J & K BOARD OF TECHNICAL EDUCATION

SEMESTER: 1st
MAX.MARKS: 100
BRANCHES : MLT

SCHEME: New
TIME ALLOWED: 03 Hrs
SUBJECT: Anatomy & Physiology-I

SECTION- A

Attempt all question in Section A. 2×10=20 Marks

Q1. Define fibrous joint.

Q2. Name the bones of cranium.

Q3. Name the enzymes of small intestine.

Q4. Name the four parts of nephron

Q5. Name any four bones of upper limbs.

Q6. What is the function of lipase.

Q7. Define endocrine.

Q8. Name the parts of large intestine.

Q9. What is the function of glucogen hormone.

Q10. What is bile pigment

SECTION B

***Attempt any four questions in Section B (short answer type)* 4×5=20 marks**

Q1. Write notes on cardiac and skeletan muscles.

Q2. Draw a neat labelled diagram of urinary tract.

Q3. Write notes on basal metabolic rate.

Q4. Write short notes on lungs.

Q5. Define vitamins. Write about fat soluble vitamin.

Q6. Name the various parts of digestive system and explain briefly on stomach.

Q6. Explain clavicle bones briefly with labelled diagram.

Q7. Write notes on regulation of respiration.

Q8. Write short notes on epithelium tissue.

SECTION C

Attempt any four questions in Section C (long answer type) 4x15=60 marks

Q1. Describe the articulation of bones in detail.

Q2. Describe any two upper limbs bones with labelled diagram.

Q3. Explain the structure and function of liver in detail.

albumin
humerus
Gloum
Gloumerul an
Glomerula

SCHEME: New

Q4. Write short notes on

A. Pancreas. B. formation of urine

C. Absorption and assimilation of food

Q5. Describe the Histology structure of nephron with labelled diagram.

Q6. Write notes on

A. Small intestine B. Salivary gland

C. Exchange of gases in lungs

Q7. Describe about connective tissue with pictures

Q8. Explain the following

A. Femur. B. Kidney

ND22MNEP

J & K BOARD OF TECHNICAL EDUCATION

SEMESTER: 1st
MAX.MARKS: 100
BRANCHES : MLT

SCHEME: New
TIME ALLOWED: 03 Hrs
SUBJECT: Clinical Microbiology-I

SECTION- A

Attempt all question in Section A. 2x10=20 Marks

Q1. Define the term resolution power.
Q2. Define spore.
Q3. What is blood agar
Q4. Who is the father of bacteriology.
Q5. Name two acid fast bacilli.
Q6. Define flagella
Q7. Definefiltration.
Q8. Mycolic acid is present in cell wall of_____.
Q9. Define the term pasteurization.
Q10. Define magnification

SECTION -B

Do any four questions in Section B.(short answer type) 4x5=20 Marks

Q1. Draw the bacterial growth curve and explain its phases in brief.
Q2. Write notes on dark field microscope.
Q3. Write notes on pasteurization and tyndallization.
Q4. What is enriched media and enrichment media.
Q5. Explain the hot air oven in brief.
Q6. Write notes on Indian ink preparation.
Q7. Write notes on importance of microbiology in brief.
Q8. Write about streak plate method with picture.

SECTION -C

Attempt any four questions in Section C (long answer type) 4x15=60Marks

Q1. Describe parts ,care and handling of microscope with diagram.
Q2. Explain the structure function and control of autoclave in detail.
Q3. What are culture media classify the types of culture media with suitable example.
Q4. Draw the diagram of bacteria. Explain the parts of bacterior cell in detail.

Q5. Write notes on

A. ZN stain. B. Gram stain

Q6. Define disinfection. Classify various methods of sterilization with suitable example.

Q7. Explain the following

A. Electron microscope B. Fluorescent microscope

Q8. Write notes on

A. Indian ink preparation B. Hot air oven

ND22MNEP

J & K BOARD OF TECHNICAL EDUCATION

SEMESTER: 1st | **SCHEME: New**
MAX.MARKS: 100 | **TIME ALLOWED: 03 Hrs**
BRANCHES : MLT | **SUBJECT: Basic Chemistry**

SECTION- A

Attempt all question in Section A. 2x10=20 Marks

Q1. The word lipid derived from Greek word_____

Q2. Sucrose commonly called as_____.

Q3. pH of human bloodbloodis_____

Q4. An element may be defined as the simplest form of_____ substance.

Q5. Define normality.

Q6. Define PH.

Q7. Define buffer.

Q8. Define atomic mass

Q9. Define S.I unit.

Q10. Lipids are oily and _____waxy substance.

SECTION -B

Attempt any four questions in Section B.(Short Answer Type) 4x5=20 Marks

Q1. *Write short notes on neutralisation.*

Q2. What are the importance of protein.

Q3. Write the concept of pH scale

Q4. What are the function of enzyme in biosystem.

Q5. Write down primary structure of protein.

