source for muscle use in phosphocreatine.
12. Write the physiology of exercise.
13. Write the actin and myosin
14. Explain the source of energy for athletes.
15. Write the biochemistry of exercise..

III. Answer all the questions Section C (3 x 10 = 10)

16. a) Explain excessive physical exercise on cardio vascular system. (or)
b) Explain glucose and fat as an energy source for muscles.
17. a) Enumerate the need for nutritional counseling for athletes. (or)
b) Explain adaptation of muscle and body physiology to exercise.
18. a) Elaborate the hydration strategies to be followed to optimize physical activity. (or)
b) Write about body and weight composition of athletes.

Incharge's sign

HOD sign

CLASS : II B.Sc (N & D)
SUBJECT : Allied Paper - Image Editing Tool

MAX. HOURS: 2
MAX. MARKS: 50

SECTION - A (10 X 1=10)

I. ANSWER ALL QUESTIONS

1. The Pen tool is used to create
a) Tools b) Points c) Straight Lines d) Clone
2. The _____ tool has a collection of pre-designed shapes, such as star, sun, and moon.
a) Custom Shape b) Brush c) Dialog d) Pen
3. The _____ is created to add a sheet of pixels to an image.
a) Mask b) Color c) Layer d) Resolution
4. What is the shortcut key used to shifts the layer down by one level?
a) Ctrl+] b) Shift + [c) Ctrl+Shift +] d) Ctrl+ [
5. _____ applies a three- dimensional edge effect to an image.
a) Bevel and Emboss b) Drop Shadow c) Glow d) Stroke
6. The _____ tool is used to lighten the pixels in an image.
a) Smudge b) Sponge c) Dodge d) Blur
7. _____ are special effects that can be applied on an image.
a) Filters b) Styles c) Retouching d) Shapes
8. Merging all the layers of an image into one single layer is known as _____.
a) Combining b) Flattening c) Collecting d) Grouping
9. The _____ icon indicates the visibility of a layer in the layer palette.
a) Magic Tool b) Opacity c) Eye d) Lock
10. The _____ option is used to remove a layer effect permanently.
a) Eraser b) Clear Layer Style c) Delete d) None

SECTION - B (2 X 5 = 10)

II. ANSWER ANY TWO QUESTIONS

11. Describe about the drawing tools in Photoshop.
12. Write short notes on Layer masking.
13. Illustrate Layer styles.

SECTION - C (3 X 10 = 30)

III. ANSWER ANY THREE QUESTIONS.

14. Describe in detail about Layer palette with suitable options.
15. Explain the various painting tools in Photoshop.
16. Write in detail about Filter Gallery with suitable diagrams.
17. How to change the color of an image and explain retouching tools in Photoshop.

S. Dorell
SUBJECT INCHARGE

12/5/22
HEAD OF THE DEPARTMENT

Government Arts and Science College for Women, Barugur
Department of Nutrition & Dietetics
Cycle Test II- Apr'23

Class: II M.Sc., FN

Paper Name: Nutrition For Health Fitness

Time: 2Hrs
Max Marks: 50
(1X10=10)

Choose the best answer

1. Which of the following is not considered as a macronutrient?
Carbohydrate b) Protein c) Fats d) Minerals
2. How many amino acids must be available in diet?
a) 23 b) 9 c) 17 d) 30
3. In sports, ergogenic aids helps to _____
a) Increase strength b) Endurance c) Increase weight d) Increase weight
4. Which macro mineral helps in hydro balance in the body?
a) Potassium b) Calcium c) Sodium d) phosphorous
5. Vitamin B12 is also called as _____
a) Niacin b) Riboflavin c) Thiamin d) Pantothenic acid
6. Which vitamins are most likely to be lacking in vegan diet?
a) Vit-B1 b) Vit-B12 c) Folate d) Vit-A
7. Vegetarian athletes may be at high risk for _____
a) Lower fluid b) lower vitamins c) lower omega -3-fatty acids d) both a&b
8. The common micronutrient deficiencies found on female athletes are _____
a) Iron b) Vit D c) Both a & b d) None
9. The electrolyte plays vital role in hydration _____
a) K b) Fe c) Zn d) P
10. _____ type of protein is helpful in tissue repairing
a) Structural Protein b) Lean Protein c) Fibrous Protein d) Contractile Protein

