Anatomy

January 2000

Illustrate your answers with diagrams whenever possible:

1. Describe with a diagram the pathway of pain sensation from the hand.
2. Describe with a diagram the arterial supply of the lateral surface of cerebral hemisphere.
3.
4. Mention the component fibers of the superior cerebellar peduncle.
5. Mention with a diagram the development of the pancreas.
6. Mention with a diagram the development of the typical vertebra.
7. Mention the beginning and termination of the femoral artery. Enumerate its branches.
8. Mention the nerve supply and action of the Adductor Magnus.

May 2000

Illustrate your answers with diagrams:

1. Mention the boundaries, roof, floor and contents of the posterior triangle of the neck.
2. Mention the site, relations and arterial supply of the thyroid gland.
3. Mention the motor distribution of oculo-motor nerve inside the orbit.
4. Illustrate with a diagram only the visual pathway. Mention the effect of lesion of the right optic tract.
5. Illustrate with a diagram only the descent of the cotico-spinal tract. Mention the effect of its unilateral lesion at the internal capsule.
6. Mention the course, branches and effect of injury of the common peroneal nerve.
7. Mention the attachments, nerve supply and actions of GluteusMaximus, Medius and Minimus.
8. Mention the development and congenital anomalies of each of the following:
    - **a)** The stomach.
    - **b)** The atrial septum.
9. Mention the development of each of the following:
    - **a)** The tongue.
    - **b)** The breast.

September 2000

Answer the following questions:

1. Mention the position, connections and contents of the cavernous sinus.
2. Mention the course of the external carotid artery. Enumerate its branches.
3. Mention the attachments, nerve supply and action of the extrinsic muscles of the tongue.
4. Mention the boundaries, roof, floor and contents of the popliteal fossa.
5. Mention the course and branches of the femoral nerve.
6. Mention the boundaries, roof and floor of the fourth ventricle.
7. Mention the boundaries and fiber contents of the internal capsule.
8. Mention the development and anomalies of the uterus.
9. Mention the development of the pancreas.
10. Mention the derivatives of the first branchial arch.

January 2002

Answer all the following questions:

1. Illustrate with a diagram only the visual pathway.
2. Describe with a diagram the arterial supply of the lateral and medial surfaces of cerebral hemisphere.
3. Mention the distribution of the oculo-motor nerve inside the orbit.
4. Mention the contents and tributaries of the cavernous sinus.
5. Illustrate with a diagram only the fetal circulation.
6. Mention congenital anomalies of the kidney.

May 2002

Answer the following questions:

1. Mention the form, relations and contents within the parotid gland. Mention its motor supply.
2. In a tabulated form, mention the origin, insertion, nerve supply and action of the muscles of mastication.
3. Mention the course of external carotid artery and enumerate its branches.
4. Describe with a diagram the roof, floor and lateral boundaries of the fourth ventricle.
5. Describe with a diagram the auditory pathway.
6. Mention the arches of the foot and the factors maintaining them.
7. In a tabulated form, mention the origin, insertion, nerve supply and action of the quadriceps femoris muscles.
8. Illustrate with a diagram only the fetal circulation and enumerate its postnatal changes.
9. Mention the fate of the mesonephric duct in male.

September 2002

Answer the following questions:

1. Mention the layers of the scalp, its nerve supply and its arterial supply.
2. Mention the position, relations and arterial supply of the thyroid gland.
3. Mention the course and distribution of the mandibular nerve.
4. Describe with a diagram the cortical areas of the lateral surface of the cerebral hemisphere and mention its arterial supply.
5. Describe with a diagram the boundaries and component fibers of the internal capsule.
6. Mention the course and branches of the popliteal artery.
7. In a tabulated form mention the origin, insertion, nerve supply and action of the gluteus maximus, gluteus, medius and gluteus minimus.
8. Mention the development of the atrial septum.
9. Mention the development and anomalies of the breast.
10. Mention the development of the vertebra.
11. Mention the development of the pancreas.

May 2003

Answer the following questions:

1. Mention the boundaries and contents of the posterior triangle of the neck.
2. Mention the course, motor and sensory distribution of the mandibular nerve.
3. Describe with a diagram the shape, position relations and arterial supply of the thyroid gland.
4. Describe with a diagram the arterial supply of the lateral and medial surfaces of the cerebral hemisphere, and their main cortical areas.
5. Describe with a diagram the visual pathway. Mention the effect of lesion at optic tract.
6. In a tabulated form mention the origin, insertion, nerve supply and action of adductors (longus, brevis, and magnus muscles).
7. Mention the course and motor distribution of the common peroneal nerve in leg. Illustrate with a diagram its sensory distribution on the dorsum of the foot.
8. Illustrate With a diagram only the fetal circulation.
9. Mention the development and congenital anomalies of the tongue.
10. Mention the development of the metanephros. Mention five of its anomalies.

September 2003

Answer the following questions:

1. Mention layers and nerve supply of the scalp.
2. Mention course and enumerate branches of the external carotid artery.
3. Mention motor and sensory supply of the tongue.
4. Describe with a diagram the boundaries and connections of the fourth ventricle.
5. Describe with a diagram the parts, boundaries and components fibers of the internal capsule.
6. Describe with a diagram the course and relations of the femoral artery. Enumerate its branches.
7. Mention the arches of the foot and the factors supporting them.
8. Mention development of the pancreas.
9. Mention development of the uterus.
10. Mention derivatives of the first branchial arch.
11. Mention development of the interatrial septum.

May 2004

Answer the following questions:

1. Mention the boundaries and contents of the posterior triangle.
2. Describe with a diagram the position, relations and arterial supply of the thyroid gland.
3. Mention origin, insertion, nerve supply and action of the extrinsic muscles of the tongue.
4. Describe with a diagram the arterial supply and cortical areas on the lateral and medial surfaces of the cerebral hemisphere.
5. Describe with a diagram the parts, boundaries and fiber contents of the internal capsule.
6. Describe with a diagram the boundaries of the femoral triangle. Enumerate its contents.
7. Mention the course and motor distribution of the common peroneal nerve in leg. Mention the foot deformity resulting from its lesion.
8. Describe with a diagram the development of the pancreas.
9. Describe with a diagram the development and anomalies of the uterus.
10. Illustrate with a diagram only the fetal circulation.

September 2004

Answer the following question illustrating your answers with a diagram as you can:

1. Mention layers, arterial and nerve supply of scalp.
2. Mention relations and arterial supply of the thyroid gland.
3. Enumerate muscles of the pharynx. Mention origin, insertion, action and nerve supply of each.
4. Mention boundaries, roof, floor and contents of femoral triangle.
5. Mention arches of the foot and factors maintaining them.
6. Illustrate with a diagram the boundaries, roof and floor of the fourth ventricle.
7. Illustrate with a diagram pain and temperature pathway from the big toe.
8. Mention myoskeletal elements derived from 1st branchial arch.
9. Mention development and congenital anomalies of kidney.
10. Mention development of female breast.

January 2005

Answer all the following questions:

1. Describe boundaries, communications and contents of infra temporal fossa.
2. Describe shape, site and medial relations of the lobe and mention arterial supply of thyroid gland.
3. Mention motor and sensory nerve supply of the tongue.
4. Mention 5 anomalies of the uterus.
5. Write a short report on development of the pancreas.
6. Mention boundaries and contents of femoral triangle.

June 2005

Write a report on each of the following:

1. Sternodeidomastoid muscle (origin, insertion, nerve supply, actions & deep relations).
2. External carotid artery (origin, termination & branches).
3. Tongue (motor and sensory Innervation).
4. Visual pathway and its lesions.
5. Arterial supply and important areas of the lateral surface of cerebral hemisphere.
6. Common peroneal nerve (root value, course, relations & branches).
7. Femoral triangle (boundaries and contents).
8. Cloaca (development & derivatives).
9. Pancreas (development & congenital anomalies).
10. Draw a diagram of foetal circulation and mention its postnatal changes.

September 2005

Answer the following questions:

Illustrate your answers with diagrams:

Head and Neck:

1. Give an account on the blood supply of the thyroid gland.
2. Give an account on the carotid sheath.
3. Mention the name, origin and branches of an artery whose pulsations can be felt at the lower border of the mandible just anterior to masseter muscle.
4. Movement of the temporomandibular joint. Name the muscle producing them.

Neuroanatomy

1. Give an account on the lateral leminiscus.
2. Middle cerebral artery.
3. Deep sensation from the index finger.

Lower Limb

Give an account on:

1. Adductor canal (boundaries and contents).
2. Deep relations of the gluteas maximus muscle.
3. Flexor retinacula.

Special Embryology

1. Development of the female gonad.
2. Congenital anomalies of the hindgut.
3. Derivatives of the first and second pharyngeal arches.
4. Fallot's tetralogy.

January 2005

Answer the following questions:

Head & Neck

1. What are the structures pass through the superior orbital fissure.
2. Give the origin, insertion and action of buccinator muscle.
3. Give an account on parasympathetic nerve supply of the parotid gland.
4. Give the branches of the posterior division of the mandibular nerve.
5. Innervation of the larynx.
6. Deep relations of the carotid sheath in the carotid triangle.

Special embryology

1. Derivatives of the first and second pharyngeal arches.
2. Congenital anomalies of the hind gut.
3. Development of the male gonad.

Lower limb

1. Origin, insertion and action of gastrocnemius and soleus muscles.
2. Course and branches of the posterior tiblal artery.

