

PM/PD EXAMINATION – 2020 (I)
ANATOMY
(O.T. ASSISTANT COURSE)

Paper – I

1st Year

Full Marks – 100.
Time – 3 hours.

Answer all questions.

- Q-1. Describe in brief the boundary and contents of inguinal canal . (20)
- Q-2. Short notes on the following – (2 x 10 = 20)
- (a) Mediastinal surface of left lung
 - (b) External features of spleen
- Q-3. Give a short account of the following :- (2 x 10 = 20)
- (a) Great saphenous vein
 - (b) Deltoid muscle
- Q-4. Describe the gross anatomy of a stomach . (20)
- Q.5. Enumerate (name only) the following :- (4 x 5 = 20)
- (a) Layers of scrotum
 - (b) Parts of male urethra
 - (c) Branches of abdominal aorta
 - (d) Branches of posterior cord of brachial-plexus

ANATOMY – 2018 (I)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

Answer All questions.

- 1.** What are paranasal sinuses ? Give the location, boundaries and drainage of maxillary air sinus. Why maxillary air sinus is most commonly infected ?
- 2.** Describe arterial supply of heart.
- 3.** What are the main muscles of mastication ? Give origin, insertion and nerve supply.

4. Write Short notes on any four—

- (a) Layer of scalp
- (b) Submandibular gland
- (c) Gall bladder
- (d) Ovary
- (e) Arterial supply of stomach.

5. Write true or false —

- (i) Liver has coronary ligament.

Fill up the blanks—

- (ii) Common peroneal nerve is branch of
- (iii) Femoral artery is the continuation of
- (iv) Medial sacral artery is the branch of

Multiple Choice Questions :

(v) Which nerve may be palpated at neck of fibula ?

- (a) Tibial nerve
- (b) Sciatic nerve
- (c) Common peroneal nerve
- (d) Saphenous nerve

(vi) Inferior epigastric artery is a branch of—

- (a) Femoral artery
- (b) External iliac artery
- (c) Obturator artery
- (d) Internal thoracic artery

(vii) Tunica vaginalis is found over—

- (a) Vagina
- (b) Uterus
- (c) Ovary
- (d) Testis

(viii) Deep peroneal nerve is the branch of—

- (a) Tibial nerve
- (b) Femoral nerve
- (c) Superficial peroneal nerve
- (d) Common peroneal nerve

(ix) All structures pass through deep inguinal ring except—

- (a) Testicular artery
- (b) Cremasteric artery
- (c) Ilioinguinal nerve
- (d) Genitofemoral nerve

(x) Main action of peroneus longus muscle is—

- (a) Plantar flexion
- (b) Dorsi flexion
- (c) Inversion
- (d) Eversion

ANATOMY – 2017 (II)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

Answer All questions.

1. Describe the development of tongue. Mention its nerve supply and lymphatic drainage.
2. Describe the anatomy of the lateral wall of the nasal cavity. Mention the opening of nasal sinuses.
3. Describe the mechanism of normal breathing. What do you understand by vesicular and bronchial breathing.
4. What are the basic difference between Plain muscle and Cardiac muscle. What changes take in uterus during pregnancy and soon after birth of the baby ?
5. Write Short notes on any two—
 - (i) Tonsil

- (ii) Parotid duct
- (iii) Soft Palate
- (iv) Lesser omentum

6. *Objective Questions :*

- (i) Cell of the respiratory centre are found in—
 - (a) Inferior olive
 - (b) Pyramid
 - (c) Left colic artery
 - (d) Reticular formation
- (ii) Radial nerve is injured in—
 - (a) Saturday night paralysis
 - (b) Crutch paralysis
 - (c) Wrist drop
 - (d) All of the above
- (iii) Foot drops is due to injury to—
 - (a) Sciatic nerve
 - (b) Tibial nerve
 - (c) Common Peroneal nerve
 - (d) Femoral nerve
- (iv) Fossa Ovalis is present in—
 - (a) Right ventricle
 - (b) Left ventricle
 - (c) Right atrium
 - (d) Left atrium
- (v) Greater curvature of stomach gives attachment to—
 - (a) Greater omentum
 - (b) Gastrosplenic ligament
 - (c) Gastro phrenic ligament
 - (d) All of the above.