II. Answer any 2 of the following

(2X5=10)

11. Define ergogenic acid and give some popular ergogenic aids.
12. List out some commercial mutagenic supplements.
13. Write a short note on effect of exercise and vegetarianism on protein requirements.
14. Give a brief note on nutritional care for young athletes.

III. Answer all the following

(10X3=30)

15. a) Explain in detail about diet manipulation. OR
b) Write briefly on pregame and post game meals.
16. a) Briefly discuss about the assessment of different mutagenic aids. OR
b) Discuss in detail about the nutritional considerations for vegetarian athletes.
17. a) Give a detail note on practical issues for vegan athletes in achieving their nutritional requirements. OR
b) Explain in detail about the nutritional care for athletes with special needs.

1. 
2. 
Subject Incharge

HOD

Government Arts and Science College for Women, Bargur.
Department of Nutrition and Dietetics
Model Examination May-2023

Class: III B.Sc N&D
Sub: Food Biotechnology

Time : 3 Hrs
Marks: 75

I. Answer all the Questions

(15×1=15 marks)

- Who gave the definition of biotechnology?
a) The European Federation of Biotechnology b) National Centre for Biotechnology
c) National Institute of Health d) National Centre for Cell Science
- The two core techniques that enables the birth of modern biotechnology _____
a) Red biotechnology and green biotechnology b) Classical and traditional biotechnology
c) Genetics and mathematics d) Genetic engineering and maintenance of a sterile environment
- _____ is a product of biotechnology.
a) Bacteria b) Skin c) Vaccine d) Plants
- The first plant that was modified by genetic engineering was produced in a laboratory in _____.
a) 1954 b) 1964 c) 1974 d) 1984
- Which of the following is the most common source of SCP?
a) Multicellular yeast b) Single celled yeast c) Unicellular algae d) Unicellular bacteria
- The term genomics was coined by _____.
a) Thomas Cech b) T.H Morgan c) Thomas Roder d) Craig Venter
- _____ is the large scale study of proteins.
a) Genomics b) Proteomics c) Both A and B d) None
- The human genome contains approximately _____.
a) 6 billion base pairs b) 5 billion pairs c) 3 billion pairs d) 4 billion pairs
- The enzyme was first isolated and purified in the form of crystals _____.
a) Urease b) Pepsin c) Amylase d) Ribonuclease
- Enzymes which are mainly used in clarification of fruit juices are _____.
a) Pectinases and pectinesterases b) Hemicellulase c) Cellulases d) Amylases
- The type of fermentation observed in yeasts is _____.
a) acrylic fermentation b) lactic acid fermentation c) pyruvic fermentation d) alcoholic fermentation
- Fermentation occurs in the _____.
a) presence of oxygen b) absence of oxygen c) presence of nitrogen d) presence of carbon
- The yeast generated during the fermentation of beer is generally separated by _____.
a) centrifugation b) filtration c) cell disruption d) all of them
- Intellectual property rights protect the use of information and ideas that are of _____.
a) Social value b) Moral value c) Commercial value d) Ethical value
- IPR in India covers _____.
a) Patents b) Copyrights c) Trademarks d) All of the above

II. Answer any two of the following

2 × 5 = 10 marks

- Write the definition and examples of genetically modified foods.
- Explain the processing of mushroom.
- Explain the role of enzymes in food processing.
- Write the types and advantages of fermentation.
- Explain intellectual property laws.