May 2006

Head and Neck:

Just mention

1. Arterial supply of the face & scalp.
2. Ciliary ganglion (site, motor, sensory and sympathetic roots).
3. Parotid duct, surface markings, sites of origin & end and structure priced by it.
4. Tongue: nerve supply and lymphatic drainage.
5. Lateral pterygoid muscle, origin, insertion and actions.
6. Innervations of the larynx.
7. Isthmus of thyroid gland, level and relations.

Neuro anatomy

1. Posterior ventral nucleus of the thalamus.
2. Facial nerve: nuclei, type of fibers, their distributions and effect of its lesion if it occur at the sytomastoid foramen.
3. Boundaries of the body (central part) of the lateral ventricle.
4. Gracile & cuneate tracts (with diagrams only).

Lower Limb

1. Origin & branches of the profunda femoris artery.
2. Common peroneal nerve (root value, course, branches & effects of its injury.
3. Cruciate ligaments.
4. Bursae around the knee joint (just mention).
5. Structures around the ankle joint.

Special Embryology

Just mention

1. Fate of :
    - **a)** Allantois.
    - **b)** Mesonephric duct in male & female.
    - **c)** Reichert's cartilage.

2. Development of the vagina (with diagram).
3. Falot's tetralogy.
4. Congenital anomalies of mid gut loop.

September 2006

Answer the following questions:

Head and Neck:

1. Site, size, parts, relations and nerve supply of the submandibular salivary gland.
2. Types of fibers of the facial nerve and their distributions.
3. In a table mention the constrictors of the pharynx with their origin, insertion, nerve supply and action.
4. Beginning, termination and branches of the external carotid artery.

Neuroanatomy

1. Illustrate with a diagram the boundaries of the fourth ventricle.
2. Illustrate with a diagram pain and temperature pathway from the big toe.
3. Illustrate with a diagram parts, fibers components and blood supply of the internal capsule.

Lower Limb

1. Beginning, course, end and branches of the femoral artery.
2. Illustrate with a diagram boundaries and contents of the popliteal fossa.
3. What is meant by everstion and inverstion, mention the joint at which these movements occur and muscles producing these movements with heir origin, insertion, action and nerve supply in a table.

Special Embryology

1. Illustrate with a diagram the development and congenital anomalies of the uterus.
2. Illustrate with a diagram the development and congenital anomalies of the pancreas.
3. Mesodermal derivatives of the first branchial arch.

January 2007

Give the missing word (s):

1. The scalp has a very rich supply of …….and so the smallest cut ……profusely.
2. The subaponeurotic space is the potential space beneath ……...
3. The infraorbital nerve is the direct continuation of the …… It enters the ……and appears on the face through ……..
4. The facial artery arches upward and over the submandibular salivary gland, then after it curves around ……of the …… at the ……of the ……..
5. The geniohyoid muscle arises from …….. and inserted into …… Its nerve supply from ……through …… Its action is a-……and b-……...
6. The middle meningeal artery arises from the ……..part of the ……in the …… It enters the cranial cavity through the …….passes to lie between the …….and …….....layers of ……..and runs forward and laterally in …….on the ……surface of the …….part of the ……bone. After a short distance the artery divides into …….and ……branches.
7. The rima glottides is the ……between the ……in front and the ……..behind. It is the ……part of the laryngeal cavity. It has two parts a- …… … and b-…….
8. The sphenoethmoidal recess is a small depression between the ……..of the nose and the ……. It receives the opening of the ……..
9. The tympanic membrane is a thin fibrous oval membrane separates the ……... from ……..and conducts sound waves to the ……..
10. The sex of the embryo is determined genetically at the time of ……... and depends on the ……or …….of the ……in the ……

11. During the seventh week of development the ……..causes the newly formed genital ridge to secrete testosterone and this induces the development of the …….and other ……
12. The uterine tube on each side is developed from the ……..and …… of the ……..
13. 13-In the male embryo, the cranial end of the paramesonephric duct persists as …….while the candal end forms the ……..
14. The anterior portion of the cloaca may be divided into an upper part……... and a lower part ……. By the openings of the ……
15. In the male embryo, the primitive bladder forms …….. except …… and the …….as far distally as the …….....
16. In the female embryo, most of the mesonephric tubules ……..but a few …… to form …… and …….
17. In both sexes, the mesonephric duct gives origin on each side to …… which forms the ……., the……., the……., and the ……... of the kidney.
18. The pancreas develops from …….……buds, which arises from the …….
19. The posterior portion of the cloaca may be called …… which give rise to the …… and …….
20. Give the numbered structures in the following figure:

June 2007

Illustrate your answers with diagrams:

1. Origin, course, end and branches of facial artery and mention where its pulsation can be felt.
2. Type, articular parts, movements of temporomandibular joint and mention muscles acting these movements.
3. Structure, location, surfaces, relations, blood supply and lymphatic drainage of palatine tonsil and give an account on Waldeyer's ring.
4. Facial nerve nuclei, type of facial nerve fibers and their distribution.

5. Illustrate with diagram the cortical areas on the superolateral and medial surfaces of cerebral hemisphere.
6. Position, parts and fibers components of internal capsule and mention its blood supply.
7. Beginning, course, end, branches and surface markings of the femoral artery and mention where its pulsation can be felt.
8. Distribution of common peroneal nerve and effects of its injury.
9. Type, articular parts, movements of subtalar joint and mention muscles acting these movements with their nerve supply.
10. Development and fate paramesonephric ducts.
11. Fate of bulbus cordis and truncus arteriosis.
12. Derivatives of the second branchial arch.
13. Derivatives of the midgut.

September 2007

Illustrate your answers with diagrams:

1. Origin, insertion, nerve supply and action of buccinator muscle.
2. Site, lobes, relations and blood supply of pituitary gland and mention its connections with the hypothalamus.
3. Mention extrinsic and intrinsic muscles of the larynx with their actions and nerve supply.
4. Type, subtype, articular parts, movements of hip joint and mention muscles acting these movements with their nerve supply.
5. Beginning, end, course and branches of the popliteal artery.
6. Boundaries of fourth ventricle and mention its connections.
7. Parasympathetic nuclei of cranial nerves and distribution of their parasympathetic fibers.
8. Congenital anomalies of kidney and ureter.
9. Development and congenital anomalies of interatrial septum.
10. Derivatives of the second branchial arch.

Give the missing word (s):

1. The parotid duct emerges from the ……process of the …….. gland and passes ……..over the …….at the anterior border of the muscle it turns sharply …….and pierces the ……. and …… It then passes forward for a short distance between the muscle and the mucous membrane and finally opens into the …… of the …….upon a small …….opposite …….. The oblique passage of the duct forward between the mucous membrane and the buccinator serves as a …… and prevents the …….. during ……..

2. The otic ganglion:

It is a small ……ganglion the lies in ……just below the ……

It receives afferents from:

- **a-** ……..
- **b-** ……..
- **c-** ……..

Its branches (afferents) are:

- **d-** ……..
- **e-** ……..
- **f-** ……..

3. Facial artery arises from the …….just above the tip of the ……It passes deep to the ……. It arches upward grooving …… Then it turns downward between the ……..and the …… It hooks around the …….. to enter the face at …… It is here that the …… can be felt.

4. The vestibular folds of laryngeal cavity are two thick folds of …….. that cover the ……..

5. The rima glottides is the space between ……anteriorly and the ……..posteriorly, so it is composed of …… part which lies between the ……..and …….part which lies between the …… and ……....

6. The recess in the laryngeal cavity between vocal folds on each side is called the …… from its mucous membrane, a small diverticulum, called the ……passes upward between the vestibular fold and the thyroid cartilage.

7. The labyrinth is situated in the ……part of the ……....., it consists of the …….. and the …….

8. The bony labyrinth consists of three parts (……., ……. And …….). These cavities are lined by …….. and contain a …… in which is suspended the …….

9. Branches of the facial nerve at the geniculate ganglion:

- **a-** ……
- **b-** ……...
- **c-** ……...

10. The hepatic diverticulum divides into 2 parts:

- **a-** A large ……portion (……..) which will give rise to the ……
- **b-** A small …….portion (……..) which gives rise to the …….

11. Congenital faecal umbilical fistula is due to …….

12. Congenital umbilical hernia caused by …….

13. Imperforate anus is due to …….

14. The rectum thus may open into the vagina leading to …….....

15. The rectum may open into the urinary bladder oruretha leading to ……..

16. Fallot tetralogy is due to unequal division of the ……due to an …….. This results in the followings:

- **a-** ……
- **b-** ……
- **c-** ……

17. In the male embryo, degeneration of paramesonephric ducts occurs during the ….....month, leaving behind small portions of the …… The cranial end persists as the ……. While the caudal end forms the …….

18. In hypospadias the external meatus situated on the..…….. anywhere between the …… and ……

19. Five degrees of hypospadias may occur:

- **a-** ……
- **b-** ……...
- **c-** ……
- **d-** ……
- **e-** ……

May 2008

Give answers to the following:

1. Failure of the paramesonephric ducts to the fuse may cause a variety of uterine defects. Discuss with diagrams such defects and mention their clinical problems.
2. While the intestinal loop is developing, it undergoes certain changes. Discuss such changes.
3. Mention skeletal derivatives of the cartilages of branchial arches.
4. Illustrate With diagrams only four brain circuits involving thalamic nuclei.
5. Illustrate with a table site, function, beginning and termination of tracts which carry conscious sensations from the body below the head.
6. Illustrate with diagrams anatomy of the fornix.
7. If the formal artery is ligated or obstructed above the origin of the profunda femoris artery, a collateral circulation will carry arterial blood to the upper limb. Illustrate such collaterals.
8. Give an account on attachments, structure and function of cruciate ligaments of the knee joint.
9. Describe with diagrams arches of the foot and mention factors maintain the integrity of these arches.
10. The orbital cavity contains seven extra-ocular muscles, in addition to the eyeball which has three intra-ocular muscles. Illustrate with a table these muscles with their nerve supply and action.
11. Mention the features of dural venous sinuses and in a table classify them which their sites and connections of each sinus.
12. Give an account on site, part, relation and nerve supply of submandibular salivary gland.