ANATOMY – 2017 (I)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

Answer All questions.

(A) Objective Questions :

1. Which part of hip bone is used for taking bone marrow biopsy in anaemia or leukemia ?

(a) Ilium

(b) Iliac crest

(c) ASIS

(d) PSIS

2. The bone devoid of muscular attachment.
- (a) Cuboid (b) Talus
(c) Navicular (d) Medial cuneiform
3. Meckel's diverticulum is a remnant of—
- (a) Mullerian duct (b) Wolffian duct
(c) Mesonephric duct (d) Vitellointestinal duct
4. Left gonadal vein drains into—
- (a) Internal iliac vein (b) Inferior vena cava
(c) Left renal vein (d) Vena azygos
5. Uterine artery is a branch of which artery—
- (a) External iliac (b) Internal iliac
(c) Abdominal aorta (d) Common iliac artery
6. Which of the following joints do not have a fibro cartilaginous intra-articular disc?
- (a) TM joint (b) Shoulder joint
(c) Sternoclavicular joint (d) Inf. Radioulnar joint
7. The joint between tooth and gum is—
- (a) Syndesosis (b) Gomphosis
(c) Sutures (d) Primary cartilaginous joint
8. Sensory fibres from the tongue is carried by all nerves except—
- (a) V (b) VIII
(c) IX (d) X
9. Fracture of humerus of mid shaft is likely to damage which nerve—
- (a) Median (b) Radial
(c) Ulnar (d) Axillary

10. Three large openings in the diaphragm are at levels of following thoracic vertebra—

(a) T8, T9, T10

(b) T 7, T 8, T 9

(c) T8, T10, T12

(d) T9, T10, T12

(B) Write short notes on—

1. Rectus sheath
2. Portal triad
3. Femoral triangle
4. Radial nerve.

(C) Answer any three questions—

1. Describe uterus and its support.
2. Describe gross anatomy of spleen and splenic circulation.
3. Describe knee joint and arterial anatomises around the joint.
4. Developments of tongue and nerve supply.

ANATOMY – 2016 (I)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

All questions carry equal marks. Answer All questions.

1. What is Sternal Angle ? Mention its importance.
2. Describe the Blood supply and lymphatic drainage of the Breast.
3. Write only the name of the following :
 - (a) Bones of the Carpal Bones.
 - (b) Organs of the Gastrointestinal Tract.
 - (c) Muscles of Rotator's Cuff.
 - (d) Branches of Arch of Aorta.
4. Describe briefly :
 - (a) Carpal Tunnel Syndrome
 - (b) Muscles of shoulder region.
5. Write Short-notes on any two :
 - (a) Testes
 - (b) Muscle forming the rectus sheath
 - (c) Cubital fossae.

ANATOMY – 2015 (I)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

All questions carry equal marks. Answer All questions.

1. Write the gross anatomy of Stomach with diagram.
2. Write the name of the organs of Urinary system. Describe the blood supply of the kidney.
3. Write the name of the following :
 - (a) Structures piercing Clavipectoral fascia.
 - (b) Portal triad.
 - (c) Branches of celiac trunk.
 - (d) Structures forming the boundaries of Femoral Triangle.
4. Describe briefly :
 - (a) Spleen
 - (b) Axillary Nerve.

5. Write Short notes on any two :

(a) Testes

(b) Ovary

(c) Mammary Gland.

ANATOMY – 2014 (I)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

All questions carry equal marks. Answer All questions.

- 1. Write the gross anatomy of spleen with diagram.**

2. Write the name of the organs of digestive system with the name of arteries supplying them.
3. Enumerate only —
 - (a) Bones of the upper limb.
 - (b) Branches of abdominal aorta.
 - (c) Muscles of arm.
 - (d) Different Salivary Glands.
4. Write briefly about :
 - (a) Appendix
 - (b) Thyroid
5. Write Short notes on any two :
 - (a) Urinary bladder
 - (b) Sternal angle
 - (c) Rectus sheath.