III. Answer all of the following

5 × 10 = 50 marks

- 21. a) Explain the traditional biotechnology. (Or)
b) Write the advantages and disadvantages of genetically modified foods.
- 22. a) Explain the production and uses of single cell protein. (Or)
b) Write the meaning, types and future of genomics.
- 23. a) Explain the industrial application of amylase and lipase
b) Write about the production of batch fermentation and continuous fermentation. (Or)
- 24. a) Explain the processing of wine.
b) Explain the forms of IPR. (Or)
- 25. a) Explain the forms of IPR. (Or)
b) Write about different paradigms of bioethics.


Subject Incharge


Head of the Department

21PFN05

Candidates admitted from 2021-2022 onwards)

B.Sc. DEGREE EXAMINATION, JUNE 2022

Second Semester

Food and Nutrition

NUTRITIONAL BIOCHEMISTRY

Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

All questions. All questions carry equal marks.

Fructose is converted into glucose -6-p by the

(a) Aldolase

(b) Enolase

(c) Hexokinase

(d) Phospho isomerase

Adenylate kinase is present in

(a) Liver

(b) Bone marrow

3. The disease that occurs due to the deficiency of maltase is

(a) Von Gierke's disease

(b) Pompe's disease

(c) Forbe's

(d) None of these

4. Active methionine acts as a _____ donor.

(a) Methyl (b) acetyl

(c) acyl (d) hydroxyl

5. Creative is synthesized in

(a) Liver (b) Kidney

(c) Spleen (d) Liver and Kidney

6. Which of the following is a Coenzyme?

(a) Choline (b) Inositol

(c) Lipoic acid (d) Mg⁺⁺

7. Normal levels of serum HDL cholesterol is _____ mg/dl.

(a) 20-35

(c) 60-80

(b) 35-55

(d) 100-120

The _____ of fatty acid is proposed

- by
- (a) Embden
 - (b) Knoop
 - (c) Krebs
 - (d) Pompe

The function of apo E is to _____ cholesterol.

- (a) transport
- (b) absorb
- (c) breakdown
- (d) synthesis

Thymine is found in

- (a) RNA
- (b) DNA
- (c) RNA and DNA
- (d) t-RNA

There are _____ hydrogen bonds between guanine and cytosine.

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Many coenzymes are derived from the constituents of

- (a) Vitamin A
- (b) Vitamin B
- (c) Vitamin C
- (d) Vitamin D

13. _____ works on partition principle.
- (a) Colorimetry
 - (b) Electrophoresis
 - (c) Chromatography
 - (d) Photometry
14. Charged particles stop their movement in electric field at
- (a) Neutral point
 - (b) Isoelectric point
 - (c) Ground point
 - (d) Dynamic point
15. Concentration is assessed by measuring turbidity in
- (a) Microbiological assays
 - (b) Animal assays
 - (c) Human assays
 - (d) Chemical assays

PART B — (2 × 5 = 10 marks)

Answer any TWO questions.

16. Summarize the ATP production in glycolysis.
17. Differentiate between deamination and transamination.
18. What are bile acids? How are they synthesised?
19. Point out the significance of electron transport chain.
20. State the principles of colorimetry.

21PHR01

For the candidates admitted from 2021-2022 onwards)
COMMON FOR ALL P.G. DEGREE EXAMINATION,
JUNE 2022.

Second Semester

HUMAN RIGHTS

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL the questions.

In which year UNHRC was started?

- (a) 1944 (b) 1945
(c) 1946 (d) 1947

UNHRC எந்த ஆண்டு தொடங்கப்பட்டது?

- (அ) 1944 (ஆ) 1945
(இ) 1946 (ஈ) 1947

Which king is related to Magna Carta?

- (a) King John (b) King Johnson
(c) King William (d) King Stuart

எந்த அரசர் மகா சாசனத்தோடு தொடர்புடையவர்?

