All State

NHM/AIIMS/ESIC/PGI

Pharmacist

Exam Planner

Chapterwise Solved Papers

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Pharmacist/JR Pharmacist Previous Year Exam Papers Analysis Chart

S.No.	Papers	Organized Year	Total Question
1.	Safdarjung Pharmacist Mains	21.11.2023	80
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3.	UPSSSC Pharmacist	26.03.2023	35
4.	Lucknow Cantonment Board Pharmacist	05.02.2023	50
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6.	UP NHM Pharmacist	29.12.2022	80
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8.	Kerala PSC Pharmacist Gr. II	27.10.2022	100
9.	HPSSC Pharmacist	22.08.2022	120
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31.	RRB Pharmacist Gr. III	19.07.2019	80
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33.	TNPSC Drugs inspector	27.06.2019	200
34.	TNPSC Drugs inspector	27.06.2019	200
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36.	ESIC Pharmacist	26.02.2019(Shift-II)	100
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39.	CGHS Delhi Pharmacist	26.12.2018	50
40.	HPSSC Pharmacist	19.08.2018	120
41.	CGHS Hyderabad Pharmacist	27.06.2018	60
42.	Kerala PSC Pharmacist Gr. II	01.06.2018	80
43.	TNPSC Pharmacist (degree)	21.02.2018	200
44.	GSSSB Jr. Pharmacist	18.02.2018	100
45.	CGHS Pharmacist	08.01.2018	45
46.	AIIMS Delhi Pharmacist	2018	135
47.	GPAT	2018	125
48.	BSSC Pharmacist	2018	100
49.	VSSC Pharmacist - A	10.12.2017	80
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53.	MP Vyapam Pharmacist	16.04.2017 (Shift-II)	75
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58.	ESIC Delhi Pharmacist	19.03.2016	100
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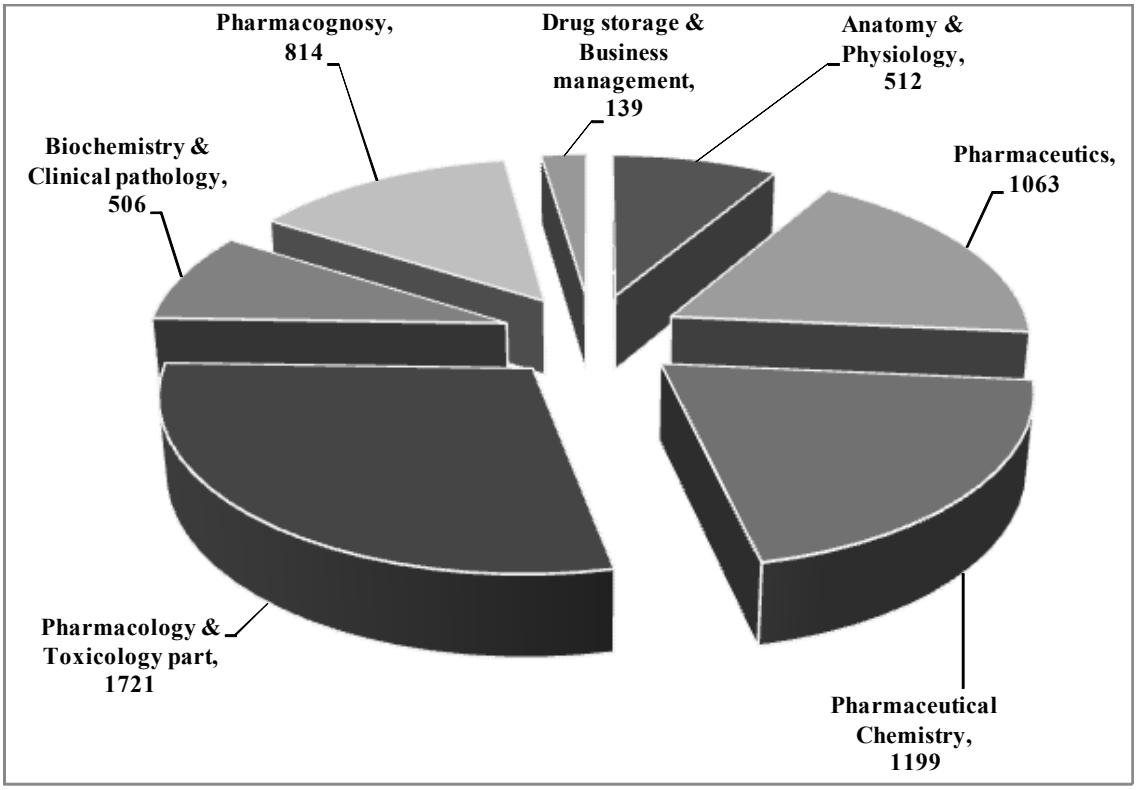
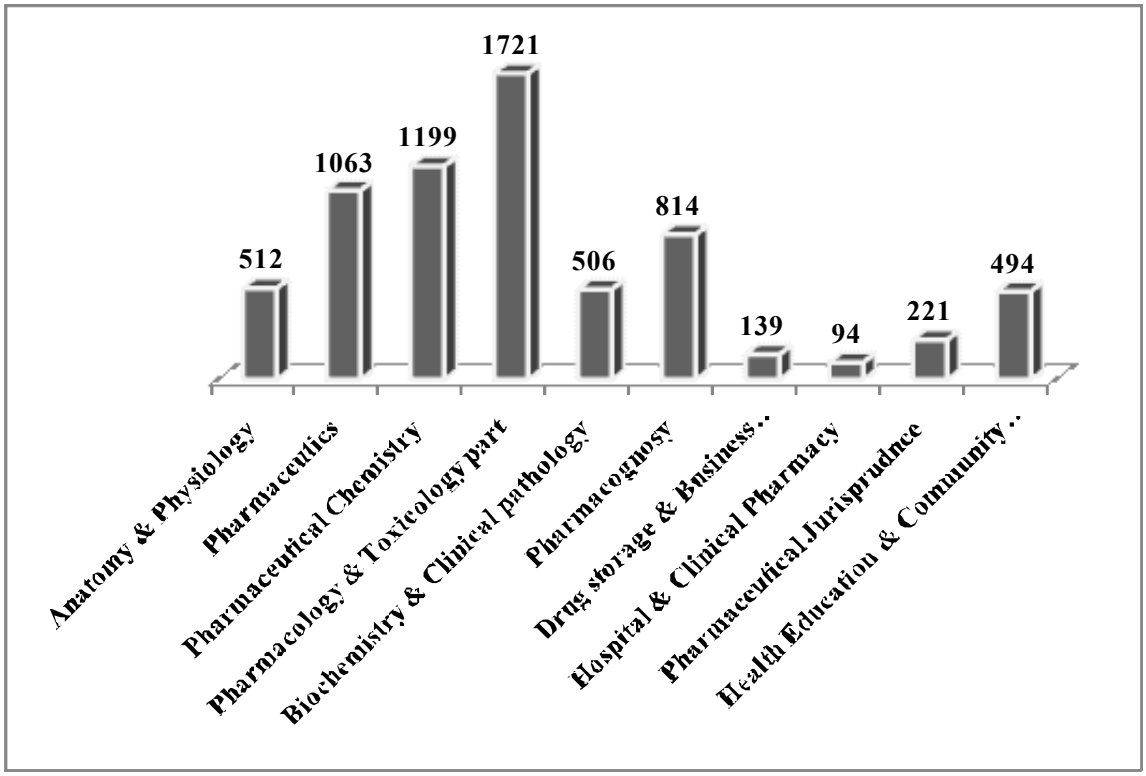
Trend Analysis of Previous Year Exams Papers Through Bar Graph and Pie Chart





01.

Anatomy & Physiology

1. Select the correct name for cranial nerve -X

(a) Olfactory (b) Optic
(c) Facial (d) Vagus

Lucknow Cantonment Board Pharmacist (05.02.2023)

Ans. (d) : There are 12 cranial nerves in our body, each having a particular function.

- Cranial nerve 3 is the oculomotor nerve which helps the movements of muscles of eyes.
- The vagus nerve verifiably referred to as the pneumogastric nerve. It is the longest cranial nerve. It is the 10^{th} cranial nerve and interfaces with the lungs, heart, and stomach related lot.

2. Partial pressure of carbon dioxide in alveoli is...

(a) 160 mm Hg (b) 105 mm Hg
(c) 40 mm Hg (d) 45 mm Hg

Lucknow Cantonment Board Pharmacist (05.02.2023)

Ans. (c) : Partial pressure is the amount of pressure that each gas in a mixture exerts. Gas will flow from one area with greater partial pressure to another with lower partial pressure. The partial pressure of carbon dioxide (CO_2) at alveoli (the site of diffusion) is 40 mmHg.

- The partial pressure of oxygen (O_2) at alveoli is 104 mmHg.

3. During the embryonic development midbrain is developed from?

(a) Rhombencephalon (b) Mesencephalon
(c) Procencephelon (d) Telencephelon

Lucknow Cantonment Board Pharmacist (05.02.2023)

Ans. (b) : The middle vesicle is the "mesencephalon" which is the precursor of midbrain structures, the most anterior of these embryonic brain vesicles is called the "Prosencephalon" which is the embryonic precursor of the forebrain, and the most posterior is the "rhombencephalon" which will become the hindbrain.

4. Smallest bone of the body is

(a) Malleus (b) Incus
(c) Stapes (d) Femur

Lucknow Cantonment Board Pharmacist (05.02.2023)

Ans. (c) : The human body consists of both long and short bones. Longest bone is the thigh bone but the smallest and the lightest bone in a human body is stapes or stirrup found in our middle ear.

- There are three bones in the middle ear-malleus, stapes and incus.

5. The formation of plaque inside the coronary artery due to deposition of the lipid content is known as

(a) Thrombosis (b) Embolism
(c) Atherosclerosis (d) Myocardial infarction

UPSSSC Pharmacist (26.03.2023)

Ans. (c) : Atherosclerosis is thickening or hardening of the arteries caused by a buildup of plaque in the inner lining of an artery. Risk factors may include high cholesterol and triglyceride levels, high blood pressure smoking, diabetes, obesity, physical activity and eating saturated fats.

6. Which of the following antigens are present on the RBC in the person having blood group O?

(a) Antigen-A (b) Antigen-B
(c) Both (d) None

UPSSSC Pharmacist (26.03.2023)

Ans. (d) : A Blood group is a classification of blood based on the presence and absence of antibodies and inherited antigenic substances on the surface of red blood cells. These antigen may be proteins, carbohydrates, glycoproteins or glycolipids, depending on the blood group system. Blood group O has no antigens but both anti-A and anti-B antibodies in the plasma. Blood group AB has both A and B antigens, but no antibodies.

7. The following organs are part of male reproductive system except;

(a) Vas deferen (b) Urethra
(c) Ureter (d) Testis

UPSSSC Pharmacist (26.03.2023)

Ans.(c): The ureters are tubular structures approximately 20–23 cm in adults that pass from the pelvis of each kidney into the bladder. Form the renal pelvis they descend on top of the psoas major muscle to reach the brim of the pelvis.

8. Which of the following cranial nerve is known as facial nerve?

(a) Cranial nerve V (b) Cranial nerve VI
(c) Cranial nerve VII (d) Cranial nerve VIII

UPSSSC Pharmacist (26.03.2023)

Ans. (c) : Facial nerve is the 7^{th} cranial nerve and carries nerve fibers that control facial movement and expression.

The facial nerve also carries nerves that are involved in taste to the anterior 2/3 of the tongue and producing tears.

9. The life span of WBC is approximately

(a) Less than 10 days
(b) Between 10 to 20 days
(c) Between 20 to 30 days
(d) Between 30 to 45 days

Lucknow Cantonment Board Pharmacist (05.02.2023)

Ans. (b): white blood cells, also called leukocytes or leucocytes, are the cells of the immune system that are involved in protecting the body against both infectious disease and foreign invaders.

- The life span of the WBC is between 10 to 20 days. It is mainly responsible for the protection of the body from diseases.
- The life span of the RBCs is 20–120 days.
- The life span of the blood platelets is 3–5 days.

Note: According to commission right answer is option (c).

10. Red cell count is carried out by _____

(a) Electrogram
(b) Sphygmomanometer
(c) Haemoglobinometer
(d) Haemocytometer

Lucknow Cantonment Board Pharmacist (05.02.2023)

Ans. (d) : Red cell refers to red blood cells also known as erythrocytes which carries oxygen to the body from the lungs. A healthy person has 5–5.5 million RBCs per mm^3 of blood which have lifespan of 120 days.

- Haemocytometer is a device that is used for counting red blood cells, it contains different grids and has specific area and volume to count the number of RBCs in a particular volume of blood.
- Haemoglobinometer is a device used for measuring the hemoglobin concentration of the blood.
- A sphygmomanometer is an instrument used to determine blood pressure.

11. Urea formation occurs in

(a) Heart (b) Liver
(c) Spleen (d) Kidney

HPSSC Pharmacist (22.08.2022)

Ans. (b) : Urea is formed in are body during nitrogen metabolism the hepatic cells in the liver. Urea is an excretory product and it enters into the blood, after it's formation in the liver, when blood reaches the kidney, which filters it out from the blood and hence excretes urea out through the urine.

12. Bile is formed in

(a) Gall bladder (b) Liver
(c) Spleen (d) Blood

HPSSC Pharmacist (22.08.2022)

Ans. (b) : Bile is an aqueous liquid solution produced in the liver. It consists mainly bile salts, conjugated bilirubin with some electrolytes and water.

13. Mitochondria are sites of

(a) Oxidative phosphorylation
(b) Photolysis
(c) Phosphorylation
(d) Starch synthesis

HPSSC Pharmacist (22.08.2022)

Ans. (a) : Oxidative phosphorylation is the final step incellular respiration, it occurs in the mitochondria. It is the principal purpose of oxygen respiration and the principal use of breathed in oxygen is to generate energy in the body.

14. Which is not a true for Insulin?

(a) It is a amphoteric protein
(b) It is soluble in water
(c) It is inactivated by digestive enzymes
(d) It combines with zinc to lose activity

HPSSC Pharmacist (22.08.2022)

Ans. (d) : Insulin is a small protein consisting 51 amino acids in it's molecule. It works as a hormone and produced in the pancreas and added to the blood after meals when sugar levels are high it controls the sugar level in blood by allowing cells to absorb glucose. Insulin do not combine with zinc instead in the presence of zinc improves the peripheral insulin senstivity.

15. Heart rate of 160-180 refers to

(a) Atrial flutter (b) Atrial fibrillation
(c) Adam syndrome (d) Ectopic activity

HPSSC Pharmacist (22.08.2022)

Ans. (d) : Inregular and fast rate of heartbeat (ranging 160-180) is termed as ectopic activity and it happens when our heart contracts (beats) too soon.

16. Sphincter of oddi is present at exit of

(a) Oesophagus (b) Stomach
(c) Urinary bladder (d) Gall bladder

HPSSC Pharmacist (22.08.2022)

Ans. (d) : The sphincter of oddi is the muscular valve surrounding the exit of the gall bladder i,e at the exit of bile duct and pancreatic duct into the duodenum.

17. Male sex hormone testosterone is secreted by

(a) Spermatogenic (b) Sertoli cells
(c) Leydig cells (d) Epididymis

HPSSC Pharmacist (22.08.2022)

Ans. (c) : Leydig cells are the source of androgenic hormone i.e testosterone in males. Leydig cells (LC) are present in the testicular interstitial tissue and their main function is to produce testosterone.

18. All of the following are the disadvantages of diabetes, EXCEPT:

(a) Hypothyroid (b) Neuropathy
(c) Kidney damage (d) Retinopathy

UP NHM Pharmacist (29.12.2022)

Ans. (a) : A condition in which the thyroid gland does not produce enough thyroid hormone.

Hypothyroidism deficiency of thyroid hormones can disrupt such things as heart rate body temperatures and all aspect of metabolism. Hypothyroidsm is most prevalent in older in older woman.

19. A person with O blood group can receive blood from a person having ___ blood group.

(a) A, AB (b) A
(c) O (d) B

UP NHM Pharmacist (29.12.2022)

Ans. (c) : A blood type is a classification of blood based on the presence and absence of antibodies and in hirite antigenic substances on the & surface of red blood cells. These antigene may be proteins are body glycoprotins or glycolipids depending on the blood group system.

20. The chronic inflammation of a delayed hypersensitivity reaction is mediated by:

(a) Glucagon (b) Bradykinin
(c) Lymphokines (d) Histamine

UP NHM Pharmacist (29.12.2022)

Ans. (d) : Histomine - a chemical found in some of the body's calls caused many of the symtoms of allergic such as runny nose are sneezing when a person is allergic to a particular substance such as a food or dust, the Immune system mistakenly belieuss that us usually harmless substance is act orally harmful to the body

21. What happens when the level of bilirubin in the blood increases?

(a) Alzhelmer's (b) Jaundice
(c) Diabetes (d) Cancer

UP NHM Pharmacist (29.12.2022)

Ans. (b) : Jauindice is a condition in which the whites of the eyes and mucous membranes turm yellow because of a high level of bilirubin a yellow - orange bile pigment jaundice has many couses including hepatitis , gall stones and tomars . In adults jaundice usually do ent need to bet treated.

Jaundis two types -

(1) Physiological jaundice
(2) Pathaphysi ological jaundice

22. _____ excreted by the respiratory system.

(a) Carbon dioxide (b) Urea
(c) Faeces (d) Protein

UP NHM Pharmacist (29.12.2022)

Ans. (a) : Corbon dioxide is a naturally occurring chemical compound that plays an integral role in the earth's ecosystem . It is essential for photosynthesis which all plants need to survive carbondioxide also helps regulate the temperature of the atmosphere and the plant as well. They are often referred to as green house gases because they allow sunlight to enter but do not allow it to leave thus heating the lower atmosphere. but corbon dioxide is exhaled by the respirating system.

23. Right-sided cardiac failure is called:

(a) Congestive cardiac failure
(b) Left ventricular failure
(c) Chronic cardiac failure
(d) Acute cardiac failure

UP NHM Pharmacist (29.12.2022)

Ans. (a) : Congestive heart failure is a long term Condition that happens when your heart can't pump blood well enough to give our body a normal supply blood and fluids collect in our lungs and legs over time medications and other treatments.

24. Bronchial obstruction is a common symptom of:

(a) Liver failure (b) Asthma
(c) Lung cancer (d) Cancer

UP NHM Pharmacist (29.12.2022)

Ans. (b) : Recurrent episodes of acute shartness of breath typically accurring at night or the early morning hours, are the cordinal manifestation of bronchial asthma, farther symptoms include cough wheezing and feeling of tightness in the chest.

25. It is found only in muscles and this binds oxygen molecules

(a) Myoglobin (b) Sarcolemma
(c) Mitochondrion (d) Myofibril

UP NHM Pharmacist (29.12.2022)

Ans. (a) : Myoglobin is a protein located primarily in the striated muscles of vertebrates MB is the geneoncoding myoglobin is humans. It encodes a single polypeptide chain with one oxygen binding site Myoglobin contains heme prosthetic group that can reversibly bind to oxygen

26. In the presence of inflammation, _____ is/ are raised.

(a) Fibrinogen (b) Platelets
(c) Ceruloplasmin (d) Ferritin

UP NHM Pharmacist (29.12.2022)

Ans. (b) : Platetets are pieces of very large cells in the bone morrow called me gakargoctles. they help form blood clots to slow or stop bleeding and to help wounds heal or having platetets that don't work as they should can couse problems.

27. An example of haemostatic suture is:

(a) Sterile polyester suture
(b) Sterile linen suture
(c) Oxidised cellulose
(d) Sterile catgut

UP NHM Pharmacist (29.12.2022)

Ans. (c) : The Atlantic cod is a benthopelagic fish of the family gadidae widely consumed by human It is also commercially known as cod or codling Dry cod may be prepared as unsalted salt stack fish and as cured slot cod or clipfish.

28. Which ion is essential for muscle contraction?

(a) Na (b) K
(c) Ca (d) Cl

HPSSC Pharmacist (14.05.2022)

Ans. (c) : The essential muscle contraction is caused by calcium ions. These calcium ions bind to the protein complex troponin in order to remove the masking of active site on actin. This results in the exposure of the active- binding sites on the actin for myosin.

29. White matter is external and grey matter is internal in

(a) Cerebrum (b) Cerebellum
(c) Medulla oblongata (d) Both (b) and (c)

HPSSC Pharmacist (14.05.2022)

Ans. (c) : The medulla oblongata consists of both cells and fibres, which are similarly to those in the spinal cord, the cells or grey matter being on the inside and the fibres of white matter on the outside. It lies at the base of the skull just in front o the foramen magnum and links the pons and spinal cord.

30. Light rays entering the eye is controlled by

(a) Pupil (b) Iris
(c) Cornea (d) Lens

HPSSC Pharmacist (14.05.2022)

Ans. (a): Light rays entering the eye is controlled by pupil, lets into our eyes as the muscles of our iris change its shape. The lens in our eye focuses light then goes to the back of our eye and hits our retina.

31. Antiageing hormone is

(a) Thyroxine (b) Melatonin
(c) Estrogen (d) Testosterone

HPSSC Pharmacist (14.05.2022)

Ans. (b) : Antiaging hormone is melatonin. Melatonin is a hormone produced in the glandula pinealis that follows a circadian light dependent rhythm of secretion

32. Oogenesis is an example of

(a) Mitosis (b) Meiosis
(c) Specialisation of cell (d) DNA replication

HPSSC Pharmacist (14.05.2022)

Ans. (b) : Oagenesis is an example of meiosis. Meiosis produces sex cells or gametes, Oagenesis is a process which creates female gametes called ovum. Meiosis is a type of cell division in sexually reproducing organisms that reduces the number of cloromosomes in gametes.

33. Nuclear envelope reappears at

(a) Metaphase (b) Anaphase
(c) Cytokinesis (d) Telophase

HPSSC Pharmacist (14.05.2022)

Ans. (d) : Nuclear envelope reappears at telophase. Telophase- During this phase, chromosomes disappears (become chromatin), nuclear membrane reforms, nucleoli reappears,. Telophase is the fifth and final phase of mitosis, the process that separates the duplicated genetic material carried in the nucleus of a parent cell into two identical daughter cells.

34. Cytochromes are

(a) O_2 acceptors (b) H_2 acceptors
(c) Electron acceptors (d) H_2O acceptors

HPSSC Pharmacist (14.05.2022)

Ans. (c) : The role of cytochrome c is to carry electrons from one complex of integral membrane proteins of the inner mitochondrial membrane to another, cytochromes are electron acceptors.

35. The most common respiratory substrate is

(a) Glucose (b) Sucrose
(c) Maltose (d) Glycogen

HPSSC Pharmacist (14.05.2022)

Ans. (a) : Glucose is the most common respiratory substrate. One molecules of glucose produces 38 molecules of ATP. So its an instant energy source. It is also abundant and easily stored in the body in the form of glycogen. It is also stored in plants in the form of starch and glycoconjugates.

36. Sebaceous glands are

(a) Apocrine (b) Mesocrine
(c) Holocrine (d) None of these

HPSSC Pharmacist (14.05.2022)

Ans. (c): Sebaceous glands are holocrins glands. sebaceous glands produce sebum via holocrine secretion, a largely uncharacterized mode of programmed cell death that contributes to the homeostasis and barrier function of the skin.

37. A digestive enzyme functional only in infants is

(a) Lactose (b) Gastric lipase
(c) Intestinal lipase (d) Chymotrypsin

HPSSC Pharmacist (14.05.2022)

Ans. (b) : A digestive enzyme functional only in infants in gastric lipase. Intragastric lipolysis is probably of major importance in the newborn and especially in the premature infants. Gastric lipase is essential for infant fat digestion.

38. Residual air mostly occurs in

(a) Alveoli (b) Bronchus
(c) Nostrils (d) Trachea

HPSSC Pharmacist (14.05.2022)

Ans. (a): Residual air mostly occurs in alveoli. The residual volume (RV) is the alveoli of the lungs, after respiratory. The lungs are never left completely empty, there is always some air left in the lungs after a maximum exhalation.

39. Agranulocytes are

(a) Eosinophils (b) Neutrophils
(c) Basophils (d) None of these

HPSSC Pharmacist (14.05.2022)

Ans. (d) : Agranulocytes are white blood cells that have no distinct granules in their cytoplasm. Agranulocytes orginates from the lymph nodes.

- Agranulocytes are known as mononuclear leukocytes.
- Granulocytes (neutrophils, eosinophils and basophils).
- Agranulocytes (lymphocytes and monocytes).

40. The elimination of insoluble calcium phosphate takes place by

(a) Liver (b) Kidney
(c) Large intestine (d) Skin

HPSSC Pharmacist (14.05.2022)

Ans. (c) : The calcium ions binds to the phosphates and are present in the dietary food. Sometimes, calcium phosphate are consumed as an antacid. The calcium phosphate is a salt which is insoluble in water. The calcium ions are absorbed by the cells of the intestine as per requirement. The excess of calcium and phosphate ions are excreted by the large intestine in the form of paeces.