ANATOMY – 2013 (I)

1st Year

Paper – I

Full Marks : 100

Time : 3 Hours

All questions carry equal marks. Answer All questions.

1. Write the gross anatomy of liver with diagram.
2. Write the name of the organs of Urinary System. Describe the blood supply of the Kidney.
3. Write the names of the following :
 - (a) Bones of the lower limb.
 - (b) Organs of the female reproductive system.
 - (c) Muscles of mastication
 - (d) Salivary Gland.
4. Describe briefly :
 - (a) Heart
 - (b) Muscles of shoulder region.
5. Write Short notes on any two :
 - (a) Testes
 - (b) Ovary
 - (c) Mammary Gland.

PM/PD Exam 2020 (I)

PHYSIOLOGY

(O.T. ASSISTANT Course)

Paper- II

1st Year

Full Marks - 100

Time - 3 Hours

Answer any FIVE questions.

Each question carries equal Marks.

- 1) Define cardiac cycle. How different heart sounds are generated?
- 2) Define anemia . Describe nutritional anemia .
- 3) Describe the mechanics of respiration.
- 4) What is balanced diet / Discuss protein digestion and absorption?
- 5) Write short notes on any two –
 - (a) Juxta-glomerular apparatus
 - (b) Taste bud
 - (c) Myopia
 - (d) Sarcomere
- 6) Define reflex . Describe different components of a neuron .
- 7) Fill in the blank :
 - i) Acromegaly is caused by
 - ii) Most common cause of jaundice in adult
 - iii) Trypsin enzyme is secreted by.....
 - iv) Normal daily urinary output is
 - v) Diabetes insipidus is caused by
 - vi) Number of ATP generated by Glycolysis is
 - vii) Zona reticularis secretes
 - viii) Rectus femoris is component of
 - ix) ABO blood group system was given by.....
 - x) Rhodopsin is found in.....

PM/PD Exam 2019 (II)
PHYSIOLOGY
(O.T. ASSISTANT Course)
Paper- II

1st Year

Full Marks - 100
Time - 3 Hours

Answer any FIVE questions.
Each question carries equal Marks.

- 1) Mention the composition of saliva . Describe different functions of saliva .
- 2) Mention different types of blood group . What is cross matching ? Describe the features of transfusion reaction .

A, B, AB, O
- 3) What is Synapse ? Describe properties of synapse .
- 4) Define blood pressure . How it is measured ?
- 5) Describe different refractive errors of eye .
- 6) Write short notes on any two –

- (a) Hypoxia
- (b) Oxygen dissociation curve
- (c) Muscle protein
- (d) Hypothyroidism

7) Fill in the blank (each having 2 marks):

- i) Engulfment of solid material by the cell is called
- ii) Z disc is absent in muscle .
- iii) Ossicles are present in
- iv) Most common type of anaemia in India is
- v) Menstruation takes place .. uterus .. days after ovulation .
- vi) Passive expiration is due
- vii) Iron is absorbed inof gastrointestinal tract .
- viii) Normal end diastolic volume is ... 80 mm Hg ..
- ix) Diabetes insipidus is due to deficiency of
- x) T wave in ECG is due to

PHYSIOLOGY – 2018 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer all questions. Each question carries equal Marks.

1. Define arterial blood pressure. Describe methods of its measurement.

Or,

What is cardiac output ? Describe various factors affecting it.

2. Describe how oxygen is carried from atmosphere to the tissue ?

Or,

What is hypoxia ? Describe its various types.

3. Describe the composition and function of blood.

Or,

Describe blood coagulation by flow chart.

4. Write short notes on any two—

- (a) Goitre
- (b) Diabetes mellitus
- (c) Menstrual cycle
- (d) Intercalated disc.

5. *Fill up the blanks* (each having 2 marks.)

