2018

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:

10×2=20

(a) What are the three types of muscles present in the body? Give the main differentiating features between them. Write briefly about excitation contraction coupling.

3+3+4=10

- (b) Write briefly about composition and function of saliva. What is deglutition?

 4+4+2=10
- (c) Name the hormones secreted by the pancreas. Write briefly about functions of insulin. What is diabetes mellitus?

 4+3+3=10

Contd.

2. Answer any ten of the following:

5×10=50

- (a) Functions of blood.
- (b) Myopia and Hypermetropia with diagram
- (c) Taste buds
- (d) Hormones of posterior pituitary— name and functions.
- (e) Surfactant.
- (f) Types of White Blood Cell (WBC).
- (g) Micturition Reflex.
- (h) Different transport mechanisms across the cell membrane.
- (i) Write briefly about erythropoiesis.
- (j) Plasma proteins.
- (k) What is colour blindness? Classify.
- (l) What is bile? Write briefly about its secretion and functions.

(0)		ficiency of RBC (Red Blood Cell)
(8)	(a)	Anemia
	(b)	Leucopenia
	(c)	Thrombocytopenia
	(d)	Polycythemia.
(p)	Juxtaglomerular apparatus secretes —	
	(a)	Renin
	(b)	Erythropoietin
	(c)	Aldosterone
	(d)	Insulin.
<i>(q)</i>	The receptor for vision —	
	(a)	Rods
	(b)	Hair cells
	(c)	Macula
	(d)	Crista.
(r)	Pineal gland secretes the hormones—	
	(a)	Somatostatin
	(b)	Melatonin
	(c)	Calcitonin

Contd.

(d) Inhibin.

34 (1) PHYS 1·2/G

- (s) The largest WBC (White Blood Cell) is -
 - (a) Neutrophil
 - (b) Monocyte
 - (c) Eosinophil
 - (d) Basophil.
- (t) Intrinsic factor is required for absorption of—
 - (a) Vitamin C
 - (b) Vitamin A
 - (c) Vitamin B₁
 - (d) Vitamin B₂.