September 2008

Answer the following questions:

1. Give an account on congenital abnormalities of the intestinal tract.
2. Mention derivatives of typical, preotic and occipital myotomes.
3. Discuss development of uterus and its congenital anomalies.
4. Illustrate site, structure, relations, blood supply and lymphatic drainage of palatine tonsils.
5. Give an account on origin, course, branches and distribution of mandibular nerve.

6. Illustrate with diagrams position, contents, relations and communications of the cavernous sinuses.
7. Mention beginning, course, end, branches and surface markings of femoral artery.
8. Mention type, subtype, articular parts, movements of subtalar joint and muscle acting these movements with their nerve supply.
9. Illustrate receptors, 1st order neuron, 2nd order neuron, 3rd order neuron and termination of light touch pathway from the body below the head.
10. Illustrate by a table the parasympathetic cranial nerve nuclei with their sites and distribution of their fibers.

January 2009 (1)

Answer all the following questions:

1. Enumerate layers of the scalp and mention its nerve supply.
2. Mention contents and communications of cavernous sinus.
3. Mention beginning, termination and enumerate branches of the external carotid artery.
4. Enumerate nerves supplying the tongue and their functions.
5. Mention development of the interatrial septum.
6. Mention the fate of the mesonephric duct in male.

January 2009 (2)

Answer all the following questions:

1. Enumerate the muscles of the pharynx and their nerve supply.
2. Enumerate the branches of the external carotid artery.
3. Enumerate the muscles supplied by the oculo-motor nerve inside the orbit.
4. Enumerate the structures related to the lateral surface of the hyoglossus muscle arranged from above downwards.
5. Enumerate the derivatives of the hepatic diverticulum.
6. Enumerate the mesodermal derivatives of the second brachial arch.
7. Mention the fate of the bulbus cords.
8. Illustrate With a diagram the arterial supply of the lateral surface of the cerebral hemisphere.

May, 2009

Answer the following questions:

1- Mention nuclei of the special visceral efferent column with distribution of their efferent.

2- Mention the arterial supply of each of the following parts of central nervous system:

a) Spinal cord **b)** Cerebellum **c)** Midbrain

d) Thalamus **e)** Internal capsule.

3- Discuss the functional anatomy of the foot and how it can fulfill its function.

4- Illustrate, by a table, type, subtype, articular parts, movements of hip joint and muscles acting these movements with their never supply.

5- Mention origin, course and branches of maxillary never with their distribution.

6- Illustrate the position of larynx and muscles acting on it with never supply of each muscle.

7- Discuss congenital anomalies of intestine.

8- Mention derivatives of pharyngeal pouches.

9- Enumerate derivatives of metanephros.

10- Give an account on fate of bulbuls cordis.

Biochemistry

January 2000

Answer all the following questions

1. **Write on the following:**
   - **a)** Biosynthesis of sphingomyelins.
   - **b)** Biosynthesis of acetoacetate.
   - **c)** Omega oxidation of fatty acids.
2. **Give an account on:**
   - **a)** Niemann-pick disease.
   - **b)** Steatorrhoea.
   - **c)** Refsum's disease.

May 2000

All questions to be answered (formulae are must whenever possible):

1. **On biochemical basis discuss:**
   - **a)** De-novo biosynthesis of palmitic acid.
   - **b)** Acetyl CoA to acetoacetate.
   - **c)** Propionate to succinyl CoA.
   - **d)** Glyceral 3-p-to lecithin.
   - **e)** Promoter region.
2. **An oral glucose tolerance test was performed for the first time to an adult subject using 75 gram glucose, with the following result:**
   - **a)** Fasting plasma glucose = 80 mg/dl.
   - **b)** One hour after the glucose load, the level was 150 mg/dl.
   - **c)** Two hours after the glucose load, the level was 80 mg/dl.
     Comment what is the most probable diagnosis?
3. **Mention:**
   - **a)** Two causes of Proteinuria.
   - **b)** Two compounds derived from cholesterol in the body.
   - **c)** Two antioxidants and two free radicals.
   - **d)** Two tumor markers one for prostate and other for breast.
   - **e)** Two functions of calcium and two factors involved its regulation.
4. **What is the most commonly affected enzyme in the following metabolic inborn errors:**
   - **a)** Albinism.
   - **b)** Von Gierk's disease.
   - **c)** Phenylketonuria.
   - **d)** Galactosemia.
   - **e)** Favism.
   - **f)** Hereditary fructose intolerance.
   - **g)** Refsum's disease.
   - **h)** Lesch-Nyhan syndrome.

i) Gaucher' disease.
j) Alkaptonuria.

5. **Mention:**

a) Mechanism by which proto become Oncogenes.
b) Growth factor receptors.
c) Lactose and colostrum is suitable and beneficial to infants.
d) Initiation phase in protein synthesis.
e) Two important compounds synthesized from glycine.

September 2000

All questions to be answered (formulae are must whenever possible):

1. **Discuss the comparison between:**

a) HMP shunt and Glycolysis.
b) Hyperglycemia and hypoglycemia.
c) Liver glycogen and muscle glycogen.
d) Leading strand and lagging strand.

2. **Write an account on:**

a) Tumor markers definition, uses and examples.
b) NPN constituents of urine.
c) Types of mutations.
d) Fate of ammonia.

3. **Mention:**

a) Importance of copper, zinc and iron.
b) Lipotropic and antilipotropic factors.
c) Biosynthesis of sphingomyelins.
d) Antioxidants.
e) Characters of genetic codes.

January 2001

Answer all the following questions

1-Write on the following:

d) ∞-oxidation of fatty acids.

e) Favism.

f) Regulation of kerb's cycle.

g) Irreversible reaction in Glycolysis.

h) Nitrogen balance.

2-On biochemical basis discuss:

i) Fate of ammonia.

j) Promoter region.

k) Diagnosis and monitoring of diabetes mellitus.

September 2001

Formulae are a must whenever possible:
Write on the following:

1-On biochemical basis discuss:

a) Types of damage caused by free radicals.
b) Diagnosis and monitoring of diabetes mellitus.
c) Classification of tumor markers.
d) Regulation of Glycolysis.
e) Inhibitors of Kerb's cycle.

2-Fully define:

a) *b* -oxidation of fatty acids.
b) Promoter region.
c) Genotherapy.
d) Gout.
e) Cell cycle.

3-Illustrate by formulae only:

a. Isocitrate to succinyl CoA.
b. Carbamyol phosphate to urea.
c. Serine to cysterine.

January 2002

Answer all the following questions, formula are a must whenever possible:

1. **a)** Four differences between apoptosis and necrosis.

   b) Four differences between Glycolysis and HMP shunt.

2. **a**) Two fate of ammonia.

   b) Gene replacement.

   c) Glycosylated hemoglobin (HbA_1c)

3. **a)** Succinyl-COA to Oxaloacetate.

   b) Glucose-1-phosphate to Glucuronic acid.

June 2002

All questions to be answered (formulae are must whenever possible):

1. **Fully define:**
   - **a)** Point mutation.
   - **b)** Classification of tumor markers and give two examples.
   - **c)** Genetic code.
   - **d)** Fatty liver.
   - **e)** Cytochrome P_{450}.
   - **f)** Growth factors receptors.
   - **g)** Gout.
   - **h)** Biological role of two trace elements.
2. **A 30-year-old male presents with evidence of coronary heart disease. Blood analysis yields serum levels of cholesterol of 420 mg/dL and of triacylglycerols of 75 mg/dL.**
   - **a)** Suggest a likely diagnosis.
   - **b)** What is the key enzyme required for the synthesis of cholesterol.
   - **c)** Mention two compounds derived from cholesterol in the body.
3. **Illustrate by formulae only:**
   - **a)** DOPA $\rightarrow$ Epinephrine.
   - **b)** Glutamic acid $\rightarrow$ GA BA.
   - **c)** Methionine $\rightarrow$ Homocysteine.
   - **d)** Propionyl CoA $\rightarrow$ Succinyl CoA.
   - **e)** Biosynthesis of porphobilinogen.
4. **Write three differences between:**
   - **a)** L-amino acid oxidase and D-amino acid oxidase.
   - **b)** HMP shunt and Glycolysis.
   - **c)** Oncogenes and tumor suppressor genes.
   - **d)** Liver glycogen and muscle glycogen.
   - **e)** Human milk and cow milk.

September 2002

All questions to be answered:

1. **What is the most commonly affected enzyme in the following metabolic inborn errors:**
   - **a)** Alkaptonuria.
   - **b)** Favism.
   - **c)** Albinism.
   - **d)** Galactosemia.
   - **e)** Von Geirk's disease.
2. **Mention:**
   - **a)** Mechanism by Which proto Oncogenes become Oncogenes.

b) Initiation phase in protein synthesis.
c) Biochemistry of obesity.
d) Phase I in xenobiotics.

