



DZ-4003

First M. B. B. S. Examination

June / July - 2016

Physiology : Paper - I

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवडी पर अवश्य लभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
FIRST M. B. B. S.

Name of the Subject :
PHYSIOLOGY : PAPER - 1

Subject Code No. : 4 0 0 3 Section No. (1, 2,.....) : 1&2

Seat No. :

Student's Signature

(2) Both the sections should be written in separate answer sheets

SECTION - I

- 1 Write briefly : (any three) 3×2=6
- (a) Facilitated diffusion
- (b) A-V Nodal delay
- (c) Frank Starling law
- (d) Transport maximum for Glucose.
- 2 Short essays : (any three) 3×5=15
- (a) Pathophysiology of haemorrhagic shock
- (b) Cell mediated immunity
- (c) Composition and function of gastric juice
- (d) GFR and factors affecting it.

DZ-4003]

1

[Contd...

SECTION - II

- 3 Define and classify Hypoxia. Describe hypoxic hypoxia in detail. Add a note on acclimatization to high altitude. 10
- 4 Write notes on : (any **three**) 3×3=9
- (a) Compare and contrast first and second Heart sounds.
 - (b) Oxygen-hemoglobin dissociation curve.
 - (c) Sliding filament theory of muscle contraction.
 - (d) Mismatched Blood transfusion.
- 5 MCQs 1×10=10



DZ-4004

First M. B. B. S. Examination

June / July - 2016

Physiology : Paper - II

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 50

Instructions :

(1)

नीचे डफांवेव निशानीवाणी विगतो उत्तरवकी पर अवश्य लखवी. Fillup strictly the details of signs on your answer book.	Seat No. : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Name of the Examination : First M. B. B. S.	Student's Signature
Name of the Subject : Physiology : Paper - 2	
Subject Code No. : 4 0 0 4 Section No. (1, 2,.....) : 1&2	

(2) Both the sections should be written in separate answersheets

SECTION - I

- 1 Write briefly : (any three) 3×2=6
- Property of synapse-'Subliminal fringe'.
 - Draw a neat labelled diagram of photoreceptors.
 - Differences between somatic and autonomic nervous system
 - Functions of CSF.
- 2 Short essays : (any three) 3×5=15
- Precocious puberty
 - Saltatory conduction
 - Tests of hearing
 - Physiological actions of Insulin

DZ-4004]

1

[Contd...

SECTION - II

- 3 Give an account of connections and functions of cerebellum. **10**
- 4 Write notes on : (any **three**) **3×3=9**
- (a) Mechanism of action of combined Oral Contraceptive Pills
 - (b) Brown-Sequard Syndrome
 - (c) Milk ejection reflex
 - (d) Dark adaptation.
- 5 MCQs **1×10=10**

4. The main muscle of inspiration is :
 - (a) External intercostal
 - (b) Internal intercostal
 - (c) Diaphragm
 - (d) Scalene

5. Hb appears in which stage of erythropoiesis ?
 - (a) Proerythroblast
 - (b) Intermediate normoblast
 - (c) Reticulocyte
 - (d) None of the above

