

# Madhya Pradesh Medical Science University, Jabalpur

### MBBS First Professional Examination Feb-2023

## Paper Code- 23BM0000100551

### Subject- Physiology (Old Scheme)

### Paper-I

Time:3 Hours Maximum Marks:50

#### Instructions:

- a) All questions are compulsory
- b) Draw diagrams wherever necessary
- c) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper.
- d) Subjective Answer should be answered in up to 30 words per marks. For example if a question having 2 marks answer should be answered in up to 60 works.

#### Q.1 Long Answer Questions

[ 2X 5 = 10 ]

- Define Hypoxia. Classify hypoxia and discuss the causes of the same.
- b. Define Cardiac Cycle. Describe various phases occurring in it.

#### Q.2 Short Answer Questions

[ 10 X 3 = 30 ]

- a. Define Homeostasis. Discuss all the mechanism involved in homeostasis.
- b. Describe the composition, Functions and regulation of secretion of gastric juice.
- c. Define GFR. Explain briefly the factors affecting GFR.
- d. Properties of cardiac muscle
- e. Define Action potential. Draw a well labelled diagram of different phases of action potential in nerve.
- f. Define immunity. Describe the role of major Histocompatibility complex in immunity.
- g. Define Erythropoiesis. Describe with the help of diagram stages of erythropoiesis.
- h. Write briefly about mechanism of Micturition Reflex.
- i. Define Blood Pressure and Describe in brief Baroreceptor reflex.
- j. Surface tension helps in alveolar stability. Justify the statement.





### Q.3 Very Short Answer Questions

10x1=10

- a. Transport Maximum of glucose
- b. Define Peristalsis
- c. Renal Clearance Test
- d. Define VO2max
- e. Primary active transport
- f. Juxtaglomerular apparatus
- g. Haldane effect
- h. What happened if hemoglobin is not enclosed in RBC?
- i. Define Hemostasis
- www.FirstRanker.com j. Physiological basis of booster dose in vaccination.