- (i) Power house of the cell is
- (ii) Renin is secreted by
- (iii) Leukaemia is
- (iv) Carbonic anhydrase helps in
- (v) Pace-maker of the heart is
- (vi) Protein is absorbed in form of
- (vii) Examples of secondary active transporter
- (viii) Serum does not contain
- (ix) Value of end systolic volume is
- (x) Neutrophil granule is neutral in colour because



PHYSIOLOGY – 2017 (I) Special

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Each question carries equal Marks. Answer any Five questions.

1. What is any erythropoiesis ?
2. Name the hormones secreted by Adrenal
3. Describe the function of kidney. Define glomerular filtration rate.

4. Define cardiac cycle. Describe different phases of cardiac cycle.
5. Describe the physiology O_2 (oxygen) transport from atmosphere to body tissue.
6. Mention the composition of Gastric juice. Describe the steps of Protein digestion.
7. Write short notes on any two—
 - (a) Myopia
 - (b) Rinne test
 - (c) Taste bud
 - (d) Cone photoreceptor.

PHYSIOLOGY – 2017 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer any Five questions. Each question carries equal Marks.

1. Draw a neat diagram of alimentary tract. Describe the functions of saliva.
2. Define blood pressure. What is pulse pressure ? Describe different methods of measurement of blood pressure.
3. Describe the phases of respiration along with muscles involved.
4. Enumerate the hormones secreted by Pituitary gland. Describe the functions of Growth hormone.
5. Define anaemia. Describe nutritional deficiency anaemia.
6. Draw a neat diagram of nephron. Describe the functions of its different segments.
7. Write short notes on any two—
 - (a) Neuron
 - (b) A. V. Node
 - (c) Lymphocyte
 - (d) Jaundice

PHYSIOLOGY – 2016 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer any Five questions. Each question carries equal Marks.

1. How many cranial nerves are present in human body ? Write their names and organs/system they are concerned with.
2. Describe the functions and secretions of the stomach.
3. Define hypoxia . Describe different types of hypoxia . Describe the function of lungs.
4. Describe different types of heart sounds with their cause of origin and characteristic features.
5. Describe optic pathway with well labelled diagram.
6. Write short notes on any two of the following—
 - (a) Oxygen dissociation curve.
 - (b) Immunoglobulins
 - (c) Cardiac cycle.
 - (d) CSF.
7. Write the difference between—
 - (a) Artery and vein.
 - (b) Large and small intestine.
 - (c) Anaemia and leukaemia.
 - (d) Cerebrum and cerebellum.

PHYSIOLOGY – 2015 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer any Five questions. Each question carries equal Marks.

1. Describe various types of salivary gland, composition , mechanism and control of salivary secretions and of saliva.
2. Define blood pressure and its various components. Describe the factors affecting and determining arterial B.P.
3. Describe physiology of respiration . What are various pulmonary function tests ?
4. What is Landsteiner's law ? Describe the hazards of mismatched blood transfusion .
5. How many cranial nerves are present in human body ? Write their names and organs/system they are concerned with.
6. Write short notes on any two of the following—
 - (a) Hormones secreted by testis and ovary
 - (b) CSF
 - (c) Nephron .
 - (d) Immunoglobulins.

7. Write the difference between—

(a) Cardiac and skeletal muscles.

(b) Bile salt and bile pigments.

(c) B and T lymphocytes.

(d) Endocrine and exocrine glands.

PHYSIOLOGY – 2014 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer any Five questions. Each question carries equal Marks.

1. Describe the functions and secretions of the stomach.
2. Define hypoxia . Describe different types of hypoxia . Describe the functions of lungs.
3. What is Landsteiner's law ? Describe the hazards of mismatched blood transfusion.
4. Define hormone . Enumerate different endocrine glands . Describe in detail hormones secreted by thyroid gland.
5. Describe different types of heart sounds with their cause of origin and characteristic features.

6. Write the difference between -

(a) Artery & vein.

(b) Large & small intestine.

(c) Endocrine and exocrine glands.

(d) Cardiac and skeletal muscles.

