[MBBS 0221] FEBRUARY 2021 **Sub.Code :6053**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER I – PHYSIOLOGY

Q.P. Code: 526053

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQS)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Describe the physiological roles of the different types of leucocytes circulating in blood. Add a note on functions of lymphocytes in viral infection.

2. Describe the digestion and absorption of proteins in the digestive tract. Write a note on malabsorption.

II. Write notes on: **(10 x 5 = 50)**

1. Classify the fluid compartments of body giving their normal values, mention two methods to determine E.C.F. volume.
2. Transport across cell membrane.
3. Structure and functions of Neuromuscular junction.
4. Tissue macrophage system.
5. Non-excretory functions of kidney.
6. Cystometrogram and its significance.
7. Secretion of HCl in stomach and its regulation.
8. Regulations of blood calcium levels.
9. Spermatogenesis and seminal analysis.
10. Female contraceptive methods for birth control.

[MBBS 0521] MAY 2021 **Sub.Code :6053**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER I – PHYSIOLOGY

Q.P. Code: 526053

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Describe the mechanism of secretion of Hydrochloric acid in the stomach. What are the factors regulating acid secretion? Add a note on peptic ulcer.

2. What is Erythropoiesis? Describe the stages and factors regulating Erythropoiesis. Add a note on Anaemias.

II. Write notes on: **(10 x 5 = 50)**

1. Classify diuretics and write a note on their sites of action.
2. Draw a neat labeled diagram of neuro-muscular junction and explain the events in neuro-muscular transmission.
3. Movements of small intestine.
4. Actions of Parathormone.
5. Juxta Glomerular apparatus.
6. Fibrinolytic system.
7. Functions of Glucocorticoid.
8. Endometrial changes in menstrual cycle.
9. Active transport across cell membrane.
10. Digestion and absorption of fat.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0222] FEBRUARY 2022 **Sub.Code : 6053**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

FIRST YEAR

PAPER I – PHYSIOLOGY

Q.P. Code: 526053

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQS)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Describe the function and regulation of Insulin .Add a note on diabetes mellitus.

2. Explain the sliding filament hypothesis. Add a note on isometric and isotonic muscle contractions.

II. Short Notes : **(10 x 5 = 50)**

1. Second messengers.
2. Types of lymphocytes and its functions.
3. Haemophilia.
4. Describe the phases of gastric juice secretion.
5. Functions of bile salts.
6. Renal Buffers.
7. Auto regulation of GFR.
8. Calcitriol.
9. Contraceptive methods for males.
10. Phases of Menstrual cycle.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0522] **MAY 2022** **Sub. Code : 6053**

M.B.B.S. DEGREE EXAMINATION
(For the candidates admitted from the Academic Year 2019-2020)
FIRST YEAR – SUPPLEMENTARY (CBME)
PAPER I – PHYSIOLOGY

Q.P. Code: 526053

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Describe the digestion and absorption of fat in the digestive tract. Add a note on steatorrhea.

2. Mention the various phases of menstrual cycle. Correlate the ovarian changes with endometrial changes during the menstrual cycle.

II. Short Notes : **(10 x 5 = 50)**

1. Inter cellular connections.
2. Types of polycythemia and complications due to this conditions.
3. Humoral immunity.
4. Transfusion reaction.
5. Molecular basis of action potential.
6. Plasticity of smooth muscle.
7. Peculiarities of renal blood flow.
8. Parathormone.
9. Patho-physiology of diabetes mellitus.
10. Barrier contraceptives.

****

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0123] **JANUARY 2023** **Sub. Code : 6053**

M.B.B.S. DEGREE EXAMINATION
(For the candidates admitted from the Academic Year 2019-2020)

FIRST YEAR – (CBME)

PAPER I – PHYSIOLOGY

Q.P. Code: 526053

Time: Three hours **Maximum: 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Define Immunity. Classify different types of Immunity. Explain in detail the cell mediated Immunity. Add note on Natural Killer cells.

2. Describe how the countercurrent mechanism in the kidney operates to produce hypertonic urine? Add a note on Diabetes Insipidus.

II. Write Short Notes on: **(10 x 5 = 50)**

1. Sodium Potassium ATPase pump.
2. Hemolytic anemia.
3. Glucose reabsorption in Nephron.
4. Explain the structure of smooth muscle and its properties.
5. Body Fluid Compartments.
6. Phases of gastric juice secretion.
7. Dietary fibre.
8. Neuroendocrine reflex.
9. Role of Vitamin D in calcium homeostasis.
10. Mechanism of action and functions of testosterone.

****