SRI VENKATESWARA UNIVERSITY

DEPARTMENT OF HOME SCIENCE

CHOICE BASED CREDIT SYSTEM (C.B.C.S) SYLLABUS AND SCHEME OF EXAMINATION

(WITH EFFECT FROM THE ACADEMIC YEAR 2015 -16)

B. Sc. HOME SCIENCE

Course :B.Sc Subject : Home Science

| Semester II | Part 1 | | Language 1 | 4 | 0 | 4 | 25 | 75 | 100 |
|-------------|--------|---------|--|----|----|----|----|----|-----|
| | | | Language 2 | 4 | 0 | 4 | 25 | 75 | 100 |
| | SK/FC | | Environmental Edn | 2 | - | 2 | - | 50 | 50 |
| | | | ICT – 1 (Information & Communication Technology) | 2 | - | 2 | - | 50 | 50 |
| | Part 2 | HSC 201 | Introduction to Food science | 4 | - | 4 | 25 | 75 | 100 |
| | | | Food science Practicals | - | 3 | 2 | - | 50 | 50 |
| | | HSC 202 | Human physiology | 4 | ı | 4 | 25 | 75 | 100 |
| | | | Human physiology Practicals | - | 3 | 2 | - | 50 | 50 |
| | | HSC 203 | General Psychology | 4 | ı | 4 | 25 | 75 | 100 |
| | | | General Psychology Practicals | - | 3 | 2 | - | 50 | 50 |
| | | | Total Marks | 22 | 13 | 30 | | | 750 |

FIRST YEAR Semester-II

3-2-107

HSc-201 INTRODUCTION TO FOOD SCIENCE

Theory: 4hrs/week practicals: 3hrs./week

THEORY

- Unit I
- : A) Foods-Definition and objectives in the study of foods.
 - B) Relation to nutrition and function of foods.
 - C) ICMR food group classification
 - D) Cereals and millets-structure, composition and nutritive value, processing, use in variety of preparations, selections, nutritional aspects and cost.
- Unit II: A) Pulses and legumes: Composition and nutritive value, production, selection and variety, storage and processing.
 - B) Vegetables and fruits: Classification, nutritional aspect, pigments present, enzyme browning.
- Unit III : A) Milk and Milk products: nutritive value, use in cookery
 - B) Meat, fish, poultry and eggs: nutritive value, use in cookery
 - C) Nuts and oils seeds: nutritive value, use in cookery
 - D) Spices and condiments: nutritive value, use in cookery
 - E) Beverages
- Unit IV : A)
- Food preservation-methods, techniques, principles applications-high and their temperature, low temperature, removal of moisture, irradiation and preservatives.
 - B) Multi purpose foods, dehydrated foods, frozen foods, ready mixers.
 - C) Food spoilage
 - Improving nutritional quality of foods: D) Germination, Fermentation, Supplementation, Substitution, Fortification and enrichment

Unit V: Food Sanitation and hygiene

- A) Control and inspection
- B) Planning and implementation of training program for health personal.

PRACTICALS

I Standardization of weights and measures of various food items.

- 2. Cereals and pulse preparation.
- B) Vegetable preparation.
- D) Breakfast and snack preparations.
- E) Milk preparation
- F) Soups
- G) Bakery preparation
- H) Beverages
- J) Egg, fish and meat preparations

References

- 1. Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- 2. Srilakshmi (2010). Food Science, 5th Edition. New Age International Ltd.
- 3. Wardlaw MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition, Mosby.

BSc Home Science Semester-II HSc-201 INTRODUCTION TO FOOD SCIENCE Model Question Paper

Time: 3 hrs. Max. Marks: 75

Part - A

Answer any five Questions Each question carries 5 Marks

(Marks = 5x5 = 25 marks)

- 1. What are basic five food groups? How do you use the food guide.
- 2. Describe the preparation and advantages of parboiled rice.
- 3. What is enzymatic browning? What measures would you take to prevent it?
- 4. What are the natural toxins present in pulses?
- 5. Explain lathyrism.
- 6. What is the significance of spices in cooking.
- 7. Explain the composition of milk.
- 8. What are multipurpose foods and their importance.