3. **Write on:**

a) Two functions of calcium and two factors involved its regulation.
b) Two important compounds Synthesized from Tyrosine.
c) Two types of mutations.
d) Two compounds derived from cholesterol.

4. **On biochemical basis explain:**

a) De-novo biosynthesis of Palmitic acid.
b) Propionate to succinyl CoA.
c) Lac-operon- concept.
d) Acetyl CoA to acetoacetate.

January 2003

Answer all the following questions:

I- Mention:

1. Properties of genetic code.
2. Topoisomerase.
3. Genotherapy.

II- Illustrate by formula only:

1. Succinyl-COA to Oxaloacetate.
2. Glucose-1-phosphate to Glucuronic acid.
3. Glucose-6-phosphate to Ribose-5- phosphate.

May 2003

All questions to be answered (formulae are must whenever possible):

1. **Write on:**

a) Steatorrhea.
b) Favism
c) Von Gierk's disease.
d) Albinism.
e) Fatty liver.
f) Gout.

2. **An individual who consumes 100g of protein loses 13.5g of nitrogen in the urine, 2g in the feces and 0.5g by other routes. This individual is most likely to be:**

a) A woman in her eighth month of pregnancy.
b) A 6-year-old child.
c) Recovering from major surgery.
d) A normal and healthy adult

3. **On biochemical basis explain:**

a) Glycerol 3-p-to lecithin.
b) Succinyl- CoA-to-oxaloacetate.
c) Cytochrome P_{450} .
d) Benefits of human cloning.
e) Point mutations.

4. **Write on:**

a) Hormones using CAMP as the second messenger.
b) Role of liver in carbohydrate metabolism during starvation.
c) Non-protein nitrogenous constituents of urine (NPN).
d) Two important compounds synthesized from phyenylalanine and tyrosin.
e) Apoptosis.

September 2003

Answer all the following questions:

1. **On biochemical basis explain:**

a) Glycerol 3-p-to-lecithin.
b) Acetyl CoA-to-acetoacetate.
c) Biosynthesis of lactose.
d) Glucose-6-phosphate-to-Ribose-5-phosphste.
e) Methionine-to-Homocysteine.

2. **Write differences between:**

a) Group I and group II hormones.
b) HMP shunt and Glycolysis.
c) L-amino acid oxidase and D-amino acid oxidase.
d) Type I and type II diabetes mellitus.
e) Oncogenes and tumor suppressor genes.

3. **Fully define:**

a) Classification of tumor markers and give two examples.
b) Cytochrome P_{450} .
c) Genetic code.
d) Growth factors receptors.
e) None-protein nitrogen in urine (NPN).
f) Advantage of breast feeding (human milk).

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January 2004

Answer all the following questions:

I- Write on the following:

1. Point mutations.
2. Characters of the genetic code.

II- On biochemical basis explain the following:

1. Glycolysis in RBCs.
2. Propionic acid to Succinyl-COA.
3. Glucose to Fructose.
4. Types of diabetes mellitus.

May 2004

Formulae are a must whenever possible:
Answer the following questions:

1. **Write on:**
   - **a)** Biochemical diagnosis of diabetes mellitus.
   - **b)** Importance of uronic acid pathway.
   - **c)** Growth factors receptors.
   - **d)** Sulphur in urine.
2. **On Biochemical basis explain:**
   - **a)** Phenylketonuria.
   - **b)** Indican formation.
   - **c)** Transamination.
   - **d)** Colostrum.
3. **Discuss:**
   - **a)** Sphingomyelin synthesis.
   - **b)** Lipotropic factors.
   - **c)** Phase I in xenobiotics.
   - **d)** Hormone sensitive lipase.
4. **Write on:**
   - **a)** Initiation stage of protein synthesis.
   - **b)** DNA polymerases.
   - **c)** Mechanism of action of group IIa hormones.
   - **d)** Calcitirol.

.....

Septemper 2004

Formulae are a must whenever possible:
Write on the following:

1. Ketogenesis and Ketosis.
2. Three products obtained from Glycine amino acid metabolism.
3. Key enzymes of Gluconeogenesis.
4. Thyroid hormones.
5. Lac.operon.
6. Abnormal constituents of urine.
7. Catabolism of haemoglobin.
8. Cytochrome p 450.
9. Apoptosis.
10. Decarboxylation o

January 2005

Write on the following:

1. Phosphorylation at substance level and give example.
2. Oxidative decarboxylation of pyruvate.
3. Ketosis.
4. None oxidative deamination.
5. Transmethylation.

June 2005

Formulae are a must whenever possible:

Answer the following questions:

1. **Write on:**
   - **a)** Role on liver in starvation.
   - **b)** Pathological constituents of urine.
   - **c)** Catabolism of haemoglobin.
2. **Give an account on:**
   - **a)** Sulphur storage diseases.
   - **b)** Nitrogen balance.
3. **Discuss:**
   - **a)** Glycogen storage diseases.
   - **b)** Lac-operon.
   - **c)** DNA polymerases.
4. **By formulae illustrate:**
   - **a)** Conversion of acyle-CoA to active acetate.
   - **b)** Synthesis of sphingomyelin.
   - **c)** Two shuttles of Glycolysis

.

September 2005

Formulae are a must whenever possible:
Answer the following questions:

5. **Write on:**
   - **a)** Regulation of kerb's cycle.
   - **b)** Key enzymes of Gluconeogenesis.
   - **c)** Mechanism of action of insulin hormone.
6. **Give an account on:**
   - **a)** Ketosis.
   - **b)** Fatty liver.
   - **c)** Lecithin metabolism.
7. **Write on:**
   - **a)** Four products obtained from glycine amino acid.
   - **b)** Four products obtained from phenylalanine amino acid.
   - **c)** Oxidative deamination.
8. **Give an account on:**
   - **a)** Post transcriptional modification.
   - **b)** Importance of human milk.
   - **c)** Iron absorption.

……

January 2006

Answer all the following questions:

I- Describe the differences between:

1. Liver and muscle glycogen.
2. Lipoprotein lipase and hormone-sensitive lipase.
3. Extramitochondrial and mitochondrial synthesis of saturated fatty acids.

II- Write on the sources and fates of the following:

1. Acetyl-CoA (active acetate).
2. Oxaloacetate.
3. Palmitate.

III- Account on the regulation of the following:

1. Acetyl-CoA caboxylase enzyme.
2. Glycogen synthesis enzyme.
3. Gluconeogenesis.

IV- Write on the following:

1. Causes of ketoacidosis.
2. Inhibitors of respiratory chain.
3. Lipotropic factors.

June 2006

Formulae are a must whenever possible:

Answer the following questions:

1. **With formulae only describe the formation of the following:**
   - **a)** Urea from ammonia.
   - **b)** Palmitic acid from acetyl-CoA.
   - **c)** 2-phosphoenolpyruvate from glyceraldehyde-3-phosphate.
   - **d)** Glycine from choline.
   - **e)** Porphobilinogen from succinyl-CoA.
2. **Writ accounts on:**
   - **a)** Role of adipose tissue in starvation.
   - **b)** Differences between human and cow milk.
   - **c)** Cytochrome P-450.
   - **d)** Proteinuria.
   - **e)** Lipotropic factors.
3. **Discuss the following:**
   - **a)** C-AMP nucleotide as a second messenger of group-IIa hormones.
   - **b)** Factors affecting iron absorption.
   - **c)** Substrate level phosphorylation.
   - **d)** Key enzymes of Gluconeogenesis.
   - **e)** Lipoprotein lipase enzyme.

……

January 2007

Answer the following questions:

1. **Write on:**
   - **a)** Pint mutaions.
   - **b)** Characters of the genetic code.
2. **On Biochemical basis explain.**
   - **a)** Glycolysis acid in RBCs.
   - **b)** Propionic acid → succinyl CoA.
   - **c)** Glucose → Fructose.
   - **d)** Types of diabetes mellitus.

May 2007

Formulae are must whenever possible

Answer the following questions:

I) With formulae only describe the conversion of the following:

1. Palmitoyl-CoA to ceramids.
2. Pyruvate to 3-phosphoglycerate.
3. Serine to cystine.
4. Glutamate to glutathione.
5. Succiny-CoA to porphobilinogen.

II) Write short notes on the following:

1. Biochemical functions of Glycolysis.
2. Ketosis.
3. L-glutamate dehydrogenase.
4. Methyl donors and methyl acceptors.

5- Effect of insulin on lipid metabolism.

III) Write very short notes on each of:

1. Proteins of milk.
2. Sulphates in urine.
3. Body calcium and plasma forms.
4. Inhibitors of respiratory chain.
5. Function of bile salts.

……

September 2007

All questions to be answer (formulae are must whenever possible):

On Biochemical basis explain:

1. Adrenalin and nor adrenalin hormones.
2. Role of adipose tissue in starvation.
3. Haem synthesis.
4. B-oxidation of fatty acid.
5. Bile salts.
6. Key regulatory enzymes of Gluconeogenesis.
7. Phase II xenobiotics metabolism.
8. Transmethylation.
9. Inorganic constituents of urine.
10. Regulation of lipolysis.

January 2008

Write a short account on:

1. Oxidative decarboxylation of pyruvate.
2. Inhibitors of respiratory chain.
3. Indican.
4. Types of lipases.
5. Mutienzyme complex (in extramitochondrial synthesis of fatty acids).
6. Synthesis of carbamoyl-phosphate.