41. Longest cells in human body are

(a) Nerve cells (b) Bone cells
(c) Leg muscle cells (d) Heart muscle cells

HPSSC Pharmacist (14.05.2022)

Ans. (a) : Longest cells in Human body are Nerve cells are also called Neurons that are found in the Nervous system they can be up to 3 feet long.

- Nerve cells are only present in animals. Nerve cells is an excitable and specialized cell of the Nervous tissue which helps in proper functioning of the brain and coordination of other parts of the body.
- Neurons are divided into 3 Types : Sensory neurons (stimuli response) Motor response (receive singnals) and interneurons (connects one neuron to Another Neuron).

42. The term cytoplasm was coined by

(a) Sachs (b) Strasburger
(c) Hanstein (d) Flemming

HPSSC Pharmacist (14.05.2022)

Ans. (b) : Term cytoplasm refers to the living substance or protoplast found within a cell, including the Nucleus, Eduard strans burger created the word cytoplasm.

→ The cytoplasm is the gel- like fluid inside the cell. It is the medium for chemical reaction. It provides a plate form upon which other organelles can operate within the cell.

43. Muscle relation is completed in which phase of general anesthesia?

(a) Phase-I (b) Phase-II
(c) Phase-III (d) Phase-IV

HPSSC Pharmacist (14.05.2022)

Ans. (c) : Stage of general anesthesia:- Before they had machines to track our vital signs during general anesthesia, doctor come up with a monitoring system to keep patients safe. They divided the system into four stage -

- Stage 1. Induction
- Stage 2. Excitement or delirium
- Stage 3. surgical Anesthesia
- Stage 4. Over dose.

State : 3. **Surgical anesthesia:-** At this stage surgery can takes place our eyes stop moving muscle completely relax, and we may stop breathing without the help of machines. The anesthesiogist will keep we at this stage until the procedures is over.

44. An adult has _____ number teeth's of incisors in total.

(a) 2 (b) 4
(c) 6 (d) 8

HPSSC Pharmacist (14.05.2022)

Ans. (d) : An Adult has 8 number teeth's of incisor in total. Human teeth function to mechanically break down items of food by cutting & crushing the food material.

- Human have four types of Teeth -
  - Incisors
  - Canines
  - Premolars
  - Molars
- Human dental formula = $\frac{2123}{2123}$

45. Which one of the following is not a function of Liver?

(a) Storage site for vitamins
(b) Site for metabolism of proteins
(c) Secretion of glucagon
(d) Detoxification of various drugs.

HPSSC Pharmacist (14.05.2022)

Ans. (c) : Secretion of glucagon is not a function of Liver.

Function of Liver →

- Bile production and excretion
- Excretion of bilirubin, cholesterol hormone and drugs.
- Metabolism of fats, protein and carbohydrates.
- Enzyme Activation
- Storage of glycogen, vitamins and minerals
- Synthesis of plasma proteins, such as albumin and clotting factor.

46. Calcitonin is secreted by

(a) Pituitary gland (b) Thyroid
(c) Pancreas (d) Adrenal

HPSSC Pharmacist (14.05.2022)

Ans. (b) : Calcitonin is secreted by thyroid. Calcitonin is a 32 amino acid hormone secreted by the C- cells of thyroid gland.

Pituitary gland :- Its function including growth, metabolism, reproduction, lactation, water and sodium (salt) balance, labour and child birth.

Pancrease :- Pancrease creates natural juices called pancreatic enzyme to beak down food. These Juice travel through our pancrease.

Adrenal gland :- Adrenal gland produce hormone that help regulate our metabolism, immune system, blood pressure response stress and other essential function.

47. Progestational phase of menstrual cycle is antagonized by

(a) Progesterone (b) Oestrogen
(c) Luteinizing hormone (d) Prolactin

HPSSC Pharmacist (14.05.2022)

Ans. (b) : Progestational phase of menstrual cycle is antagonised by Oestrogen. The menstrual cycle is governed by an interaction between reproductive hormone (L.H,F.S.H, oestradiol and progesterone) that result in growth of a follicle, ovulation [release of egg from the ovary into the fallopian tubes].

48. Ganglion refers to

(a) Collection of cell bodies of neurons in Central Nervous System.
(b) Collection of numerous axons in Peripheral Nervous System.
(c) Collection of cell bodies of neurons in Peripheral Nervous System.
(d) Collection of axons in Central Nervous System.

HPSSC Pharmacist (14.05.2022)

Ans. (c) : Ganglion refers to collection of cell bodies of neurons in peripheral Nervous system. A ganglion is a cluster of nerve cells found in the P.N.S. The cells that are specific to a ganglion are called ganglion cells. However the term is some time used to describe retinal ganglion cells. The main component of the ganglion a cell body called the somata and associate dendritic structure.

49. The middle protective covering layer of brain is
(a) Pia mater (b) Dura mater
(c) Arachnoid mater (d) Pons

HPSSC Pharmacist (14.05.2022)

Ans. (c) : The middle protective covering layer of brain is Arachnoid mater. There present three meninges layers that constitute the outer layer, the dura mater, a thin middle layer called the Arachnoid and the inner most layer called the pia mater.
* Dura mater give a protective shield for the brain and the spinal cord helps prevent the C.N.S. from gostling by fastening it to the skull.
* Arachnoid mater is defined as a middle meninges layer that connect the dura mater & pia, mater.
* The pia mater is composed of a rich supply of blood vessels to provide the Nervous tissue with nutrient. Pia mater usually cover the spinal cord and is made up of two layers.

50. The germinal epithelium of ovary is
(a) Stratified columnar epithelium
(b) Simple cuboidal epithelium
(c) Simple columnar epithelium
(d) Stratified cuboidal epithelium
(e) Not attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (b) : The ovarian surface epithelium, also called the germinal epithelium of waldeyer, or coelomic epithelium is a layer of simple squamous to cuboidal epithelial cell covering the ovary.

51. Which of the following pairs of chemotherapeutic agents is most commonlyused as maintenance in the treatment of Acute Lymphoblastic Leukemia (ALL)?
(a) Dauroribicin, Gemcitabine
(b) Fludarabine Cyclophosphamide
(c) Mereaptopurine, Methotrexate
(d) Vincristine, Imatinib

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (c): Mereaptopurine Methotrexate pairs of chemotherapeutic agents is most commonly used as maintenance in the treatment of Acute Lymphoblastic Leukemia (ALL).

52. Glomerular filtrate is equal to:
(a) Serum + Plasma Proteins
(b) Plasma
(c) Blood – (RBCs – WBCs)
(d) Blood – (Blood Cells + Plasma Proteins)
(e) Not attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (d) : Glomerular filtrate is equal to blood (Blood cells + Plasma Proteins).

53. Chemoreceptor trigger zone is an area of the _____ and plays role in stimulating _____.
(a) Medulla Oblongata, Respiration
(b) Cerebrum, Emesis
(c) Cerebrum, Respiration
(d) Medulla Oblongata, Emesis
(e) Not attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (d): Chemoreceptor trigger zone is an area of the Medulla oblongata and plays role in stimulating emesis.

54. Which of the following is a sign or symptom of left sided heart failure?
(a) Hepatomegaly
(b) Peripheral edema
(c) Bilateral rales
(d) Jugular venous distension
(e) Not attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (c) : Bilateral rales is a sign or symptom of left sided heart failure.
- Hepatomegaly is prominent in patients with chronic right-sided heart failure, but it may occur rapidly in acute heart failure.
- Peripheral edema (PE) is an accumulation of fluid in the interstitial space that occurs as the capillary filtration exceeds the limits of lymphatic drainage.

55. Tidal volume is equal to:
(a) (Residual volume) + (Expiratory reserve volume)
(b) (Total lung capacity) – (Vital capacity)
(c) (Functional residual capacity) – (Expiratory reserve volume)
(d) (Inspiratory capacity) – (Inspiratory reserve volume)
(e) Not attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (d) : Tidal volume is equal to (Inspiratory capacity) – (Inspiratory reserve volume) inspiratory capacity is the total volume of air that can be inhaled after a normal expiration. includes tidal volume and inspiratory reserve volume IC = TV + 1RV.

56. β-cells of Pancreatic is lets secret _____.
(a) Insulin
(b) Panereatic polypeptide
(c) Somatostatin
(d) Glueagon
(e) Not attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (a) : The Pancreatic beta cells are Endocrine cells the synthetize, store and release insulin the anti-hyperglycemic hormone that antagonizes glucagon, Growth hormone. glucocorticosteroids epinephrine and other hyperglycemic hormones, to maintain circulating glucose concentrations within a narrow physiologic range.Pancreatic polypeptide (PP) is an endogenus peptide hormone secreted by the cells, also called PP cells of the islets of langerhans of pancreas. Mostly postprandially.

57. Carp metacarpal joint of the thumb is an example of :
(a) Ball and socked joint (b) Saddle. joint
(c) Hanger, joint (d) Pivot joint
(e) Not Attempted

GPSSB Jr. Pharmacist (08.05.2022)

Ans. (b): The carpometacarpal joint is a synovial saddle-shaped joint that serves as the articulation between the trapezium and the base of the first metacarpal the joint's primary function is to optimize the pinch function of the hand.

58. Nose, pharynx, windpipe, trachia and lungs are located in _____

(a) Excretory system
(b) Cardiovascular system
(c) Renal system
(d) Respiratory system

UP NHM Pharmacist (28.12.2022)

Ans. (d) : The respiratory system starts at the nose and mouth and continues through the airways and the lungs.

- The excretory system is a vital biological system that removes excess and waste, products from the body to maintain homeostasis.
- Cardiovascular system, which is made up of our heart and blood vessels is a crucial part of our body.

59. There are _____ isolated operable irregular bone in the vertebral column

(a) 20 (b) 15
(c) 24 (d) 10

UP NHM Pharmacist (28.12.2022)

Ans. (c) : There are 24 isolated operable irregular bone in the vertebral column. Vertebrae are the 33 individual bones that inter lock with each other to form the spinal column. The vertebrae are numbered and divided into regions-cervical. Thoracic, lumber, sacrum and coccyx. Only the top bones are moveable, the vertebrae of sacrum and coccyx are fused. The vertebrae in each region have unique features that help them perform their main functions.

60. Persons having blood group 'A' makes ____

(a) Anti-O (b) Anti-B
(c) Anti-A and Anti-B (d) Anti-A

UP NHM Pharmacist (28.12.2022)

Ans. (b) : Persons having blood group 'A' makes Anti-B.

- The Anti-A, Anti-B, and Anti-A,B, reagents are used in the red blood cell determination of the ABO blood group.

61. An organ that is not a component of the urinary system, is _____

(a) Adrenal gland (b) Ureter
(c) Urinary bladder (d) Urethra

UP NHM Pharmacist (28.12.2022)

Ans. (a) : An organ or structure that is not a component of the urinary system is the Adrenal gland.

The urinary system consists of ureters, kidneys, nephrons, urinary bladder, and urethra.

- The ureter is a small tube, or duct that connects the bladder and kidneys. urine passes through the ureter from the kidneys to the bladder, the urethra is the tubular path that connects the bladder to the body's exterior, allowing urine to exit the body.

Adrenal glands, also known as suprarenal glands, are small triangular-shaped glands located on top of both kidneys. Adrenal glands produced hormones that help regulate our metabolism, immune system, blood pressure, response to stress and other essential functions.

62. Which of the following enzymes is repressed by the insulin hormone?

(a) Pyruvate kinase (b) Glycogen veductase
(c) Hexokinase (d) Glycogen synthase

UP NHM Pharmacist (28.12.2022)

Ans. (a) : The Pyruvate kinase exerts glucokinase-independent effects on insulin secretion pathways in B-cells. An exciting finding is that, by stealing the ADP required for oxphos, Pyruvate Kinase toggles mitochondria between ATP generation and PFP biosynthesis.

63. In NREM Sleep, Which part of brain is not involved?

(a) Dorsal raphe nucleus (b) Thalamus
(c) Hypothalamus (d) Basal forebrain

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (a) : IN NREM Sleep Dorsal raphe nucleus in not involved.

- NREM sleep involves a reduce heart rate, lower blood
- The dorsal raphe nucleus is located on the midline of the brainstem and in one of raphe nucleus. It has rostral and caudal subdivisions. The dorsal raphe in the largest serotonergic nucleus and provides a substantial proportion of the serotonin inneruation to the forebrain.

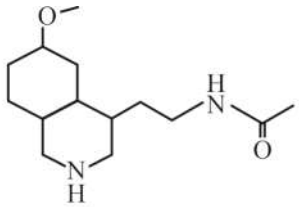
64. Melatonin is secreted by

(a) Hypothalamus (b) Pineal gland
(c) Adrenal cortex (d) Melanocytes

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (b) : Melatoninn is a hormone secreted by the enigmatic pineal gland in response to darkness, hence named as the hormone of darkness.

- The pineal gland, conarium or epiphysis cerebri, is a small endocrine gland in the brain of most vertebrates.
- Melatonin found in plants and animals. It is primarily known in animals as a hormone.



N-[2-(5-methoxy- 1 H-indol-3-yl)ethyle]acetamide

65. Ventricles of brain are lined by

(a) Ependymocytes (b) Astrocytes
(c) Oligodendrocytes (d) Podocytes

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (a) : Ependymocytes are one of the three types of ependymal cells which in turn are one of the four principles types of glial cells, and are found lining ventricular system of the brain and the central canal of the spinal cord.

• Astrpcutes are specialized glial cells that outnumber neurons by over fivefold, they contiguously tile the entire CNS and exert many essential complex functions in the healthy CNS.

• Oligodenrocytes - These are the myelinating cells of CNS.

• Podocytes→ podocytes are terminally differentiated cells of the kidney glomerulus that are essential for the integrity of the kidney filter.

66. Arch of aorta lies at what vertebral level?

(a) T5 (b) T4
(c) T6 (d) T2

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (b) : The initial portion of the aorta ascending behind the sternum is referred to as the ascending aorta extends approximately to the level of the T_4 vertebral body. From this point, it is known as the aortic arch.

67. Which veins drain directly into inferior vena cava?

(a) Superior mesentric vein
(b) Inferior mesentric vein
(c) Hepatic vein
(d) Splenic vein

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (c) : Hepatic Vein→
The hepatic vein carried the blood away from the inferior vena cava, which leads to the right atrium, one of the four chambers of the heart.

• They are usually there-
RHV, MHV and LHV.

• Vena cava is the largest vein in the body.

68. The spleen is located under the ribcage and above the stomach in the_____ of the abdomen.

(a) Left upper quadrant
(b) Left lower quadrant
(c) Right upper quadrant
(d) Right lower quadrant

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (b) : The spleen is part of our lymphatic system.
The spleen is a fist-sized organ found in the upper left side of our abdomen, next to our stomach and behind our left ribs. We can survive without it but it is an important part of our immune system.

69. Inulin clearance is a measure of

(a) Glomerular filtration rate
(b) Tubular Secretion flow
(c) Tubular reabsorption rate
(d) Renal plasma flow

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (a) : Inulin clearance is measure of Glomerular filtration rate. Glomerular filtration is the process that takes place in the kidney. It is a process that involves the filtration of blood and the removal of waste takes place. $\boxed{GFR = \frac{Uinulin(Vu)}{Pinulin}}$

Where,
Uinulin = Concentration of inulin in the urine.
Pinulm = Concentration of inulin in plasma.
Vu = Urine flow rate.

70. An example of flat bone

(a) Carpals (b) Kneecap
(c) Sternum (d) Skull bone

UP NHM Pharmacist (29.12.2022)

Ans. (c) : The sternum is a partially T. Shaped vertical bone that forms the anterior portion of the chest wall centrally. The sternum of the sternum is divided anatomically into three segments.
The sternum connects the ribs via the costal cartilages forming the anterior rib cage.

71. Erythropoietin is produced by

(a) Liver (b) Lungs
(c) Bone marrow (d) Kidney

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (d) : Erythropoietin (EPO) is a glycoprotein hormone, naturally produced by the peritubular cells of the kidney, that stimulates red blood cells production. Renal cortex peritubular cells produce most EPO in the human body. PO_2 directly regulates EPO production. The lower the PO_2. the greater the production of EPO.

72. Which among the following is a light receptor protein synthesized by vitamin A for night vision?

(a) Globul in (b) Lipoprotein
(c) Chromoprotein (d) Rhodopsin

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (d) : Vitamin A is a precursor of rhodopsin, the photo pigment found in rods within retina of our eye that helps us to see at night. Without vitamin A, "night blindness' occurs. vitamin A is a fat soluble vitamin and found in many supplements and foods.
Rhodopsin also known as visual purple, is a protein encoded by the RHO gene and a G-protein-coupled receptor.

73. How many laminae are present in the grey matter of spinal cord?

(a) 8/8 (b) 9/9
(c) 7/7 (d) 10/10

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (d) : 10 (1–x) laminae are present in the grey matter of spinal cord.
Structure of brain & spinal cord are arranged in two layers namely grey matter & white matter. Grey matter is formed by neuron cell bodies (soma). Grey matter present in outer surface of cerebrum & cerebellum.

• In brain stem grey matter is located in groups of neurons called nuclei, embedded with white matter tracts. (Ex→ Basal ganglia)

• Grey matter is the outer parts of the brain & inner parts of the spinal cord but white matter is present in inner part of brain & outer part of spinal cord.

74. In Central nervous system, the nerves that arise from cerebrum and brain stem are called as_____

(a) Spinal nerves (b) Cranial nerves
(c) Temporal nerves (d) Frontal nerves

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (b) : In central nervous system, the nerves that arise from cerebrum and brain stem are called as cranial nerves. The cranial nerves are a set of 12 paired nerves in the back of our brain cranial nerves send electrical signal to our brain. Face, neck and torso. Our cranial nerves help us taste smell, hear and fell sensations. These also help us to make facial expressions, blink our eyes and move our tongue.

75. Creatinine clearance is used as a measurement of

(a) Renal excretion rate
(b) Glomerular Filtration Rate
(c) Active renal secretion
(d) Passive renal absorption

MP NHM Pharmacist-Contractual (04.08.2022)

Ans. (b): Creatinine clearance is used as a measurement of Glomerular Filtration Rate(GFR). The creatinine clearance test helps provide information about how well the kidneys are working. The test compares the creatinine level in urine with the creatinine level in blood. This test requires both a urine sample and blood sample.

76. In healthy adult, glomercular filtration rate is ____

(a) 125 ml/min (b) 80 ml/min
(c) 180 ml/min (d) 50 ml/min

UP NHM Pharmacist (28.12.2022)

Ans. (a) : In a healthy person the GFR is about 125 ml/min, which makes 180 liters per day.

77. A large number of cells present in nervous system, is called _____

Or

Which of the following is a part of the nervous system?

(a) Neuroglia (b) Nerve impulses
(c) Dendrites (d) Neurons

UP NHM Pharmacist (28.12.2022)
BSSC Pharmacist (2018)

Ans. (d) : The nervous system is made up of neurons, specialized cells that can receive and transmit chemical or electrical signals and glia cells that provide support functions for the neurons by playing an information processing role that is complementary to neurons.

78. Which of the following type of food poisoning is caused by staphylococcus aureus?

(a) Autoimmune chronic gastritis
(b) Helicobacter associated
(c) Acute gastritis
(d) Peptic ulceration

UP NHM Pharmacist (28.12.2022)

Ans. (c): Acute gastritis Type of food poisoning is caused by staphylococcus aureus. Staph food poisoning is a gastrointestinal illness caused by eating foods contaminated with toxins produced by the bacterium staphylococcus aureus staph bacteria.

79. Cere brosides are ____

(a) Sulpholipids (b) Phospholipids
(c) Drived lipids (d) Glycolipids

UP NHM Pharmacist (28.12.2022)

Ans. (d) : Cerebrosides the simplest neutral glycolipids/ glycosphingolipids have a single sugar that is linked to ceramide.

80. Which one of the following statement is true for-cancer cells

(a) Oncoproteins produced by cancer cells act a neighboring cells
(b) Cancer cells require stimulation by growth factors (c)
(c) Cancer cells are highly sensitive to growth inhibitory signals
(d) Cancer cells produce Oncoproteins in the absence of growth factors or external stimuli

AMC Pharmacist (15.05.2022)

Ans. (a) : Cancer cells:-

- Grow in the absence of signals telling them to grow.
- Ignore signals that normally tell cell to stop dividing or to die invade into nearby areas and spread to other areas of the body.
- Hide from the immune system, that normally eliminates damaged or abnormal cells.
- Trick the immune system into helping cancer cells stay a Live and grow.
- Mutations destroy telomerase intibitor.

81. Human Serum Albumin has a molecular weight of

(a) 34,000 (b) 65,000
(c) 44,000 (d) 59,000

AMC Pharmacist (15.05.2022)

Ans. (b) : The human serum albumin is the most abundant protein in the human body. The molecular weight of human serum albumin is 65,000 Dalton.

82. Which of the following will result in very closest value to the Glomerular Filteration Rate (GFR)?

(a) Insulin Clearance
(b) Albumin Clearance
(c) Measure of Blood Urea Nitrogen (BUN)
(d) Creatinine Clearance

AMC Pharmacist (15.05.2022)

Ans. (d): The creatinie clearance (crcl) rate approximates the calculation of Glomerular filtration rate (GFR) since the glomerulus freely filters creatinine. However it is also secreted by the per tubular capillaries causing crcl to overestimate the GFR by approximately 10% to 20%

83. The term coronary artery disease is used to designate all of the following conditions, EXCEPT

(a) Angina Pectoris
(b) Sudden cardiac death
(c) Congestive Heart Failure (CHF)
(d) Myocardial Infraction

Kerala PSC Pharmacist Gr.III (22.12.2021)

Ans. (c) : Heart failure, also known as congestive heart failure is a condition that develops when your heart doesn't pump enough blood for our body's needs this can happen if our heart can fill up with enough blood. It can also happen when our heart is too weak to pump properly.

→ Angina pectoris is the medical term for chest pain or discomfort due to coronary heart disease.

→ sudden cardiac death (SCD) is by unexpected and cardiac in nature.

84. Which of the following isotope is used to study the functioning of thyroid gland?

(a) Iodine 135 (b) Iodine 133
(c) Iodine 123 (d) Iodine 127

GMC Pharmacist (08.08.2021)

Ans. (c) : Iodine-123 (or I-123) is a radio-isotope of iodine used for evaluation of the thyroid function and morphology. It is used in nuclear medicine for the diagnostic study of thyroid disease.

85. Which of the following releases renin?

(a) Cells of Juxta-glomerular apparatus
(b) Cells of Justa-medullary apparatus
(c) Gastric glands of infants
(d) Crypts of Lieberkuhn

GMC Pharmacist (08.08.2021)

Ans. (a) : The juxt-aglomerular cells are stimulated to secrete renin by three mechanism, all of which are activated in response to decreased extracellular fluid volume. Macula densa cells stimulate Juxtaglomerular cells to release renin when they detect a drop in sodium concentration in the tubular fluid.

86. Bile is produced by

(a) Gallbladder (b) Liver
(c) Pancreas (d) Intestine

VSSC Pharmacist-A (07.11.2021)

Ans. (b) : Bile is a physiological aqueous solution product and secreted by the liver. It consists mainly of bile salts phospholipids, cholesterol, conjugate billirubin electrolytes and water bile travels through the liver in series of ducts. Eventually exiting through the common hepatic duct.

87. Largest organ is the body is

(a) Liver (b) Skin
(c) Bone (d) Lungs

VSSC Pharmacist-A (07.11.2021)

Ans. (b) : Largest organ is the body is skin. It can seem counterintuitive since many of our other organs are unseen. The skin, made up of three of the layers the Epidermis the Dermis and hypodermis is an external organ.

88. All the following causes hyperglycemia except

(a) Streptozotocin (b) Diazoxide
(c) Glucagon (d) Miglitol

VSSC Pharmacist-A (07.11.2021)

Ans. (d): Miglitol is an oral alpha-gluconsidase inhibitor used to improve glycemic control by delaying the digestion of carbohydrate. Miglitol inhibits the breakdown complexes carbohydrate in to glucose. Miglitol is used to treat high blood sugar levels that are caused by type 2 diabetes.

89. Endothelium dependent relaxing factor of blood.

(a) Acetyl Choline (b) Nor adrenaline
(c) Nitric oxide (d) None of the above

VSSC Pharmacist-A (07.11.2021)

Ans. (c) : Endothelium dependent relaxing factor of blood Nitric oxide.

Endothelium dependent relaxation occurs in resistance vessels as well as in larger arteries and is generally more pronounced in arteries platetet aggregation and adhesion to the blood vessel wall.

90. Thromboxane is mainly synthesized by

(a) Lungs (b) Spleen
(c) Platelets (d) Endothelium

VSSC Pharmacist-A (07.11.2021)

Ans. (c): Thromboxane is mainly synthesized by platelets. Thromboxanes, a substance produced by platelets, lead to occlusion of blood vessel by fueling blood clots inside the vascular system, this has been implicated in many cardiovascular conditions ranging from heart attack to stroke.

91. Identify the method of metabolism of salicylates in our body.

(a) Hydroxylation (b) Reduction
(c) Conjugation with glucuronic acid
(d) Oxidation

Kerala PSC Pharmacist Gr.II (04.01.2021)

Ans. (c) : metabolism of salicylates occurs through glucuronidation and by conjugation to salcyluric acid. Liver metabolizes salicylates by first order elimination, and the inactive metabolites are then excreted in the urine.

