

2016

M.Sc.

2nd Semester Examination

HUMAN PHYSIOLOGY

PAPER—PHY-201

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

(Unit—13)

Answer all questions from the following :

1. (a) What is meant by Non-Communicable Diseases ?
- (b) Mention the names of four major global non-communicable diseases.

(Turn Over)

- (c) Differentiate modifiable and non-modifiable risk factors.
- (d) Potray the interdependence of the reasons causing non-communicable diseases. 1+1+2+1

Or

- (a) What is infection ?
- (b) Give an account of the different modes of transmission of infectious diseases.
- (c) Name two leading viral diseases in India. 1+3+1
2. (a) Give a brief overview of the structure of retrovirus.
- (b) Discuss the modes of transmission of HIV.
- (c) Name one HIV genome replication inhibitor. 2+2+1

Or

- (a) Describe the biotechnological and chemical control of malaria. 1+4

3. (a) Who are considered as vulnerable section in a society? Explain your answer mentioning the specific groups.
- (b) Draw the relationship of social vulnerability with malnutrition.
- (c) Mention the intervention strategies of UNICEF's Child Protection Programme in India. 2+1+2

Or

- (a) Define Infant Mortality Rate.
- (b) What is meant by neonatal mortality and Post-neonatal mortality?
- (c) Discuss the consequences of malnourishment in children.
- (d) Mention the major steps of prevention of diarrhoeal diseases in children. 1+(1+1)+1+1
4. (a) What is meant by 'Positive Health'?
- (b) Mention the fundamental approaches of management of communicable diseases. 2+3

Or

- (a) What are the major steps and preparation for management of an outbreak of a communicable disease ?
- (b) Mention the major steps to be followed for prevention and control of HIV/AIDS. (1+2)+2

(Unit—14)

Answer all questions from the following :

1. (a) Briefly describe the causes and symptoms of paralytic shellfish poisoning.
- (b) Explain the seven principles of 'Hazard Analysis Critical Control Point (HACCP)' regarding food safety. 2+3

Or

- (a) How does drug-nutrient interactions occur in case of lipid lowering drug and MAO inhibitors.
- (b) Define fat mimetics and fat substitutes with examples. 3+(1+1)

2. (a) What are the feeding problems developed after the delivery of pre-term babies ?
- (b) Prescribe the special formula food used for pre-term babies.
- (c) Briefly write the mechanisms of formation of dental carries. 2+1+2

Or

- (a) Discuss the maternal risk factors affecting pregnancy outcomes.
- (b) What do you mean by morning sickness during pregnancy ?
- (c) Define galactopoesis. 3+1+1
3. (a) Discuss the role of neuropeptide Y (NPY) and melanocortin in the regulation of food intake.
- (b) Mention the major physiological role of iron in human body. 3+2

Or

- (a) How can you prevent protein energy malnutrition through dietary management?
- (b) Why ferric EDTA is preferred to ferrous sulphate in iron fortification?
- (c) Define orexigenic peptides. 3+1+1
4. (a) Write the objectives, beneficiaries and activities of Integrated Child Development Services (ICDS) programme in India.
- (b) Briefly write how Delayed Cutaneous Hypersensitivity (DCH) response test can help in detection of nutritional deficiencies. 3+2

Or

- (a) Describe the neuroendocrine theory of aging.
- (b) Explain the role of antioxidants in the health of old age. 3+2
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