7. Write short notes on any two of the following:

(a) Nephron

(b) Cardiac cycle

(c) Sensory receptors

(d) CSF.

PHYSIOLOGY – 2013 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer any Five questions. Each question carries equal Marks.

- 1. Name the organs of genito urinary system. Describe the function of kidney.**

2. Describe different parts of respiratory system. What are functions of lungs ?
3. Name the parts of gastro intestinal system. Write the function of liver.
4. What are blood groups ? Describe the hazards of mismatched blood transfusion.
5. Write short notes on any two of the following :
 - (a) Oxygen dissociation curve
 - (b) Stretch reflex
 - (c) Immunoglobulin
 - (d) Pulse rate
6. What are the hormones secreted by pituitary gland ? Describe the function of growth hormone and prolactin.
7. Write short notes on—
 - (a) Anaemia
 - (b) Different components of WBC.

PHYSIOLOGY – 2012 (I)

1st Year

Paper – II

Full Marks : 100

Time : 3 Hours

Answer any Five questions. Each question carries equal Marks.

1. Mention histological structure of Pancreas. Describe its various exocrine functions.
2. Describe different types of heart sound with their cause of origin and characteristic features..
3. Describe optic pathway with well-labelled diagram.
4. What is Landsteiner's law ? Describe the hazards of mismatched blood transfusion.
5. Write short notes on any two of the following :
 - (a) Oxygen dissociation curve
 - (b) Vasomotor centre
 - (c) Immunoglobulin
 - (d) Sarcomere
6. What is Neuron? Describe its function and interconnections.
7. Differentiate between—
 - (a) Anaemia & Leukaemia
 - (b) Cerebrum & Cerebellum.

PM/PD Exam 2020 (I)
MICROBIOLOGY
(O.T.Assistant Course)

Paper – III

1st Year

Full Marks – 100.
Time – 3 Hours.

All question carry equal marks.
Answer any four questions.

1. Define sterilization & disinfecton. Classify the methods used in sterilization .
2. Enumerate the common etiological agents causing urinary tract infection (UTI) .
Write lab diagnosis of UTI in brief .
3. What is hypersensitivity reaction ? Describe type IV hypersensitivity reaction in brief.
4. Describe the morphological classification of fungi. Describe in brief about the lab diagnosis of fungal infection.
5. Name the virus causing hepatitis . Write method of transmission of hepatitis B infection and laboratory diagnosis of hepatitis B infection.
6. Write short notes on any four –
 - a) Structure of ova of hook worm.
 - b) Widal test
 - c) Albert Stain.
 - d) Passive immunity .
 - e) Causative agent of diarrhoea .
 - f) Precipitation reaction .

PM/PD Exam 2019 (II)
MICROBIOLOGY
(O.T.Assistant Course)
Paper – III

1st Year

Full Marks – 100.
Time – 3 Hours.

All question carry equal marks.
Answer any five questions.

1. Define sterilisation . Describe in detail the various physical method of sterilisation .
2. What is hospital waste ? What are the types of hospital waste? What is the chief objective of hospital waste management ?
3. What is antigen – antibody reaction ? Describe precipitation reaction in brief.
4. What is mycology ? Classify dermatophytes . Describe in brief about the lab diagnosis of fungal infection.
5. Name the causative agent of diphtheria . How you will diagnose diphtheria in laboratory ?
6. What is AIDS ? Name the virus causing AIDS . Write method of transmission of HIV infection and laboratory diagnosis of HIV infection.
7. Write short notes on any four –
 - a) Structure of ova of round worm.
 - b) ASO titre
 - c) Gram's Stain.
 - d) Casoni's test .
 - e) Causative agent of urinary tract infection .
 - f) Mantoux test.

MICROBIOLOGY – 2018 (I)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

Answer any four questions. All Questions carry equal marks.