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June 2008

All questions to be answered (formulae are must whenever possible):

On Biochemical basis explain:

1. Discuss omega oxidation of fatty acids.
2. Mention the factors which regulate fatty acid synthesis.
3. Write down the formulae of mineralocorticoids and mention the regulation.
4. Mention regulation of glycogen synthesis.
5. Explain Gluconeogenesis from Propionic acid.
6. Discuss metabolism of amino acid serine.
7. Write short notes on copper metabolism.
8. **Mention the enzymes deficient in:**
    - **a)** Acute intermittent hepatic porphyria.
    - **b)** Haemolytic anaemia.
    - **c)** Essential pentosuria.
    - **d)** Gaucher's diseases.
9. Discuss non protein nitrogenous compound of urine.

September 2008

All questions to be answer (formulae are must whenever possible):

On Biochemical basis explain:

1. Regulation of Krebs cycle.
2. Gout.

3. Alkaptonuria.
4. Illustrate by formula transformation of DOPA to epinephrine.
5. Two compounds synthesized from glycine.
6. Pathological constituents of urine.
7. Factors affecting calcium absorption.
8. Positive nitrogen balance.
9. On biochemical basis explain transformation of glycerol-3ptolecithin.
10. Beta oxidation of fatty acid.

……

January 2008

1. **With formulae only describe the following:**
   - **a)** Biosynthesis of ribose-5-phosphate.
   - **b)** Formation of ketone bodies.
   - **c)** Biosynthesis of epinephrine.
   - **d)** Formation of succinyl Co-A from Propionic acid.
   - **e)** Alpha oxidation of fatty acids.
2. **Discuss the following:**
   - **a)** Biochemical importance (functions) of glutathione.
   - **b)** Factors affecting calcium absorption.
   - **c)** Colostrum milk: definition, function and differences from mature milk.
   - **d)** Differences between group I and group ii hormones.

……

May, 2009

All questions are to be answered (formulae are a must whenever possible)

1- Discuss the following:

- **a)** Oxidative decarboxylation of pyruvate.
- **b)** Regulation of cholesterol biosynthesis.
- **c)** Desulfhydration reaction.
- **d)** Phase II- Xenobiotic metabolism.
- **e)** Non protein nitrogenous constituents of urine.
- **f)** Mechanism of action of glucagons hormone.

2- Write short notes on:

- **a)** Role of liver in fat metabolism during starvation.
- **b)** Inhibitors of the respiratory chain.
- **c)** Hemoglobin catabolism.
- **d)** Factors inhibiting calcium absorption.

3- Outline the biochemical role and deficiency of (name of the disease only).

a) Zinc **b)** Parathyroid hormone **c)** Lipotropic factors

4- Illustrate by formulae the metabolic interconversion of:

a) Glycine to glycine – betaine.

b) Lactate to glyceraldhyde -3-p.

c) Glucose – I-p to glucuronic acid.

d) B- hydroxybutyrate to acetyl- CoA.

5- Give the biochemical explanation of:

a) Hyperammonemia is toxic to the brain.

b) Carnitine shares in lipid transport.

6- Mention the name of the deficient enzyme of the following inborn errors:

a) Favism **b)** Refsum's disease **c)** Galactosemia

d) Albinism **e)** Lesch – Nyhan synd rome

Histology

June 2000

Answer the following question Illustrate your answer with diagrams:

1. **Discuss the structure and function of the following:**
   - **a)** The mucosa of the duodenum.
   - **b)** The process of Spermiogenesis.
2. **Report on:**
   - **a)** Blood capillaries.
   - **b)** Bowman's capsule.
   - **c)** One of the photoreceptors.
3. **Draw only labeled diagrams for two of the following:**
   - **a)** Mature (Graffian) follicle (L.M).
   - **b)** Pars distalis (L.M).
   - **c)** The great alveolar cell (E.M).

…….

September 2000

Answer the following questions Illustrate your answer with diagrams:

4. **Discuss the structure and function of the following:**
   - **a)** Intestinal villus.
   - **b)** Sertoli cell.
   - **c)** Pigmented epithelium of retina.
2. **Report on:**
   - a) Classical hepatic lobule.
   - b) Proximal convoluted tubules.
   - c) Corpus Luteum.
3. **Draw only labeled diagrams for the following:**
   - a) Oxyntic (parietal) cell (E.M).
   - b) The great alveolar cell (E.M).

…….

June 2001

Answer the following question Illustrate your answer with diagrams whenever possible:

1. Describe in details the different cells of the skin epidermis.
2. Enumerate the structures that affect blood pressure and give the details about the renal component that is involved in such effect.
3. **In a table form compare:**
   - a) The liver lobules.
   - b) Rods and cones.
4. Discuss the structure of the protein and steroid secreting cells giving a good example fort each.

May 2002

Answer the following questions illustrating your answers with diagrams:

1. **Report on the following:**
   - **a)** Antigen presenting cells.
   - **b)** Melanocyte and its clinical correlation.
   - **c)** Suprarenal cortex.
2. **Describe the and function of:**
   - **a)** Alveolar epithelium.
   - **b)** Proximal convoluted tubules.
   - **c)** Endometrium of uterus.
3. **Draw labeled diagram only for:**

   Ultrastructure of Hepatocytes.

September 2002

Answer the following questions illustrating your answers with diagrams:

1. **In a table form compare between the histological structure of:**
   - **a)** Medium sized artery and vein.
   - **b)** Parotid gland and pancreas.
   - **c)** Intrapulmonary bronchus and bronchiole.
2. **Describe the histological structure of:**
   - **a)** Thyroid follicles.
   - **b)** Sebaceous glands.
   - **c)** Thymic lobules.
3. **Draw labeled diagrams only for Ultrastructure of:**
   - **a)** Pigmented epithelium.
   - **b)** Sertoli cells.
   - **c)** Urinary filtration barrier.

September 2003

Answer the following questions illustrating your answers with diagrams:

1-Write an account on:

- **a)** General histological structure of blood vessels.
- **b)** Cortex of lymph node.
- **c)** Cortex of suprarenal gland**.**

2-Describe the structure and function of:

i. Hepatocytes.

ii. Great alveolar cells lining the lung alveoli.

iii. Pigmented epithelium of the retina.

3- Draw labeled diagram for the structure of:

1. Parietal (oxyphil) cells of the fundic glands (E.M).
2. Mature Graffian follicle.(L.M)
3. Filteration barrier of the kidney.(L.M)

May 2004

Answer the following questions: Illustrate your answers with diagrams whenever possible:

1- Give an account on:

a) Pigmented epithelium of the retina.
b) Fundic gland of the stomach.
c) Melanocyte.

2- Write a report on:

a) Renal corpuscle.
b) Sertoli cells.

3-Draw labeled diagram for:

a) A hepatocyte (E.M).
b) Great alveolar cell (E.M).

…….

September 2004

Answer the following questions illustrating your answers with diagrams:

1-Report on the following:

a) General structure of blood vessels.
b) Keratinoctytes.
c) Microscopic structure of renal corpuscle.

2-Describe the structure and function of:

a) Suprarenal cortex.
b) White pulp of spleen
c) Intestinal villi lining epithelium.

3- Draw labeled diagram only for:

a) Mature Graffian follicale (L.M).
b) Alveolar epithelium of lung (L.M).

June 2005

Answer the following questions illustrating your answers with diagrams:

1-Write an account on:

a) Sweat glands.
b) Bowman's capsule of the kidney.
c) Corpus Luteum of the ovary.

2-Report on the following:

a) Antigen presenting cells.
b) Parietal cells of the fundic glands of the stomach.
c) cells lining the trachea, then discuss one of them.

3-Draw labeled diagrams only for:

a) Rods of retina (E.M).
b) Sertoli cells of testis.(E.M)
c) Principal thyroid follicular cells (E.M).

…….

August 2005

Answer the following questions illustrating your answers with diagrams:

1-Write an account on:

a) Epidermis of the skin.
b) Cortex of lymph node.
c) Cortex of suprarenal gland.

2-Describe the structure and function of:

a) Rod cells of the retina.
b) Tracheal epithelium.
c) Hepatocytes.

3-Draw labeled diagram for the structure of:

a) Parietal (oxyphil) cells of the fundic glands (E/M).
b) Filtration barrier of the kidney.

June 2006

Answer the following questions illustrating your answers with diagrams:

1. **Write an account on:**
   - **a)** Keratinocyte and layers of epidermis.
   - **b)** Sertoli cells.
   - **c)** Endometrium of the uterus.
2. **Report on the following:**
   - **a)** Rods of retina.
   - **b)** Parietal cells of the fundic glands of the stomach.
   - **c)** cells lining the trachea, then discuss one of them.

3. **Draw labeled diagrams only for:**

   a) Proximal convoluted tubule of the kidney (L/M & E/M).
   b) Blood supply of the pituitary.
   c) Hepatocytes of the liver (E/M).

August 2006

Answer the following questions illustrating your answers with diagrams whenever possible:

d) Write an account on:

a) The process of Spermiogenesis.
b) Adrenal cortex.
c) Sweat glands.

e) Describe the histological structure and function of:

a) Intestinal villi.
b) Juxtaglomerular apparatus.
c) Endometrium of the uterus.

f) Draw labeled diagram for ultra structure of :

a) Rods of retina.
b) Follicular cells.
c) Parietal cells.