- (அ) அரசர் ஜான் (ஆ) அரசர் ஜான்சன்
(இ) அரசர் வில்லியம் (ஈ) அரசர் ஸ்டுவர்ட்

3. The Amendment that assures free and compulsory education for children is

- (a) eighty fourth amendment
(b) eighty fifth amendment
(c) eighty sixth amendment
(d) eighty seventh amendment

எந்த சட்டத்திருத்தம் இலவச மற்றும் சிம்தந்தகளுக்கான கட்டாய கல்வி பற்றி விளக்குகிறது.

- (அ) 84 வது சட்ட திருத்தம்
(ஆ) 85 வது சட்ட திருத்தம்
(இ) 86 வது சட்ட திருத்தம்
(ஈ) 87 வது சட்ட திருத்தம்

4. Which Article of Indian Constitution deals with Right to Liberty?

- (a) Article (14-18) (b) Article (19-22)
(c) Article (23-24) (d) Article (25-28)

இந்திய அரசியலமைப்புச் சட்டத்தின் எந்த ஷரத்து சுதந்திர உரிமை பற்றி கூறுகிறது?

- (அ) ஷரத்து (14-18) (ஆ) ஷரத்து (19-22)
(இ) ஷரத்து (23-24) (ஈ) ஷரத்து (25-28)

5. Right to Information Act was the introduced in the year

- (a) 2004 (b) 2003
(c) 2005 (d) 2006

சுவல் அறியும் உரிமைச் சட்டம் எந்த ஆண்டு அறிமுகப்படுத்தப்பட்டது?

- (அ) 2004 (ஆ) 2003
(இ) 2005 (ஈ) 2006

Environmental Protection Act was enacted in the year

- (a) 1986 (b) 1985
(c) 1983 (d) 1984

எந்த ஆண்டு சுற்றுச்சூழல் பாதுகாப்புச் சட்டம் கொண்டுவரப்பட்டது?

- (அ) 1986 (ஆ) 1985
(இ) 1983 (ஈ) 1984

Which state has the highest amount of Child labour?

- (a) Madhya Pradesh
(b) Andhra Pradesh
(c) Uttar Pradesh
(d) Himachal Pradesh

எந்த மாநிலத்தில் குழந்தைத் தொழிலாளர் முறை அதிகமாக உள்ளது?

- (அ) மத்தியப் பிரதேஷம்
(ஆ) ஆந்திரப் பிரதேஷம்
(இ) உத்திரப் பிரதேஷம்
(ஈ) ஹிமாச்சல பிரதேஷம்

8. The article that makes special provision for women in Local Government is

- (a) Article 27 (b) Article 30
(c) Article 31 (d) Article 32

எந்த ஷரத்து உள்ளட்சியில் பெண்களுக்கான சிறப்பு சலுகைகள் வழங்கப்பட்டுள்ளது?

- (அ) ஷரத்து 27 (ஆ) ஷரத்து 30
(இ) ஷரத்து 31 (ஈ) ஷரத்து 32

9. Protection of women from Domestic Violence Act was passed in the year

- (a) 2005 (b) 2004
(c) 2003 (d) 2002

குடும்ப வன்முறைத் தடுப்புச் சட்டம் நடைமுறைப்படுத்தப்பட்ட ஆண்டு

- (அ) 2005 (ஆ) 2004
(இ) 2003 (ஈ) 2002

10. Who is the protector of Human Rights in India?

- (a) High Court (b) Supreme Court
(c) Municipal Court (d) District Court

இந்தியாவில், மனித உரிமைகளின் பாதுகாவலர் எனப்படுபவர் யார்?

- (அ) உயர் நீதிமன்றம் (ஆ) உச்ச நீதிமன்றம்
(இ) நகராட்சி நீதிமன்றம் (ஈ) மாவட்ட நீதிமன்றம்

11. When the National Commission for Protection of child rights was started?

- (a) 2005 (b) 2006
(c) 2007 (d) 2008