A. Objective Questions :

- Which one is not studied in microbiology ?
(a) Bacteria (b) Animal behaviour
(c) Fungi (d) Algae
- Steam sterilization of 100°C for 20 minutes on three successive days is known as—
(a) Tyndallisation (b) Inspissation
(c) Pasteurisation (d) Vaccine bath
- Which one the following method is used for sterilization of operation theatre ?
(a) Gamma radiation (b) Formaldehyde
(c) Lysol (d) None
- O. T. aprons and gloves are sterilized by—
(a) Autoclaving (b) Hot air oven
(c) Savlon (d) None
- Who is known as Father of Microbiology ?
(a) Paul Ehrlich (b) Joseph Lister
(c) Louis Pasteur (d) Robert Koch

6. Which immunoglobulin class is involved in type I hypersensitivity reaction ?
- (a) IgG (b) IgM (c) IgA (d) IgE
7. Drumstick appearance of spores is a characteristic feature of—
- (a) *C. perfringens* (b) *C. tetani*
(c) *C. septicum* (d) None
8. How many categories of biomedical waste are there ?
- (a) Five (b) Four (c) Seven (d) Eight
9. Kala-azar is transmitted by—
- (a) Rat flea (b) Sand fly
(c) Tick (d) Mite
10. Albert's stain is used to demonstrate—
- (a) *C. diphtheriae* (b) *M. tuberculosis*
(c) *S. aureus* (d) None
- B.** Write short notes on any two of the following :
- (i) Z-N staining (ii) Hot air oven
(iii) Selective media (iv) Tuberculin skin test
- C.** Write short notes on any two of the following—
- (i) Prions (ii) Mycotic poisoning
(iii) Widal Test (iv) *Candida albicans*
- D.** Describe the mode of transmission and lab. diagnosis of HIV.
- E.** Diagnosis, control and prevention of health care associated infection.
- F.** Enumerate the different causes of diarrhoea. How will you diagnose it in the laboratory ?
- G.** Define immunity. Tabulate the difference between active and passive immunity.



MICROBIOLOGY – 2017 (I) (Special)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

Answer any four questions. All Questions carry equal marks.

A. Objective Questions :

1. Aibert's stain is used to demonstrate—

(a) *C. diphtheriae*

(b) *M. tuberculosis*

(c) *S. aureus*

(d) None

2. Glutaraldehyde is used for sterilization of—

(a) Cystoscopes

(b) Endoscopes

(c) Bronchoscopes

(d) All of the above

3. Gamma radiations can be used for sterilization of—
(a) Plastic Syringes (b) Catheters
(c) Swabs (d) All of the above
4. In the first week typhoid is diagnosed by—
(a) Widal test (b) Stool culture
(c) Urine culture (d) Blood culture
5. All of the following are examples of enriched media except—
(a) Blood Agar (b) Chocolate Agar
(c) Loeffler's serum slope (d) Bile salt Agar
6. The culture medium for *Corynebacterium diphtheriae* is—
(a) Loeffler's serum slope (b) Mc Conkey agar
(c) Sabouraud's agar (d) L-J medium
7. All of the following are live vaccines except —
(a) BCG (b) Sabin vaccine
(c) MMR (d) TAB vaccine
8. Anaerobic jar is commonly used to grow—
(a) *C. tetani* (b) *Klebsiella* sp.
(c) *Pseudomonas* (d) None of the above
9. Malaria fever is transmitted by which of the following mosquito—
(a) *Anopheles* (b) *Aedes* (c) *Culex* (d) *Mansoni*
10. Which of the following immunoglobulin can pass through placenta?
(a) IgG (b) IgM (c) IgA (d) IgE

B. Define sterilization. How does it differ from disinfection? Classify the various agents used in sterilisation.

C. Mention the various antigen-antibody reactions. Describe the principle, methodology and clinical applications of the agglutination reaction.

- D.** Classify streptococci. Describe pathogenicity and laboratory diagnosis of staphylococcus aureus.
- E.** Describe the mode of transmission and lab diagnosis of HIV.
- F.** Write short notes on any two—
- (i) Tyndillisation
 - (ii) Differential media
 - (iii) Active immunity
 - (iv) Procedure for sterilization of operation theatre.