92. Which is used in cheese manufacturing as a substitute of rennin?

(a) Papain (b) Collagenase
(c) Pepsin (d) Urokinase

Kerala PSC Pharmacist Gr.II (04.01.2021)

Ans. (c) : Pepsin is used in cheese manufacturing as substitute of rennin. The key & characteristics step in the manufacture of rennet coagulated cheeses is the coagulation of milk through the limited proteolytic action certain proteinases, called rennnets. Several proteinases can coagulate milk but only a few are suitable for cheese production. This led to a search for rennet substitute, four of which are commercially successful: bovine, pepsin and proteinases from the fungi R. meihei, R. pusillus and C. parasitica.

All successful rennet substitutes are aspartyl (acid) proteinases.

93. The cardiovascular disease associated with the disorder of heart rate or rhythm is called:

(a) Arrhythmia
(b) Myocardial infarction
(c) Angina pectoris
(d) Ischemia

Gujarat VMC Pharmacist (28.03.2021)

Ans. (a) : A heart arrhythmia is an irregular heartbeat. Heart rhythm problems occur when the electrical signals that coordinate the hearts beats don't work properly. The faulty signaling causes the heart to beat too fast or irregularly.

- In general , heart arrhythmias are grouped by the speed of the heart rate, for example -
- Tachycardia is a fast heart. The resting heart rate is greater than 100 beats a minute.
- Bradycardia is a slow heartbeat. The resting heart rate is less than 60 beats a minute.

94. mRNA is synthesized in the nucleus as :

(a) tmRNA (b) snRNA
(c) scRNA (d) hnRNA

Gujarat VMC Pharmacist (28.03.2021)

Ans. (d) : hn RAN stands for heterogenous nuclear RNA. It refers to the large pre - mRNAs of various nucleotide sequences II and processed in the nucleus to become cytoplasmic mRNAs .

- The hn RNA that is associated with proteins from the heterogenous nuclear ribonucleoprotein (hn RNP)

95. Which of the following is a catecholamine/

(a) Thyroxine (b) Melanine
(c) Tyramine (d) Dopamine

Gujarat VMC Pharmacist (28.03.2021)

Ans. (d) : Dopamine, adrenaline and noradrenalin are all catecholamine's.

- Catecholamine's are hormones that the brain, nerve tissue, and adrenal glands produce.
- The body releases catecholamine's in response to emotional or physical stress.
- Catecholamine's are responsible for the body's "fight or flight" response.

96. Which of the following is a plasma kinin?

(a) Kallidin (b) Serotonin
(c) Histamine (d) Rennin

Gujarat VMC Pharmacist (28.03.2021)

Ans. (a) : Kallidin is a bioactive kinin formed in response to injury from kininogen precursors through the action of kallikreins .

- The activation of plasma kallikrein - kinin leads to the activation of several sequential effector proenzymes resulting in the induction of genes and activation of biomolecules involved in the molecular mechanisms of vasodilation , blood coagulation and fibrinolysis.

97. The powerhouse of the cell is :

(a) Golgi Bodies (b) Mitochondria
(c) Ribosomes (d) Nucleus

Gujarat VMC Pharmacist (28.03.2021)

Ans. (b) : Mitochondria is known as the "powerhouse of the cell"

- It is a double membrane bound organelle found in most eukaryotic organisms.
- They play a major role in breaking down nutrients and generating energy rich molecules for the cell. Many of the biochemical reactions involved in cellular respiration take place within the mitochondria.
- It was discovered by a German pathologist named Richard Altman in year 1890 .

98. Which of the following hormones inhibits the secretion of insulin, glucagon and growth hormone?

(a) Somatostatin (b) thyroxin
(c) Melatonin (d) Serotonin

Gujarat VMC Pharmacist (28.03.2021)

Ans. (a): The hypothalamus secretes somatostatin , an inhibitory hormone.

- Somatostatin, commonly known as growth inhibiting hormone, prevents the pituitary gland from secreting GH.
- It has been shown to suppress GI, endocrine, exocrine, pancreatic and pituitary secretions, as well as neurotransmission and memory formation in the CNS.

99. The condensation of chromation and shrinkage of the nucleus leading to cell death is termed as:

(a) Karyorrhexis (b) Pyknosis
(c) Karyolysis (d) Autophagy

Gujarat VMC Pharmacist (28.03.2021)

Ans. (b): Pyknosis is the process of nuclear shrinkage. It is an irreversible condition of chromatin in the nucleus of a cell wall undergoing necrosis or apoptosis.

- By following the progression of necrotic pyknosis, we surprisingly observed a transient state of chromatin detachment from the nuclear envelop followed by the nuclear envelope completely collapsing into chromatin.

100. Which of the following is a female sex hormone?

(a) Stilbesterol (b) Testisteribe
(c) Estrogen (d) Benzesterol

Gujarat VMC Pharmacist (28.03.2021)

Ans. (c): Estrogens are a group of hormones that play an important role in the normal sexual and Reproductiove development in female.

- In addition to regulation the menstrual cycle, estrogen affects the reproductive tract, the urinary tract, the heart and blood vessels, breasts , skin pelvic muscle etc.
- Some hereditary and other conditions can lead to high levels of estrogen in male which can results in :
- Infertility
- Erectile dysfunction.
- Longer breasts, known as gynecomastia.

101. Indicate muscles, which are more resistant to block recover more arapidly

(a) Hand (b) Leg
(c) Neck (d) Diaphragm

Gujarat VMC Pharmacist (28.03.2021)

Ans. (d) : The diaphragm is the most highly resistant muscle to NMBAs as well as the first to recover but the occurrence of its dysfunction has been implicated in postoperative respiratory failure, especially when mechanical ventilation is prolonged. Therefore studying diaphragmatic function in a preoperative context is extremely important.

102. Active immunity may be gained by

(a) Vaccines (b) Toxoids
(c) Natural infection (d) All of these

HPSSC Pharmacist (12.12.2020)

Ans. (d) : Active immunity results when exposure to a disease organism triggers the immune system to produce antibodies to that disease. Active immunity may be acquired by natural infection, vaccination or by applying toxoids to the immune system.

103. Life span of W.B.C. in human is

(a) 7 days (b) 50 days
(c) 100 days (d) None of these

HPSSC Pharmacist (12.12.2020)

Ans. (a) : White blood cells (WBCs) protect the body from infections and foreign particles WBCs are irregular and colorless cells with a nucleus, their life span is very short and ranges from few hours to maximum 20 days only.

104. Which of the following lack blood Supply?

(a) Bone (b) Connective tissue
(c) Cartilage (d) None of these

HPSSC Pharmacist (12.12.2020)

Ans. (c) : Cartilage is a strong flexible connective tissue that protects our joints and bones. It is a firm tissue but is soften and much more flexible than bone. Cartilage lacks blood supply as it has no blood vessels nerves, of lymphatics.

105. Plasma has water to the extent of

(a) 60% (b) 70%
(c) 80% (d) 90%

HPSSC Pharmacist (12.12.2020)

Ans. (d) : Solid part of blood is composed of red blood cells (RBCs), white blood cells (WBCs) and platelets. The fluid (or liquid) part of blood is known as plasma and is a straw cloloured , viscous fluid and containing 90 to 92% of water and 6 to 8% proteins.

106. Nissl granules occur in

(a) Bone cells (b) Mast cells
(c) Nerve cells (d) Chondrocytes

HPSSC Pharmacist (12.12.2020)

Ans. (c) : Nissl's granules are the large granular body found in neurons (or- nerve cells). These granules are rough endoplasmic reticulum (RER) with rosettes of free rebosomes and are the sites of protein synthesis.

107. Loss of muscle tone occurs in _____ stage.

(a) Stage I (b) Stage II
(c) Stage III (d) Stage IV

HPSSC Pharmacist (12.12.2020)

Ans. (c) : loss of muscle tone occurs in stage - III . Muscle tone is the amount of tension (or resistance to movement) in muscles. Our muscle tone help us to hold our bodies upright when we are sitting and standing.

108. Angiology refers to

(a) Skeletal system
(b) Articular system
(c) Integumentary system
(d) Circulatory system

HPSSC Pharmacist (12.12.2020)

Ans. (d) : Angiology deals with circulatory system of our body. It is the branch of science which deals with the study of blood vessels, under this branch of medical science diagnosis and treatment of diseases associated with the circulatory system and the lymphatic system.

109. Function of Golgi apparatus is

(a) Synthesis of ribosomes
(b) Synthesis of proteins
(c) Breakdown of toxic substance
(d) Transport of proteins

HPSSC Pharmacist (12.12.2020)

Ans. (d) : The cell organelle , which is known as golgi body or golgi- apparatus, helps in transporting, modifying and packaging proteins and lipids into vesicles for delivery to the targeted destinations Golgi - body is membrane bound organelle of eukaryotic cell,

110. Total number of phalanges in upper limb is

(a) 10 (b) 14
(c) 20 (d) 28

HPSSC Pharmacist (12.12.2020)

Ans. (d) : The bones in the fingers and toes were first called phalanges by Greek philosopher Aristotle because they are arranged in ranks suggesting the military formation Each of human hand has 14 phalanges and therefore both hands of upper limb have a total of 28 phalanges.

111. Lymphocytes accounts for what percent of leucocytes in normal adults?

(a) 15 (b) 30 (c) 60 (d) 90

HPSSC Pharmacist (12.12.2020)

Ans. (b) : Lymphocytes are a type of white blood cell that develop in the bone marrow. A normal range of lymphocytes percentage is 18-45% of total leucocytes in normal adults.

112. Which one of the following is not a function of lymphatic system?

(a) Return tissue fluid to blood stream
(b) Transport of dietary protein
(c) Transport of fats
(d) Protection of body from foreign material

HPSSC Pharmacist (12.12.2020)

Ans. (b): Lymphatic system is the part of are body 's immune system, it helps in managing the fluid levels in the body, react to bacteria deals with cancer cells , lymphatic system also absorbs some of the fats in our diet from the intestine but not proteins, therefore transport of dietary protein is not the function of lymphatic system.

113. The incorrect statement about heart is

(a) Heart has three valves
(b) Heart has three layers
(c) Heart had four chambers
(d) Heart is located in thoracic cavity

HPSSC Pharmacist (12.12.2020)

Ans. (a): Human heart is a fist-sized organ that contains form main sections (chambers) mode of muscle. There are four valve in the human heart : aortic valves, mitral valve, tricuspid valve, and pulmonary valve. Heart walls have three layers: Endocardium (inner layer), myocardium (muscular middle layer) and third Epicardium (protective outer layer), our heart is located in the thoracic cavity (a space in the chest that contains other organs as lungs esophagus, trachea and thymus).

114. Which vein drain abdomen?

(a) Coronary sinus (b) Superior vena cava
(c) Inferior vena cava (d) None of these

HPSSC Pharmacist (12.12.2020)

Ans. (c) : The inferior vena cava (IVC) drains venous blood from the lower trunk, abdomen, pelvis and lower limbs to the right artrium of the heart .The inferior vena cava is formed by the confluence of two common iliac veins at L-5 vertebral level.

115. Choose the correct statement about bronchus.

(a) The right bronchus is wider
(b) The left bronchus is shorter
(c) The right bronchus is more vetical
(d) The left bronchus divides into two

HPSSC Pharmacist (12.12.2020)

Ans. (a) : Bronchi is a wind pipe that distribute the air within our lungs. The key difference between right and left bronchus is that the right bronchus is shorter and wider while the left bronchus is longer and narrower.

Note : According to the commission right answer is (b).

116. How many pairs of intercostals muscles are present?

(a) 11 (b) 12
(c) 13 (d) 14

HPSSC Pharmacist (12.12.2020)

Ans. (a) : There are 11 pairs of intercostal muscles present is intercostal spaces, these are many different groups of muscles that run between the ribs and help form and move the chest wall. There are 3 groups : external, internal and innermost intercostal muscles.

117. The proximal convoluted tubules lies in

(a) Renal medulla (b) Renal sinus
(c) Renal cortex (d) Renal pelvis

HPSSC Pharmacist (12.12.2020)

Ans. (c): The proximal convoluted tubule (PCT) is located in the renal cortex. PCT is a segment of the renal tubule responsible for the reabsorption and secretion of various solutes and water.

118. Sarcolemma refers to

(a) Cytoplasm of skeletal muscle
(b) Mitochondria of skeletal muscle
(c) Endoplasmic reticulum of skeletal muscle
(d) Membrane of skeletal muscle

HPSSC Pharmacist (12.12.2020)

Ans. (d) : The plasma membrane of a skeletal muscle fiber is called sarcolemma. It consists of a lipid bilayer and a thin outer coat of polysaccharide material (glycocalyx) that contacts the basement membrane.

119. Main muscle of shoulder is

(a) Trapezius (b) Gluteus
(c) Deltoid (d) Suprasinatus

HPSSC Pharmacist (12.12.2020)

Ans. (c) : Deltoid muscles are the main muscles of our shoulder has ball-and -socked joint that connects the arm to the trunk of are body. Deltoid muscles help to move our arms in different directions. These muscles protect and stabilize the shoulder joint,

120. Human being have____ number of Parathyroid glands.

(a) 2 (b) 4
(c) 6 (d) 8

HPSSC Pharmacist (12.12.2020)

Ans. (b) : There are two pairs i.e 4 parathyroid glands found in human body, these are oval shaped glands located next to the two thyroid gland lobes in the neck , Each of these gland is usually about the size of a pea. The parathyroid glands produce a hormone that regulates the amount of calcium in the blood.

121. Percentage of bicarbonate reabsorbed in proximal convoluted tubule is

(a) 15 – 20% (b) 30 – 35%
(c) 55 – 60% (d) 85 – 90%

HPSSC Pharmacist (12.12.2020)

Ans. (d) : The kidneys have two main ways to maintain acid base balance their cells reabsorbs bicarbonate HCO_3^- from urine back to the blood. Abort 85 to 90% of the filtered bicarbonate is reabsorbed in the proximal tubule. Proximal renal tubule is the major site for HCO_3^- reabsorption.

122. CAMP acts as 2^{nd} messenger for the following except:

(a) TSH (b) Insulin
(c) LH (d) FSH

NCL Pharmacist (08.11.2020)

Ans. (b) : CAMP acts as 2^{nd} messenger are TSH, LH, FSH, Glucagon epinephrine & norepinephrine. But insulin is not 2^{nd} messenger. It is receptor Tyrosine kinase. Insulin hormone is secreted by β-cells of langerhans of pancreases. Insulin is controlled glucose level in the blood. Insulin converted Glucose into glycogen.

123. Which of the following is contraindicated in pregnancy:

(a) Labetalol (b) Hydralazine
(c) Nifedipine (d) ACE inhibitors

NCL Pharmacist (08.11.2020)

Ans. (d) : Drugs contraindicated in pregnancy are medicines that should be avoided by pregnant women. Since they carry a cancer for teratogenicity or there is on indication for their use during.
The use of ACE inhibitor during the second and third trimesters of pregnancy has been associated with a number of serious foetal malformation including oligohy dramnios foetal and neonatal renal failure, bony malform actions limb contractures, pulmonary hyperplasia, prolonged hypotension and neonatal death.

124. Prostaglandin derivatives are used in the following conditions except:

(a) Cervical ripening
(b) As an abortifacient
(c) NSAID induced peptic ulcer
(d) PDA

NCL Pharmacist (08.11.2020)

Ans. (d) : Patent duct us aiteriosus (PDA) is a persistent opening between the two major blood vessele leading from the heart. The heart problem is present from birth, called the ducts arteriasus is part of a baby's blood flow system in the womb.

125. Phase four clinical trials are also called:

(a) Human Pharmacology and safety
(b) Prepost-marketing surveillance
(c) Therapeutic confirmation
(d) Post-marketing surveillance

NCL Pharmacist (08.11.2020)

Ans. (d) : These trials look for effects that were not seen is earlier trials and may also study now well a new treatment works over a long period of time. Phase IV clinical trials may include thousands of people. Also called phase 4 clinical trial and post-marketing surveillance trial.

126. Fatigue, weight loss, chronic cough, night sweats, chest pain are clinical symptoms of

(a) Angina pectoris (b) Tuberculosis
(c) Hypertension (d) Diabetes mellitus

Kerala PSC Pharmacist Gr.II (04.11.2020)

Ans. (b) : Fatigue, weight loss, chronic cough night sweats, chest pain are clinical symptoms of Tuberculosis (TB). It is caused by Mycobacterium tuberculosis bacteria.

127. Which one is used for aspiration of stomach contents?

(a) Endotracheal tube (b) Ryle's tube
(c) Metal catheter (d) Rubber catheter

Kerala PSC Pharmacist Gr.II (04.11.2020)

Ans. (b): Aspiration of gastric contents through a nasogastric tube (Ryle's tube) will reveal substantial quantities of retained fluid.

128. The duration of action of Cephalosporins is longer in neonates than in adults because

(a) Intestinal transit is fast.
(b) Drug metabolizing enzymes are overactive.
(c) Tubular transport mechanisms are not well developed.
(d) Glomerular filtration rate is high.

GPSC Asst. Professor Pharmacist (23.01.2021)

Ans. (c) : The duration of action of Cephalosporin is longer in neonates than in adults because in neonates tubular transport mechanisms are not well developed.

129. Which of the following hormone is not synthesized by Pancreas?

(a) Gastrin (b) Thyroxin
(c) Glucagon (d) Insulin

Gujarat JMC Jr. Pharmacist (19.06.2021)

Ans. (b) : Thyroxin hormone is not synthesized by pancreas.
Thyroxin is the main hormone secreted into the bloodstream by the thyroid gland. It plays vital roles in digestion, heart and muscle function, brain development and maintenance of bones.

130. Tetanus is related to –

1. Skeletal muscle fibers.
2. Locking of jaw.
3. Food habits.

(a) 1 and 2 only (b) 1 and 3 only
(c) 2 and 3 only (d) 2 and 3

Gujarat JMC Jr. Pharmacist (19.06.2021)

Ans. (A) : Tetanus is related to skeletal muscle fiber and locking of jaw.
Tetanus is an infection caused by a bacterium called clostridium tetani.
When these bacteria enter the body, they produce a toxin that causes painful muscle contractions.
Another name of tetanus is "Lockjaw". It often causes a person's neck and jaw muscles to lock, making it hard to open the mouth or swallow.

131. "Ptyalin" an enzyme found in saliva, its main function is -

(a) To breakdown starch into glucose.
(b) To breakdown starch into maltose and dextrin.
(c) To breakdown starch into fructose.
(d) To breakdown starch into galactose.

Gujarat JMC Jr. Pharmacist (19.06.2021)

Ans. (b): "Ptyalin" an enzyme found in saliva, its main function is to breakdown starch into maltose and dextrin.
Ptyalin is a kind of amylase enzyme that is secreted by the salivary glands in the buccal cavity.
It begins the digestion process and breaks down carbohydrates into simple sugars. This enzyme is necessary for the conversion of starch in our food into maltose and dextrin.

132. Increased level of potassium in blood is known as -

(a) Hyperkalemia (b) Hypernatrium
(c) Hyperglyeemia (d) Hyperlipidemia

Gujarat JMC Jr. Pharmacist (19.06.2021)

Ans. (a) : Increased level of potassium in blood is known as hyperkalemia.

High potassium (called Hyperkalemia) is a medical problem in which we have too much potassium in our blood. Our blood needs potassium. It is an important nutrient that is found in many of the food which we eat. Potassium helps our nerves and muscles including our heart work the right way. But too much potassium in our blood can be dangerous. It can cause ferious heart problems.

133. The major immunoglobulin present in the human serum is:

(a) IgG (b) IgE
(c) IgA (d) IgF

GSSSB Sr. Pharmacist (07.01.2020)

Ans. (a) : Immunoglobulins are basically the antibodies Produced naturally by the body's immune system. Which help fight infection and disease? This is a protein that is made by B cells and Plasma cells which is a types of white blood cells and helps the body fight infection.

- Immunoglobulin G is the most common and abundant antibody present in the human serum.
- Blood Plasma mainly contains 75-80% of IgG antibodies.
- IgG has longest lifespan of about 23 days.
- IgG is the only antibody that crosses the Placental barrier and Provide Passive immunity to a developing fetus.

134. Cranial nerves arises from the .....

(a) Lungs (b) Kidney
(c) Heart (d) Brain

RRB Pharmacist Gr.III (21.07.2019)

Ans. (d) : The cranial nerves are a set of 12 paired nerves in the back of our brain, that pass through the openings in the skull, to different areas of head, neck, chest and abdomen.

- The cranial nerves send information between the brain and the sense organs.

135. Cells are enclosed by a plasma membrane composed mainly of ..... and .....

(a) Lipids and proteins
(b) Proteins and emulsified fats
(c) Fats and carbohydrates
(d) Lipids and emulsified fats

RRB Pharmacist Gr.III (21.07.2019)

Ans. (a) : The Plasma membrane is a selectively permeable membrane of the cell, which consists of both lipids and proteins.

- Both prokaryotic and eukaryotic cells have a plasma membrane.
- Double layer of lipids is found in plasma membrane, which separates the cell interior from the outside environment.
- This double layer of plasma membrane consists largely of specialized lipids called phospholipids.

136. Which of the following is an Autosomal Dominant disorder?

(a) Polycystic Kidney disease
(b) Alkaptonuria
(c) Wilson disease
(d) Thalassemia

RRB Pharmacist Gr.III (21.07.2019)

Ans. (a) : Autosomal dominant tubulointerstitial kidney disease (ADT KD) is a group of inherited kidney disorders. This disease is characterized by progressive renal insufficiency, disorder's tubulointerstitial nephropathy, and bland urinary sediment.

- Autosmal dominant disorder are those that result from mutation in one copy of the gene.

137. Among the following organs in which the perfusion rate is maximum?

(a) Liver (b) Kidney
(c) Lungs (d) Heart

RRB Pharmacist Gr.III (21.07.2019)

Ans. (c) : Perfusion is measured as the rate at which blood is delivered to tissue, or volume of blood per unit time (blood flow) per unit tissue mass.

Among the given organs in options lungs has the maximum rate of perfusion.

138. The ability of the eye lens to adjust its focal length is called .....

(a) Magnification (b) Accommodation
(c) Modulation (d) Focal length

RRB Pharmacist Gr.III (21.07.2019)

Ans. (b) : The ability of the eye lens to adjust its focal length is known as accommodation. Power of accommodation is the ability of the eye lens to focus near and far objects clearly on the retina by adjusting its focal length.

139. Indicate the region of oral mucosa where the blood flow will be high?

(a) Ventral Tongue (b) Frenulum
(c) Sublingual (d) Buccal

RRB Pharmacist Gr.III (21.07.2019)

Ans. (c) : The blood flow to the mucosa lining the mouth is generally be greater than that to skin, and it is high in sublingual mucosa.

- The sublingual mucosa is the membrane of the ventral surface of the tongue.
- Sublingual placement of drug refers to the placement of drug under the tongue.
- Sublingual route bypasses the first-pass metabolism and hence facilitates rapid absorption of the drug into the systemic circulation.

140. Which one of the following lymphocytes produce antibodies?

(a) B cells (b) T cells
(c) Macrophages (d) Helper T cells

RRB Pharmacist Gr.III (21.07.2019)

Ans. (a) : B lymphocytes, also called B cells create a special type protein called antibody.

- B lymphocytes (B-cells) are part of the immune system and develop from stem cells in the bone marrow.
- The antibodies produced by B-cells, find to pathogens or to foreign substances such as toxins, to neutralize them.

141. Insulin is composed of total .....

(a) 30 amino acids (b) 51 amino acids
(c) 21 amino acids (d) 81 amino acids

RRB Pharmacist Gr.III (21.07.2019)

Ans. (b): There are 51 amino acids present in the insulin.

- Insulin is composed of two peptide chains referred to as 'A' chain and 'B' chain. A and B chains are linked together by two disulfide bonds.
- Insulin is a hormone created by our pancreas, that controls the amount of glucose our blood stream.
- Inside the pancreas the hormone insulin is made in the beta (β) cells. β-cells are part of islets of Langerhans.

142. Impure blood (deoxygenated) carried by .....

(a) Pulmonary Artery (b) Pulmonary vein
(c) Aorta (d) CoronaryArtery

RRB Pharmacist Gr.III (21.07.2019)

Ans. (a) : A pulmonary artery is an artery in the pulmonary circulation that carries deoxygenated blood from the right side of the heart to the lungs.

Pulmonary vein - veins originating from lungs, and which carry freshly oxygenated blood to heart, are known as pulmonary veins.

Aorta - Aorta is the main artery that carries blood away from our heart to the rest of our body.

Coronary Arteries - Coronary arteries supply blood to the heart muscle. Like all other tissues in the body, the heart muscle needs oxygen-rich blood to function.

143. Which one of the following is the normal range of diastolic pressure?

(a) 110-145 mm Hg (b) 100 - 120 mm Hg
(c) 40 - 55 mm Hg (d) 70 - 90 mm Hg

RRB Pharmacist Gr.III (21.07.2019)

Ans. (d) : The pressure of blood in our arteries, when our heart rest between beats, is called diastolic blood pressure. In the normal condition diastolic pressure measures around 80 mmHg.