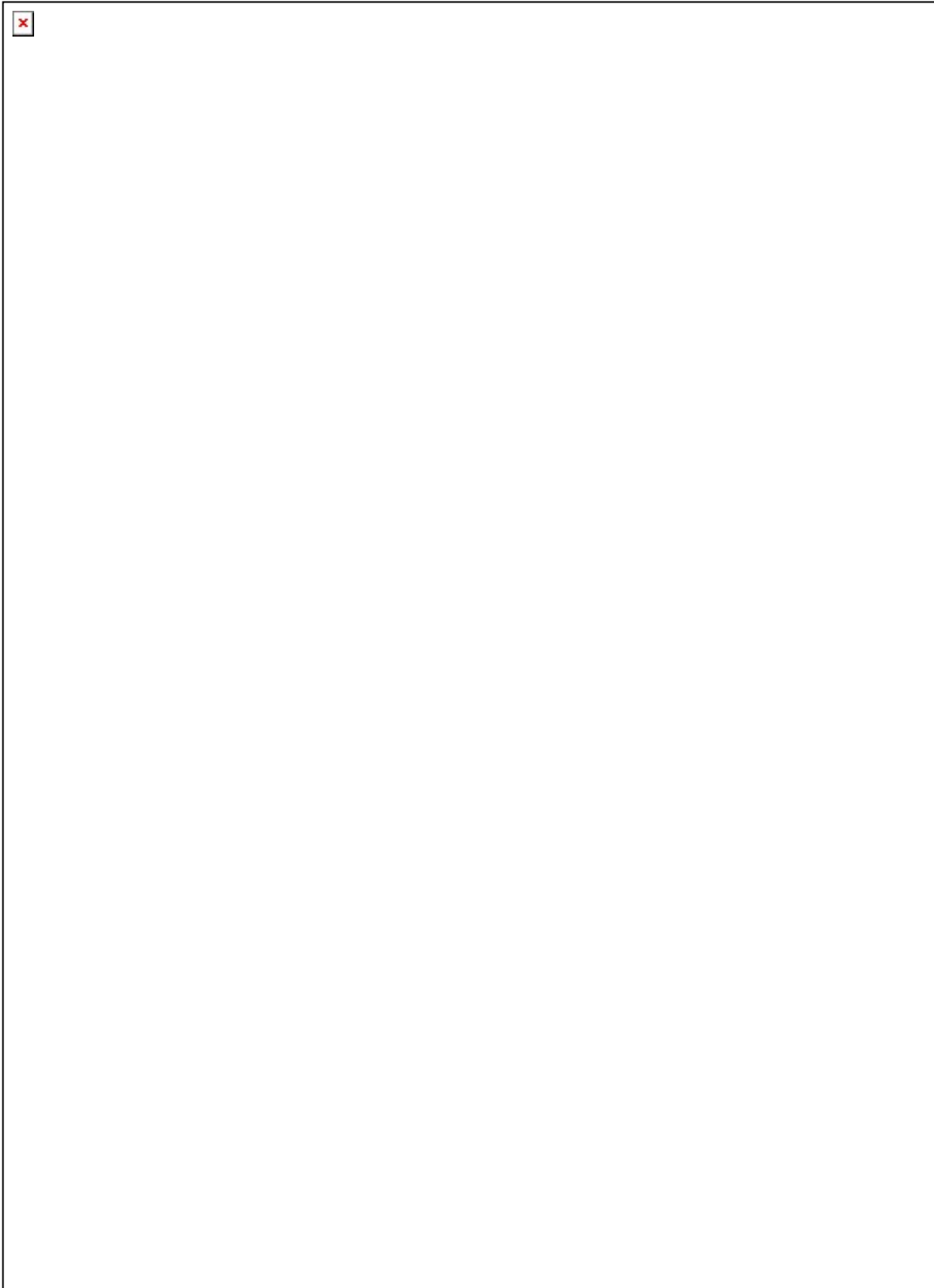
6. Tubular transport maximum for glucose in mg/min is :
 - (a) 80
 - (b) 200
 - (c) 180
 - (d) 375

7. Following is the short term regulating mechanism for Blood Pressure
 - (a) renin-angiotensin system
 - (b) stress relaxation
 - (c) baroreceptor mechanism
 - (d) abdominal compression reflex

8. For the ABO blood group system, the antigens are found _____, and the antibodies are found _____.
 - (a) on the erythrocytes, on the leukocytes
 - (b) on the erythrocytes, in the plasma
 - (c) on the leukocytes, in the plasma
 - (d) in the plasma, on the erythrocytes

