

Question Paper

Exam Date & Time: 11-Feb-2020 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER B.O.T./ B.Sc. M.L.T./ B.Sc. P.F.T./ B. Sc. E.M.T./B.Sc. E.S.S./ B.Sc. N.M.T./B. Opt./ B.Sc. H.I.M./ BPT/
B.Sc. M.R.T./B.Sc. C.V.T./B.Sc. R.T./ B.Sc. M.I.T./B.Sc. RRT&DT/ M.Sc. M.R.P. DEGREE EXAMINATION - FEBRUARY
2020

SUBJECT: ANAT 103/ANAT 101 - ANATOMY-II/ANATOMY
(2016 RV/2018/2019 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Name the parts of the gastro-intestinal tract. Describe the anal canal in detail. (10)
(4+6 = 10 marks)
- 2) Name the parts of the respiratory tract. Describe the pharynx in detail. (10)
(4+6 = 10 marks)

3. Short notes:

- 3A) Right atrium of heart (5)
- 3B) Kidneys (5)
- 3C) Testis (5)
- 3D) Medulla oblongata (5)

4. Short answers:

- 4A) Classification (types) of bones (2)
- 4B) Uterus (2)
- 4C) Eyeball (2)
- 4D) Pituitary gland (2)
- 4E) Pyramidal (cortico-spinal) tract (2)

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Question Paper

Exam Date & Time: 12-Feb-2020 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER B.O.T. / B.Sc. M.L.T. / B.Sc. P.F.T. / B.Sc. AOTT / B. Sc. E.M.T. / B.Sc. E.S.S. / B.Sc. N.M.T. / B. Opt. /
B.Sc. H.I.M. / BPT / B.Sc. C.V.T. / B.Sc. R.T. / B.Sc.
M.I.T. / B.Sc. RRT&DT / M.Sc. M.R.P. DEGREE EXAMINATION - FEBRUARY 2020
SUBJECT: PHYS 101 - PHYSIOLOGY- I / PHYSIOLOGY
(2016 RV/2018/2019 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1A) Explain the excitation contraction coupling in a skeletal muscle with the help of a flow chart. (5)
- 1B) Draw a labelled diagram of a nerve action potential and mention the ionic basis for different phases. (5)
- 2A) Explain the chemical regulation of respiration. (5)
- 2B) Describe the mechanism of normal inspiration and expiration in the form of flow chart. (5)
- 3A) Draw and label ECG recorded from limb lead II. List any two clinical applications of ECG. (5)
- 3B) Define cardiac output and give its normal value. describe any three factors regulating cardiac output. (5)
- 3C) Draw a neat labeled diagram of visual pathway. Add a note on myopia. (5)
- 3D) Describe the intrinsic mechanism of blood clotting pathway in the form of a flow chart. (5)
- 4A) Name two factors regulating erythropoiesis. (2)
- 4B) Draw a labeled diagram of a neuron. (2)
- 4C) List two differences between active and passive transport. (2)
- 4D) List two functions of vestibular apparatus. (2)
- 4E) Name the different types of hypoxia. (2)

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Question Paper

Exam Date & Time: 13-Feb-2020 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER B.Sc. RESPIRATORY THERAPY/B.Sc. ANAESTHESIA AND OPERATION THEATRE TECHNOLOGY
DEGREE EXAMINATION - FEBRUARY 2020
SUBJECT: BRES 101/BAOTT 101 - RESPIRATORY CARE EQUIPMENT
(2016 RV SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

Long Notes:

- 1) What are the indications for Tracheostomy procedure? Briefly explain the procedure. Mention few complications related to the procedure. (2+5+3 = 10 marks) (10)
- 2A) What are the clinical indications of oxygen therapy? (4)
- 2B) Write in detail about the types of pressure reducing valves. (6)

3. Short Notes:

- 3A) Short note on Heat & Moisture Exchangers. (5)
- 3B) Explain about the Safety relief valves on gas cylinders. (5)
- 3C) Write a note on Bubble CPAP system. (5)
- 3D) Advantages of Metered Dose Inhaler over Small Volume Nebulizer. (5)

4. Very Short Notes:

- 4A) Mention any two indications for arterial blood gas sampling. (2)
- 4B) Mention four indications for Home mechanical ventilation. (2)
- 4C) Define Absolute humidity & Relative humidity. (1+1 = 2 marks) (2)
- 4D) Calculate the duration of an E cylinder with 1500 psi at 2L/min set flow. (Cylinder Factor of E = 0.28) (2)
- 4E) What is Seldinger technique? (2)

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