- Systolic blood pressure on the other hand is the pressure, when heart contracts to pump blood in arteries during each time it beats. In the normal case it measure 120 mmHg.
- A person's blood pressure is said to be normal if systolic is less than 120 mmHg and diastolic less than 80 mmHg.

144. "Astrocytes" are present in-

(a) Blood brain barrier
(b) Blood cerebrospinal fluid barrier
(c) Cell membrane barrier
(d) Blood placental barrier

RRB Pharmacist Gr.III (19.07.2019)

Ans. (a) : Astrocytes are the most numerous cell type within the central nervous system (CNS) and perform various functions, as the guidance and synaptic support, to the control of the blood brain barrier and blood flow.

145. Enamel is a constituent of

(a) Bones (b) Nail (c) Hair (d) Teeth

RRB Pharmacist Gr.III (19.07.2019)

Ans. (d) : Enamel is a constituent of teeth. Dental enamel is the hardest substance in the human body. Enamel forms an insulating barrier that protects the tooth from physical, thermal and chemical attack from the substances in the form of food and liquid etc.

146. Estimation of serum creatinine is considered to be a more reliable indicator for the evaluation of .....

(a) Lung function (b) Liver function
(c) Kidney function (d) Gastric function

RRB Pharmacist Gr.III (19.07.2019)

Ans. (c) : The measure of serum creatinine may also be used to estimate how quickly the kidneys filter blood. Glomerular filtration rate (G.F.R) the GFR may provide a more accurate reading on kidney function.

147. Who introduced the Mutation theory?

(a) Von Baer (b) Edward Jenner
(c) Camilo Golgi (d) Hugo de Vries

RRB Pharmacist Gr.III (19.07.2019)

Ans. (d): Hugo de Vries introduced the Mutation theory. According to de Vries' Mutation theory living organisms can develop changes to their genes that greatly alter the organism.

148. Calcitonin is secreted by

(a) Adrenals (b) Thyroid
(c) Parathyroid (d) Thymus

RRB Pharmacist Gr.III (19.07.2019)

Ans. (b) : Calcitonin is secreted by thyroid. Calcitonin is a hormone that the C-Cells in the thyroid gland produce and release.

Colcitonin is involved in helping to regulate levels of calcium and phosphate in the blood. Opposing the action of parathyroid hormone.

Adrenal gland :- The adrenal gland secretes hormones such as cortisol and aldosterone.

149. G protiein coupled receptor .....

(a) A bundle of seven alpha helices
(b) As a bundle of four alpha helices
(c) A bundle of six alpha helices
(d) A bundle of five alpha helices

RRB Pharmacist Gr.III (19.07.2019)

Ans. (a): G-protein coupled receptor is a bundle of seven alpha helices .
G-protein is heterotrimeric and is made up of three different subunits. alpha (α) beta (β) and gama (γ).
G-protein -coupled receptors also called seven - trans membrane receptor.

150. How many chromosomes are there in the human being?
(a) 46 (b) 40
(c) 44 (d) 48

RRB Pharmacist Gr.III (19.07.2019)

Ans. (a) : In humans each cell normally contains 23 pairs of chromosomes i,e there are total of 46, chromosomes found in our cells. This means that humans have 22 pairs of numbered chromosomes (autosomes) and one pair of sex chromosomes (XX or XY), for a total of 46
- Chromosome are thread like structures made of protein and a single molecule of DNA that serve to carry the genomic information from cell to cell,

151. Axis is a bone of
(a) Skull (b) Forearm
(c) Leg (d) Spinal cord

RRB Pharmacist Gr.III (19.07.2019)

Ans. (d) : Axis is a bone of spinal cord .
The spinal cord is a long tube - like band of tissue .
Skull :- The skull is made up of cranial bones and facial bones.

152. In stomach, the stimulatin vegal, that increases the gastric acid, due to
(a) H_2 Receptor (b) M_3 Receptor
(c) 5HT Receptor (d) α Receptor

RRB Pharmacist Gr.III (19.07.2019)

Ans. (b) : M_3 receptors that turn on acid secretion. Stimulation of the vagus excites postganglionic parasympathetic neurons in the stomach, which then release acetylcholine on to parietal cells to stimulate acid secretion .

153. The transformation of the larvae into an adult through drastic changes is called .....
(a) Budding (b) Reverse osmosis
(c) Menopause (d) Metamorphosis

RRB Pharmacist Gr.III (19.07.2019)

Ans. (d) : The transformation of the larva into an adult through drastic changes is called Metamorphosis
Metamorphosis : Change of physical form , structure or substance. In frog butterfly metamorphosis occurs.
Budding : It is an asexual mode of producing new organisms. In this process a new organism is developed from a small part of the parents body.

154. Incretion Analogs belongs to _____ group
(a) Dipeptidyl peptidase 4 inhibitors
(b) Glucagon like peptide – 1
(c) α- Glucosidase inhibitors
(d) Amylin Analogs

TNPSC Drugs Inspector (27.06.2019)

Ans. (b): Incretion analogs belongs to glucagon like peptide -1 group. Glucagon like peptide -1 (GL P-1) is an incretin secretory molecule. GLP-1 receptor agonist are widely used in the treatment of type 2 diabetes.

155. Somatostatin is a growth hormone releasing inhibiting hormone present in the
(a) GI tract (b) Heart
(c) Kidneys (d) Muscles

TNPSC Drugs Inspector (27.06.2019)

Ans. (a) : The gastrointestinal (GI) tract, also called the digestive tract of the alimentary canal, is the system of organs within multicellular animals that takes in food, digests it to extract energy and nutrients and example the remaining waste.

156. The reason for the action of heparin in cleaning the turbid plasma is
(a) Releases bradikinin
(b) Releases lipoprotein lipase
(c) Releases histamine
(d) Release hexokinase

TNPSC Drugs Inspector (27.06.2019)

Ans. (b) : Heparin activates lipoprotein lipase and hepatic lipase enhances plasma lipolytic activity and elevates plasma levels of free fatty acids. Lipoproteins lipase catalyses the hydrolysis of the triacylglcerol component of circulating chylomicrons and very low density lipoproteins. Heparin is used to prevent blood clots.

157. The $t_{1/2}$ of heparin is reduced in patients with _____condition.
(a) Cirrhosis of the liver
(b) Kidney malfunction
(c) Pulmonary embolism
(d) Gall bladder dip function

TNPSC Drugs Inspector (27.06.2019)

Ans. (c) : The $t_1/2$ of heparin is reduced in patients with pulmonary embolism condition. Immediate therapeutic anticoagulation is initiated for patients with suspected deep venous thrombosis or pulmonary embolism. Anticoagulation therapy with heparin reduces mortality rates form 30% to less than 10%.
Heparin works by activating antitherombin 111 to slow or prevent the progression of DVT and to reduce the size and frequency of pulmonary embolism. Heparin does not dissolve existing clot.

158. Retention hyperbilirubenamia is caused due to
(a) Choleric jaundice
(b) Non clearance of bilirubin
(c) Reflux of bilirubin into blood stream
(d) Over production of bilirubin

GPAT (28.01.2019)

Ans. (d) Retention hyperbilirubenamia is caused due to over production of bilirubin. Jaundice, also Known as hyperbilirubenamia is defined as, a yellow discoloration of the body tissue resulting from the accumulation of excess bilirubin. Deposition of bilirubin happen only when there is an excess of

bilirubin, and this indicate increased production or impaired excretion. Bilirubin level is often elevated by alcohol, infectious, hepatitis, drug reaction and autoimmune disorder.

159. The rheological and functional properties of synovial fluid are impaired due to:

(a) Increase in the content of mucus
(b) Decrease in the content of mucus
(c) Increase in the content of hyaluronic acid
(d) Decrease in the content of hyaluronic acid

GPAT (28.01.2019)

Ans. (d) The rheological and functional properties of synovial fluid are impaired due to decrease in the content of hyaluronic acid.

160. Volume of blood that flows per unit time per unit volume of the tissue is:

(a) Residence time (b) Elimination rate
(c) Gastric emptying rate (d) Perfusion rate

GPAT (28.01.2019)

Ans. (d) Volume of blood that flows per unit time per unit volume of the tissue is perfusion rate.
Perfusion rate is defined as the volume of blood that flow per unit time volume of the tissue it is expressed in ml/min/ml of the tissue.
$\Rightarrow$ Highly per-fused organs- Lungs, kidneys, Liver, heart brain
$\Rightarrow$ Moderately per-fused organs - muscles and skin
$\Rightarrow$ Poorly per-fused organs - fat and bone.

161. Characteristic microscopic features observed in Alzheimer's disease is:

(a) Epidural haemoregic patches
(b) Depigmentation of substantia nigra
(c) Demyelination of neurons in spinal cord
(d) Presence of neutritic plaques containing Ab-amyloid

GPAT (28.01.2019)

Ans. (d) Characteristic microscopic features observed in Alzheimer's disease is presence of neutritic plaques containing Ab- amyloid, alzheimer's disease is a chronic irreversible disease that affects the cells of the brain and causes dementia impairment of in tellectul functioning.

162. Cardiac output is:

(a) Volume of blood ejected by the auride per minute
(b) Volume of the blood ejected by the left ventricle per beat
(c) Volume of the blood ejected by the left ventricle per minute
(d) Volume of blood ejected by the auricle per beat

GPAT (28.01.2019)

Ans. (c) Cardiac output is volume of blood ejected by the left ventricle per minute.
Unit- litre (ml)/minute.

$$\text{cardiac output (CO)} = \underset{\text{(Stroke volume)}}{\text{SV}} \times \underset{\text{(Heart rate)}}{\text{HR}}$$

163. What are sutures?

(a) Cartilaginous joints (b) Non fibrous joints
(c) Synovial joints
(d) Fibrous joints of the skull

GPAT (28.01.2019)

Ans. (d) The bones of the skull joined together except for the mandible by a fibrous joint called a suture. The fibrous connective tissue found at a suture (to attach or sew) strongly unites the adjacent bones of the skull and thus help protect the form the face.

164. Following are the facts regarding clinical applications of muscarinic receptor blocking drugs. Identify the false statement:

(a) Used in the treatment of parkinson's disease is often an exercise in polypharmacy, since no single agent is fully effective.
(b) Marked reflex vagal discharge may stimulate sinoatrial oratrioventricular node to improve cardiac output.
(c) Mydriasis produced greatly facilitates opthalmoscopic examination of the retina and measurement of refractive error in uncooperative patient.
(d) Scopolamine is one among the old remedies used to treat sea-sickness.

GPAT (28.01.2019)

Ans. (b) Heart Ach, by stimulating Mz receptor of the heart opens k^+ channel resulting in hyperpolaidtion therefore S-A and A.V nodal activity is reduced.

165. Which of the following cells are called scavenger cells?

(a) Neutrophils (b) Natural killer cells
(c) Marcrophages (d) Mast cells

GPAT (28.01.2019)

Ans. (c) Macrophages are largest corpuscles in the blood tissue - resident phagocytes and antigen presenting cells. They differentiate from circulating peripheral blood monocytes they perform important active and regulating functions in innate as well as adaptive immunitius

166. Glucocorticoids have following effects- EXCEPT:

(a) Stimulation of immune responses
(b) Resistance to stress
(c) Lipolysis
(d) Protein breakdown and glucose formation

GPAT (28.01.2019)

Ans. (a) Functions of glucocorticoids :-
carbohydrate metabolism, protein metabolism, fat metabolism (lipolysis), resistance to stress, immunosuppressive effect, Anti-inflammatory effects, Anti-allergic actions etc.

167. What is anaplasia?

(a) Morphological and functional alterations/changes, that are different from normal cells
(b) Morphological and functional resemblance to normal cells
(c) Increase in size of cell
(d) Lack of growth of cells

GPAT (28.01.2019)

Ans. (a) Morphological and functional alterations changes that are different from normal cells is anaplasia. Anaplasia is a term used to describe cells that have lost the unique characterstics that define them as a certain tissue type.

168. Match the following liver abnormalities with consequences:

(a) Steatosis (M) Raised hiliruhin level
(b) Cholestasis (N) Slight rise in serum transaminase level
(c) Hepatitis (O) Accumulation of fat droplets within liver cells
(d) Fibrosis (P) lilevated liver function test (LFT's)

(a) (a) - (N), (b) - (P), (c) - (M), (d) - (O)
(b) (a) - (O), (b) - (M), (c) - (P), (d) - (N)
(c) (a) - (N), (b) - (O), (c) - (P), (d) - (M)
(d) (a) - (P), (b) - (O), (c) - (N), (d) - (M)

GPAT (28.01.2019)

Ans. (b)	
(a) Steatosis	(O) Accumulation of fat droplets within liver cells
(b) Cholestasis	(M) Raised hiliruhin level
(c) Hepatitis	(P) lilevated liver function test (LFT's)
(d) Fibrosis	(N) Slight rise in serum transaminase level

169. Several different chemicals released by microbes and inflamed tissues attract phagocytes, this phenomenon is called as ……

(a) Phagocytosis (b) Integrins
(c) Chemotaxis (d) Emigration

GPAT (28.01.2019)

Ans. (c) Chemotaxis is the directed movement of cells along a concentration gradient of soluble chemicals emanating form a distant source.

170. Hematocrit 65% to 70% indicates:

(a) Hemophilia (b) Polycythemia
(c) Hypoxia (d) Anaemia

GPAT (28.01.2019)

Ans (b): At extreme levels of secondary polycythemia, patients can be at risk for thrrombosis etecessive polycythemia usually defined as hematocrit levels higher than 65-70% may result in increased whole blood viscosity.

171. Thyrotoxicosis causes

(a) Odema of tha foot (b) Myxoedema
(c) Cretinism (d) Nodular goitre

TNPSC Drugs Inspector (27.06.2019)

Ans. (d) : Thyrotoxicosis causes nodular goiter. Toxic nodular goiter involves an enlarged thyroid gland. Thyrotoxicosis is a condition in which you have too much thyroid hormone in your body.

- Myxoedema is a term generally used to denote severs hypothyroidism.
- Cretinism is a condition of severly stunted physical and mental growth due untreated congenital deficiency of thyroid hormones.

172. Infertility in men is induced by

(a) Vitamin C (b) Gossypol
(c) Estrogen (d) Antibiotics

TNPSC Drugs Inspector (27.06.2019)

Ans. (b) : Infertility in men is induced by gossypol. Gossypol is non-steroidal and does not affect hormone levels, but does inhibit sperm production and motility in male animals and humans.

It acts as a contraceptive by inhibiting enzyme systems that effect energy metabolism in sperm and spermatogenic cells.

173. Gluconeogenesis is promoted by

(a) Glucocorticoids
(b) Insulin
(c) Oral hypoglycemic agents
(d) Food intake

TNPSC Drugs Inspector (27.06.2019)

Ans. (a) : Glucocorticoids promote gluconeogenesis in liver, whereas in skeletal muscle and white adipose tissue they decrease glucose uptake and utilization by antagonizing insulin response. Therefore, excess glucocotricoid exposure causes hyperglycemia and insulin resistance

174. An ischaemic nefrosis of a portion of the myocardium due to sudden occlusion'of a branch of coronary artery is called as

(a) Angina Pectoris (AP)
(b) Cardiac Arrythmia (CA)
(c) Congestive Cardiac Failure *(CCF)*
(d) Myocardial infarction (M. I)

TNPSC Drugs Inspector (27.06.2019)

Ans. (d) : An ischemic necrosis of a portion of the myocardium due to sudden occlusion of a branch of coronary artery is called as Myocardial infection (MI). Heart attack, also called a myocardial infarction, happens when a part of the heart muscle does not get enough blood.

Coronary artery disease is the main cause of heart attack.

175. The following are used as nerve gases except

(a) Taliun (b) Dyflos
(c) Soman (d) Sarin

TNPSC Drugs Inspector (27.06.2019)

Ans. (b) : Soman and sarin are nerve gases designed for use in chemical warfare to induce nausea, vomiting, convulsions and death in humans.

Dyflos does nor used as nerve gases.

Dyflos is a parasympathomimetic drug irreversible anticholinesterase and has been used in ophthalmology as a miotic agent in treatment of chronic glaucoma.

176. Acetylcholine is not used commercially because

(a) Long duration of action
(b) Costly
(c) Rapidly destroyed in the body
(d) Crosses blood main barrier

TNPSC Drugs Inspector (27.06.2019)

Ans. (c): Acetylcholine is not used commercially because rapidly destroyed in the body.

• Myasthenia gravis cause the immune system to block or destroy acetylcholine receptors. The, the muscles do not receive the neurotransmitter and cannot function normally, without acetylcholine muscles cannot contract

177. Example for tyrosine kinase receptor is

(a) Insulin receptor
(b) $GABA_A$ receptor
(c) Acetylcholine receptor
(d) Steroid receptor

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (a) : Insulin receptor is a kind of tyrosine kinase receptor. Tyrosine kinase is a cell surface receptor. In it the binding of an agonistic ligand triggers autophosphorylation of tyrosine residues.

178. The capacity of a drug to cause, foetal abnormality is known as

(a) Carcinogenicity (b) Teratogenicity
(c) Mutagenicity (d) Photosensitivity

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (b) : The capacity of a drug to cause, foetal abnormality is known as teratogenicity.

179. The predominant muscarinic receptor which mediates vagal bradycardia is

(a) M_1 (b) M_2
(c) M_3 (d) M_5

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (b) : M_2 is the predominant muscarinic receptor which mediates vagal bradycardia. The M_2 muscarinic receptor is widely distributed in mammalian tissues and is the only subtype found in the human heart. Its activation results in a decrease in heart rate and a reduction in heart contraction force.

180. Estradiol is a

(a) Male sex hormone
(b) Female sex hormone
(c) Pituitary hormone
(d) Parathyroid hormone

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (b) : Estradiol is a female sex hormone. It is the major female sex hormone, an estrogen steroid hormone involved in the regulation of the estrous and menstrual female reproductive cycles.

181. Human Immunoglobulin is the other name of

(a) Beta-globulin (b) Gamma-globulin
(c) Prothrombin (d) Fibrinogen

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (b) : Another name of Human Immunoglobulin is Gamma-globulin. Gamma globulins are antibodies of the most abundant class of serum proteins after albumin. The main classes of gamma globuline are IgA, IgG and IgM.

182. The human Insulin analogues are the following EXCEPT

(a) Lispro insulin (b) Aspart insulin
(c) Glargine insulin (d) Isophane insulin

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (d) : Analog insulins are very similar to human insulin, but they have one or two amino acids changed. Analog insulin preparations have been modified to change how fast and how slow they act after Injections.

Examples of short-acting analog insulins are Lipro, Glulisine and Aspart.

* Insulin human isophane is a intermediate acting type insulin. Insulin is one of many hormones that help the body turn the food we eat into energy.

183. The drug which increases uterine motility is

(a) Oxytocin (b) Ritodrine
(c) Atosiban (d) Nifedipine

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (a) : Oxytocin promotes myo-metrial contractions by increasing free intracellular calcium in the myo-metrial cell thereby promoting contractility uterine stimulants are also called uterotonics because they increase the tone of the muscles of the uterus.

They are mainly used to induce or facilitate labour reduce postpartum hemorrhage & induce abortion.

Example- Oxytocin, ergonovine, & prostaglandins.

184. Sumatriptan is a selective

(a) 5 - $HT_{1D/1B}$ receptor agonist
(b) 5 - HT_{2Al2B} receptor agonist
(c) 5 - HT_{3B13D} receptor agonist
(d) 5 - HT_{4-7} receptor agonist

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (a) : Sumatriptan (GR43175) is a selective 5- HT1 - receptor agonist effective in the acute treatment of migraine. vasoactive properties in other vascular beds have been suggested by recent in vitrostudiel .

185. Angiotensin-II is a

(a) Carbohydrate (b) Eicosanoids
(c) Peptide (d) Cardenolide

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (c) : Angiotensin- II is a peptide hormone that causes vasoconstriction and an increase in blood pressure. It is part of the renin- angiotension system which regulates blood pressure. Angiotensin also stimulates the releases of aldosterone from the adrenal cortex to promote sodium retention by the kidneys.

186. Who is introduced the somatic embryo genesis in callus, cultured on a semisolid medium?

(a) Cocking (b) Michel
(c) Rienert (d) Steward

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (c) : Somatic embryogenesis is a process by which somatic cells or tissue, including haploid cells develops into differentiated embryos and to regenerate plants.

→ Steward (1958) first included embryo through suspension culture in carrot.

→ Reinert (1959) produce embryo from callus in carrot through suspension culture.

187. Which of the following parameter are evaluated by comparing curves of serum concentration versus time?

(a) Peak concentration, biological half life and elimination rate constant

(b) **B**iological half life, t_{max} and absorption rate constant

(c) Peak concentration, t_{max} and total area under the curve

(d) Adsorption rate constant, area under the curve and elimination rate constant

TNPSC Pharmacist-Degree (27.06.2019)

Ans. (c) : Three important parameters useful in assessing the bioavailability of a drug from its formulation are–

1. Peak plasma concentration (C_{max})– The point at which, maximum concentration of drug in plasma. Unit : μg/ml

2. Time of peak concentration (t_{max})– The time for the drug to reach peak concentration in plasma (after extra vascular administration). unit - hrs

3. Area under curve (AUC)– It represents the total integrated area under the plasma level-time profile and expresses the total amount of the drug that comes into systemic circulation after its administration. units - μg/ml x hrs.

188. Endothelium is the squamous epithelium associated with:

(a) heart (b) collecting ducts

(c) lymph vessels (d) small intestine

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (c) : Endothelium is a type of epithelium that lines the interior surface of blood vessels and lymphatic vessels forming an interface between circulating blood or lymph in the lumen and the rest of the vessel wall. It is a thin layer of simple squamous cells called endothelial cells.

189. The adipose tissue in newborns is called:

(a) Brown fat (b) Yellow fat

(c) White fat (d) Black fat

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (a) : Brown adipose tissue or brown fat is one of two types of fat that human and other mammales have. It main function is to turn food in to body heat. It is sometimes called "good" fat. Human newborns and hibernating mammals have high levels of brown fat. The other type of fat is white or yellow fat.

The largest accumulations of brown fat envelop the kidneys' and adrenal glands and smaller amounts surround the blood vessels of the mediastinum and neck.

190. Synovial cells in joints is an example of:

(a) Neutrophils (b) Macrophages

(c) Basophils (d) Lymphocytes

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (b): Synovial cells in joints is an example of macrophages.

Nucleated cells recognized frequently in synovial fluid include neutrophils, lymphocytes, monocytes and macrophages. These cells are seen in fluid from normal as well as diseased joints.

191. An important site of fetal blood cell production is:

(a) Pons (b) Spleen

(c) Lymph (d) Thymus

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (b) : An important site of fetal blood cell production is spleen.

In the fetus, blood cell production occurs in the yolk, liver, spleen and eventually in bone marrow.

192. An integral membrane glycoprotein of the human erythrocyte is:

(a) Chitin (b) Amylopectin

(c) Glycophorin (d) Glycogen

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (c) : The structures and functions of major human red cell integral membrane proteins are summarized in this review. The proteins that are discussed are the anion transporter (band 3), the sialic acid- rich glycophorins and the glucose transporter. The glycophorins comprise three major proteins, glycophorin A, glycophorin B and Glycophorin C.

193. Penalty for non-disclosure of the name of the manufacturer is:

(a) ₹ 10,000 (b) ₹ 2,000

(c) ₹ 1,000 (d) ₹ 500

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (c) : Penalty for non– disclosure of the name of the manufacturer is 1000 rupees.

It is in section 28 of the drug & cosmetics act 1940.

194. Which of the following is a superficial vein of the cardiovascular system?

(a) Basilica vein (b) Axillary vein

(c) Subclavian vein (d) Palmar vein

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (a) : Superficial veins in the arms/upper extremities included- Digital meta carpel, Cephalic basilic and median veins.

195. Which of the following hormones inhibits the secretion of insulin, glucagon and growth hormone?

(a) Somatostatin (b) Thyroxin

(c) Melatonin (d) Serotonin

ESIC Pharmacist (26.02.2019, Shift-II)

Ans. (a) : In pancreas prevents (inhibits) the release of pancreatic hormones, including insulin, glucagon and gastrin, and pancreatic enzymes that aid in digestion.

In our hypothalamus, somatostatin stops the release of hormones our pituitary gland makes including growth hormone.

196. Which one of the following is a nonapeptide hormone which is produced by the posterior pituitary gland?

(a) Prolactin (b) Vasopressin

(c) Aldosterane (d) Thyroxine

ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (b): Vasopressin (also called antidiuretic hormone) plays role in regulating the circadian rhythm. The period of sleepiness and wake fulness in a 24 hours cycle.
Vasopressin also helps maintain the body's internal temperature. its blood volume and the proper flow of urine from the kidneys. Vasopressin is a hormone made by the hypothalamus in the brain and stored in the posterior. Pituitary gland.

197. The procedure of removing ovaries is called:
(a) Colostomy (b) Salpingectomy
(c) Oophorectomy (d) Vasectomy
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (c) : Oophorectomy is a surgical procedure where one or both of ovaries are removed. This procedure can be done through a laparoscopic approach, a vaginal approach or a laparotomy. Removing both ovaries will cause menopause to begin immediately.