Part - B

Answer any five Questions Each Question carries 10 marks (Marks = 5x10 = 50 marks)

1. a) Describe the various types of milk and milk products available in the market.

(Or)

- b) Milk is a complete food discuss.
- 2. a) Discuss the nutritive value of nuts and oil seeds.

(Or)

- b) Write different uses of nuts and oil seeds.
- 3. a) Draw the diagram of egg and explain its role in cookery.

(Or)

b) Write about selection of fresh egg and discuss egg processing methods.

- 4. a) Describe various methods of preserving food. (Or)
 - b) Discuss the internal and external factors effect on nutritive value of foods.
- 5. a) How do you alter the tenderness of meat? (Or)
 - b) Write changes during while cooking of meat.

FIRST YEAR Semester -II

3-2-112

HSc-202 HUMAN PHYSIOLOGY

Theory: 4hrs/week practicals: 3hrs./week

THEORY

UNIT-I

- (a) Skeletal system: Classification and bones-structure and functions, Joints of skeleton.
- **(b) Circulatory system :** Blood Composition, functions, anemia, clotting of blood, blood groups.
- **(c) Cardiovascular system :** Anatomy of the heart, heart rate, Cardiac cycle, Blood Pressure, Factors maintaining blood pressure.

UNIT-II

Respiration: Structure of respiratory organs; Mechanism and Chemistry of respiration. Abnormal types of respiration anoxia or hypoxia, Asphyxia and Artificial respiration.

UNIT-III

Excretory system: Structure and function of Kidney, blood and nerve supply to the kidney-composition, volume, formation and maturation of urine – Skin and its role in excretion.

UNIT-IV

Nervous system:

- (a) Structure of neuron, reflex action, spinal cord, brain and their membranes, autonomic nervous system.
- (b) Special senses: Vision (eye), hearing (ear), perception and taste, smell and touch.

UNIT-V

Physiology of Reproduction: Anatomy of male and female reproductive system. Puberty changes.

Endocrine glands : Hormones, Secretion of hormones, and their influence on growth metabolism and reproduction.

Practicals

I. Slides

- 1. Columnar epithelium.
- 2. Ciliated epithelium.
- 3. Squamous epithelium.
- 4. Striated muscle.
- 5. Unstriated muscle.
- 6. Cardiac muscle.
- 7. V.S.of Skin.
- 8. T.S. of Cartilage.
- 9. T.S. of Bone.
- 10. T.S. of Stomach
- 11.T.S. of Intestine.
- 12. T.S. of Liver.
- 13. T.S. of Pancreas.
- 14. T.S. of Kidney.
- 15. T.S. of Testis.
- 16.T.S. of Ovary.

II. Experiments.

- 1. Identification of Blood groups.
- 2. Preparation of Blood smear.
- 3. Measurement of temperature and pulse rate before and after exercise.
- 4. Test for tastes.

References:

- 1. <u>Telugu Academy Books</u> Volume I, II, III Pineni Indira, P.K.Jayalakshmi.
- 2. <u>Text Book of Medical Physiology</u>. Arthur C.Guyton.
- 3. <u>Living Body Best and taylor</u>.
- 4. <u>Human Physiology</u> C.C. Chatterjee.
- 5. <u>Medical Physiology</u> Ganong.
- 6. <u>Human physiology</u> Dr. N.M. Muthayya.

I year II Semester Paper HSC 202Human Physiology Model Question Paper

Time: 3 hrs Max. Marks: 75

Part – A Answer any five Questions Each question carries 5 Marks (Marks = 5x5 = 25 marks)

- 1. Blood Pressure
- 2. Artificial Respiration.
- 3. Classification of Bones
- 4. Brain structure
- 5. Structure of Ear
- 6. Reflex Action
- 7. Puberty Changes
- 8. Factors maintaining Blood pressure

Part - B

Answer any five Questions Each Question carries 10 marks (Marks = 5x10 = 50 marks)

- a) Explain the composition of blood and its functions (or)
 - b) Draw the diagram of heart and explain the cardiac cycles
- 2. a) Describe the structure of lungs and process of respiration (or)
 - b) What are the important organs helped during respiration process.
- 3. a) Explain the structure of Nephron and how urine is formed

(or)

b) Discuss the role of skin in excretory system

4. a) Describe the structure and functions of brain.