January 2007

Choose one correct answer:

1. **The red margin of the lip:**
   a) Is covered by keratinized st. sq. epithelium.
   b) Is red due to presence of deeply acidophilic cells.
   c) Is covered by modified thin skin.
   d) Is covered by simple squamus epithelium
   e) a and b.
2. **The circumvallate papillae:**
   a) Present mainly at the sides of the dorsal surface of the tongue.
   b) Scattered all over the dorsal surface of the tongue.
   c) Have no taste buds.
   d) Arranged along the sulcus terminalis.
   e) They are slender shape.
3. **Fundic glands:**
   a) Are simple branched alveolar glands.
   b) Their gastric pits are deep and wide.
   c) Long glands extending from muscularis mucosa to the base of the gastric pits.
   d) Mainly mucous secreting glands.
   e) All of the above.
4. **The parietal cells:**
   a) Are present in the intestinal crypts.
   b) Their cytoplasm shows acidophilic granules.
   c) They have extra ordinary number of mitochondria.

d) Responsible for production of Hcl in fundic glands.
e) c and d.

5. **Renewal of the epithelium of the crypts and villi is the function of :**
   a) Surface absorptive cells.
   b) Paneth cells.
   c) Stem cells.
   d) DNEC.
   e) All of the above.
6. **Paneth cells:**
   a) Proliferate to renew epithelium of the crypts.
   b) Are numerous in the villi of small intestine.
   c) Produce antibacterial agents.
   d) Are numerous in crypts of the large intestine.
   e) Have basophilic granules.
7. **Secretory (striated) ducts of the salivary glands:**
   a) Are lined by pseudostratified col. epith.
   b) Are present in the pancreas.
   c) Their lining cells have acidophilic cytoplasm.
   d) The lining cells have basophilic cytoplasm.
   e) None of the above.
8. **The centroaciner cells:**
   a) Constitute the intra-acinar portion of the intercalated ducts of the pancreas.
   b) Constitute the intra-acinar portion of the intercalated ducts of the parotid gland.
   c) They are columnar cells.
   d) They continue as striated ducts.
   e) None of the above.
9. **Hepatic blood sinusoids:**
   a) Have well developed basal lamina.
   b) Are present in the portal area.
   c) Their endothelial cells have gaps, fenesrate and deficient basal lamina.
   d) Form the morphological axis of the classic lobules.
   e) Converge to form the sublobular vein.
10. **As regard the gall bladder:**
    a) Its lumen is lined by stratified squamous epithelium.
    b) The lining cells are col. and ciliated.
    c) No lamina propria in its wall.
    d) Its wall consists of mucosa, submucosa, muscularis externa and adventitia.
    e) No muscularis mucosa, no submucosa in its wall.
11. **Stratum granulosum:**
    a) Consists of one layer of columnar cells.
    b) Its cells contain large irregular basophilic keratohyaline granules.
    c) Its cells contain elidine and densely packed keratin.
    d) Its cells are highly mitotic and responsible for renewal of epidermal cells.
    e) All of the above.
12. **Melanocytes:**
    a) Depend on the presence of lipase enzyme in melanin synthesis.
    b) Are scattered in the stratum spinosum.
    c) Are also called melanophores because they contain melanin pigments.
    d) Secret melanin granules by cytocrine secretion.
    e) Secret melanin by holocrine secretion.
13. **The epidermal cells which act as antigen presenting cells are:**
    a) Merkel's cells.
    b) Langerhan's cells.

c) Melanocytes.
d) Keratinocytes.
e) None of the above.

14. Merocrine sweat glands:
a) Are located in the axilla and anal region.
b) The secretory part is lined with a single layer of cuboidal cells.
c) Located in the skin throughout most of the body.
d) Are under the control of hormones.
e) Are simple tubuloalveolar gland.

15. In the structure of hair
a) The cuticle is formed of tapering cornified cells:
b) Both the cuticle and the cortex contain hard keratin.
c) Cells of the medulla interdigitate with those of internal root sheath.
d) The cuticle contains melanin pigment which gives the hair its color.
e) The cortex consists of shrunken polygonal cells.

16. Bowman's gland of the olfactory mucosa secret:
a) Serous secretion
b) Mucous secretion
c) Substances which trap particulate matter.
d) Seromucous substance.
e) None of the above.

17. Brush cells of the tracheal epithelium:
a) Are argentaffin – like cells.
b) They constitute 40% of the lining cells.
c) Are sensory chemoreceptor cells.
d) Secrete mucinogen granules.
e) Are slender columnar cells with apical motile cilia.

18. The name heart failure cells is termed to:
a) Small pneumocytes.
b) Large pneumocytes.
c) Alveolar macrophages.
d) Clara cells.
e) Capillary endothelium.

19. Great alveolar cells:
a) Contain pinocytotic vesicles in their cytoplasm.
b) Share in the blood air barrier.
c) They make 30% of the alveolar surface.
d) Contain multivesicular bodies and lamellar bodies.

20. Clara cells:
a) Present in the lining epithelium of all bronchioles.
b) Are columnar cells with apical microvilli.
c) Their cytoplasm contains apical secretory granules.
d) Produce surfactant.
e) b and c

June 2007

Answer the following questions illustrating your answers with diagrams:

1. Write an account on the keratinocytes.
2. Describe the structure of different types of cells in the olfactory epithelium.

3. Describe the histological structure of the pars nervosa of the pituitary gland showing the significance of its connection with the C.N.S.
4. Report on the structure and function of the parietal cells of the fundic glands of the stomach.
5. Describe the histological structure and function of podocytes
6. Give an account on the corpus luteum.
7. Give an account on the circumvallate papillae.
8. Draw labeled diagram for the electron microscopic structure of rods of the retina.
9. With a labeled diagram only describe the process of Spermiogenesis.

August 2007

Answer the following questions illustrating your answers with diagrams:

1. Discuss in details the epithelial cells covering the intestinal villi.
2. Give an account on the structure of the proximal convoluted tubule of the kidney.
3. Discuss the structure and function of sertoli cells.
4. Discuss the structure and function of alveolar epithelium.
5. Discuss the structure and function of follicular cells of the thyroid gland.
6. Give an account on the endometrium of the uterus.
7. Give an account on Melanocytes.
8. Draw only labeled diagram showing the E/M structure of the liver cells.
9. Draw only labeled diagram showing the E/M structure of cells of pigmented epithelium of the retina.

May 2008

Answer the following questions illustrating your answers with diagrams:

1. Describe the histological structure of the great alveolar cells.
2. In a table form compare between the proximal and distal convoluted tubules of the kidney.
3. Write an account on the duct portion of the salivary glands.
4. Give an account on cells controlling blood calcium level.
5. Describe the histological structure of the endometrium (Mucosa of the uterus) in relation to the menstrual cycle.
6. Mention the different types and structures of the brain barriers.
7. With labeled diagram only describe the (E.M) structure of hepatocyte.

8. Draw a labeled diagram for the (E.M) structure of the pigmented epithelium of the retina.

September 2008

Answer the following questions illustrating your answers with diagrams:

1. Describe the histological structure of the renal corpuscle.
2. Describe the lining epithelium of the fundic gland.
3. Give an account on Melanocytes.
4. Write an account on olfactory epithelium.
5. Describe the histological structure of the thyroid gland

With labeled diagram only describe:

1. Electron microscopic structure (EM) of the rods of the retina.
2. Histological structure (LM) of the mature graffian follicle of the ovary.

……..

May, 2009

I- Describe the histological structure of the following, illustrating your answer with diagram:

1- Sebaceous glands.

2- Exocrine pancreas**.**

3- Primary ovarian follicles.

4- Proximal convoluted tubules of the kidney.

5-Enteroendocrine cells.

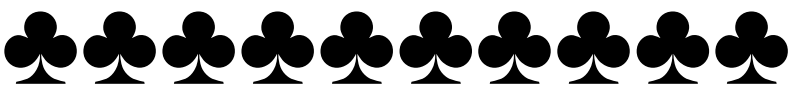
6- Adrenal medulla.

II- Mention the histological structure of the following:

7- Interstitial cells of Leydig.

8- Tympanic membrane.

9- Choroid plexus.



Physiology

May 2000

Answer the following questions:

1. **Discuss the following:**

   a) Functions of the thalamus.
   b) Effects of removal or lesions of area6.
   c) Types of brain waves.

2. **Give an account on:**

   a) Inverse stretch reflex.
   b) Chemical transmission at the basal ganglia.
   c) The near reflex and Argyll Robertson pupil.

3. **Discuss the following:**

   a) Control of secretion and functions of the Antidiuretic hormone.
   b) The menstrual cycle and its hormonal regulation.
   c) Dwarfism and cretinism.

4. **Give an account on:**

   a) Role of the kidney in the regulation of the acid-base balance.
   b) Determination of the direction of sound.
   c) Regulation of the body temperature during exposure to hot weather.

September 2001

Answer the following questions:

3. **Discuss the following:**

   a) Effect of hemisection of the spinal cord.

   b) Types of intracranial headache.

   c) Excitatory neurotransmitters.

4. **Give an account on:**

   a) Role of cerebellum in control of voluntary movements.

   b) Characters of Parkinson's disease.

   c) Binocular vision & its requirements.

5. **Give an account on:**

   a) Function of thyroid hormones and control of thyroid activity.

   b) Addison's disease.

   c) Function of Sertoli cells.

6. **Discuss the following:**

   a) Glucose transport by the renal tubules.

   b) Higher control of Micturition.

c) Types and causes of deafness.

d) Regulation of body temperature on exposure to cold.

