500-A

DR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008

M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016

FIRST M.B.B.S. EXAMINATION

BIOCHEMISTRY

PAPER-I

Time : 2 ½ Hours Max. Marks: 50

Answer all questions

|  |  |  |
| --- | --- | --- |
|  | Write in detail about the metabolism of chylomicrons giving suitable examples. | 6+4=10 |
|  | Write in detail about the steps of glycolysis in anerobic condition. Add a note on its regulation and energetics. | 6+2+2=10 |
|  | WRITE SHORT NOTES ON: | 5x4=20 |
|  | Functions of biotin |  |
|  | Homopolysaccharides |  |
|  | Define Basal Metabolic Rate (BMR) and write the factors affecting BMR |  |
|  | Protein energy malnutrition |  |
|  | Isoenzymes |  |
|  | WRITE BRIEFLY ON: | 5x2=10 |
|  | Significance of uronic acid pathway |  |
|  | Acute intermittent porphyria – mention the deficient enzyme and the lab findings |  |
|  | Effect of temperature on enzyme activity |  |
|  | Mention different types of α-Thalassemias |  |
|  | Mention functions of Haemoglobin |  |

500-B

DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA – 520 008

M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016

FIRST M.B.B.S. EXAMINATION

**BIOCHEMISTRY**

PAPER-II

Time : 2 ½ Hours Max. Marks : 50

Note: Answer all questions

Draw diagrammatic representation wherever necessary.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Write about transamination, deamination and transmethylation | 4+3+3=10 | |
|  | Discuss the role of buffers and kidney in pH homeostasis. | 3+7=10 | |
|  |  |  | |
|  | WRITE SHORT NOTES ON: | 5x4=20 | |
|  | Hyperuricemia |  | |
|  | Mutations |  | |
|  | Structure of plasma membrane |  | |
|  | Recombinant DNA |  | |
|  | Iron absorption |  | |
|  | WRITE BRIEFLY ON: | 5x2=10 | |
|  |  |  | |
|  | Isoelectric pH | |  | |
|  | Functions of Calcium |  | | | |
|  | Termination of Transcription |  | | | |
|  | Alkaptonuria  501-A  DR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008  M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016  FIRST M.B.B.S. EXAMINATION  ANATOMY  PAPER-I  Time : 2 ½ Hours Max. Marks : 50  Note: Answer all questions  Illustrate your answers with suitable diagrams   |  |  |  | | --- | --- | --- | |  | Describe the thyroid gland under the following headings:   * 1. Location   2. Relations   3. Blood supply   4. Applied anatomy | 2+3+3+2=10 | |  | Describe the brachial plexus under the following headings:   * 1. Formation   2. Relations   3. Branches   4. Applied Anatomy | 2+2+3+3=10 | |  | WRITE SHORT NOTES ON: | 5x4=20 | |  | Rhomboid fossa |  | |  | Internal capsule |  | |  | Development of tongue |  | |  | Histology of cardiac muscle |  | |  | Facial artery – origin, course, relations and applied anatomy |  | |  | WRITE BRIEFLY ON: | 5x2=10 | |  | Nerve supply and actions of deltoid muscle |  | |  | Contents and applied anatomy of cubital fossa |  | |  | Subarachnoid space |  | |  | Layers of retina |  | |  | Pulp space of the fingers  --- |  |   502-A  DR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008  M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016  FIRST M.B.B.S. EXAMINATION  ANATOMY  PAPER-II  Time : 2 ½ Hours Max. Marks: 50  Note: Answer all questions  Illustrate your answers with suitable diagrams     |  |  |  | | --- | --- | --- | |  | Describe the hip joint under the following headings:   * 1. Articular surfaces   2. Ligaments   3. Movements   4. Blood and nerve supply   5. Applied anatomy | 2+3+2+2+1=10 | |  | Describe pancreas under the following headings:   * 1. Parts   2. Relations   3. Blood supply   4. Applied anatomy | 1+4+3+2=10 | |  | WRITE SHORT NOTES ON: | 5x4=20 | |  | Popliteal artery – origin, relations and Branches |  | |  | Gluteus maximus – Origin, insertion, nerve supply and actions |  | |  | Development of urinary bladder and mention two congenital anomalies |  | |  | Histology of uterus |  | |  | Ischiorectal fossa |  | |  | WRITE BRIEFLY ON: | 5x2=10 | |  | Enumerate features of Turner’s Syndrome |  | |  | Sinoatrial (SA) node |  | |  | Lymphatic drainage of breast |  | |  | Pericardial sinuses |  | |  | Mention the differences between right and left lungs |  |     503-A  DR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008  M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016  FIRST M.B.B.S. EXAMINATION  PHYSIOLOGY  PAPER-I  Time : 2 ½ Hours Max. Marks: 50  Note : Answer all questions  Give diagrammatic representation wherever possible   |  |  |  | | --- | --- | --- | |  | Define Hypertension. Describe briefly the physiological principles underlying pathogenesis and management of Hypertension. | 2+4+4=10 | | 2) | Define Airway Resistance. Give its normal value. List the factors affecting it. Describe briefly the principles governing flow of Air in Air Passages. | 1+1+3+5=10 | |  | WRITE SHORT NOTES ON: | 5x4=20 | | 3) | Sodium – Potassium ATPase |  | | 4) | Composition and functions of bile |  | | 5) | Mechanism of secretion of Saliva |  | | 6) | Regulation of Sodium excretion by kidney |  | | 7) | Abnormalities in Haemoglobin synthesis |  | |  | WRITE BRIEFLY ON: | 5x2=10 | | 8) | Mention functions of spleen |  | | 9) | Hypothermia |  | | 10) | Alimentary Glycosuria |  | | 11) | Deglutition apnoea |  | | 12) | Desmosomes  --- |  |   504-A  DR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008  M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016  FIRST M.B.B.S. EXAMINATION  PHYSIOLOGY  PAPER-II  Time : 2 ½ Hours Max. Marks : 50  Note: Answer all questions  Give diagrammatic representation wherever possible     |  |  |  | | --- | --- | --- | |  | Define terms “Growth and Development”. List the factors affecting them. Describe briefly physiological aspects of both. | 2+2+3+3=10 | |  | Name the components of middle ear. Give their functions. Describe briefly the role of internal ear in hearing. | 2+2+6=10 | |  | WRITE SHORT NOTES ON: | 5x4=20 | |  | Properties of Nerve Fibers |  | |  | Withdrawal reflex |  | |  | Control of testicular activity |  | |  | Somatosensory Cortex |  | |  | Fertilization and implantation of ovum |  | |  | WRITE BRIEFLY ON: | 5x2=10 | |  | Miniature end plate potential |  | |  | Catabolic Nervous System |  | |  | Isometric Muscle Contraction |  | |  | Colostrum |  | |  | Types of smooth muscles  --- |  | |  | | | |