

FAD

2006

MEDICAL SCIENCE - I (Optional)

000054

Standard : Degree

Total Marks : 200

Nature : Conventional

Duration : 3 Hours

Note :

- (i) Answers must be written in English.
- (ii) Question No. 1 is Compulsory. Of the remaining questions, attempt **any four** selecting one question from each section.
- (iii) Figures to the **RIGHT** indicate marks of the respective question.
- (iv) Number of optional questions upto the prescribed number in the order in which they have been solved will only be assessed. Excess answers will not be assessed.
- (v) Credit will be given for orderly, concise and effective writing.
- (vi) Candidate should not write roll number, any name (including their own), signature, address or any indication of their identity anywhere inside the answer book otherwise he will be penalised.
- (vii) For slab of 10 marks, the examinee is expected to write answers in 125 words.

1. Answer any four of the following (10 marks each) :

- (a) Describe the coronary arteries under following heads : 10
 - (i) Diagram and Branches
 - (ii) Applied anatomy
- (b) Describe composition and functions of Gastric juice and give an account of phases and regulation of gastric juice. 10
- (c) Define acute inflammation. Describe cellular events in Acute inflammation. 10
- (d) Enumerate organisms causing urinary tract infection. Describe Laboratory diagnosis of urinary tract infection. 10
- (e) Write in brief on any two of the following : 10
 - (i) Therapeutic uses of α -Blocking agents
 - (ii) Therapeutic uses of ACE inhibitors
 - (iii) Low molecular weight heparin

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SECTION - A

Marks

2. *Answer the following sub-questions :*
- (a) Write short answer on any five : 10
- (i) Draw and label Sarcomere
 - (ii) Sesamoid Bone
 - (iii) Pivot Joint
 - (iv) Elastic Artery
 - (v) Fibro Cartilage
 - (vi) Deep Fascia
- (b) Describe the venous drainage of lower limb under the following heads : 10
- (i) Course and relation of great saphenous vein
 - (ii) Perforating veins
 - (iii) Test for varicose vein
- (c) Write short answer on any two : 10
- (i) In vitro Fertilization
 - (ii) Primitive Streak
 - (iii) Function of Placenta
- (d) Write short answer on any two : 10
- (i) Microstructure of testis
 - (ii) Transitional epithelium
 - (iii) Karyotyping
3. *Answer the following sub-questions :*
- (a) Write short answer on any two : 10
- (i) Classification of joints with examples
 - (ii) Blood supply of long bone
 - (iii) Typical spinal nerve
- (b) Describe the mammary gland under following heads : 10
- (i) Gross anatomy
 - (ii) Blood supply and lymphatic drainage
 - (iii) Applied anatomy
- (c) Write short answer on any two : 10
- (i) Development and anomalies of thyroid gland
 - (ii) Development of right atrium of heart
 - (iii) Cleft lip and cleft palate
- (d) Write short answer on any two : 10
- (i) Down's syndrome
 - (ii) Perinatal diagnosis
 - (iii) Histology of fundic part of stomach.

SECTION - B

4. *Answer the following sub-questions :*

- (a) Give an account of nervous regulation of respiration. 10
- (b) Define erythropoiesis, Describe factors essential for erythropoiesis. 10
- (c) Define Polysaccharides and describe the glycogen metabolism with its regulation. 10
- (d) Describe the pathway of heme biosynthesis. Add a note on porphyrias. 10

5. *Answer the following sub-questions :*

- (a) Define arterial blood pressure. Enumerate different regulatory mechanisms of blood pressure. 10
- (b) Enumerate the hormones secreted by Ant. pituitary. Describe action of growth hormone. 10
- (c) Describe sources, biochemical functions, deficiency disorder, daily requirement of Vitamin A. 10
- (d) Write short answer on any two : 10
- (i) Fatty liver and lipotropic factors.
- (ii) Role of liver in blood sugar regulation.
- (iii) Tubular function test.

SECTION - C

6. *Answer the following sub-questions :*

- (a) Define amyloidosis. Describe physical and chemical properties of Amyloid. 10
- (b) Describe liver cirrhosis. Describe etio-pathogenesis of alcoholic cirrhosis. 10
- (c) Classify micro-organisms. What are the various aspects for the identification of micro-organism. 10
- (d) Enumerate viruses causing hepatitis. Discuss clinical features, laboratory diagnosis of Hepatitis A. 10

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| 7. Answer the following sub-questions : | |
| (a) Discuss various blood transfusion reactions. How will you investigate a case of haemolytic reaction. | 10 |
| (b) Classify lung tumours. Describe etiology and gross pathology of Bronchogenic carcinoma. | 10 |
| (c) Enumerate the micro-organism causing upper respiratory tract infection. Give laboratory diagnosis of Streptococcus Pyogens. | 10 |
| (d) Describe life cycle, pathogenicity and laboratory diagnosis of Ancylostoma duodenale. | 10 |

SECTION - D

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| 8. Answer the following sub-questions : | |
| (a) Define Antagonism. What are the various types of Antagonism ? Give examples and significance. | 10 |
| (b) Write short answer on any two : 10 | |
| (i) Oral antidiabetic agents | |
| (ii) Vitamin B ₁₂ | |
| (iii) Adverse effect of corticosteroid | |
| (c) Enumerate various injurious, write detail on laceration. | 10 |
| (d) Classify poisons. Describe signs, symptoms and management of Acute alcohol poisoning. | 10 |
| 9. Answer the following sub-questions : | |
| (a) Enumerate calcium channel blockers. Describe therapeutic uses and adverse effect of calcium channel blockers. | 10 |
| (b) Enumerate anti-malarial agents. Describe adverse effect and therapeutic uses of chloroquine. | 10 |
| (c) How you will establish an identity of an individual ? Describe in detail about fingerprint system. | 10 |
| (d) Discuss on "Restrain of mentally ill person". | 10 |

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