

Question Paper

Exam Date & Time: 21-Apr-2022 (10:00 AM - 12:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. MRP DEGREE EXAMINATION - APRIL 2022
SUBJECT: PHY5101 - PHYSIOLOGY
(2021 SCHEME)

Answer ALL questions.

Marks: 50

Duration: 120 mins.

- 1A) Name the different types of plasma proteins. List four functions of plasma proteins. Describe any two functions of plasma proteins. (5)
- 1B) Define erythropoiesis. Describe the stages and factors influencing erythropoiesis. (5)
- 2A) In the form of a flow chart, describe the mechanism of excitation-contraction coupling in a skeletal muscle. (5)
- 2B) Draw a neat labelled diagram of nerve action potential and give the ionic basis for different phases of action potential. (5)
- 3A) Name the muscles of inspiration. Describe the mechanism of inspiration. (5)
- 3B) Define blood pressure. Give its normal value. Mention THREE factors influencing blood pressure. (5)
- 3C) Draw a labelled diagram of visual pathway. Indicate lesion of visual pathway at right optic tract and name the defect in field of vision. (5)
- 3D) Describe the neural regulation of respiration. (5)
- 4A) Enumerate two differences between first and second heart sounds. (2)
- 4B) Define cardiac output. Give its normal value. (2)
- 4C) Define ageusia and anosmia. (2)
- 4D) Mention the parts of vestibular apparatus. (2)
- 4E) Describe primary active transport mechanism with suitable examples. (2)

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