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 |  |
|  | Alkaptonuria501-ADR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016FIRST M.B.B.S. EXAMINATIONANATOMYPAPER-ITime : 2 ½ Hours Max. Marks : 50Note: 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-ADR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016FIRST M.B.B.S. EXAMINATIONANATOMYPAPER-IITime : 2 ½ Hours Max. Marks: 50Note: 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-ADR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016FIRST M.B.B.S. EXAMINATIONPHYSIOLOGYPAPER-ITime : 2 ½ Hours Max. Marks: 50Note : 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-ADR. NTR UNIVERSITY OF HEALTH SCIENCES: AP: VIJAYAWADA-520 008M.B.B.S. DEGREE EXAMINATION – DECEMBER, 2016FIRST M.B.B.S. EXAMINATIONPHYSIOLOGYPAPER-IITime : 2 ½ Hours Max. Marks : 50Note: 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--- |  |

 |  |