198. Which of the following is a part of cardio system of upper vein?
(a) Axial vein (b) Parmar vein
(c) Subclavian vein (d) Basilic vein
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (d) : The basilic vein originated for the medial side of the dorsal venous network, ascended along the medial side of the forearm and joined the brachial vein to form the oxillary vein at the distal border of the terse major muscle.

199. Haemostatic forceps are also known as:
(a) Moynihan's forceps
(b) Swab holding forceps
(c) Artery forceps
(d) Ordinary forceps
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (c) : Haemostatic forceps are also known as artery forceps.
An artery forceps is surgical instruments that is used to stop the flow of blood and shut the blood vessels and retraction of tissues, skin and other body organs.

200. Endothelium is the squamous epithelium associated with:
(a) Small intestine (b) Collecting ducts
(c) Heart (d) Lymph vessels
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (d) : Lymph or lymphatic vessels are the five tubes carrying the lymphatic fluid and with blood cells all through the lymphatic system. They are physically similar to blood vessels. Afferent lymph vessels bring lymph to a lymph node and efferent lymph vessels carry lymph away from a lymph node.

201. Adipose tissue in newborn baby is called
(a) Black fat (b) White fat
(c) Brown (d) Yellow fat
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (c) : Brown fat also called brown adipose tissue help maintain body temperature when get too cold. It's the same fat that bears use to stay warm when they hibernate. Babies are born with a lot of brown fat behind their shoulder blades. Newborns can't shiver which is one of the ways the body creates heat.

202. An integral membrane glycoprotein of the human erythrocyte is:
(a) Amylopectin (b) Glycophorin
(c) Chitin (d) Glycogen
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (b) : A glycophorin is a sialoglycoprotein of the membrane of a red blood cell. It is a membrance-spanning protein and carries sugar molecules. It is heavily glycosylated (60%) glycophorins are rich in silica acid, which gives the blood cells a very hydrophilic-charged coat. This enables them to circulate without adhering to other cells or vessel walls. glycophorin plays an important role in the invasion of red blood cells, by malaria parasites, which involves several ligends binding to RBC receptors.

203. Glucocorticoids are involved in:
(a) Potassium metabolism
(b) Fluid balance
(c) Sodium metabolism
(d) Fat metabolism
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (d) : Glucocorticoids are involved in fat metabolism.
Glucocorticoids regulate are also expressed in adipose tissue and liver and glucocorticoids may be important in both the acute and chronic regulation of fatty acid trafficking and metabolism and in influencing adipose tissue differentiation and function.

204. Which of the following hormones inhibits the secretion of insulin, glucagon and growth hormone?
(a) Thyroxin (b) Somatostatin
(c) Serotonin (d) Melatonin
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (b) : In our pancreas, somatostatin prevents (In hibits) the release of pancreatic hormones, including insulin, glucagon and gastrin, and pancreatic enzymes that aid indigestion.
Somatostatin stops the release of hormones our pituitary your gland makes, including growth hormones.

205. Which of the following is a plasma kinin?
(a) Rennin (b) Kallidin
(c) Serotonin (d) Histamine
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (b) : The examples of plasm kinins include bradykinin and kallidin. They may have a role in inflammation and exocrine gland secretion. Kinins cause vasodilatation of most vessels but vasoconstriction of the pulmonary bed, and they also alter vascular permeability.

206. A condition clinical obesity is a condition in which the range of BMI is.
(a) 30–40 kg/m^2 (b) 25–30 kg/m^2
(c) 45–50 kg/m^2 (d) 40–45 kg/m^2
ESIC Delhi Pharmacist (26.02.2019, Shift-I)

Ans. (a): BMI **Weight status**
Below 18.5 → Underweight
18.5- 24.9 → Normal
25.0-29.9 → Overweight
30.0 and higher → Obesity

207. Hydrochloric acid present in gastric juice is secreted by _____.
(a) Parietal cells (b) Mucous cells
(c) Chief cells (d) G cells

DSSSB Pharmacist (01.11.2019)

Ans. (a): Gastric HCl is secreted from the highly specialized parietal cells located in the corpus of the stomach, generating a H^+ concentration in the gastric juice that is 3 million time greater than that in blood and tissue.

208. What type of hormones are androgens?
(a) Glucocorticoid (b) Sex hormone
(c) Growth hormone (d) Mineralocorticoid

DSSSB Pharmacist (01.11.2019)

Ans. (b) : Androgens are reproductive and growth hormones that are produced in male and female bodies. Some people think androgens are male hormones but the female body naturally produces small amounts of androgens too. For example, testosterone. It is also a steroid hormones.
• Mineralocorticoids (release from zona Glomerulosa). Its regulation is electrolyte and water. It is secreted by the outer most region of the adrenal cortex. Ex :- Aldosterone.

209. How many parietal bones are there in the cranium?
(a) Four (b) One
(c) Two (d) Three

DSSSB Pharmacist (01.11.2019)

Ans. (c) : 8 bones are in the cranium are as follows–
• Parietal (2) • Temporal (1)
• Frontal (1) • Occipital (1)
• Ethmoid (1) • Sphenoid (1)

210. Parotid gland is a part of _____.
(a) Submaxillary glands
(b) Salivary glands
(c) Sublingual glands
(d) Submandibular glands

GSSSB Jr. Pharmacist (18.02.2018)

Ans. (b) : Parotid gland is a part of salivary glands. The parotid gland is the largest of three paired major salivary glands, including the submandibular and subligual glands. It is located in the retromandibular fosa, space mainly occupied by this gland.
Parotid gland and other salivary glands play an essential function in the oral cavity because they secret saliva, facilitating chewing swallowing, speaking and digesting.

211. Goitre is caused due to deficiency of
(a) Chloride (b) Iodine
(c) Calcium (d) Sodium

GSSSB Jr. Pharmacist (18.02.2018)

Ans. (b) : Iodine deficiency is the most common cause of goiter. The body needs iodine to produce thyroid hormone. If we do not have enough iodine in our diet, the thyroid gets larger to try and capture all the iodine it can, so it can make the right amount of thyroid hormone.

212. In living cell,____ is just like the brain of body.
(a) Nucleus
(b) Lysosomes
(c) Endoplasmic reticulum
(d) Mitochondria

GSSSB Jr. Pharmacist (18.02.2018)

Ans. (a) : In living cell, nucleus is just like the brain of body.
A nucleus is a double membrened organelle that contains the genetic material and other instructions required for the cellular processes. It is exclussively found in eukaryotic cells and is also one of the largest organells. By housing the cell's genome the nucleus serves both as the repository of generic information and as the cell's control center.
DNA replication, transcription and RNA processing all tak place within the nucleus, with only the final state of gene expression (translation) localized to the cytoplasm.

213. Hyponatremia is a condition in which
(a) Low potassium level in blood
(b) Low sodium level in blood
(c) Low calcium level in blood
(d) Low iodine level in blood

GSSSB Jr. Pharmacist (18.02.2018)

Ans. (b) : Hyponatremia means that the Sodium level in the blood is below than normal. Our body needs Sodium for fluid balance, blood pressure control as well as the nerves and muscles. The normal blood Sodium level is 135 to 145 milliequivalents / liter (mEg/L). Hyponatremia occurs when our blood Sodium lever goes below 135 mEg/L.
When the Sodium level in our blood is too low extra water goes into our cells and makes them swell. This swelling can be dangerous especially in the brain, since the brain cannot expand past the skull.

214. Diaphragm is a type of .....
(a) Smooth muscle (b) Bone cavity
(c) Artery (d) Skeletal muscle

GSSSB Jr. Pharmacist (18.02.2018)

Ans. (d) : Diaphragm is a type of skeletal muscle. The mammalian diaphragm muscles is essential for respiration and thus is one of the most critical skeletal muscles in the human body.
Diaphragm is the thin dome-shaped muscle below the lungs and heart that separates the chest from the abdominal.

115. ..... is the longest and strongest bone of the body.
(a) Femur (b) Fibula
(c) Radius (d) Hmerus

GSSSB Jr. Pharmacist (18.02.2018)

Ans. (a): The femur is the longest and strongest bone in the human body. It is located in our thigh. All of the body's weight is supported by the femurs during many activities' such as running, jumping, walking and standing.

216. What is the fluid part of the blood known as

(a) RBC (b) Plasma
(c) WBC (d) Platelets

CGHS Pharmacist (08.01.2018)

Ans. (b) :

- Your blood is made up of liquid and solids.
- The liquid part, called plasma, is made of water, salts, and protein. Over half of your blood is plasma
- The solid part of your blood contains red blood cells, white blood cells, and platelets.

217. The special muscles tissues myocardium is found only in the

(a) Heart (b) Lungs
(c) Stomach (d) Brain

CGHS Pharmacist (08.01.2018)

Ans. (a) : • Cardiac muscle, also called myocardium, in vertebrates, one of three major muscle types found only in the heart.

218. In a normal young healthy adult male weighing about 70 kg, the blood volume is

(a) 5 litre (b) 7 litre
(c) 10 litre (d) 2 litre

CGHS Pharmacist (08.01.2018)

Ans. (a) : • A typical adult has a blood volume of approximately 5 liters.

219. Which among the below is the function of insulin?

(a) Ovulation
(b) Intake or sugar from the blood in a tissue
(c) Inhibit production of FSH
(d) Releasing of breast milk

CGHS Pharmacist (08.01.2018)

Ans. (b) : • Insulin is a hormone made by the pancreas that allows your body to use sugar (glucose) from carbohydrates in the food that you eat for energy or to store glucose for future use. Insulin helps keeps our blood sugar level from getting too high (hyperglycemia) or too low (hypoglycemia).

220. Gall bladder is located in

(a) Right lumbar region
(b) Right Iliac region
(c) Left Iliac region
(d) Right hypochondriac region

CGHS Pharmacist (08.01.2018)

Ans. (d): • The gallbladder is a pear-shaped, hollow structure located under the liver and on the right side of the abdomen. Its primary function is to store and concentrate bile, a yellow-brown digestive enzyme produced by the liver. The gallbladder is part of the biliary tract.

The Upper Abdomen–

• **Region 01–**It is known as the right hypochondriac region. This area is home to organs such as the liver, gallbladder, right kidney, and small intestine.

• **Region 02–**It is known as the epigastric region. Here, we have the stomach, liver and the pancreas.

221. In medical parlance, the term "neonates" refer to a baby that is

(a) Older than 12 week but no older than 16 weeks
(b) No older than 4 weeks
(c) Older than 6 week but no older than 12 weeks
(d) Older than 4 weeks but no older than 8 weeks

CGHS Pharmacist (08.01.2018)

Ans. (b) : • In medical contexts, nerwborn or neonate (from Latin, neonatus, newborn) refers to an infant in the first 28 days after birth.

• The term applies to premature, full term, and postmature infant; before birth, the term "fetus" is used.

• The term "infant" is typically applied to very young children under one year of age; however, definition may vary and may include children up to two years of age.

• When a human child learns to walk, the term "toddler" may be used instead.

• In British English, an infant school is for children aged between four and seven.

• As a legal term, "infancy" continues from birth until age 18.

222. ..... Are reabsorbed from the proximal convulated tubule by passive diffusion

(a) Sodium, glucose, vitamin and amino acid
(b) Sodium and urea
(c) Chloride and potassium
(d) Chloride, Sulphate, phosphate and urea

CGHS Hyderabad Pharmacist (27.06.2018)

Ans. (d) : Chloride, Sulphate, phosphate and urea are reabsorbed from the proximal convulated tubule by passive diffusion.

223. What is the pH level of intestinal juice

(a) 5-10 (b) 2-4
(c) 7-9 (d) 6.4-6.5

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Ans. (c)

- pH is the highly acids within the stomach and is rapidly changing throughout the body.
- pH gradually increases within the small intestine. Within the duodenum it is pH 6, and is between 7 to 9 in the Jejunum, to about 7.4 in the Ileum.
- Sodium bicarbonate released by the pancreas maintains pH levels.

224. Which of the following produces VASOCONSTRICTION as the most prominent action?

(a) Angiotensin-II (b) Fenoldopam
(c) Sodium Nitroprusside (d) Nicardipine

CGHS Delhi Pharmacist (26.12.2018)

Ans. (a): Angiotensin is a peptide endowing hormone It has two categories Angiotensin 1 and angiotensin -2 . Angiotensin-2 is the protein that directly acts on blood vesells for constriction and raising the blood pressure .

225. The normal range of HDL cholesterol in a male is?
(a) 120 to 140 mg/dl (b) 30 to 60 mg/dl
(c) 160 to 200 mg/dl (d) 40 to 60 mg/dl

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Ans. (d) : HDL (High density lipoprotein) cholesterol is a type of cholesterol that absorbs cholesterol in blood and carries back in the liver , there fore usually it also known as good cholesterol Normal range of HDL cholesterol in male (men) is 40 to 60 mg/dl

226. BLOOD GROUP ANTIGEN belong which of the following class of proteins?
(a) Chromoproteins (b) Lipoproteins
(c) Nucleoproteins (d) Glycoproteins

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Ans. (d) : Antigens (related to blood group) are protein molecules found on the surface of red blood cells . Antigen belongs to class of proteins known as glycoprotein. Actually human red blood cell (erythrocytes) may prepare glycoprotein and glycolipid components on their cell membrane surfaces that have antigenic properties.

227. Thyroid-stimulating hormone (TSH) or thyrotrophic Hormone is secreted by which gland?
(a) Posterior Pituitary (b) Anterior Pituitary
(c) Thyroid (d) Supra renal

CGHS Delhi Pharmacist (26.12.2018)

Ans. (b) : A small and pea-sized gland located at the bare of human brain below the hypothalamus is known as pituitary gland. It is divided into two main sections the anterior pituitary (front lobe) and the posterior pituitary (back lobe) Anterior pituitary gland secretes the TSH (thyroid stimulating hormone) as well as some other hormones as adrenocorticotropic hormone (ACTH) follicle-stimulating hormone (FSH) etc.

228. The normal rhythmical impulse is generated from which point in the conductive system of heart?
(a) Atrioventricular Bundle
(b) Sinoatrial Node
(c) Purkinje Fiber
(d) Atrioventricular Node

CGHS Delhi Pharmacist (26.12.2018)

Ans. (b) : Sinoatrial (SA) node is a small mass of specialized tissue located in the right upper chamber (atria) of the heart. It is a place in the heart from where a normal rhythmical electrical impulse is generated. SA node is also known as sinus node.

229. Which of the following chamber of heart receives venous from the whole body?
(a) Right Ventricle (b) Right Atrium
(c) Left Ventricle (d) Left Atrium

CGHS Delhi Pharmacist (26.12.2018)

Ans. (b) : Right atrium is one of the four chambers of the heart, it receives venous from whole body as it receives deoxygenated blood from the systemic circulation via the superior and inferior vena cava.

230. Which of the following is the largest tarsal bone?
(a) Navicular (b) Calcaneus
(c) Cuboid (d) Talus

CGHS Delhi Pharmacist (26.12.2018)

Ans. (b) : The tarsal bones are found in the ankle and include 7 bones . the calcaneus, talus, navicular, medial intermediate, lateral cuneiform and cuboid calcaneus among all these tarsal bones is the largent in size.

231. The HYDROCHLORIC ACID in stomach is secreted by which type of cells?
(a) Mucus neck cells
(b) Enterochromaffin (EC) cells
(c) Parietal cells
(d) Enterochromaffin-like (ECL) cells

CGHS Delhi Pharmacist (26.12.2018)

Ans. (c) : Pariethal cells are epithelial cells in the stomach, that secrete hydrochloric acid (HCL) the main constituent of gastric juice. It helps in the digestion of food, absorption of minerals and controls the harmful bacteria.

232. Which of the following is in the normal range of weight of the Right Lung in an adult?
(a) 1175 gm (b) 120 gm
(c) 625 gm (d) 1345 gm

CGHS Delhi Pharmacist (26.12.2018)

Ans. (c): Among humans, the lungs in an adult normally weigh approximately 100 gm (sum of left and right lungs) right lung is more in size and it weighs around 625 gm and the left lung weighs just less than 600 gm (opprox 565 gm)

233. DNA Replication and Transcription is the function of which subcellular organelle?
(a) Endoplasmic Reticulum
(b) Nucleus
(c) Golgi body
(d) Lysosome

CGHS Delhi Pharmacist (26.12.2018)

Ans. (b) : Nucleus is an important integral part of eukaryotes cell and it is generally located at the center of cell floating in cytoplasm. Primary functions of nucleus are to store the cell's DNA, maintain its integrity and instigate transcription and replication of the DNA.

234. Which of the following is NOT a lipid derived autacoids?
(a) Leukotrienes (b) Prostaglandins
(c) Histamine
(d) Platelet activating factor

CGHS Delhi Pharmacist (26.12.2018)

Ans. (c): Autacoids (or autocoids) are biological factors which act like local hormones it have brief duration and just act near their site of synthesis. Histamine among the given options is not a lipid derived autacoids. Histamine and serotonin are two important amine autacoids.

235. How many coccygeal vertebrae fuse to form Coccyx Bone?
(a) 4 (b) 6 (c) 2 (d) 8

CGHS Delhi Pharmacist (26.12.2018)

Ans. (a) : The coccyx is a triangular arrangement of bone that makes up the very bottom portion of the spine below sacrum. The coccyx is formed of three four or five coccygeal vertebrae fusing together.

236. When PARASYMPETHETIC STIMULATING drugs are used, which of the following action on heart is noted?
(a) Bradycardia
(b) Conductivity is enhanced
(c) Tachycardia
(d) Refractory period of atria is shortened

CGHS Delhi Pharmacist (26.12.2018)

Ans. (a) : Bradycardia is a condition represents slow heart rate. Bradycardia could occur due to the intake of those drags which stimulates parasympathetic activation and via sympathetic withdrawal.

237. Stimulation of the nicotinic receptor causes
(a) Muscle contraction and twitching
(b) Bradycardia
(c) Bladder muscle contraction
(d) Increase secretion of saliva and gastric acid

CGHS Hyderabad Pharmacist (27.06.2018)

Ans. (a)
- The nicotinic acetylcholine receptors on the endplate respond by opening channels for the influx of sodium ions and subsequent endplate depolarisation leads to muscle contraction.
- The acetylcholine immediately detaches from the receptor and is hydrolysed by acetylcholinesterase enzyme.

238. Study the following two statements and choose the correct answer.]
[P]: Antibodies are immunity to new providing immunity.
[Q]: lgG provides immunity to new born babies while lgM is the first generated antibody.
(a) P is correct and Q is incorrect
(b) P is incorrect and Q is correct
(c) Both P and Q are correct
(d) Both P and Q are incorrect

AIIMS Delhi Pharmacist (2018)

Ans. (c): An antibody is a protein (Immunoglobulin (Ig) component of the immune system present in the blood serum. They attach to antigens (foreign substance) such as bacteria, fungi, viruses and toxins) and help in removing these from the body.
Immunoglobin M (IgM) is found mainly in blood and lymph fluid. This is the first antibody, the body makes when it fights a new infection. Human infants receive the various kinds of Immunoglobin's (Ig) with specifically Immunoglobin G (I_2G) from their mother.

239. Which of the following mechanisms is NOT related to platelet aggregation inhibitory action?
(a) ADP receptor antagonism
(b) Glycoprotein IIb/IIIa receptor antagonism
(c) Phosphodiesterase inhibition
(d) Prostacyclin inhibition

AIIMS Delhi Pharmacist (2018)

Ans. (d): ADP receptor antagonism, Glycoprotein IIb/IIIa receptor antagonism, Phosphodiesterase inhibition are mechanisms of platelet aggregation inhibitory action. But prostacyclin inhibits platelet aggregation by increasing cyclic AMP level. Prostacyclin is a circulating hormone continually released by the lungs into the aterial circulation. It is promotes VSMC relaxation (Vasodilatation) and inhibits aggregation (antithrombotic). It is also an important inflammatory mediator.

240. Which of the following cytokines are the most important regulators in inflammation and are the targets for anti-inflammatory agents used in rheumatoid arthritis?
(a) Tumor necrosis factor-a and Interleukin-1
(b) Acetylcholine esterase and Eicosanoids
(c) Leukotrienes and Isoprostanes
(d) Adhesion factor and Monoamine oxidase A

AIIMS Delhi Pharmacist (2018)

Ans. (a) : Cytokines are small protein that are crucial in controlling the growth activity of other immune system cells and blood cells, they actually signal the immune system to respond according the situation. Tumor necrosis factors a and interleukin -1 are the cytokines that play important role in regulation of inflammation and therefore are also target of anti-inflammatory agents used in rheumatoid arthritis.

241. Which one of the followings is a FALSE statement for competitive antagonists?
(a) They have an affinity for the agonist binding site on receptor
(b) They have no intrinsic activity
(c) They cause parallel rightward shift of the control dose response curve
(d) Maximum response of the agonist cannot be achieved in their presence by increasing the concentration of the agonist.

AIIMS Delhi Pharmacist (2018)

Ans. (d) : A completive antagonist binds to the same site as the agonist but does not activate it, thus blocks the agonist's action, but we can achieve the maximum response of as agonist if its concentration is increased.

242. Which one of the following receptors is NOT a ligand-gated ion channel receptor?
(a) Nicotinic Receptor (b) 5HT3-Receptor
(c) GABAA-Receptor (d) H2 - Receptor

AIIMS Delhi Pharmacist (2018)

Ans. (d): The histamine receptor H2 belongs to the rhodoprin – like family of G- protein coupled receptors. H2 receptors are found in the brain, the endocrine and exocrine glands the pulmonary system etc.

243. Somatostatin is released from
(a) Adrenal medulla (b) Pancreas
(c) Testes (d) Ovaries

HPSSC Pharmacist (19.08.2018)

Ans. (b) : Somatostatin is released from pancreas.
The endocrine part of the pancreas consists of specialised tissue called the islets of Langerhans.

The islets of Langerhans consist of alpha, beta and delta cells.
Insulin and glucagon are secreted by the beta and alpha cells respectively. They are responsible for maintaining the blood glucose levels.
Somatostatin is produced by the delta cells as well as the hypothalamus. The target organ of somatostatin are the anterior pituitary and the pancreas.
Somatostatin inhibits the secretion of growth hormone by the pituitary, and the secretion of insulin & glucagon by the pancreas.

244. Vasopressin is released from

(a) Parathyroid gland (b) Hypothalamus
(c) Pituitary gland (d) Pineal gland

HPSSC Pharmacist (19.08.2018)

Ans. (c) : Vasopressin, also known as antidiuretic hormone is a peptide hormone synthesized in the hypothalamus and stored or released from the posterior pituitary gland.

245. The hormone involved in the secretion and regulation of milk is

(a) Progesterone (b) Prolactin
(c) Oestrogen (d) FSH

HPSSC Pharmacist (19.08.2018)
ESIC Delhi Pharmacist (19.03.2016)

Ans. (b) : The hormone involved in the secretion and regulation of milk is Prolactin .
Prolactin is necessary for the secretion of the milk by the cells of the alveoli. The level of prolactin in the blood increases markedly during pragnancy, and stimulates the growth and development of mammary tissue, in preparation for the production of milk.
Prolactin involved in the lactational process, prolactin is the key hormone controlling milk synthesis.

246. How many pairs of cranial nerves do human have?

(a) 8 (b) 10 (c) 12 (d) 14

HPSSC Pharmacist (19.08.2018)

Ans. (c) : There are 12 pairs of cranial nerves and 31 pairs of spinal nerves which constitute of peripheral nervous system or PNS.

247. The sudden influx of sodium in heart muscle results in :

(a) Depolarisation (b) Repolarisation
(c) Slow depolarisation (d) Slow repolarisation

HPSSC Pharmacist (19.08.2018)

Ans. (a): The sudden influx of sodium in heart muscles results in Depolarization.
Depolarization of the heart leads to the contraction of the heart muscles and therefore an electrocardiogram is an in direct indicator of the heart muscles contractions. The cells of heart will depolarize without an outside stimulus. This property of cardiac muscles tissue is called automaticity or autorhythmicity.

248. The modifying, sorting and packaging of proteins for secretion in cell is carried out by

(a) Lysosomes (b) Golgi bodies
(c) Ribosomes (d) RNA

HPSSC Pharmacist (19.08.2018)

Ans. (b) : The Golgi bodies or Golgi apparatus is the sorting, packaging and distribution center of the exocytic pathway, handling proteins and lipids destined for the ER, plasmamembrane, endosome and lysosomes or the Golgi body itself.

249. Renin a proteolytic enzyme which is produced in

(a) Spleen (b) Liver
(c) Kidney (d) Pancreas

HPSSC Pharmacist (19.08.2018)

Ans. (c) : Renin is a proteolytic enzyme made by special cells in our kidney. It's part of the renin - angiotensin- aldosterone system. A chain reaction designed to regulate our blood pressure.
Specifically, renin controls the production of aldo-steron, a hormone made by our adrenal glands.

