

Total number of printed pages-8

34(1) PHYS 1-2

2012

(April)

PHYSIOLOGY

Full Marks : 100

Time : Three hours

*The figures in the margin indicate full marks
for the questions.*

1. Answer *any two* of the following
 - (a) Define blood pressure. Mention its normal values in adult male. Discuss how blood pressure is regulated in our body. 2+1+7=10
 - (b) Describe the transport of oxygen and carbon-dioxide in blood. Name the different types of hypoxia. 8+2=10
 - (c) Discuss the functions of Glucocorticoids. Write the features of cushings syndrome. 6+4=10

Cont

2. Answer *any ten (10)* of the following : 5×10

- (a) Name the agglutinins and agglutinogens present in different blood groups. What is the R^h-incompatibility? 2+3
- (b) Define "Reflex". Describe a reflex arc with a diagram. 2+3
- (c) What are the different types of haemoglobin? Write the functions of haemoglobin. 2+3
- (d) Explain the ionic basis of different phases of an action potential. 5
- (e) Discuss the functions of stomach.
- (f) Discuss briefly : "Glomerular Filtration Rate."
- (g) Name the ascending tract carrying pain. Describe its course with diagram.
- (h) Discuss the functions of Hypothalamus.
- (i) Discuss the Errors of Refraction of Eyes.
- (j) Write the composition and function of saliva.

2

- (k) Write the steps of Thyroid hormone-synthesis.
- (l) Write the formation, circulation, absorption and functions of cerebrospinal fluid. (CSF).

3. Answer in short : (*any five*) 2×5=10

- (a) Write the Landsteiner's law.
- (b) Name the contents of Middle ear.
- (c) Name the pancreatic enzymes.
- (d) Draw a synapse.
- (e) Explain the Endocrine functions of the kidney.
- (f) Differentiate between 1st and 2nd Heart Sounds.
- (g) Define vital capacity. What is its normal value?

№ 2

(xviii) Hemoglobin appears in RBC in — stage.

- (a) Erythroblast
- (b) Intermediate normoblast
- (c) Late normoblast
- (d) Reticulocyte.

(xix) Normal stroke volume of each ventricle is—

- (a) 50 ml
- (b) 5L
- (c) 80 ml
- (d) 80 L

(xx) Function of smooth Endoplasmic reticulum—

- (a) Protein synthesis
- (b) Lipid synthesis
- (c) Glucose metabolism
- (d) Transport.

Physio (12, 13, 14, 15, 16)