

**2013**

**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.*

*Write the answers to the questions of each Unit in separate books.*

**UNIT—13**

Answer any two questions.

1. (a) Define population.
- (b) How will you determine the frequency of any allele in a population? Explain with an example.
- (c) Give example of one disease related to autosomal

(Turn Over)

dominant, autosomal recessive, recessive sex-linked trait and dominant x-linked trait. 2+4+4

2. (a) Write on the current problems of aged people in India.  
 (b) Discuss briefly on various plans and programs taken up by India Government to combat the problem.

5+5

3. (a) Mention the important check points of cell cycle. Write down their significance in relation to the development of cancer.  
 (b) Give a brief account of important cell cycle regulators.  
 (c) Discuss the mechanisms of conversion of proto-oncogenes into oncogenes.

$(2+3)+2\frac{1}{2}+2\frac{1}{2}$

4. (a) What is drug abuse? What are the different classes of drugs which are abused?  
 (b) Mention the causes of sustained diastolic hypertension in man. What is malignant hypertension?  
 (c) How is dengue transmitted? (1+2)+(3+2)+2

**UNIT—14**

Answer any two questions.

1. (a) Write about the ICDS programme and its present situation in India.
- (b) What do you mean by indirect nutritional intervention programme?
- (c) How do you prepare the soy-protein based formula?

$$5+2\frac{1}{2}+2\frac{1}{2}$$

2. (a) What are the basic reasons for the use of infant formula feeding?
- (b) How do you estimate the energy requirement of an infant?
- (c) What is fortified human milk?

$$5+3+2$$

3. (a) What are adipose drug targets for obesity management?
- (b) Discuss the diagnostic tests used in assessing iron deficiency anemia.
- (c) Write the symptoms of binge-eating disorder (BED).

$$4+3+3$$

4. (a) Discuss briefly the control strategy of malaria in India.  
(b) How do food allergic reactions work?  
(c) What are the main causes behind the constipation?

$5+2\frac{1}{2}+2\frac{1}{2}$

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