(or)

- b) Explain in detail about senses of nervous system.
- 5. a) Describe the anatomy of male and female reproductive system.

(or)

b) Explain the influence of endocrine glands on growth metabolism and reproduction.

FIRST YEAR

Semester-II

3-2-113

HSc-203 GENERAL PSYCHOLOGY

Theory: 4hrs/week practicals: 3hrs./week

THEORY

UNIT-I

Psychology as a Science of behaviour : Difinition, scope and methods used – observational, experimental, clinical and survey methods. Branches of psychology – Developmental, social ,Abnormal, Educational and organizational psychology.

UNIT-II

- (a)**Perception and Attention :** Object perception and perceptual constancies, organization and perception Attention types determinants of attention.
- **(b)Learning and Remembering :** Definition classical and operant conditioning- learning by imitation cognitive learning .Kinds of remembering nature of forgetting improving memory.

UNIT-III

Motivation and Emotions : definition – psychological basis – classification – physiological, psychological and social motives, unconscious motivation. Definition of emotion and feelings development of emotions. Some examples of adaptive and disruptive emotions.

UNIT-IV

Intelligence, Aptitude and Interest: Definition and its nature – tests of general intelligence, extreme of intelligence, sub normal and the gifted. Definition of the terms – aptitude and interest – assessment through well known tests.

UNIT -V

Personality : Definition-Personality types- assessment of personality – normal and abnormal personalities – preventing personality disorders.

PRACTICALS

- 1. Muller lyer illusion Perception.
- 2. Thurstones Interest Schedule Vocational Interest.
- 3. Bells Adjustment Inventory Personality.
- 4. Imagery.
- 5. Raven's progressive Matrices Intelligence.
- 6. Memory Recognition Memory.
- 7. Projective tests Personality.
- 8. Aptitude and Interest Test.

References

- (1) Milgard.F.R; Atkinson, R.C. and Atkinson R.L. <u>Introduction to psychology</u>, Oxford, IBM, 1975.
- (2) Baron, R.A. <u>Psychology</u> (2001) (5th edition), Pearson Education Inc., New Delhi.
- (3) Feldman, R.S. (1997), <u>Essentials of understanding psychology (3rd Edition)</u>McGraw-Hill Companies. Inc. New York.
- (4) Parameswaran, E.G. and Beena, C. <u>Invitation to psychology</u>, Hyderabad: Neel Kamal Publications.

I year II Semester Paper HSC 203General Psychology Model Question Paper

Time: 3 hrs Max. Marks: 75

Part - A

Answer any five Questions each question carries 5 Marks

(Marks = 5x5 = 25 marks)

- 1. Define Psychology
- 2. Factors of Attention
- 3. Physiological Changes during Emotion
- 4. Intelligence quotient
- 5. Describe Observation Method
- 6. Primary Motives
- 7. Gestalt Psychology
- 8. Defence mechanisms

Part - B

Answer any five Questions Each Question carries 10 marks (Marks = 5x10 = 50 marks)

- 1. a) Describe the scope and methods of Psychology (or)
 - b) Explain experimental and survey methods
- 2. a) What is conditioning. Explain the two types of conditioning. (or)
 - b) What is perception. Write about the principles of perception.
- 3. a) What is motives? What are the types of motives.

(or)

- b) Explain the role of endocrine glands in emotions?
- 4. a) Explain aptitude and interest tests.

(or)

b) Explain the types of intelligence tests.

5. a) Describe the various tools to assess personality?

(or)
b) Define personality. Explain normal and abnormal personalities?