250. Mannitol is

(a) Loop diuretic
(b) Potassium sparing diuretic
(c) Carbonic anhydrase diuretic
(d) Osmotic diuretic

HPSSC Pharmacist (19.08.2018)

Ans. (d) : Mannitol is an osmotic diuretic that is metabolically inert in human and occurs naturally, as a sugar or sugar alcohol, in fruits and vegetables. Mannitol elevates blood plasma osmolality, resulting in enhanced flow of water from tissues, including the brain and cerebrospinal fluid, in to in interstitial fluid & plasma.

251. Aminoacid present in high concentration in brain tissues

(a) Glutamic acid (b) Lysine
(c) Arginine (d) Proline

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (a): Glutamic acid is the most abundant amino acid in the brain it is also a neurotransmitter so armstrong expected to see at least some D - gluramati.
The three amino acids with the highest levels in the brain tissues are glutamic acid, glutamine and aspartic acid.

252. Which of the following monoclonal antibody is fully human origin?

(a) Daclizumab (b) Inflizimab
(c) Adalimumab (d) Edrecolomab

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (c): Monoclonal antibody (mAb) are antibodies that are identical because they were produced by one type of immune cell, all clones of a single parent cell.
→1986 first monoclonal antibody reached the market-muromonab CD3.
→ 2003 first fully human monoclonal antibody Adalimumab.

253. An indication of renal function which is used to estimate glomerular filtration rate is

(a) Serum urea
(b) Serum alkaline phosphatase
(c) Blood urea nitrogen
(d) Serum creatinine

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (d): Serum creatinine is a waste Product in our blood that comes from our muscles healthy kidney filter creatinine out of our blood through our urine, our serum creatinine level is based on a blood test that measures the amount of creatinine in our blood.

254. All enzymes involved in glycolysis are present in

(a) Mitochondria (b) Blood
(c) Cytosol (d) Cellwall

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (c) : All enzymes involved in glycolsis are present in cytosol, rest of the processes of aerobic respiration takes in the mitochondria.

⇒ A mitochondrion is an organelle found in the cells of most eukaryotes, such as animals', plants and fungi. Mitochondria have a double membrane structure and use areobic respiration to generate adenosine triphoshate, which is used throughout the cell as source of chemical energy.

255. Most abundant cation in the extra cellular fluid

(a) Potassium (b) Calcium
(c) Sodium (d) Chloride

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (c) : Electrolyte are substance that dissociate in solution and have the ability to conduct and electrical current. These substances are located and in the extracellular and intracellular fluid, within the extracellular fluid, the major cation is sodium and the major anion is chloride the major cation in the Intracellular fluid is potassium.

256. Intracellular enzyme which is a combination of heme and protein and act as catalyst in biological oxidation are termed as

(a) Hemoglobin (b) Cytochromes
(c) Creatine kinase (d) Transferrin

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (b) : Hemo is kind of porphyrin compound which binds iron. It is auxiliary group of hem proteins, including, hemoglobin myoglobin, cytochrome peroxides, cataloes etc.

hemoglobin and myoglobin are typical heme -binding proteins, which are partners in the transport in the transport and storage of oxygen in vertebrates

257. Identify the clotting factor which is known as Stuart factor or thrombokinase.

(a) Clotting factor - IV
(b) Clotting factor - VIII
(c) Clotting factor - X
(d) Clotting factor - XII

GPAT-2018

Ans. (c) : Clotting factor - X is known as stuart factor or thrombokinase.

- Factor – X, also known by the eponym stuart-Prower factor, is a enzyme of the coagulation cascade. It is a serine endopeptidase.
- Factor – X, is synthesized in the liver & requires vitamin K for its synthesis.
- It plays a central role in the coagulation cascade at the point of convergence of the intrinsic & extrinsic pathways.

258. Which part of the eye is light sensitive (photosensitive)?

(a) Iris (b) Sclera
(c) Lens (d) Retina

GPAT-2018

Ans. (d) : • Retina is the light-sensitive layers of nerve tissue at the back of the eye, that receive images & sends them as electric signals through the optic nerve to the brain.

- The optics of the eye create a focused 2-D image of the visual world on the retina, which then processes that image within the retina & sends nerve impulses along the optic nerve to the visual cortex to create visual perception.
- The retina serves a function which is in many ways analogous to that of the film or image sensor in a camera.

259. Identify the specific site where maturation of sperm takes place.

(a) Spermatic cord (b) Epididymis
(c) Testis (d) Vas deference

GPAT-2018

Ans. (b): The epididymis is a tube that connects a testicle to a vas-deferens in the male reproductive system.

- Spermatozoa formed in the testes enter the caput epididymis, progress to the corpus, where they are stored.
- During their transit in the epididymis, sperm under goes maturation process necessary for them to acquire motility & fertility.
- Final maturation (Capacitation) is completed in the female reproductive tract.

260. Identify the hormone that stimulates sperm production in testes and ovulation in females.

(a) Prolactin
(b) Luteinising hormone
(c) Follicle stimulating hormone
(d) Adrenocorticotropic hormone

GPAT-2018

Ans. (c): Follicle stimulating hormone (FSH)- regulates the development, growth, pubertal maturation, & reproductive process of the human body.

- In both males & females, FSH stimaulates the maturation primordial germ cells.
- In males, FSH induces sertoli cells to secrete and rogen-binding proteins (ABPs), regulated by inhibin's negative feedback mechanism on the anterior pituitary.
- In Females (♀), FSH induces follicular growth specifically affecting granulosa cells. With the concomitant rise in inhibin-B, FSH level then decline in the late follicular phase.

261. Identify the correct pair from the following:-

(a) Sympathetic stimulation: Bronchoconstriction
(b) Parasympathetic stimulation: Secretion of gastric juice
(c) Sympathetic stimulation: Contraction of pupil
(d) Parasympathetic stimulation:Dilatation of pupil

GPAT-2018

Ans. (b): Correct pair is -

- Parasympathetic stimulation-secretion of gastric Juice.
- **Sympathetic Stimulations are** –
  - Acceleration of heart rate.
  - Widen bronchial passages.
  - Constrict blood vessels.
  - Causes pupil dilation.
  - Activate goose bumps
  - Sweating.
  - Raise blood pressure.
  - Decreases movement of the large instestine.
- **Parasympathetic stimulations are -**
  - Salivation
  - Lacrimation
  - Increases motility of intestines & relaxation of sphincters of stomach.
- Slows down heart rate.
- Secretion of gastric juice
- Contraction of pupil.

262. Histamine concentration is highest in:-

(a) Beta cells (b) Mast cells
(c) Lymphocytes (d) Adipocytes

GPAT-2018

Ans. (b) : Histamine can also be produced by basophiles & other immune cells, but much higher concentrations of histamine may be found in intestinal mucosa, skin & bronchial tissues & mast cell.

- Mast cells play an important role in how the immune system responds to certain bacteria & parasites & they help control other types of immune responses.
- They contain chemicals such as histamine, heparin, cytokines & growth factors.

263. Which of the following is used to ligated large blood vessels?

(a) Aneurism clip (b) Foley's catheter
(c) Splint (d) Umbilical tape

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (a) : Brain aneurism clipping is a type of microsurgery in which a metal surgical clip is used to off an aneurism in the brain.

The surgeon makes a small an opening in our skull to reach brain. They use an operating microscope and very small instrument to perform detailed surgical procedures.

264. An ultra filtrate of plasma formed by the choroid plexus is

(a) Cerebrospinal fluid (b) Amniotic fluid
(c) Interstitial fluid (d) Serum

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (a) : An ultra filtrate of plasma formed by the choroid plexus is cerebrospinal fluid. Cerebrospinal fluid (CSF) is clear plasma - like fluid (an ultrabiltrate of plasma) that bathes the central nervous system (CNS). It occupies the central spinal canal, the ventricular system and the subarachnoid space.

265. Condition in which WBC is significantly lower than the reference range

(a) Pancytopenia (b) Leucocytosis
(c) Leucopenia (d) Neutropenia

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (c) : Condition is leucopenia WBC is significantly lower than the reference range.

Leucopenia (low white blood cell count) happens when you have a lower than normal number of white blood cells specifically, you have fewer - neutrophils than normal. Neutrophilis are white blood cells that act as you immune system's first line of defense.

266. The Immunoglobin present in very low concentration in normal serum

(a) lg E (b) lg M
(c) lg G (d) lg A

Kerala PSC Pharmacist Gr.II (01.06.2018)

Ans. (a) : The Immunoglobin IgE present in very low concentration is normal serum.

Although IgE is typically the least abundant also type blood serum IgE levels in normal (non - atopic) in dividable are only 0.05 of the IgE at 10 mg/ml.

267. The longest and strongest bone of the body is _____.

(a) Fibula (b) Radius
(c) Femur (d) Humerus

Gujarat BMC Pharmacist (30.12.2018)

Ans. (c) : Femur is the longest & strongest bone of the body. It's a critical part of your ability to stand & move. All of the body weight is supported by the femur during many activities, such as running, jumping, walking and standing.

268. Acetylcholine is

(a) Muscarinic receptor agonist
(b) Muscarinic receptor antagonist
(c) Adrenergic receptor agonist
(d) Adrenergic receptor antagonist

Gujarat BMC Pharmacist (30.12.2018)

Ans. (a): Acetylcholine is a muscarinic receptor agonist. Acetylcholine is the physiological agonist. Muscarine and atropine are the prototypical agonist & antagonist which define the receptor class. Muscarinic receptors are divided into five main subtypes M_1, M_2, M_3, M_4 & M_5. The molecule acetylcholine activates muscarinic receptors, allowing for a parasympathetic reaction in any organs & tissues where the receptor is expressed. Muscarinic antagonists are also known as ant cholinergic agents.

269. __ is not associated with ischemic heart disease.

(a) Atherosclerosis
(b) Congestive heart disease
(c) Angina pectoris
(d) Myocardial infarction

Gujarat BMC Pharmacist (30.12.2018)

Ans. (b) : Ischemic means that an organ (Heart) is not getting enough blood & oxygen, ischemic heart disease also called coronary heart disease.

When the blood flow to the heart muscle is completely blocked the heart muscle cells die. Which is termed a

heart attack or myocardial infarction (mI). Unstable angina (UA), Non-SI - segment elevation myocardial infarction (NSTEMI), ST-Segment elevation myocardial infarction (STEMI), Unspecified myocardial infarction (MI) is a type of ischemic heart disease. So congestive heart disease is not associated with ischemic heart disease.

270. Thin plate like bone present in postero-inferior part of the nasal septum

(a) Zygomatic bone (b) Parietal bone
(c) Ethmoid bone (d) Vomer

Kerala PSC Pharmacist Gr.II (12.07.2017)

Ans. (d) : Vomer is the thin plate like bone present in postero-inferior part of the nasal bones of the skull.

271. Gluconeogenesis mainly occurs in

(a) Muscle (b) Pancreas
(c) Kidney (d) Adipose tissue

Kerala PSC Pharmacist Gr.II (12.07.2017)

Ans. (c) : Gluconeogenesis occurs in the liver and kidney and it starts in the mitochondria of the cells. Gluconeogenesis stimulated by some of the hormones as growth hormone glucagon, epinephrine and cortisol etc.

272. Nicotinic receptors are found in

(a) Skeletal muscles (b) Smooth muscles
(c) Heart (d) Exocrine glands

Kerala PSC Pharmacist Gr.II (12.07.2017)

Ans. (a) : Nicotinic receptors are found in the somatic nervous system (i.e. neuromuscular junctions in skeletal muscles) and in the sympathetic and parasympathetic nervous system.

273. Creatinine clearance is used as measurement of

(a) Renal excretion rate
(b) Glomerular filtration rate
(c) Passive renal absorption
(d) Active renal secretion

Kerala PSC Pharmacist Gr.II (12.07.2017)

Ans. (b): Creatinine clearance is used as measurement of glomerular filtration rate. Creatinine clearance is generally measured in milliliters per minute (mL/min) or misters per second (mL/s).
Glomeruar filtration rate (GFR) is a blood test that checks how well our kidneys are working.

274. Most abundant antibodies found in serum

(a) Ig M (b) Ig A
(c) Ig D (d) Ig G

Kerala PSC Pharmacist Gr.II (12.07.2017)

Ans. (d) : A Most abundant antibody found in the serum is Ig-G. Immunoglobin G is a type of antibody, representing approximately 75% of serum antibodies in our body.

275. Antibody containing preparation are commonly known as

(a) Antitoxins (b) Vaccines
(c) Toxoids (d) Polyvalent vaccines

Kerala PSC Pharmacist Gr.II (12.07.2017)

Ans. (a): Antibody containing preparations are commonly known as antitoxins. Antitoxins are produced by injecting an animal with toxin in, the animal most commonly horse, is given repeated small doses of toxin until it's blood creates sufficient concentration of the antibody or antibody for the disease resistance.

276. Platelets contain an enzyme which has an important role in clotting of blood. This enzyme is known as

(a) Cholinesterase (b) Transaminase
(c) Decarboxylase (d) Thrombokinase

VSSC Pharmacist-A (10.12.2017)

Ans. (d) : Thrombokinase is an enzyme present in platelets of blood. Thrombokinase is required blood clotting. Blood clotting is the process by which the loss of blood is prevented at the site of injury and the injured site is healed.

277. Glycogen is present is all body tissue except

(a) Liver (b) Brain
(c) Kidney (d) Stomach

VSSC Pharmacist-A (10.12.2017)

Ans. (b) : Glycogen is present in all body tissues except brain. Glycogen is a complex glucose polymer found in a variety of tissues including brain where it is localized primarily in astrocytes.

278. The conversion of carotenoids to vitamin A takes place in

(a) Intestine (b) Liver
(c) Kidney (d) Skin

VSSC Pharmacist-A (10.12.2017)

Ans. (a) : In humans conversion of β-carotene into vitamin A takes place predominantly in the intestine and less so in other tissues.

279. The precursor of bile salts, sex hormones and vitamin D is

(a) Diosgenin (b) Cholesterol
(c) Campesterol (d) Ergosterol

VSSC Pharmacist-A (10.12.2017)

Ans. (b): Cholesterol also works as a precursor for the synthesis of steroid hormones vitamin D, and bile salts which and important in fat absorption from the small intestine in to the blood circulatory system and secretion of liver waste products through excretion.

280. Tetracycline is found in large quantities in

(a) Liver (b) Bone
(c) Kidney (d) Spleen

Kerala PSC Pharmacist Gr.II (18.05.2017)

Ans. (b) : Tetracycline is found in large quantities in bone.
Since tetracycline is absorbed into bone, it is used as a marker of bone growth for biopsies in
- Tetracycline may be stored in bone due to a tetracycline hydrochloride calcium phosphate complex after prolonged tetracycline administration.

281. Average life span of erythrocytes in humans

(a) 100 days (b) 45 days
(c) 120 days (d) 90 days

Kerala PSC Pharmacist Gr.II (18.05.2017)

Ans. (c): Average life span of erythrocytes in humans are 120 days.

• Human red blood cells (RBC) after differentiating from erythroblasts in the bone marrow, are released into the blood and survive in the circulation for a 120 days.

282. Milky white color of urine is due to the presence of

(a) Albumin (b) Fat globules
(c) Haemoglobin (d) Nephritis

Kerala PSC Pharmacist Gr.II (18.05.2017)

Ans. (b) : Milky white color of urine is due to the presence of fat globules.

• Milky urine is a sign of a urinary tract of infection, which may also caused a bad smell. Milky urine may also be caused by bacteria, crystals, fat white or red blood cells, or mucus in the urine.

283. The thymus secretes several hormones related to the immunity. These hormones promote the maturation of T lymphocyte cells. The hormones are-

1. Thymosin 2. Thymichumoral factor
3. Thymic factor 4. Inter;eiloms

(a) Only 1,2 (b) 1,2 and 3
(c) Only 3 (d) Only 4

GPAT-2017

Ans. (b) : The thymus secretes several hormones related to the immunity. These hormones promote the maturation of T. lymphocyte cells. The hormones are thymosin, thymichumoral factor, thymic factor.

These hormones produced by thymus gland.

• Thymosin and other thymus are involved in maturation of thymocytes.

• Thymus gland in endocrine gland situated in thorax cavity it present above the heart.

Interleukins are a type of cytokine first thought to be expressed by leukocytes alone but have later been found to be produced by many other body cells. The play essential roles in the activation and differentiation, of immune cells, as well as proliferation, maturation, migration and adhesion.

284. In respect of female reproductive cycle, which of the following statements are correct

(1) The female reproductive cycle consists of menstrual phase, a pre-ovulatory phase, ovulation and post ovulatory phase.
(2) During the menstrual phase, small secondary follicles in the ovary begin to enlarge while the uterus is shedding its lining.
(3) During the pre-ovulatory phase, a dominant follicle continues to grow and begins to secret estrogen and inhibin while the uterine lining begins to rebuild
(4) Ovulation results in the release of an ovum and the shedding of the uterus lining tonourish and support the release ovum.
(5) After ovulation, a corpus luteum forms the ruptured follicles and begins to secrete progesterone and estrogne, which it will continue to do throughout pregnancy if the eggis fertilized.
(6) If pregnancy does not occur, then the corpus luteum degenerates into a scar known as corpus albicans and uterine lining is prepared to be shed again.

(a) 1, 2, 3 and 6 (b) 2, 3, 4 and 6
(c) 1, 2, 4 and 5 (d) 1, 4, 5 and 6

GPAT-2017

Ans. (a): The reproductive system in females consists of the ovaries, uterine tubes, uterus, vagina and external genitalia, periodic changes occur, nearly every one month, in the ovary and uterus of a fertile female. The ovarian cycle consists of three phases: follicular (perovulatory) phase, ovulation, and luteal (postovulatory) phase, where as the uterine cycle is divided into menstruation, proliferative (postmenstrual) phase and secretary (premenstrual) phase.

• During the menstrual phase, small secondary follicles in the ovary being to enlarge while the uterus is shedding its lining.

• If pregnancy does not occur, then the corpus luterum degenerates into a scar known as corpus albicans and uterine lining is prepared to be shed again.

• During the pre-ovulatroy phase, a dominant follicle continues to grow and begins to secret estrogen.

• Ovulation is the process of rupture of the Grafian follicle and release of the mature ovum from the ovary.

285. Which of the following statement regarding cerebral hemisphere is true

(a) The right and left hemisphere are symmetrical
(b) This right more important for spoken and written language
(c) The left hemisphere is more important for musical and artistic awareness
(d) Hemispheric lateralization is more pronounced in male than in female

GPAT-2017

Ans. (d): Cerebral Hemispheres:- • It is the largest part of the brain and large paired structures, divided into left and right hemispheres.

• In left hemispheres	**Right hemispheres**
⇒ Analysis, facts, logic, science, language etc.	⇒ Creative, Intuition, Arts, Emotions, music, Zmagination etc

• The right and left hemisphere are asymmetrical and hemispheric lateralization is more pronounced in male than female.

• The right hemisphere is more important for musical and artistic awareness.

286. The process by which the formed elements of blood develop is call as hemopoiesis. In the process of hemopoies is the stem cells are converted into myeloid stem cell and subsequently differentiated and are developed into precursor cells. Match the following precursor cells with the formed elements of blood from which they are formed.

(i)	Reticulocyte	(a)	Platelets
(ii)	Megakaryoblast	(b)	Macrophages
(iii)	Myeloblast	(c)	Erythrocytes
(iv)	Monoblast	(d)	Neutrophils

(a) 1-C, 2-A, 3-D, 4-B (b) 1-A, 2-C, 3-B, 4-D
(c) 1-B, 2-D, 3-C, 4-A (d) 1-D, 2-B, 3-A, 4-C

GPAT-2017

Ans. (a) : The process by which the formed elements of blood develop is called as hemopoiesis. In the process of hemopoiesis is the stem cells are converted into myeloid stem cell & subsequently differentiated & are developed into precursor cells. The correct matches of formed elements & precursor cells are-

• Reticulocyte	Erythrocytes
• Megakaryoblast	Platelets
• Myeloblast	Neutrophils
• Monoblast	Macrophages

287. Cells that contribute for immune system are

1. T Lymphocytes **2. Eosinophil**
3. B Lymphocytes **4. Dendritic cells**
5. Erythrocytes **6. Natural killer cells**

(a) 1,3,4 and 6 (b) 1,2,4 and 6
(c) 1,3,5 and 6 (d) 1,2, 5 and 6

GPAT-2017

Ans. (a) : Cells that contributes for immune- system are:-
- T- Lymphocytes
- B- Lymphocytes
- Dendritic cells.
- Natural killer cells.

Immunity is defined as resistance exhibited by the host against any foreign antigen.
Immunity may be innate or acquired.

288. RNA synthesis on DNA strand is known as

(a) Transcription (b) Translation
(c) Transduction (d) Replication

Kerala PSC Pharmacist Gr.II (18.05.2017)

Ans. (a) : RNA synthesis on DNA strand is known as transcription.

- The central dogma of molecular biology states that the information flows from DNA to m-RNA and then to protein.

Synthesis of m-RNA from DNA is called transcription.

- Translation– The synthesis protein from RNA.

During translation, ribosome's synthesize polypeptide chains from m-RNA template molecules.

289. The Pigment in the rod cells of eye is called as

(a) Melnin
(b) Rhodopsin
(c) Color blindennes
(d) Defect in blood clotting

Kerala PSC Pharmacist Gr.II (18.05.2017)

Ans. (b) : The pigment in the rod cells of eye is called as rhodopsin.

- Rhodopsin is the light receptor in rod photoreceptor cells of the retina.
- Rhodopsin, a visual pigment found in the rod photoreceptor cell of the retina, is responsible for converting photons into chemical signals that stimulate biological processes in the nervous systems of humans and other vertebrate animals allowing them to sense.

290. The process in which there is union of single spermatozoan with ovum at ampullary part of a tube is called as_____.

(a) Oogenesis (b) Spermatogenesis
(c) Fertilization (d) Conception

MP Vyapam Pharmacist(16.04.2017,Shift-III)

Ans. (c) : The process in which there is union of single spermatozoan with ovum at ampullary part of a tube is called as fertilization.
Fertilization :- The fusion of a haploid male gamete (spermatozoa) and a haploid female gamete (ovum) to form a diploid cell the zygote, is called fertilization.

291. In mammary glands, milk secretion occurs due to _____.

(a) Estrogen (b) Progesterone
(c) Prolactin (d) Oxytocin

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (c) : In mammary glands, milk secretion occurs due to prolactin. Prolactin is a hormone made by the pituitary gland (a small gland at the base of brain). Prolactin causes the breasts to grow and make milk during pregnancy and after birth.

292. Angiotensinogen is produced by_____.

(a) Kidney (b) Liver
(c) Muscle (d) Spleen

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (b) : Angiotensinogen is produced by liver. It is an alpha-globuline and the peptide prohormone and synthesized primarily in the liver and circulates in plasma. Angiotensinogen causes blood vessels to become narrower and therefore it helps to maintain blood pressure and fluid balance in the body.

293. Corpus luteum is maintained by_____.

(a) FSH (b) Estrogen
(c) HCG (d) Oxytocin

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (c) : Corpus luteum is a completely normal cyst. It is a yellow hormone-secreting body in the female reproductive system. It is formed in an ovary at the site of a follicle. Human choroinic gonadotropin (HCG) hormone produced by the placenta during preganancy stimulates corpus luteum to produce progesterone to maintain pregnancy.

294. Site of action of ADH is _____.

(a) Proximal tubules
(b) Ascending loop of Henle
(c) Descending loop of Henle
(d) Collecting duct

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (d) : Antidiuretic Hormone (ADH) primarily affects the ability of the kidney to reabsorb water, when present. ADH induces expression of water transport proteins in the late distal convoluted tubule and collecting duct to increase water reabsorption.

295. Thromboxane A_2 is released mainly by_____.

(a) T- Lymphocytes (b) Liver
(c) Muscles (d) Platelets

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (d): Thromboxane A_2 (TXA_2) is the major platelet product of arachidonic acid metabolism by the eicosanoid pathway and its synthesis occurs very rapidly. Thromboxane A_2 binds to a G protein coupled receptor on the plate surface leading to an increase in intracellular calcium and activation of protein kinase.

296. In CNS, the main excitatory neurotransmitter.

(a) GABA (b) Glutamate
(c) Glycine (d) Dopamine

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (b) : In central nervous system, the main excitatory neurotransmitter is glutamate. Glutamate in the brain is the most alundant excitatory neurotransmitter.

297. What is the life span of the platelets?

(a) 1-2 days (b) 7-10 days
(c) 1 month (d) 45 days

MP Vyapam Pharmacist(16.04.2017,Shift-I)

Ans. (b) : Life span of he platelets is about 7-10 days. Platelets are tiny blood cells that help our body by forming clots to stop bleeding.

298. How can the milk production of cows be increased?

(a) By increasing the lactation period
(b) By giving proper requirement of food
(c) By vaccinating the animals
(d) By increasing the resistance to disease

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (a): Milk production of cows be increased by increasing the lactation period.
The high producing dairy cow requires a diet that supplies the nutrient needs for high that supplies the nutrients need for high milk production. carbohydrates, amino acids, fatty acids, minerals, vitamins and water are all nutrients required by the lacting dairy cow to meet the demand by the mammary gland to produce milk and components.