Q6. What are the importance of lipids

Q7. What is enzyme inhibitors

Q8. What are the important monosaccharides ,disaccarides,polysaccharides

SECTION -C

Do any four questions in Section C (long answer type) 4x15=60 Marks

Q1. What are enzymes .what are the factors which affect enzyme activity.

Q2. What are carbohydrates and its classification.

Q3. What are proteins. Write the function and classification of protein.

Q4. Write notes on

A. Cholesterol B. Globular and fibrous protein

Q5. Explain in detail all the concept of acid and bases.

Q6.. Explain the following terms

A. pH scale. B. Application of buffers

C. Importance of carbohydrate

Q7. Write down preparation and properties of glucose.

Q8. Explain optical activity and maturatatiom..

ND22MNEP

J & K BOARD OF TECHNICAL EDUCATION

SEMESTER: 1st
MAX.MARKS: 100
BRANCHES : MLT

SCHEME: New
TIME ALLOWED: 03 Hrs
SUBJECT: Clinical Haematology-I

SECTION- A

Attempt all question in section A. 2x10=20 marks

Q1. EDTA prevents coagulation by binding. _____

Q2. Define Haemopoeisis.

Q3. Another name of neutrophil is_____ ,___.

Q4. The biggest leucocytes is _____

Q5. WBC diluting fluid is also known as_____

Q6. When erythropoiesis occurs in the liver and spleen this stage is called _____

Q7. Cell count chamber other name is _____.

Q8. Define PH.

Q9. The depth of Neubauer chamber is _____.

Q10. The count of thrombocyte should be performed within _____ hours of collection.

SECTION B

Attempt any four questions from section B (short answer type) 4x5=20 marks

Q1. What are the characteristics of good film preparation.

Q2. Write short notes on lymphocytes with picture.

Q3. Write short notes on hemocytometer.

Q4. Write the composition of RBC diluting fluid and WBC diluting fluid.

Q5. Write about various colour coded blood collection tubes.

Q6. Write the uses of Hb, RBC WBC and ESR pipette.

Q7. Write notes on Leishmans stain and effect of PH on staining.

Q8. What are the safety measures at the time of sampling and collection.

SECTION -C

Attempts any four question from section C (long answer type) 4x15=60 marks

Q1. Explain the process of erythroposes with pictures.

Q2. Define anticogulant. Explain the various type of anticogulantand their merit and demerit in detail.

Q3. What are total leucocytecount (TLC) and differential leucocyte count (DLC) and it's normal value. Describe the method of TLC estimation.

Q4. Explain the composition and function of blood in detail.

Q5. Explain the process or leeco process in detail.

Q6. Write the collection, preservation and transportation of blood sample in laboratory in detail.

Q7. Write notes on

A. Thrombopoiesis B. Romanowsky stain

Q7. Write notes on (draw picture also)

A monocyte. B. Neutrophil C. Basophil

Q8. Explain the following

A. Colour coded blood collection tube

B. Composition and staining procedure of leishmensstain

J & K BOARD OF TECHNICAL EDUCATION

SEMESTER: 1st
MAX.MARKS: 100
BRANCHES : MLT

SCHEME: New
TIME ALLOWED: 03 Hrs
SUBJECT: Clinical BioChemistry

SECTION- A

Attempt all question in Section A. 2x10=20 Marks

Q1. Define peoples
Q2. EDTA stands for_____
Q3. Define buffer solution.
Q4. Define blank solution.
Q5. Define calibration.
Q6. Define standard.
Q7. The normal pH of blood is_____
Q.8. Write any two uses of centrifuge machine
Q9. Define SI unit
Q10. Define glucometer.

SECTION -B

Do any four questions in Section B (short answer type) 4x5=20 marks

Q1. What are the clinical importance of blood glucose
Q2. Write short notes on protein free filtrate.
Q3. Write about glassware in brief.
Q4. Name the parts of chlorimeter and it's principal
Q5. Write short notes on mixers.
Q6. Write short notes on renal threshold.
Q6. Name the parts of centrifuge machine and its principle.
Q7. Write short notes on glucose tolerance test.
Q8. What is the importance of Biochemistry.

SECTION -C

Attend any four questions in section C (long answer Type) 4x15=60 Marks

Q1. Write the principal, procedure and clinical importance of uric acid.
Q2. Explain the following
A. SI units and their uses B. Water bath
Q3. Write the principle, working care and maintenance of colorimeter in detail.

Q4. Explain the following

A. Volumetric apparatus and their calibration

B. Glucometer

Q5. Write the principal, working ,handling and care of distillation plant.

Q6. Write notes on

A. Clinical importance of blood urea

B. Separation of serum and plasma

C. Clinical importance of creatinine.

Q7. Write the principle procedure clinical importance of serum creatinine.

Q8. Write notes on

A. Formation and excretion of urea

B. Electrolyte analyser.