

# Question Paper

Exam Date & Time: 05-Sep-2019 (02:00 PM - 04:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER BPT / B.Sc. C.V.T./ B.Sc. R.T./ B.Sc. M.I.T./ B.Sc. RRT&DT / B.O.T./ B.Sc. E.S.S. DEGREE  
EXAMINATION - SEPTEMBER 2019

SUBJECT : ANATOMY II

(ANAT 104; ANAT 102; ANAT 102/BRES 102; ANAT 102/BMIT 102; ANAT 102; ANAT 104; ANAT 102)

(2016 RV & 2016 SCHEME)

Thursday, September 05, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

1) Describe the hip joint under the following headings:

- |     |   |     |
|-----|---|-----|
| 1A) | Articular surfaces                      | (2) |
| 1B) | Names of the ligaments                  | (3) |
| 1C) | Muscles producing each of its movements | (3) |
| 1D) | Applied anatomy                         | (2) |

Answer all the questions.

- |     |  |      |
|-----|--|------|
| 2)  | a) Describe the origin, insertion, nerve supply and actions of deltoid muscle.<br>b) Mention the applied anatomy of deltoid muscle.<br>c) Name any six structures lying deep to (under cover of) the deltoid muscle.<br>(2+1+1+2+1+3 = 10 marks) | (10) |
| 3A) | Gluteus medius muscle  | (5)  |
| 3B) | Ulnar nerve  | (5)  |
| 3C) | Hamstring muscles  | (5)  |
| 3D) | Brachial artery  | (5)  |
| 4A) | Vertebral column   | (2)  |
| 4B) | Carpal tunnel  | (2)  |
| 4C) | Serratus anterior muscle   | (2)  |
| 4D) | Posterior cord of brachial plexus  | (2)  |
| 4E) | Femoral nerve  | (2)  |

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# Question Paper

Exam Date & Time: 11-Sep-2019 (02:00 PM - 04:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER BPT / B.Sc. C.V.T./ B.Sc. R.T./ B.Sc. M.I.T./ B.Sc. RRT&DT / BOPT / B.O.T./ B.Sc. M.L.T./ B.Sc.  
P.F.T. DEGREE EXAMINATION - SEPTEMBER 2019  
SUBJECT : BIOCHEMISTRY (BIOC 102/BPT 106)  
(2016 RV SCHEME/2016 SCHEME)  
Wednesday, September 11, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

### Answer all the questions.

- 1A) Write in detail the steps of TCA cycle. (8)
- 1B) Add a note on its energetics. (2)
- 2A) Describe the process of emulsification and lipid digestion in detail. (6)
- 2B) Diagrammatically represent lipid absorption in the intestine. (4)
- 3) **Answer the following:**
- 3A) Describe in detail the synthesis of triacylglycerol. Add a note on its fate in liver and adipose tissue. (5)
- 3B) Write the reactions of urea cycle. (5)
- 3C) Name the lipoproteins and mention one function for each. Draw the electrophoretic separation pattern for serum lipoproteins. (5)
- 3D) What are dietary fibers? Explain their significance in diet. (5)
- 4) **Answer the following:**
- 4A) Name the coenzyme form of vitamin B<sub>1</sub> and write one reaction where it is required. (2)
- 4B) Define and classify nitrogen balance. (2)
- 4C) Mention two functions of vitamin D. (2)
- 4D) What are essential fatty acids? Give two examples. (2)
- 4E) Give the normal range for fasting blood glucose and serum cholesterol. (2)

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# Question Paper

Exam Date & Time: 10-Sep-2019 (02:00 PM - 04:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER BPT/ B.Sc. MRT/ B.Sc. CVT/ B.Sc. R.T./ B.Sc. MIT/ B.Sc. RRT & DT/ BOT/ B.Sc. E.S.S./ B.Sc. MLT/  
B. Sc. PFT/ DEGREE EXAMINATION - SEPTEMBER 2019

SUBJECT: PHYSIOLOGY - II

(PHYS 102 & BMRT 102)

(2016 RV & 2016 SCHEME)

Tuesday, September 10, 2019 (14.00 - 16.00 Hrs.)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1A) Name the major subdivisions of cerebellum. Enumerate three functions of cerebellum. (5)
- 1B) List any five clinical features seen in cerebellar lesions. (5)
- 2A) Name the hormones of thyroid gland and mention any five physiological actions of thyroid hormones. (5)
- 2B) Mention the cause and four clinical features seen in myxedema. (5)
- 3A) Describe glucose reabsorption in the renal tubules. (5)
- 3B) Explain the actions of testosterone. (5)
- 3C) Describe the events in the second phase of deglutition. (5)
- 3D) Mention the site of formation and functions of CSF. (5)
- 4A) Mention any two clinical features observed in lower motor neuron lesion. (2)
- 4B) Define GFR. Mention its normal value. (2)
- 4C) Enumerate any two functions of placenta. (2)
- 4D) List the small intestinal movements. (2)
- 4E) Mention any two features of Cushing syndrome. (2)

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