January 2002

Give an account on each of the following:

1. Functions of the thalamus.
2. a- Effects of hemisection of the spinal cord (Brown-sequard syndrome).
   b- Effects of hypoxia and drugs on synaptic transmission.
3. Glucose reabsorption by the renal tubules.
4. Definition, causes, types and treatment of tetany.
5. Factors affecting basal metabolic rate (B.M.R.).

May 2002

Answer the following questions:

Give an account on each of the following:

1. a- The endogenous analgesia system.
   b- Interneurons and their functions.
2. a- Functions and effects of removal of area (4).
   b- Inverse stretch reflex.
   c- Manifestations of cerebellar disease.
3. a- Effects of hyperparathyroidism.
   b- Transmission of sound waves through the cochlea.
   c- Creatinine and urea clearance.
4. a- Effects and control of insulin H.
   b- Functions of testicular androgens and control of testicular functions.
5. a- Light and dark adaptation.
   b- Binocular vision.
   c- Effect of exposure to cold.

September 2002

Answer the following questions:

7. **Discuss in brief the following:**

a) Effects of removal of area 6.
b) Properties of the stretch reflex.

8. **Give an account on :**
   a) Chemical transmission at the basal ganglia.
   b) Light and dark adaptation.
9. **Give an account on :**
   a) Paradoxical sleep and its characteristics.
   b) Sensory aphasia.
10. **Give an account on :**
    a) Functions of Antidiuretic hormone and control of its secretion.
    b) Endocrine functions of the placenta.
11. **Give an account on :**
    a) Cushing's syndrome.
    b) The Respiratory Quotient(RQ) and its importance
12. **Give an account on :**
    a) Role of the kidney in regulation of the acid-base balance.
    b) Sensory and motor innervation of the urinary bladder.
    c) Stimulation of olfactory receptors and the nervous pathway of smell.

January 2003

Answer all the following questions:

1. Inverse stretch reflex.
2. a- Joint receptors.
   b- Quadrant lesions of the spinal cord.
3. Formation, composition and measurement of the glomerular filtrate.
4. Causes and manifestations of hyperthyroidism.
5. R.Q its importance and factors affecting it.

May 2003

Answer the following questions:

Give an account on each of the following:

1. a- Reffered pain and its mechanism.
   b- Functions of the thalamus.
2. a- Biogenic amines and amino acids transmitters.
   b- Causes and characteristics of Parkinson's disease.

3. a- Role of the hypothalamus in the control of emotional reactions.
   b- Ametropia.
4. a- Physiological effects of insulin H and control of its secretion.
   b- Cushing's syndrome.
5. a- Factors affecting spermatogenesis.
   b- Specific dynamic action.
6. a- Role of the kidney in the acid-base balance.
   b- Determination of the direction of sound.
   c- Taste buds, their distribution on the tongue, mechanism of stimulation and adaptation of taste.

September 2003

Answer the following questions:

Give an account on each of the following:

6. a- The endogenous analgesia system.
   b- Interneurons and their functions.
7. a- Properties of the stretch reflex.
   b- Definition and causes of Nystagmus.
8. a- Classifications of aphasias.
   b- Accommodation.
9. a- Functions and control of glucocorticoids.
   b- Tetany.
10. a- Hormones controlling growth and functions of breast.
    b- Factors increasing B.M.R.
11. a- Formation of the glomerular filtrate and determination of its rate.
    b- Sodium reabsorption from the proximal renal tubules.
    c- Impedance matching by the auditory ossicles.

January 2004

Give an account on each of the following:

1. Causes and effects of visceral pain.
2. a- Effect of lesion of area 6.
   b- Synaptic delay.
3. Effects of hypothyroidism.

4. Antidiuretic hormone (site of release, action and control).
5. Role of the kidney in electrolyte balance.
6. Regulation of body temperature on exposure to cold.

…….

May 2004

Answer the following questions:

Give an account on each of the following:

1. a- Properties of the stretch reflex.
   b- Effect of lesions of pyramidal tract at different levels.
2. a- Definition and causes of Nystagmus.
   b- Classifications of aphasias.
3. a- Rapid eye movement sleep and its characteristics.
   b- Visual acuity and factors affecting it.
4. a- Cushing syndrome.
   b- Physiological effects of insulin hormone and control of its secretion.
5. a- Endocrine functions of the placenta.
   b- Fever and chills.
6. a- Determination of renal blood flow.
   b- Types and causes of deafness.
   c- Taste buds, their distribution on the tongue and mechanism of stimulation.

August 2004

Answer the following questions:

Give an account on each of the following:

1. a- Cutaneous hyperalgesia (types, characters and mechanisms).
   b- Spinal shock (causes, duration and manifestations).
   c- Functions of interneurons.
2. a- Characters of Parkinson's disease.
   b- Role of hypothalamus in the control of emotional reactions.
3. a- Function and control of aldosterone.
   b- Regulation of blood glucose level.
   c- Function of testicular androgens and control of testicular functions.
4. a- Micturition reflexes in man.
   b- Transmission of sound waves through the cochlea.
5. a- Factors affecting intraocular pressure.
   b- Physiological factors affecting basal metabolic rate.

January 2005

Answer all the following questions:

Discuss the following:

1. a- Effect of lesion or removal of area 4.
   b- Cortical relay nuclei of the thalamus.
2. a- Effect of fatigue on synaptic transmission.
   b- Specific dynamic action of food.
3. a- Formation and composition of the glomerular filtrate.
   b- Glucose transport by the renal tubules.
4. a- Manifestations of hyperthyroidism.
   b- Functions of parathormone.

September 2005

Answer the following questions:

1. **Give an account on:**
   - **a)** Causes and manifestations of spinal shock.
   - **b)** Definition, types and mechanism of hyperalgesia.
   - **c)** Functions of intermeurons.
2. **Write short notes on:**
   - **a)** Hypothalamic syndromes.
   - **b)** Aphasia.
3. **Discuss the site of formation, control of secretion and functions of the following hormones:**
   - **a)** Thyrocalcitonin.
   - **b)** Antidiuretic hormone.
   - **c)** Insulin.
4. **Discuss in brief the following:**
   - **a)** Higher control of Micturition.
   - **b)** Impedance matching by the auditory ossicles.
5. **Write a short account on the following:**
   - **a)** Definition and factors increasing basal metabolic rate (physiological, pathological and chemical).
   - **b)** Ametropia.
   - **c)** Functions of the placenta.

January 2006

Write short notes on each of the followings:

1. Quadrant lesions of the spinal cord.
2. Synaptic delay.
3. Difference between fast and slow pain.
4. Causes and types of tetany.
5. Control of thyroid activity.
6. Glucose transport mechanism by renal tubules.
7. The excess R.Q and its significance.

May 2006

Answer the following questions:

1. **Write short notes on:**
   a) Protopathic and epicritic sensations.
   b) Properties of the stretch reflex.

2. **Give an account on:**
   a) Nystagmus (Definition, types and causes)
   b) Paradoxical sleep and its characteristics.
   c) Causes and characteristics of Parkinson's disease.

3. **Discuss in brief the following:**
   a) Control of secretion and functions of aldosterone.
   b) Physiological effect of insulin hormone.
   c) Endocrine functions of the placenta.

4. **Discuss the following:**
   a) Role of the kidney in the acid-base balance.
   b) Transmission of sound waves through the cochlea.
   c) Factors affecting spermatogenesis.

5. **Write a short account on:**
   a) Accommodation.
   b) Advantages and requirements of binocular vision.
   c) Specific dynamic action of food.

August 2006

Answer the following questions:

13. **Write short notes on:**
   a) Effect of lesions of pyramidal tract at different levels.
   b) Cutaneous hyperalgsia (types, characters and mechanisms).

14. **Discuss the following:**
   a) Aphasia (Definition and classification).
   b) Nystagmus (Definition, types and causes).
   c) Slow-wave sleep and its characteristics.

15. **Discuss in brief the following:**
   a) Emmetropia and ametropia.
   b) Factors affecting visual acuity.
   c) Regulation of body temperature on exposure to cold.

16. **Give an account on:**
   a) Role of the kidney in the acid-base balance.
   b) Determination of the direction of sound.

17. **Write short notes on:**
   a) Functions of Antidiuretic hormone and control of its secretion.
   b) Functions of testicular androgens and controls of testicular functions.
   c) Hormones produced by the placenta.

16 December 2006

A- Choose the correct answer:

1. Growth hormone was believed to act indirectly through stimulation of:

   a- Somatostatin.
   b- Somatomedin.
   c- Somatotropin.

2. Pain sensation is transmitted in the:

   a- Medical leminiscal system.
   b- Anterolateral system.
   c- Pyramidal tract.
   d- Rubrospinal tract.

3. Regarding adaptation of sensory receptors:

   a- All sensory receptors adapt to the same degree.
   b- Sensory receptors do not have property of adaptation.
   c- Muscle spindle is a fast adapting receptors.
   d- None of the above.

B- Write Yes or no:

1- GFR may be decreased by increased hydrostatic pressure in the glomerular capillaries. ( )

2- Osmotic diuresis may be caused by diabetes mellitus. ( )

3- The main function of iris is to provide accommodation. ( )

4- Far point is the conjugate focus of retina with accommodation at rest. ( )

January 2006 (1)

A- Choose the correct answer:

1. Which of the following is not characteristic of deficiency of ADH:
   - **a)** Polyuria.
   - **b)** Increased BMR.
   - **c)** Polydipsia.
   - **d)** Dehydration.
2. Amorphosynthesis results from lesion in:
   - **a)** Somatic sensory area I.
   - **b)** Somatic sensory area II.
   - **c)** Somatic sensory association area.
   - **d)** Primary motor area 4.
3. Primary hyperalgesia:
   - **a)** It is localized to the injured area (red area).
   - **b)** It is resulted from non nocuous stimuli.
   - **c)** The threshold of pain receptors is low.
   - **d)** All of the above true.