MICROBIOLOGY – 2017 (II)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

Answer any four questions. All Questions carry equal marks.

A. Objective Questions :

1. Indian ink staining is used to demonstrate—

- | | |
|------------------------|-----------------------|
| (a) Cell wall | (b) Bacterial capsule |
| (c) Bacterial flagella | (d) Bacterial spore |

2. Who is known as Father of Microbiology—
(a) Robert Koch (b) Joseph Lister
(c) Louis Pasteur (d) Paul Ehrlich
3. Temperature and time period used in holder method of Pasteurisation is—
(a) 63°C for 30 minutes (b) 63°C for 50 minutes
(c) 72°C for 20 seconds (d) 72°C for 40 seconds
4. In the second week, typhoid is diagnosed by—
(a) Widal test (b) Stool culture
(c) Urine culture (d) Blood culture
5. Glutaraldehyde is used for sterilization of—
(a) Cystoscopes (b) Endoscopes
(c) Bronchoscopes (d) All of the above
6. The culture medium for *Corynebacterium diphtheriae* is—
(a) Loeffler's serum slope (b) Mc Conkey agar
(c) Sabouraud's agar (d) L-J medium
7. Vaccination induces—
(a) Active natural immunity (b) Positive natural immunity
(c) Active artificial immunity (d) Passive artificial immunity
8. Which is the first immunoglobulin to appear in response from antigen—
(a) IgG (b) IgM (c) IgA (d) IgE
9. Chikungunya virus is transmitted by which of the following mosquito—
(a) Anopheles (b) Aedes
(c) Culex (d) None of the above
10. Which of the following measures can be required for prevention of rabies in humans exposed to bite of rabid animal ?
(a) Hyperimmune serum administration

- (b) Vaccination
- (c) Local treatment of wound
- (d) All of the above

- B.** Define sterilization and list the methods of sterilization
- C.** Mention the various antigen-antibody reactions. Describe the principle, methodology and clinical applications of the agglutination reaction.
- D.** What are the different organisms responsible for urinary tract infection. How would you identify *E. coli*.
- E.** What is mycology? Define and classify dermatophytes.
- F.** Describe the mode of transmission and lab diagnosis of hepatitis B virus.
- G.** Write short notes on any two—
- (i) Bacterial growth curve
 - (ii) Transport media
 - (iii) Passive immunity
 - (iv) Gram staining

MICROBIOLOGY – 2017 (I)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

Answer any four questions. All Questions carry equal marks.

A. Objective Questions :

- Gram staining was introduced by :
 - Christian Gram
 - Alfred Gram
 - Robert Cook
 - Louis Pasteur
- Which one is not studied in microbiology ?
 - Bacteria
 - Animal behaviour
 - Fungi
 - Algae
- Nagler's reactions is useful for identification of—
 - C. tetani
 - C. perfringens
 - C. botulinum
 - C. difficile
- In the first week, typhoid is diagnosed by—
 - Widal test
 - Stool culture
 - Urine culture
 - Blood culture
- Widal test detects—
 - O. antigen
 - H. antigen
 - Vi antigen
 - Both O & H antigen
- The culture medium for *Corynebacterium diphtheriae* is—
 - Loeffler's serum slope
 - Mc Conkey agar
 - Sabouraud's agar
 - L-J medium
- Traveller's diarrhoea is caused by—
 - EPCE
 - EHEC
 - ETEC
 - EIEC
- Interferon is a—
 - Protein
 - Lipid
 - Polysaccharide
 - All of the above

9. Dengue fever is transmitted by which of the following mosquito ?

- (a) Anopheles (b) Aedes (c) Culex (d) Mansoni

10. The most common hospital acquired infection is—

- (a) Bacteremia (b) Tetanus
(c) Urinary Tract Infection (d) Pneumonia

B. Define sterilization Explain how autoclave functions Mention two important uses of autoclave.

C. Define Microbiology. Describe the morphology of a bacterial cell wall with the help of a diagram. Difference between prokaryote and eukaryote.

