

# Question Paper

Exam Date & Time: 20-May-2024 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER B.Sc. (RT/ MIT/EMT/BPT/CVT/RRT & DT/BOT/AOTT/ PHYSICIAN ASSISTANT/BPO) DEGREE

EXAMINATION - MAY/JUNE 2024

SUBJECT: ANA1201/ ANA1205 - ANATOMY - II  
(2020/2022 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- |     |  |      |
|-----|--|------|
| 1)  | Describe the arches of foot and mention their applied anatomy<br>(8+2 = 10 marks)  | (10) |
| 2)  | Describe the median nerve under following headings<br>A) Origin<br>B) Root value<br>C) Course<br>D) Distribution<br>E) Applied anatomy<br>(1+1+2+5+1 = 10 marks) | (10) |
| 3A) | Popliteal fossa  | (5)  |
| 3B) | Deltoid muscle   | (5)  |
| 3C) | Sciatic nerve  | (5)  |
| 3D) | Elbow joint  | (5)  |
| 4A) | Brachial artery  | (2)  |
| 4B) | Femur  | (2)  |
| 4C) | Buccinator muscle  | (2)  |
| 4D) | Median cubital vein  | (2)  |
| 4E) | Femoral sheath   | (2)  |

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# Question Paper

Exam Date & Time: 24-May-2024 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER B.Sc. (NMT/RT/ MIT/EMT/BPT/BOPT/CVT/CND/RRT & DT/BOT/AOTT/ PHYSICIAN  
ASSISTANT/PFT/MLT) DEGREE EXAMINATION - MAY/JUNE 2024  
SUBJECT: BIC1201 - BIOCHEMISTRY  
(2020/2022 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Define gluconeogenesis and write the reactions of gluconeogenesis from pyruvate (10)
- 2) Explain with illustrations the biosynthesis of mature collagen, emphasizing the reactions catalyzed by prolyl hydroxylase, lysyl hydroxylase, and lysyl oxidase. (10)
- 3A) Illustrate the classification of lipoproteins based on their ultracentrifugation properties. Mention the site of synthesis and function for any THREE lipoproteins. (5)
- 3B) Describe in detail the activation of fatty acid and the steps of beta oxidation in mitochondria. (5)
- 3C) Mention the RDA for dietary fibres. Explain FOUR benefits of consuming dietary fibres (5)
- 3D) Mention the RDA, sources and chemical forms of vitamin A. List FOUR features of vitamin A deficiency (5)
- 4A) Mention the normal blood levels of fasting glucose, urea, cholesterol and total bilirubin. (2)
- 4B) Write the normal level of albumin in serum and mention any TWO conditions in which its levels are altered. (2)
- 4C) List FOUR differences between DNA and RNA (2)
- 4D) Write the reaction catalysed by pyruvate dehydrogenase complex indicating the coenzymes required. (2)
- 4E) Define metabolic alkalosis. Mention TWO causes for it. (2)

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# Question Paper

Exam Date & Time: 22-May-2024 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

**SECOND SEMESTER B.Sc. (NMT/RTT MIT/EMT/BPT/BOPT/CVT/RRT & DT/BOT/AOTT/ PHYSICIAN  
ASSISTANT/BPO/PFT/MLT/RESPIRATORY THERAPY) DEGREE EXAMINATION - MAY/JUNE 2024  
SUBJECT: PHY1201 - PHYSIOLOGY - II  
(2020/2022 SCHEME)**

**Marks: 50**

**Duration: 120 mins.**

**Answer all the questions.**

**Write brief, clear and legible answers.**

**Illustrate your answers with diagrams and flow charts wherever appropriate.**

- 1) Name the functional divisions of cerebellum. Enumerate the functions of each lobe of cerebellum. (10)  
Add a note on clinical features of cerebellar lesion.  
(2+5+3 = 10 marks)
- 2) Describe the actions of growth hormone. Explain the regulation of secretion of growth hormone. Add (10)  
a note on the cause and clinical features of gigantism  
(4+3+3 = 10 marks)
- 3A) Enumerate any FOUR functions of saliva. Add a note on Xerostomia (5)  
(4+1 = 5 marks)
- 3B) Describe the renal tubular reabsorption of glucose. (5)
- 3C) Draw a labeled diagram of the lateral spinothalamic pathway and mention any two sensations (5)  
carried by the same.
- 3D) Describe the uterine endometrial changes during menstrual cycle (5)
- 4A) List any TWO clinical features of Parkinson's disease (2)
- 4B) List any TWO properties of receptors (2)
- 4C) Enumerate any TWO functions of gall bladder (2)
- 4D) Define Renal clearance. Mention the substance used for the estimation of GFR (2)
- 4E) List the indicators of ovulation (2)

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# Question Paper

Exam Date & Time: 27-May-2024 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER B.Sc. RRT & DT DEGREE EXAMINATION - MAY/JUNE 2024  
SUBJECT: RRT1201 - KIDNEY DISEASE - II  
(2020 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

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|-----|---|------|
| 1)  | Define renal anemia. Explain the causes, clinical features, diagnosis and management of renal anemia in chronic kidney disease. | (20) |
| 2)  | Classify and name the uremic solutes based on physical characteristics. Outline uremic encephalopathy.                          | (20) |
| 3)  | Explain the electrolyte abnormalities in chronic kidney disease.  | (10) |
| 4)  | Define osteodystrophy and list its diagnostic method. Outline osteitis fibrosis in chronic kidney disease.                      | (10) |
| 5A) | Classify the filtration markers used to assess kidney function.   | (5)  |
| 5B) | What is a kidney biopsy? List the contraindications for kidney biopsy.  | (5)  |
| 5C) | Classify the types of urinalysis used to diagnose kidney diseases.  | (5)  |
| 5D) | List the non-traditional risk factors for cardiovascular disorders in chronic kidney disease.                                   | (5)  |
| 5E) | Define metabolic alkalosis. List the causes of metabolic alkalosis.   | (5)  |
| 5F) | Outline protein-energy malnutrition in chronic kidney disease patients.   | (5)  |
| 6A) | List the routine blood investigation done in chronic kidney disease patients.   | (2)  |
| 6B) | What is polyuria?   | (2)  |
| 6C) | List any two commonly used radiological investigations done for renal assessment.   | (2)  |
| 6D) | List any two hemostasis-related disorders in chronic kidney disease.  | (2)  |
| 6E) | List any two endocrine disorders in chronic kidney disease.   | (2)  |

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