299. Male hormones are secreted by _____.

(a) Cells of sertoli (b) Spermatogonia
(c) Cells of Leydig (d) Seminiferous tubule

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (c) : Male hormones are secreted by cells of leydig.
Leydig cells are the primary source of testosteron and androgen hormones in males.
This physiology allows them to play a crucial role in many vital physiological processes in males, including sperm production or spermatogenesis, controlling sexual development, and maintaining secondary sexual characteristics and behaviors.

300. Heart is made up of _____.

(a) Connective tissue (b) Muscular tissue
(c) Nervous tissue (d) None of the above

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (b) : Heart is made up of muscular tissue.
⇒ Cardiac muscle tissue is one of the three type of muscle tissue in our body.
⇒ Cardiac muscle tissue is only found in our heart, where it performs coordinated contractions that allow our heart to pump blood through circulatory system.
⇒ The heart is muscular organ.
⇒ The heart is largely made up of type of muscle tissue called cardiac muscle.

301. During each cycle of blood circulation in mammals, blood flows through the heart ____.

(a) Only once (b) Thrice
(c) Four times (d) Twice

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (d) : Blood comes in to the right atrium from the body, moves into the right ventricle and is pushed into the pulmonary artries in the lungs. After picking up oxygen, the blood travels back to the heart through the pulmonary veins into the left atrium, to the left ventricle and out to the body's tissues through the aorta.

302. Which connective tissue is found between the skin and the muscles?

(a) Adipose (b) Plasma
(c) Cartilage (d) Areolar

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (d): Areolar connective tissue joins the skin and muscles as it is dense and irregular in nature.
It has a gel like matrix made of cells and fibres.

303. Name the cell organelle which is associated with the elimination of old and worn out cells.

(a) Golgi apparatus (b) Nucleus
(c) Mitochondria (d) Lysosomes

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (d) : "Lysosomes are sphere-shaped sacs filled with hydrolytic enzymes that have the capability to break down many types of biomolecules".
Lysosomes are an important cell organelle found within eukaryotic cells. Due to their peculiar
function, they are also known as the "suicide bags" of the cell.
The term Lysosome was coined by De Duve.
Lysosome function as the digestive system of the cell, serving both to degrade material taken up from outside of cell and digest absolute components of the cell itself.

304. Echinoderms get its name from _____.

(a) The presence of spines on the body
(b) The presence of ossicles on the body
(c) The presence of tube feet
(d) The presence of water vascular system

MP Vyapam Pharmacist(16.04.2017,Shift-II)

Ans. (a) : Echinoderms get its name from the presence of spines on the body.
An Echinoderm is any member of the phylum Echinodermata. The adult are recognisable by their radial symmetry , and include starfish, brittle stars, sea urchins, sand dollars and sea cucumbers, as well as the sea lilies or "stone lilies".

305. Lachrymal glands produces?

(a) Tear (b) Wax
(c) Sweat (d) Sebum

ESIC Delhi Pharmacist (19.03.2016)

Ans. (a) : Lachrymal glands produces tears.
The primary function of this gland is secreting the aqueous portion of the tear film, thereby maintaining the ocular surface. It is parimarily located in the anterior, superotemporal orbit within the lacrimal fossa of the frontal bone.
Stimulation of cornea and conjunctiva activates a reflex pathway that triggers an increase in tear production from the lacrimal gland.

306. The cardiovascular disease associated with the disorder of heart rate or rhythm is called:

(a) Arrhythmia
(b) Myocardial infraction
(c) Angina pectoris
(d) Ischemia

ESIC Delhi Pharmacist (19.03.2016)

Ans. (a) : The cardiovascular disease associated with the disorder of heart rate of rhythm is called Arrhythmia.
A heart arrhythmia is a irregular heartbeat.
Heart rhythm problems (heart arrhythmias) occur when the electrical signals that coordinate the heart's beats don't work properly.
The faulty signaling caused the heart to beat to fast (tachycardia), too slow (bradycardia) or irregularly.

307. Which of the following is an antidiuretic hormone?

(a) Oxytocin
(b) Follicle stimulating hormone
(c) Vasopressin
(d) Luteinizing hormone

ESIC Delhi Pharmacist (19.03.2016)

Ans. (c): An antidiuretic hormone is vasopressin.
Antidiuretic hormone or vasopressin is made by a part of the brain called the hypothalamus and is secreted into the blood by the Pituitary gland. Antidiuretic hormone helps to control blood pressure by acting on the kidney and the blood vessels. Its most important role is to conserve the fluid volume of our body by reducing the amount of water passed out in the urine.

308. The powerhouse of the cell is:

(a) Golgi bodies (b) Mitochondria
(c) Ribosomes (d) Nucleus

ESIC Delhi Pharmacist (19.03.2016)

Ans. (b) : The powerhouse of the cell is mitochondria. Mitochondria are known as the powerhouse of cells. It is because the mitochondria is the site of cellular respiration where energy in the form of ATP (Adenosine triphosphate) is generated as a result of oxidation of food constituents. This energy is required for various chemical activities needed for life.

309. Erythroblastosis foetalis arises due to the incompatibility in the:

(a) Lymph (b) Blood
(c) Synovial fluid (d) Bile

ESIC Delhi Pharmacist (19.03.2016)

Ans. (b): Etythroblastosis foetalis arises due to the incompatibility in the blood.
Erythrobastosis fetalis classically results from Rho (D) incompatibility, which may develop when a woman with Rh- negative blood is impregnated by a man with Rh- positive blood and conceives a fetus with Rh-positive blood, some times resulting in hemolysis.

310. Myocardium is a special muscle tissue found only in the:

(a) Brain (b) Heart
(c) Stomach (d) Lungs

ESIC Delhi Pharmacist (19.03.2016)

Ans. (b) : Myocardium is a special muscles tissue found only in the heart.
Cardiac muscle also called myocardium, in vertebrates, one of three major muscles types found only in heart.

311. Which of the following is a female sex hormone?

(a) Stilbesterol (b) Testosterone
(c) Estrogen (d) Benzesterol

ESIC Delhi Pharmacist (19.03.2016)

Ans. (c): The female sex hormone are estrogen & progesterone. There are actually three major estrogen, known as estradiol, estrone and estriol. The substances work together to promote the healthy development of female sex characteristics during puberty and to ensure fertility.

312. Site of ADH action is:

(a) Proximal tubules (b) Loop of Henle
(c) Vasa recta (d) Collecting tubules

ESIC Pharmacist (22.05.2016)

Ans. (d) : Site of ADH action is collecting tubules. The main action of ADH in the kidney is to regulate the volume and osmolarity of the urine. ADH increase permeability of collecting tubules and thus absorption of water producing hypertonic urine.

313. Spinal cord in infants extends upto the level of:

(a) Lower border of L1 vertebrae
(b) Lower border of L 5
(c) Upper border of SI
(d) Lower border of L3

ESIC Pharmacist (22.05.2016)

Ans. (d) : Spinal cord in infants extends upto the level of lower border of L3 .
- In the newborn the spinal cord terminated most frequently at the level of L2/L3.

314. Lower border of scapula is at the level of:

(a) T4 (b) T3
(c) T9 (d) T7

ESIC Pharmacist (22.05.2016)

Ans. (d) : Lower border of scapula is at the level of T7 spinous process. The spinous process of the T7 is approximately on the level of the inferior angle of the scapula.

315. The length of Adult Trachea is :

(a) 6 to 8 cm (b) 10 to 11 cm
(c) 14 to 15 cm (d) 16 to 20 m

ESIC Pharmacist (22.05.2016)

Ans. (b): The length of aduld trachea is 10-11 cm long fibrocartilaginous tube of the lower respiratory tract. The trachea extends between the larynx and thorax.

316. Coronary sinus opens into:

(a) Inferior vena cava (b) Right atrium
(c) Left atrium (d) Great cardiac veins

ESIC Pharmacist (22.05.2016)

Ans. (b) : Cornary sinus opens into right atrium hear the conjuction of the posterior interventricular sulcus and the coronary sulcus. The function of the coronary sinus is to drain the venous blood from the majority of the heart.

317. Thiamine deficiency causes decreased energy production because

(a) It is required for the process of transaminati
(b) It is a co-factor in oxidative reduction
(c) It is a co-enzyme for transketolase is pentose phosphate pathway
(d) It is a co-enzyme for pyruvate dehydrogenase & alpha ketoglutarate dehydrogenase

GPAT-2016

Ans. (d) Thiamine deficiency causes decreased energy production because It is a co-enzyme for pyruvate dehydrogenase & alpha ketoglutarate dehydrogenase.

318. The longest vein in human body is:

(a) IVC (b) Cephalic
(c) Basilic (d) Long saphenous

ESIC Pharmacist (22.05.2016)

Ans.(d): The longest vein in human body is long saphenous, traveling between our foot and the top of our thigh.

319. Colour vision is by:

(a) Rods (b) Cones
(c) Occipial cortex (d) Bipolar cells

ESIC Pharmacist (22.05.2016)

Ans. (b): Colour vision is by cones. Cones contain photo pigments or Color-dete cting molecules. Thimans typically have three types of photo pigments-red, green and blue. Each type of cone is sensitive to different wavelengths of visible light,

320. The receptors of pain is:

(a) Ruffini organs (b) Meckel's bodies
(c) Golgi bodies (d) Free nerve endings

ESIC Pharmacist (22.05.2016)

Ans. (d) : The receptors of pain is free nerve endings. Free nerve endings called nociceptors in the skin have a high threshold for mechanical, chemical or thermal stimuli and respond only when the intensity of these stimuli is high enough to damage tissue.

321. BMR is dependent upon:

(a) Body weight (b) Surface area
(c) Amount of adipose Tissue
(d) Amount of lean body mass

ESIC Pharmacist (22.05.2016)

Ans. (b) : BMR is depend upon surface area BMR is directly proportional to the surface are of the subject. Larger the surface area greater will be the heat loss, and equally higher will be the heat production (i.e. metabolic rate.) It is dependent on the subject's activity, lifestyle, type of physical exercise, gender, homonal balance and previous nutritional status.

322. Oxytocin is the hormone released from:

Or

Oxytocin is secreted by-

(a) Anterior lobe of pituitary
(b) Pars intermedia
(c) Posterior lobe of pituitary
(d) Infundibulum

Kerala PSC Pharmacist Gr.II (01.08.2016)
BSSC Pharmacist (2018)

Ans. (c): Oxytocin is the hormone released form infundibulum. The posterior lobe houses the axon terminals of hypothalamic neurons. It stores and releases into the bloodstream two hypothalamic hormones, oxytocin and antidiuretic hormone. The anterior lobe is connected to the hypothalamus by vasculature in the infundibulum and produces and secretes six hormones.

323. Renin a proteolytic enzyme which is produced in:

(a) Brain (b) Liver
(c) Spleen (d) Kidney

Kerala PSC Pharmacist Gr.II (01.08.2016)

Ans. (d): Renin is an proteolytic enzyme that helps control our blood pressure and maintain healthy levels of sodium and potassium in your body.
Renin made by special cells in our kidneys, renin is released into our blood stream when our blood pressure drops too low.

324. Which of the following increase systolic and diastolic pressure in normal patient

(a) Epineherine (b) Norepinephrine
(c) Tyramine (d) Phenylephrine

GPAT-2016

Ans. (c) Tyramine can trigger nerve cells to release norepinephrine, a hormone that increases blood pressure and heart rate in normal patient.

325. Nerve impulse from the cochlea arrive first in which region of the brain

(a) Auditory cortex (b) Thalamus
(c) Medulla oblongata (d) Inferior colliculus

GPAT-2016

Ans. (c) Nerve impulse from the cochlea arrive first in Medulla oblongata of the brain.
• The first relay of the primary auditory pathway occurs in the cochlear nuclei in the brain stem, which receive Type 1 spiral ganglion axons.

326. Which are the types of antibodies involved in hypersensitivity reactions

(a) LgG and LgD (b) LgG and LgM
(c) LgD and LgA (d) LgM and LgD

GPAT-2016

Ans. (b) LgG & LgM are the types of antibodies are involved in hyper sensitivity reactions.
• LgM antibodies are the first line of defense that B-cells create.
• LgG antibodies are secreted after prolonged exposure to harmful pathogen.
• IgM is the first antibody secreted by the adaptive immune system in response to a foreign antigen.

327. If QA and QC are compared

(a) Both are literally the same
(b) QA is a higher activity in the management hierarchy
(c) QA is a higher activity in the management hierarchy
(d) QA is done by the production person and QC is done by analyst

GPAT-2016

Ans. (b) It QA & QC compared QA is a higher activity in the management hierarchy.
• QA (Quality Assurance) is a combination of activities throughout the manufacturing process that ensures the quality of the product.
• QC (Quality control) is a set of processes used to secure that the product meets the quality requirement.

328. On which chromosome, the gens for three chains of fibrinogen are found?

(a) Chromosome 1 (b) Chromosome 3
(c) Chromosome 4 (d) Chromosome 6

MPSC Drug Inspector (21.02.2016)

Ans. (c): Fibrinogen is encoded by three genes :
A ∝ (FGA), Bβ (FGB), and γ(FGG) on chromosome 4. Each gene is transcribed and translated separately to produce proteins containing 644 (A∝), 4,9, (Bβ), and 437(γ) amino acids.
• The γ(gamma) chain, transcribed from the fibrinogen gamma gene (FGG) located on chromosome 4, has two isoforms, γA and γ chains. This protein is important for blood clot formation, which is heeded to stop excessive bleeding after injury.

329. Whole human blood is a mixture of blood and anticoagulant solution and contains not less than:

(a) 8.7% w/v of haemoglobin
(b) 2.3% w/v of haemo
(c) 9.07% w/v of haemoglobin
(d) 9.7% w/v of haemoglobin

MPSC Drug Inspector (21.02.2016)

Ans. (d): Blood is a lifesaving liquid organ. Whole blood is a mixture of ellular elements, colloids and crystalloids.
• Hemoglobin is the oxygen carrying protein that is found within all RBCs. It picks up oxygen where it is abundant (the lungs) and drops off oxygen where it is needed around the body. It is also the pigment that give RBCs their red color. Normally haemoglobin level in men and women is between 14.0 gm/dL and 17.5 gm/dL. A low haemoglobin count is generally defined as less than 13.2 gm/dL.
• Whole human blood is a mixture of blood and anticoagulant solution and contains not less the 9.7% w/v of haemoglobin.

330. Basophils originate in

(a) Megakaryoblast (b) Monoblast
(c) Megakaryocyte (d) Myeloblast

MPSC Drug Inspector (21.02.2016)

Ans. (d): Basophils originate in myeloblast. Myeloblast is a type of immature white blood cell that forms in the bone marrow. Myeloblasts become mature white blood cells called granulocytes (neutrophils, basophils and eosionophils), in large blood cell development.

331. Match the following:

(a) Thromboplastin	**(i) Factro VII**
(b) Proconvertin	**(ii) Factor III**
(c) Fibrinogen	**(iii) Factro II**
(d) Prothrombin	**(iv) Factor I**

	(a)	**(b)**	**(c)**	**(d)**
(1)	(ii)	(i)	(iv)	(iii)
(2)	(iii)	(iv)	(i)	(ii)
(3)	(i)	(ii)	(iii)	(iv)
(4)	(iii)	(iv)	(ii)	(i)

MPSC Drug Inspector (21.02.2016)

Ans. (a) : Thromboplastin → Factor III
Proconvertin → Factor VII
Fibrinogen → Factor I
Prothrombin → Factor II

332. Which anticoagulant is produced by mast cells and basophils?

(a) Heparin (b) Prostaglandin
(c) Histidine (d) Vitamin K

MPSC Drug Inspector (21.02.2016)

Ans. (a) : → The function of basophiles is similar to that of mast cells.
→ Hence both these cells comprise histamine heparin and serotonin.
→ Histamines are released in response to allergens such as food or dust and heparins are anticoagulants that prevent blood clotting .

333. The procedure of removing ovaries is called:

(a) Salpingectomy (b) Oophorectomy
(c) Vasectomy (d) Colostomy

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b): Oophorectomy - An oophorectomy is a surgical procedure to remove one or both of woman's ovaries. Woman's ovaries are almond shaped organs that sit on each side of uterus in your pelvis. Woman's ovaries contain eggs menstrual cycle.
When an oophorectomy involves removing both ovaries, it's called bilateral oophorectomy. When the removing only one ovary it's called unilateral oophorectomy.

334. Passive immunity in new born babies is due to

(a) IgG (b) IgM (c) IgE (d) IgA

GPAT-2015

Ans. (a) : The transplacental passage of specific IgG antibodies from the affected mother to the unaffected fetus highlights neonatal passive immunity.
♦ IgM can neutralize pathogens, though not as effectively as IgG or IgA isotypes, most likely due to the increased flexibility of these isotypes provided by a hinge region.

335. What does in mean that a cell is polyploid

(a) That is contains more than 2 copies of one or a few of its of chromosomes
(b) That is contains more than 2 copies of a full set of homologous chromosomes

(c) That is contains more than 2 copies of its sex chromosome
(d) That is contains more than 2 copies of its autosomal chromosomes

GPAT-2015

Ans. (b) : A cell is polyploid means that contains more than 2 copies of a full set of homologous chromosomes.

- Polyploids are common among plants, as well as among certain groups of fish and amphibians. For instance, some salamanders, frogs and leeches are polyploids.

336. In mammals, The major fat in adipose tissue is:
(a) Triglyceride (b) Cholesterol
(c) Sphingophospholipids
(d) Phospholipids

GPAT-2015

Ans. (a): In mammals, the major fat in adipose tissue is triglyceride.

337. Which of the following causes arterial and bronchial constriction and platelet aggregation
(a) Prostaglandin E_2 (b) Prostaglanding A_2
(c) Prostaglandin D_2 (d) Thromboxane A_2

GPAT-2015

Ans. (d): Thromboxane A_2 causes arterial and bronchial constriction and platelet aggregation.
$\rightarrow$ Prostaglandin E_2, also known as dinoprostone is a naturally occurring prostagtaglandin with oxytocic properties that is used as a medication.

338. The mixed gland of our body which secrets both hormones and digestive enzyme, so pancreatic enzyme digest which substances
(a) Lipids, Protein, Carbohydrate but not Nucleic acid
(b) Protein, Carbohydrate, Nucleic acid but not Lipids
(c) Carbohydrate, Lipids, nucleic acid but not Protein

GPAT-2015

Ans. (a) : The pancreas produces both enzymes and hormones. The enzymes secreted by the exocrine gland in the pancreas help break down carbohydrate, Lipids, protein.

339. Creatinine clearance is used as a measurement of
(a) Passive renal absorption
(b) Glomerular filtration rate
(c) Renal excretion rate
(d) All

GPAT-2015

Ans. (b) : Creatinine clearance is used as measurement of glomerular filtration rate.

340. Seeding involves the spread of cancer cells to
(a) Blood vessels
(b) Serious membranes of body cavities
(c) Fascia surrounding muscles and bones
(d) Dermis and subcutamneum of the skin

GPAT-2015

Ans. (b): Seeding involves the spread of cancer cells to serious membranes of body cavities.

- Seeding of body cavities and surfaces may occur whenever a malignant neoplasm penetrates into a natural "open field".

341. Adverse drug Event reporting in the responsibility of all of the following EXCEPT
(a) Pharmacist and physician
(b) Manufacturer
(c) Consumer
(d) Regulatory authorities

GPAT-2015

Ans. (d): A body that carries out regulatory activities relating the medicine including the processing of marketing authorizations the monitoring of side effects inspections quality testing and monitoring the use of medicines.

342. Melanin is derived from which of the following amino acid?
(a) Histidine (b) Tyrosine
(c) Valine (d) Tryptophan

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b) : Melanin is highly irregular heteropolymer consisting of monomeric units derived from the enzymatic oxidation of amino acid tyrosine. The process of melanin formation takes place in specialized acidic organelles (Melanosomes) in melanocytes.

343. Mitochondria are sites of
(a) Oxidative phosphorylation
(b) Photolysis
(c) Phosphorylation
(d) Starch synthesis

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Ans.(a): Mitochondria are site of oxidative phosphorylation. The electron transport chain consist of various molecules that are present in the compartments of mitochondria. Through a series of Redox reaction, electrons are transported from one member of the chain to another.
NADH and $FADH_2$ act as electron carrier. They carry electron from NADH and $FADH_2$ to NAD^+ and FAD which can be re-utilised in the respiration.

344. Coil of life is
(a) Chromosome (b) Chromatin
(c) DNA (d) RNA

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Ans. (c) : D.N.A is a double - standard coiled structure which takes part in heredity. It is also known as coil of life. The D.N.A double helix is packed by special protein (Histones) to form a complex called chromatin. The chromatin undergoes further condensation to form the chromosome. R.N.A takes Part in Process of transcription and translation.

345. Sphincter of oddi is present at exit of
(a) Oesophagus (b) Stomach
(c) Urinary bladder (d) Gall bladder

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Ans. (d): Sphincter of oddi is present at exit of gall bladder. The duct of gall bladder [cystic duct] along with the hepatic duct from the liver forms the common bile duct. the bile duct and pancreatic duct open together into the duodenum as the common Hepato-pancreafic duct which is gurded by a sphinter called the sphinter of oddi.

346. Male sex hormone testosterone is secreted by

(a) Spermatogenic (b) Sertoli cells
(c) Leydig cells (d) Epididymis

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Ans. (c) : Male sex hormone testosterone is secreted by Leydig cells. Leydig cells' are the primary source of testosterone or androgens in Males. This Physiology allows them to play a crucial role in many vital physiological processes in male including sperm production or spermatogenesis controlling sexual development and maintaining secondary sexual characteristices and behaviors.

347. A adult has__ number teeth's of molar in total.

(a) 4 (b) 14
(c) 16 (d) 12

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Ans. (d) : An adult Human has 12 number of molar teeth in total . An adult Human has 32 permanent teeth which are of four different types [Heterodentation]
Namely- incisor (I), canine[C], Premolar [P.M] and Molar [M]
Arrangement of teeth in each half of the upper and lower jaw in the order I, C, P.M, M is represent by a dental formula which in Human is $\frac{2123}{2123}$ The Hard chewing surface of teeth , made up of enamel helps in mastication of food .

348. Calcitonin is secreted by

(a) Pituitary gland (b) Thyroid
(c) Pancreas (d) Adrenal

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b) : Calcitonin is secreted by thyroid, which regulate the blood calcium . Thyroid gland is composed of two lobes which are located on either side of the Trachea both lobes are Interconnected with a thin flap of connective tissue called isthmus. Thyroid gland are composed of follicle and stromal tissue. These follicle cell synthesis two hormone tetraiodothyronine or thyroxine (T4) and triiodothyronine (T3). Iodine, is essential for the Normal rate of hormone synthesis in the thyroid.

349. Identical twins arise when two

(a) Cells develop independently from the same zygote
(b) Gametes develop independently
(c) Sperms develop independently
(d) Ova develop independently

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a): Identical twins (also called monozygotic twins) result from the fertilized egg then splitting into two identical twins share the same genomes and are always of the same sex. In contrast, fraternal (dizygotic) twins result from the fertilization of two separate eggs with two different sperm during the same pregnancy.

350. Element that is not found in blood is

(a) Iron (b) Copper
(c) Chromium (d) Magnesium

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Ans. (c): Chromium is a chemical element with the Symbol 'Cr' and atomic number 24 .
Chromium is not found in the blood.
Chromium is a mineral that affects insulin.
Carbohydrate, fat, and protein levels in the body.
Iron is an essential element for blood production. About 70 percent of your body's iron is found in the red blood cells of your blood called haemoglobin and in muscle cells called myoglobin.

351. Which of the following is not a vestigial organ

(a) Centriole (b) Molar tooth
(c) Appendix (d) Diaphragm

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Vestigial organs are those organs which are present in reduced form and do not perform any function in the body but correspond to the fully developed functional organs of related animals . Few examples of vestigial organs in human are pinna at the ear, wisdom teeth, the vermiform appendix and the tailbone. Eyelids are not vestigial organs as they cover and protect the eyes.

352. Which of the following bone articulations forms the gliding joint?

(a) Humenis and radius (b) Carpals
(c) Hip girdle and femur
(d) Skull & neck vertebrae

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b): A Gliding joint, also known as a plane joint as planar joint is a common type of synovial joint formed between bones that meet at flat or nearly flat articular surfaces. Gliding joints allow the bones to gliding part one another in any direction along the plane of the Joint - up and down, left and right, and diagonally. A gliding joint is present between joints of carpals (wrist bones) other example of a gliding joint are intermetacarpal joints, Spine, etc.

353. Pancreas secretes hormones which help in

(a) Blood clotting
(b) Production of antibodies
(c) Growth of body
(d) Keeping sugar balance in body

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : The pancreas is an endocrine and exocrine gland. An exocrine gland is an organ that makes and releases chemical into duct rather than into the blood stream like endocrine gland. As an endocrine gland the

main function of the pancreas is to make hormones that control blood sugar levels. Keeping blood sugar levels stable is important to provide a constant energy supply to the body.

354. S.A. node of mammalian heart is known as

(a) Auto regulator (b) Pace-maker
(c) Time controller (d) Beat regulator

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b) : The Primary pacemaker in the mammalian heart is located in the SA node in the dorsal wall of the right atrium. At the Junction with the superior vena cava. The Pacemaker cells in the S.A. nodes are automatic and the intercellular conduction velocity is slow.
It is also called the primary pacemaker of the heart because, S.A. nodes generate electrical impulses faster than another part of the conduction system (100 times per minute).