D. Mention the various antigen-antibody reactions. Describe the principle methodology and clinical applications of the precipitation reaction.

E. Classify staphylococci. Describe the morphology, culture characteristics, pathogenicity and laboratory diagnosis of staphylococcus aureus.

F. Describe the structure, pathogenicity and lab diagnosis of HIV.

G. Write short notes on any two—

- (i) Hospital acquired infection
(ii) Candida albicans
(iii) Casoni's test
(iv) Procedure for sterilizing in operation theatre.
(v) Z-N Staining.

MICROBIOLOGY – 2016 (I)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

All Questions carry equal marks. Answer any four questions.

1. Define immunity . Classify and discuss active immunization.
2. Define microbiology . Describe the classification of bacteria .
3. What is mycology ? Define and classify dermatophytes .
4. Name the virus causing hepatitis . Write method of transmission of hepatitis infection . Describe clinical feature and lab diagnosis of hepatitis.
5. What is hospital waste ? What are the types of hospital waste ?
6. What is the chief objective of hospital waste management ?
7. Name the causative agent of Tetanus . How you will diagnose Tetanus in laboratory ?
8. Write short notes on any two—
 - (a) Z-N stain
 - (b) Difference between fertilized and unfertilized egg of Ascaris
 - (c) ELISA
 - (d) ASO titre
 - (e) RK 39 test.

MICROBIOLOGY – 2015 (I)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

All Questions carry equal marks. Answer any four questions.

- 1. What do you understand by the term sterilization and disinfection ? Describe principle , structure and uses of Autoclave .**
- 2. What is difference between prokaryote and eukaryote ? What is bacterial growth curve ? Draw and explain its various phases .**
- 3. Name the causative agent of Tetanus . How you will diagnose Tetanus in laboratory ?**
- 4. What is hospital acquired infection ? Name the bacteria responsible for it.**
- 5. What is AIDS ? Name the virus causing AIDS . Write method of**

transmission of HIV infection and laboratory diagnosis of HIV infection.

6. Write short notes on any four—

- (a) Difference between active immunity & passive immunity
- (b) Candidiasis
- (c) Albert's Stain
- (d) WIDAL test
- (e) Structure of ova of hook worm.

MICROBIOLOGY – 2014 (I)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

All Questions carry equal marks. Answer any four questions.

1. Define sterilisation . Describe in detail the various physical methods of sterilisation.

2. What is hospital waste ? What are the-different types of hospital waste? What is the chief objective of hospital waste management ?
3. What is antigen - antibody reaction ? Describe agglutination reaction in brief.
4. Define immunity ? Describe the factors affecting immunity .
5. What is hepatitis ? Name the virus causing hepatitis . Write method of transmission of Hepatitis infection and laboratory diagnosis of Hepatitis infection.
6. What is mycology ? Define and classify dermatophytes.
7. Write short notes on any four—
 - (a) Structure of ova of hookworm
 - (b) Filtration
 - (c) Gram's Stain
 - (d) Casoni's test
 - (e) Causative agent of urinary tract infection
 - (f) Mantoux test.

MICROBIOLOGY – 2013 (I)

1st Year]

Paper – III

[Full Marks : 100

Time : 3 Hours

All Questions carry equal marks. Answer any four questions.

1. What is sterilisation ? Discuss the different types of sterilisation.
2. What is antigen antibody reaction ? Describe precipitation reaction in brief.
3. What is immunity ? Classify and discuss passive immunization.
4. What is AIDS ? Name the virus causing AIDS. Write method of transmission of HIV infection and transmission of HIV infection diagnosis of HIV infection.
5. What is hospital acquired infection ? Name the bacteria responsible for it.
6. Name the causative agent of Tetanus. How you will diagnose Tetanus in laboratory ?
7. Write short notes on any four—
 - (a) Structure of ova of round worm.
 - (b) ASO titre
 - (c) AFB Stain
 - (d) WIDAL test
 - (e) Causative agent of diarrhoea .
 - (f) Candidiasis.