9. Vitamin B₁₂ is absorbed primarily in the
 - (a) Stomach
 - (b) Duodenum
 - (c) Jejunum
 - (d) Ileum

10. In gastrointestinal tract, Auerbach's plexus is concerned primarily with
 - (a) Secreting activity
 - (b) Sensory function
 - (c) Motor control
 - (d) Blood flow



4. The fovea is the part of the retina that contains :
 - (a) Amacrine cells
 - (b) Ganglion cells
 - (c) Rods
 - (d) Cones
5. A patient with hypothyroidism is likely to have :
 - (a) Subnormal body temperature
 - (b) Lid retraction
 - (c) Exophthalmos
 - (d) Moist hands and feet
6. Ovulation usually occurs :
 - (a) 14 days prior to menses
 - (b) 5 days after menses
 - (c) 7 days before menses
 - (d) During Menses
7. Bell-Magendie law is :
 - (a) Both spinal roots are sensory.
 - (b) Both spinal roots are motor.
 - (c) Dorsal root is sensory and ventral root is motor.
 - (d) Ventral root is sensory and dorsal root is motor.
8. The proliferative phase of menstrual cycle is controlled by :
 - (a) Estrogen
 - (b) Progesterone
 - (c) Prolactin
 - (d) HCG
9. The site of action of ADH is :
 - (a) Descending limb of the loop of Henle
 - (b) Ascending limb of the loop of Henle
 - (c) Distal Convolutud tubules
 - (d) Proximal Convolutud tubules
10. Which of the following is NOT a feature of Cushing's Syndrome ?
 - (a) Moon Face
 - (b) Hypoglycemia
 - (c) Abdominal Striae
 - (d) Buffalo torso.



Date of issue : Centre :
Sup. Sign. : Seat No. :

DZ-4005-O
First Year M. B. B. S. Examination
June / July - 2016
Biochemistry : Paper - I

Time : 10 Minutes]

[Total Marks : 10

OBJECTIVE QUESTIONS

Instruction :

નિચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book.

Name of the Examination :
F. Y. M. B. B. S.

Name of the Subject :
BIOCHEMISTRY : PAPER - 1

Subject Code No. : 4 0 0 5 Section No. (1, 2,.....): Nil

Seat No. :

Student's Signature

1×10=10

- (1) The end product of anaerobic glycolysis is
(A) Pyruvate
(B) Lactate
(C) Phosphoenol pyruvate
(D) Acetyl CoA
- (2) Rotenone inhibits transfer of electron from
(A) FMN to CoQ
(B) NAD⁺ to FMN
(C) Cyto bcl to cyto c
(D) Cyto a3 to O₂
- (3) Biotin takes part in one of the following types of reaction.
(A) Transamination
(B) Deamination
(C) Carboxylation
(D) Decarboxylation

- (4) Which of the following mucopolysaccharide does not contain uronic acid ?
(A) Hyaluronic acid
(B) Chondroitin sulphate
(C) Dermatan sulphate
(D) Keratin sulphate
- (5) Which of the following molecules is synthesized by Rapaport Lubering cycle ?
(A) 1-3 Biphosphoglycerate
(B) 2-3 Biphosphoglycerate
(C) Phosphoenal pyruvate
(D) Lactate
- (6) Accumulation of which of the following metabolite in lens of eye causes cataract
(A) Sorbitol
(B) Xylitol
(C) Mannitol
(D) Dulcitol
- (7) All of the following are derivatives of cholesterol EXCEPT
(A) Bile acids
(B) Bile pigments
(C) Steroid hormones
(D) Vitamin D
- (8) The ammonium ions excreted into the urine are derived from
(A) Asparagine
(B) Aspartate
(C) Glutamate
(D) Glutamine
- (9) Which one of the following apoprotein activates lipoprotein lipase enzyme ?
(A) apo A1
(B) apo B48
(C) apo CII
(D) apo E
- (10) Which of the following compounds transport activated fatty acid from cytosol to mitochondria ?
(A) Calathrin
(B) Creatin
(C) Carnitine
(D) Creatinine