355. Consider the following statements regarding blood pressure:

1. It is the pressure exerted by the blood on the walls of any vessel.
2. It decreases in the arteries as the distance from the heart increases
3. It is lower in the capillaries than in the arteries.
4. It is usually lower in women than in men.

Of these, the correct ones are

(a) 1 and 4 (b) 1, 2 and 3
(c) 2, 3 and 4 (d) 1, 2, 3 and 4

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Blood pressure is the pressure exerted on the blood Vessels when blood circulatory through them during pumping of the heart. During the contraction of blood vessels. The pressure applied by blood is termed as systolic blood pressure and during relaxation; the pressure applied is termed as diastolic blood pressure. The standard blood pressure is measured as 120/80 mmHg as systolic by diastolic respectively. Blood pressure plays an important role in maintaining the proper working of the heart, brain, kidney, and other important organs.

356. The hormone responsible for the secretion of milk in mothers, is?

(a) ACTH
(b) Leutinizing hormone
(c) Adrenalin
(d) Lactogenic hormone

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Prolactin is a hormone named originally after its function to promote milk production (lactation) in mammals in response to the suckling of young after birth. Prolactin also known as lactotropin is a protein best known for its role in enabling mammals to produce milk. It is influential in over 300 separate processes in various vertebrates, including humans.

357. Bile Juice is secreted by

(a) Pancreas (b) Liver
(c) Spleen (d) Gall bladder

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b): Bile juice is secreted by liver . Bile juice is a fluid that is made and released by the liver and stored in the gallbladder. Bile juice helps the digestion. It breaks down fats into fatty acids, which can be taken into the body by the digestive tract.

358. Veins differ from arteries in having

(a) Thinner walls (b) Strong walls
(c) Narrower lumen
(d) Valves to control direction of flow

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Arteries carry blood away from the heart, and veins carry blood toward the heart .
With the exception of pulmonary blood vessels, arteries carry oxygenated blood and veins carry deoxygenated blood.
Arteries have thick walls with muscle tissue.
Veins have thinner walls and use valves to keep your blood flowing.

359. What is the main function of insulin in the human body?

(a) To maintain blood pressure
(b) To help in digestion of food
(c) To control the level of sugar in the body
(d) To check the level of Iodine in the body

RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : Insulin is hormone produced by the pancreas that has a number of important functions in the human body , particularly in the control of blood glucose levels and preventing hyperglycemia.
The most important role of insulin in the human body is its interaction with glucose to allow the cells of the body to use glucose as energy.

360. An enzyme that works in an acidic medium is

(a) Pepsin (b) Tiypsin
(c) Ptyalin (d) Maltose

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : Pepsin is a stomach enzyme that serves to digest proteins found in ingested food gastric, chief cells secrete pepsin as an inactive zymogen called pepsinogen.
Parietal cells within the stomach lining secrete hydrochloric acid that lowers the PH of stomach.
At low pH (1.5 to 2) activates pepsin.

361. The blood pressure is the pressure of blood in

(a) Arteries (b) Veins
(c) Auricles (d) Ventricles

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : Blood Pressure is the force of the blood pushing against the artery walls. The force is generated with each heartbeat as blood is pumped from the heart into the blood vessels. The size and elasticity of the artery walls also affect blood pressure.

362. The total number of bones in human skull are

(a) 8 (b) 12
(c) 30 (d) 32

RRB Pharmacist Gr.III (23.06.2015)

Ans. (c): The total number of bones found in the human skull is 29. Eight cranial bones and fourteen facial skeleton bones. The Hyoid bone, and 6 auditory (ear) bone. The cranial bone are the a frontal, 2 parietal, a occipital, 2 temporal, sphenoid and ethmoid bones.

363. Which of the following glands controls the development of sex organs in humans?

(a) Pancreas (b) Thyroid
(c) Adrenal (d) Pituitary

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : The Pituitary gland controls the sex organ, testicles in men and the ovaries in women, that basically result in our sexual drive, our sexual growth, development,sexual function and reproduction,

364. Oxygen is transported to every cell of the human body by?

(a) Red blood cells (b) Blood platelets
(c) White blood cells (d) Hormones

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : Red blood squeeze through narrow capillaries in single file.
Haemoglobin molecules inside red blood cells pick up and carry the oxygen, These oxygen-rich cells travel in the blood vessels from the lungs to the left side of the heart. The blood is pumped around the body.

365. Which of the following components of blood protects human beings from infection?

(a) Plasma (b) Blood Platelets
(c) Haemoglobin
(d) White Blood Corpuscles

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : White blood cells, also known as leukocytes, are responsible for protecting our body from infection. As part of our immune system, white blood cells circulate in our blood and respond to injury or illness.

366. The normal temperature of the human body is

(a) 90 ºF (b) 98 ºF
(c) 98.6 ºF (d) 96.4 ºF

RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : The normal temperature of human body is 98.6 ºF (37 ºC) .
Human body temperature can vary depending on how active you are or the time of day, older people have lower body temperature than younger people have.

367. If a person can see an object clearly when it is placed at distance of about 25 cm away from him, he is suffering from

(a) Myopia (b) Hypermetropia
(c) Astigmatism (d) None of these

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Myopia is also called short-sightedness. Myopia is a very common eye condition in which near object appear, but object farther away look blurry .
Hypermetropia - Hypermetropia is also called long-sightedness.
Hypermetropia is the condition of the eyes where the image of a nearby object is formed behind the retina. The person suffering from hypermetropia will have difficulty focusing on nearby objects but can clearly see distant objects.

368. The blood pressure values of four people are given below?

(a) Mrs. X – 90/60 (b) Mr. X – 160/120
(c) Mr. Y – 120/80 (d) Mrs. Y – 140/100

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Blood pressure is generally defined as the force or the pressure of blood cells against the wall of the arteries during circulation . The normal Blood pressure 120/80 mm Hg. Types of Blood pressure
Systolic Blood pressure - The normal range of systolic pressure should be 90-120 mm Hg.
Diastolic blood pressure - The normal range of diastolic blood pressure should be 60-80 mm Hg.

369. In the case of a 'Test-tube baby'?

(a) Fertilisation takes place inside the test tube.
(b) Development of the baby takes place inside the test tube.
(c) Fertilisation takes place outside the mother body.
(d) Unfertilised egg develops inside the test tube.

RRB Pharmacist Gr.III (23.06.2015)

Ans. (c): The test tube is a term that refers to a child that is conceived outside the women's body by a scientific process known as In-Vitro Fertilization or IVF treatment.

370. Pituitary gland is present

(a) Below the brain (b) Above the brain
(c) Inside the brain
(d) Nowhere near the brain

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : The Pituitary gland also known as Hypophysis, is a pea-sized endocrine gland situated at the base of our brain . It is often referred to as the master gland because it produces some of the important hormones in the body.

371. Which of the following organs is used in the purification of blood in human body?

(a) Liver (b) Kidney
(c) Spleen (d) Lungs

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b) : The structure of human kidney can be seen as two reddish bean-shaped organs that are located below the rib cage on each side of the spine. They are almost a fistful in size, measuring around 10-12 cm.
Kidneys are the main organs in the human excretory system, which takes place in the filtration of the blood before the urine is formed.

372. Cornea is a part of which of the following organs of human body?

(a) Eye (b) Ear
(c) Nose (d) Heart

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a): The cornea is the outermost transparent layer of the eye present in the anterior portion of the eye. It covers the ting aperture of the eye, i.e. pupils. The visible pigmented portion, iris and aqueous humor.
The main function of cornea is to refract the light entering the eyes. Cornea accounts for most of the focusing function and optical power of the eyes.

373. What is Funny Bone?
(a) A muscle (b) A nerve
(c) A bone (d) A blood vessel
RRB Pharmacist Gr.III (23.06.2015)

Ans. (b) : The funny bone is a nerve called the ulnar nerve that emerges from the spine, runs through the neck and elbow to the fingers.

374. Man cannot digest cellulose whereas cows can do so because?
(a) Their gut contains bacteria capable of digesting cellulose.
(b) They have many - chambered stomach.
(c) They have efficient grinding molars.
(d) They produce an enzyme cellulose which can digest cellulose.
RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : There are some animal , such as cows and goats which graze grass that have symbiotic bacteria in their abdomen which can digest cellulose. Human do not have these bacteria no cellulose, the enzyme needed to break the bonds of cellulose whereas the bacteria in a cow's gut does produce cellulose.

375. Which of the following when taken by pregnant women, is found to be the cause of deformed children?
(a) Glycerol (b) Xylidine
(c) Thalidomide (d) None of the these
RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : In the 1950s and 1960s , thalidomide was used to treat morning sickness during pregnancy. But it was found to cause disable in the babies born to those taking the drug.
Now, decades later, thalidomide is being used to treat a skin condition and cancer.

376. The diploid number of chromosomes in human body is?
(a) 24 (b) 40 (c) 46 (d) 48
RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : A diploid cell has two complete sets of chromosome. Most cells in humans are diploid, comprising 23 chromosome pairs, so 46 chromosome in total. This is 22 pairs of autosome and one pair of sex chromosome.

377. The largest cell in the human body is
(a) Nerve cell (b) Muscle cell
(c) Liver cell (d) Kidney cell
RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : The largest cell in the human body is nerve cell. Nerve cells also called neurons are the fundamental units of the brain and nervous system, The cells responsible for receiving sensory input from the external environment, for sending motor commands to our muscles, and for transforming and relaying the electrical signals at every step in between.

378. The gland, which in relation to body size is largest at the birth and then gradually shrinks after puberty is?
(a) Thyroid (b) Pituitary
(c) Thymus (d) Adrenal
RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : The thymus is found within the upper front, a part of the chest within the anterior superior media Mediastinum, behind the sternum, and ahead at the guts. The thymus gland is large in infants about 5 cm in length, 4 cm in breath, and about 6 mm in thickness, but after infancy, if grows and reaches its maximum size during puberty. After puberty, the thymus gland is very small in elderly people, by the age at 75 years.

379. A human sperm may contain?
1. X-chromosome 2. Y-chromosome
3. XY-chromosome
(a) 1 only (b) 2 only
(c) 1 and 2 (d) 1, 2 and 3
RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : Sperm is the male reproductive cell, or gamete, in anisogamous forms of sexual reproduction. Sperm cells form during the process known as spermatogenesis. The sperm cells have only 23 chromosomes or half of the usual number. When a sperm cell unites with the ovum, which also has 23 chromosomes, the resulting 46 chromosomes determine the Offspring characteristics. A man's sperm contains either x chromosome or y chromosome which called sexual chromosome.

380. Which of the following is not a bone in the legs of human body?
(a) Radius (b) Tibia
(c) Femur (d) Fibula
RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : The radius is a long bone in the forearm. It lies laterally and parallel to ulna, the second at the forearm bones. The radius Pivots around the ulna pivot around one another to allow rotation at the wrist the radius is between 8 to 10.5 inches long in adult.

381. Bleeding from artery is characterised by which of the following?
1. Blood is red 2. Blood is purple.
3. Bleeding is continuous.
4. Bleeding is intermittent.
(a) 1 and 3 (b) 2 and 3
(c) 1 and 4 (d) 2 and 4
RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : Arterial bleeding, also called pulsatile bleeding, is the most serious type of bleeding. It's usually caused by major injuries. Since arterial blood flows from the Heart, it's oxygenated and bright red. The blood is bright red in colour due to its high oxygen concentration. When an artery is cut, the wound bleeds as pulse due to the high pressure bleeding is rated as highly serious as soon as making sure that both one's heart & lungs function properly.

382. Which of the following is not a bone in the human body?

(a) Sternum (b) Humerus
(c) Pericardium (d) Tibia

RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : Pericardium is a fluid - filled sac that surrounds our heart and the roots of the major blood vessels that extend from our heart. Conditions that affect our pericardium include pericarditis. Pericardial effusion & Constructive pericarditis. Pericardium is located in our chest. Where it surrounds our heart. Our heart is located in the front of our chest, slightly to the left of our breastbone.

383. Rennin and lactase, the enzymes required to digest milk, disappear in the human body by the age of

(a) Two (b) Three
(c) Five (d) Eight

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Lactase & Rennin is an enzyme that is required by the body cleaving lactose into glucose and galactose. Lactose is a sugar that is found in milk or its products. This enzyme is only found in the small intestine of mammals.

Both these enzymes are abundant in infancy where the infant is highly dependent on the diet of milk. At the age of eight years, Rennin and lactase disappear in the human body.

384. Duodenum is situated

(a) At the uppermost part of the small intestine
(b) Near the lungs
(c) In the brain
(d) At the tail end of the intestine

RRB Pharmacist Gr.III (23.06.2015)

Ans. (a) : The duodenum is the first part of the small intestine. The duodenum has been described as a C-shaped or horseshoe- shaped segment of the small intestine It is located below the stomach. The duodenum can be separated into four segments. Each segment has a different structure and shape and performs a different function.

385. The heart is covered by a membrane called

(a) Epidermis (b) Dermis
(c) Epicardium (d) Pericardium

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d) : Heart is a muscular organ which is present behind & is tilted slightly to the left side of the breastbone.

The heart is covered by a double- layered membrane called as parietal pericardium while the inner layer is called visceral pericardium. The Space between the two layers is filled with pericardial fluid which reduces the friction while pumping to the heart.

386. About _____ of the total calcium present in the human body is in the blood.

(a) 99% (b) 70%
(c) 5% (d) 1%

RRB Pharmacist Gr.III (23.06.2015)

Ans. (d): Calcium is one of the most important minerals in the proper function of muscles. Nerves and the heart and is necessary for blood clotting and bone formation. About 99% of calcium is found in the bones, while the remaining 1% circulates in the blood. Calcium is supplied by the food we consume or by taking calcium supplements. A balanced healthy diet profiles 1000 milligrams of calcium per day.

387. Phenylketonuria is an example of an inborn error of metabolism. This 'error' refers to

(a) Hormonal overproduction
(b) Non disjunction
(c) Atrophy of endocrine glands
(d) Inherited lack of an enzyme

RRB Pharmacist Gr.III (23.06.2015)

Ans. (c) : Phenylketonuria (PKU) is an inborn error of metabolism [IEM] in which metabolism of the essential amino acid phenylalanine is defective. It is inherited in an autosomal recessive fashion and occurs in about 1 in 15,000 live births in the U.S.

Phenylketonuria (PKU)is an inborn error of metabolism due to atrophy of endocrine glands that results in decreased metabolism of the amino acid phenylalanine untreated. PKU can Lead to intellectual disability, seizures, behavioral problems, and mental disorders. It may also result in a musty smell and lighter skin

388. As in the arms and legs, blood flows against gravity and is prevented from flowing back by

(a) The extremely low pressure of venous blood
(b) Valves
(c) Movements in the surrounding muscles
(d) The narrowing down of the lumen of veins by the contraction of the muscle layer comprising

RRB Pharmacist Gr.III (23.06.2015)

Ans. (b) : The heart is not strong enough by itself to get the blood back up the veins in our legs and back to our heart. The human body relies on a second system to finish that task. This system involves small valves throughout the veins and muscle contractions from our skeletal muscles when we walk and move about. The valves close when blood start to flow in one direction so that blood in the veins can only flow in the direction back to the heart.

389. Alpha 2 globulin is otherwise known as:

(a) Transcortin (b) Ceruloplasmin
(c) Transferrin (d) Orosomucoid

Kerala PSC Asst. Pharmacist (19.06.2015)

Ans. (b) : Alpha 2 globulin is otherwise known as ceruloplasmin.

Ceruloplasmin is a protein made in our liver. It stores and carries the mineral copper around our body. Ceruloplasmin carries 65% to 90% of the copper found in blood. Copper is vital to many process in our body. These include building strong bones and making melanin. But having too much copper in our body can be toxic.

390. Which organ comes under poorly perfused organ?

(a) Skin (b) Musde (c) Fat (d) Kidneys

Kerala PSC Asst. Pharmacist (19.06.2015)

Ans. (c): The body's circulation system sends blood and oxygen throughout our entire body. Poor cerculation, also known as poor perfusion occurs when blood flow to a specific part of our body reduced.

⇒ The well perfused organs include liver, heart, lungs and brain.

⇒ The poor perfused organs include fat, skin and subcutaneous tissue, And resting muscle

391. Select an endocrine drug which is a steroidal derivative

(a) Gonadorelin (b) Insulin

(c) Levothyroxine (d) Hydrocortisone

DSSSB Pharmacist (26.04.2015)

Ans. (d) : Hydrocortisone is a steroid (corticosteroid) medicine. It works by claming down our body's immune response to reduce pain, itching and swelling.

It can also be used as hormone replacement for people who do not have enough of the natural stress hormone cortisol.

392. Indications of vasopressin are following

(a) Diabetes mellitus

(b) Hypertension

(c) Pituitary diabetes insipidus

(d) Incompleted abortion

DSSSB Pharmacist (26.04.2015)

Ans. (c): Pituitary diabetes insipidus are indication of vasopressin.Vasopressin decreases water excretion by the kidneys, by increasing water reabsorption in the collecting ducts, hence its other name of antidiuretic hormone. Vasopressin also has a potent constricting effect on arterioles throughout the body.

393. Which of the following hormones is produced by the thyroid gland?

(a) Thyroid-stimulating hormone

(b) Thyrotropin-releasing hormone

(c) Triodothyronine

(d) Thyroglobulin

DSSSB Pharmacist (26.04.2015)

Ans. (c) : Triodothyronine hormone is Produced by the thyroid gland. Triodothyronine also known as T_3.

Triodothyronine is a thyroid hormone. It affects almost every growth and development, metabolism, body temperature and heart rate.

394. Indicate muscles, which are more resistant to block and recover more rapldly

(a) Hand (b) Leg

(c) Neck (d) Diaphragm

DSSSB Pharmacist (26.04.2015)

Ans. (d) : Diaphragm muscles are more resistant to block and recover more rapidly. The diaphragm is the most highly resistant muscle to NMBAs, as well as the first to recover but the occurrence of its dysfunction has been emplected in postoperative respiratory failure, specially when mechanical ventilation is prolonged.

395. Disease characterized by increase in the number of platelets in blood

(a) Lymphocytic leukemia

(b) Megaloblastic anemia

(c) Thrombocytopenia

(d) Thrombocythemia

Kerala PSC Pharmacist Gr.II (29.10.2015)

Ans. (d) : Thrombocythemia is a disease in which your bone marrow makes too many platelets.

→ It our platelet count is too high, blood clots can forms in our blood vessels, this can block blood flow through our body.

396. An inherited metabolic disorder Alkaptonuria is due to the lack of enzyme

(a) Phenylalanine hydroxylase

(b) Tyrosine hydroxylase

(c) Homogentisate oxidase

(d) Hydroxy phenylpyruvate hydroxylase

Kerala PSC Pharmacist Gr.II (29.10.2015)

Ans. (c) : Alkaptonuria is caused by deficiency of an enzyme Homogentisate oxidase.

→ The three major features of Alkaptonuria are the presence of dark urine, ochronosis, a buildup of dark pigment in connective tissues.

397. What is the descriptive name of clotting factor x.

(a) Fibrinogen (b) Labile factor

(c) Prothrombin factor (d) Stuart-prower

Kerala PSC Pharmacist Gr.II (29.10.2015)

Ans. (d) : Clotting factor , known as Stuart- power Factor.

→ Reduced quantity or function of coagulation Factor X prevents blood from clotting normally causing episodes of abnormal bleeding that can be serve.

→ Factor X is synthesized in the liver and requires vitamin K for its synthesis.

398. Total number of Axial bone in adult human body

(a) 126 (b) 80

(c) 206 (d) 202

Kerala PSC Pharmacist Gr.II (29.10.2015)

Ans. (b) : Total no. of axial bone in adult human body is 80.

⇒ The adult skeleton consists of 206 named bone. These bones can be grouped in two division axial skeleton and appendicular skeleton.

399. A hormone secreted by the anterior lobe of pituitary gland:

(a) Mineralocorticoids

(b) Gonadotropin releasing hormone

(c) Growth hormone

(d) Thyrotropin releasing hormone

Kerala PSC Pharmacist Gr.II (31.01.2015)

Ans. (c) : Growth hormone secreted by the anterior lobe or pituitary gland oxytocin and antidiuretic hormone secreted by the posterior lobe of pituitary gland.

400. An drug which inhibits spermatogenesis, used as male contraceptive

(a) Tamoxifen (b) Norethindrone
(c) Levonorgestrel (d) Gossypol

Kerala PSC Pharmacist Gr.II (31.01.2015)

Ans. (d): Gossypol is a polyphenolic compound derived mainly form cottonseed oil, which has been found to have antifertility effects in males it has been reported to induce disturbance of the hypothalamic pituitary axis, disruption of spermatogenesis in the testes, and inhibition of postejaculatory spermatozoa motility.

401. Diabetes insipidus is due to deficiency of :

(a) Oxytocin (b) Insulin
(c) Vasopressin (d) Aldosterone

Kerala PSC Pharmacist Gr.II (31.01.2015)

Ans. (c) : Diabetes insipidus is in caused by problems with a chemical called vasopressin (AVP), with is also known as antidiuretic hormone (ADH). AVP is produced by the hypothalamus and stored in the pituitary gland until needed

→ Oxytocins a natural hormone that manages key aspects f the female and male reproductive systems, in including labaur and delivery and lactation, as will as aspects of human behavior.

402. The Rh blood group is so named because

(a) Blood groups contain either Rh +ve or Rh – charges
(b) Antigen was discovered in the blood of Rhesus monkey
(c) Antibodies are having Rh system
(d) Antigens exist in human plasma

MPSC Pharmacist (15.04.2014)

Ans. (b) : The Rh blood group is so named because Antigen was discovered in the blood of rhesus monkey. The rhesus blood group system is comprised of Rhesus monkey erythrocyte antigen such as the D antigen that said to be Rh+. This system is guite complex and the rare Rh alloantigen are still not characterized biochemically.

403. ..... is not the component of blood proteins

(a) Albumin (b) Proconvertin
(c) Globulin (d) Fibrinogen

MPSC Pharmacist(15.04.2014)

Ans. (b) : Proconvertin is not the component of blood proteins also termed are proteins present in blood plasma. Albumin, Globulin and Fibrinogen are the 3 blood proteins.

• Albumin Liver produces albumin. Which is a protein Albumin enters our blood stream and aids in the preventin of fluid leakage from blood vessels in to other tissues

⇒ Globulins - globulins are a hind of protein found in the blood stream produced in the liver.

⇒ Fibrinogen is protein that the liver produces. This protein aids in the formation of the blood clots.

404. ..... anemia results in destruction of red bone marrow

(a) Iron deficiency (b) Pernicious
(c) Aplastic (d) Hemolytic

MPSC Pharmacist (15.04.2014)

Ans. (c): Aplastic anemia results in destruction of red bone marrow.

Aplastic anemia is condition in which the bone marrow dose not make enough blood cells.

405. Which one of the following is not one of the steps of Homeostasis?

(a) Coagulation (b) Vasoconstriction
(c) Platelet plug formation
(d) Hemophilia

MPSC Pharmacist (15.04.2014)

Ans. (d) : Coagulation vasoconstriction and platelet plug formation are the steps of the Homeostatis. But Hemophilia is not as part of homeostatis. Hemophilia is usually an inherited bleeding disorder in which the blood does not clot properly. This can lead to spontaneous bleeding as well as bleeding following injuries or surgery.

406. Which one of the following is not the component of white blood cells?

(a) Neutrophils (b) Platelets
(c) Monocytes (d) Basophils

MPSC Pharmacist (15.04.2014)

Ans. (b) : White blood cell are part of the body's immune system. They help the body fight infection and other diseases. Types of white blood cells component neutrophils, Monocytes, Basophils granulocytes, monocytes and lymphocytes (T cells and B cells). Platelets is not component of white blood cells.

407. Which type of hypersensitivity reaction has cell- mediated (delayed) type of action?

(a) Type I Hypersensitivity
(b) Type II hypersensitivity
(c) Type III hypersensitivity
(d) Type IV hypersensitivity

MPSC Pharmacist (15.04.2014)

Ans. (d) : Type IV hypersensitivity is type of delayed-type immune response in which the immune system responds to an antigen several hours or days after exposure. It is also known as cell-mediated hypersensitivity because tissue damage involves T cells.

408. Iodine is a constituent of which hormone?

(a) Thyroid hormone (b) Insulin
(c) Oxytocin (d) Corticosteroids

Kerala PSC Pharmacist Gr.II(05.09.2014)

Ans. (a) : Iodine is a constituent of thyroid hormone. Thyroid gland in our neck take, Iodine, found in many foods and convert it into thyroid hormone. Thyroid gland produces thyroxine (T_4) and another highly active hormone called triodothyrnine.

409. Which organ of human body purifies blood?

(a) Liver (b) Lungs
(c) Heart (d) Kidney

ESIC Gujarat Jr. Pharmacist (31.08.2014)

Ans. (d): Kidney is an important organ present in human body that is responsible for the purification of blood. It removes excretory substances, i.e. urea, excess of water and other waste products by filtering them out from the body in the form of urine.