B- Write yes or no:

a) Renal blood flow may be determined by finding out the renal clearance of inulin.

( )

b) Increase in renal blood flow lead to increase glomerular filtration rate. **( )**

c) Amplitude of accommodation is the distance between far and far point**.( )**

d) Corrective lenses are needed to correct Presbyopia**. ( )**

January 2006 (2)

A- Choose the correct answer:

1. Which of the following is not involved in regulating plasma Ca^{++} level:
   a) Kidneys.
   b) Liver.
   c) Lungs.
   d) Intestine.
2. Fast pain:
   a) Is carried by A-delta fibers.
   b) Can be localized.
   c) Travel to the cortex through the neospinothalamic pathway.
   d) All of the above are true.
3. Receptors of proprioceptive sensation is:
   a) Krausae's organ.
   b) Merckel's discs.
   c) Pacinian corpuscles.

d) The hair end organs.

B- Write yes or no:

1. TMG is about 180 mg/minue. **( )**
2. The renal tubular secretion means the transport of substance from the glomerular capillary to Bowman's capsule. **( )**
3. The level of IOP is determined mainly by nervous factors and to a less extant by ocular factors. **( )**
4. The lens is able to change its shape due to the elasticity of its capsule and the plasticity of its substance. **( )**

January 2006 (3)

A- Choose the correct answer:

1. A young woman has low plasma TSH concentration but increases when she is given TRH, she is probably has:

a) Hypothyroidism due to a primarily abnormality in the thyroid gland.
b) Hypothyroidism due to a primarily abnormality in the pituitary gland.
c) Hypothyroidism due to a primarily abnormality in the Hypothalamus.

2. Which of the following is not a cause of extracranial headache?

a) Low C.S.F pressure.
b) Muscle spasm.
c) Irritation of nasal cavities.

3. Which of the following do not result from lesion of somatic sensory area I?

a) The muscles are paralyzed on the contralateral half of the body.
b) The person becomes unable to localize different sensations in the different parts of the body.
c) The person becomes unable to judge the weight of the objects.

B- Write yes or no:

1. High plasma level of ADH causes water diuresis. **( )**

2. Osmolar concentration of renal tubular fluid gradually increases as it passes through descending loop of Henle. **( )**

3. Vitamin A and B_2 are needed to maintain corneal transparency. **( )**

4. Decrease aqueous out flow leads to decrease IOP. **( )**

January 2007

Write short notes on each of the followings:

1. Causes and effects of visceral pain.
2. Effect of drugs on synaptic transmission.
3. Effect of lesion in area 6.
4. Actions of parathyroid hormone on bone and kidney.
5. Physiologic effects and control of aldosterone.
6. Micturition reflexes in man.
7. Factors affecting visual acuity.

May 2007

Write an account on:

1. Characters and effects of lesion of somatic sensory area I.
2. Effects of secretion of the dorsal roots.
3. Basic theories of sleep.
4. Expression by articulation.
5. Role of the hypothalamus in the control of body weight.
6. Type 1 diabetes, its probable causes and main signs.
7. Dwarfism and cretinism.
8. Functions of testosterone and control of its secretion.
9. Hormonal control of the breast.
10. The glomerular membrane, its permeability and the formation of the glomerular filtrate.
11. Endolymphatic potential.
12. Fever and chills.

September 2007

Write an account on:

1. Types & causes of tetany.
2. Physiological effects of thyroid hormone.
3. Stages of spermatogenesis and factor affecting it.
4. Functions of the placenta.
5. Respiratory Quotient and factors affecting it.
6. Spinal shock.
7. Effect of lesion of pyramidal tract at different levels.
8. Nystagmus.
9. Neocerebellar syndrome.
10. Sensory aphasia.
11. Formation, composition and measurement of the glomerular filtrate.
12. Cochlear microphonics.
13. Accommodation.
14. Visual acuity.

January 2008

Answer all the following questions:

1. Thalamic syndrome.
2. Functions of area 6.
3. Types of synaptic inhibition.
4. Physiological functions of parathormone.
5. Micturition reflexes.
6. Functions of tear film.
7. Mechanism of accommodation.

June 2008

1. *Central Nervous System:*

   a) Mention: The effect of hemisection of spinal cord (Brown-Sequard-Syndrome) at the level of the lesion.
   b) Discuss causes & 3 symptoms of thalamic syndromes.
   c) Briefly discuss syringomyelia.
   d) Discuss mechanism of secondary hyperalgesia.

2. *Central Nervous System:*

   a) Mention briefly only 3 characteristics of cerebellar ataxia.
   b) Define vertigo & its mechanism & mention 3 of its causes.
   c) Discuss the difference between static reflex (muscle tone) & dynamic stretch reflex.
   d) Define synaptic plasticity.

3. *Central Nervous System:*

   a) Mention 2 types only of motor aphasia.
   b) Briefly discuss 3 types of brain waves (EEG).

4. *Eye:*

   a) Define accommodation.
   b) Mention the functions of aqueous humor.
   c) Write on the causes of transparency of the cornea.

5. *Metabolism:*

   a) Define:
      - The specific dynamic action.
      - Respiratory quotient (RQ).
   b) Mention briefly 4 causes of obesity.

6. *Kidney:*

   a) Write the Role of Distal Convoluted Tubule in regulation of electrolyte (Na^+ & K^+) balance.
   b) State 4 of the factors affecting the glomerular filtration rate (GFR).

7. *Hearing:*

   a) How can the tensor tympani and stapedius muscles protect the ear?
   b) What are the 3 different ways which determine the loudness of the sound?

8. *Central Nervous System:*

   a) Mention the effect of posterior quadrant lesion of spinal cord.

   b) Discuss functions of area 6.

   c) Briefly discuss 2 causes of visceral pain.

   d) Discuss briefly causes of extracranial headache.

9. *Central nervous system:*

   a) Mention briefly Advantages of servo-assist functions of stretch reflex.

   b) Compare Reflex and motor tetanus.

   c) Discuss: functions of utricle and sacculae.

   d) Define: -After discharge.

   - Synaptic fatigue.

10. *Central nervous system:*

    a) Mention 2 types only of sensory aphasia.
    b) Briefly discuss slow-wave sleep.
    c) Write on rigidity as a sign of Parkinson's disease.

11. *Eye:*

    a) Define emmetropia.
    b) Mention the requirements of binocular vision.
    c) Write on the protective functions of the eyelids.

12. *Metabolism:*

    a) State 4 factors increasing RQ to above unity.
    b) Mention briefly 2 temperature-decreasing mechanisms.

13. *Kidney:*

    a) Define filtration fraction.
    b) Write about role of kidney in secretion of Titratable acid as a regulation of acid base balance.
    c) State 4 factors affecting the glomerular filtration rate (GFR).

14. *Hearing:*

    a) Write about impedance matching by the auditory ossicles.
    b) Mention briefly the cochlear microphonic potential.

15. *Endocrine System:*

    a) Define cretinism & dwarfism.
    b) Mention control of aldosterone hormone secretion.

c) Discuss the physiological functions of ADH.
d) Mention briefly 4 causes of tetany.
e) Discuss effect of thyroid hormone on protein synthesis.

16. Reproduction:

a) Discuss the phases of menstrual cycle.
b) State 4 functions of oestrogen during pregnancy.
c) Discuss 2 functions of the prostate gland.

17. Endocrine System:

a) Define cretinism & dwarfism.
b) Mention control of aldosterone hormone secretion.
c) Discuss the physiological functions of ADH.
d) Mention briefly 4 causes of tetany.
e) Discuss effect of thyroid hormone on protein synthesis.

18. Reproduction:

a) Discuss the phases of menstrual cycle.
b) State 4 functions of oestrogen during pregnancy.
c) Discuss 2 functions of the prostate gland.

May, 2009

1) Central nervous system:

a) Discuss: The difference between fast and slow pain…….

b) Mention briefly **3** cortical Relay nuclei of the thalamus……

c) Mention: **3** manifestation of reaction of degeneration in L.M.N.L……..

2) Central nervous system:

a) Discuss: **6** differences between post synaptic potentials and action potentials……

b) Discuss two of statokinetic postural reflexes……

c) Discuss: **6** difference between sensory and motor ataxia……

d) Give **3** difference between gamma and alpha rigidity…….

3) Central nervous system:

a) Define: Aphasia……..

b) Write briefly in tremors as one character of Parkinson disease……..

c) Discuss the role of hypothalamus in control of metabolism……..

d) Mention: **4** factors which cause wakefulness…….

4- Eye:

a) Define: Near point……

b) Give **4** causes of corneal transparency…….

c) Discuss: Mechanism by which the eye adjusts to various levels of illumination…….

d) Mention: Functions of the sclera……

e) Mention: Two advantages and two requirements of binocular vision…….

5) Metabolism:

a) Define: Excess RQ……

b) Mention: **4** pathological factors that decrease BMR……

6) Reproduction:

a) Mention: **4** endocrine factors affect spermatogenesis……

b) Mention: **4** function of seminal vesicles…….

c) Discuss the secretory phase of uterine (menstrual) cycle……..

d) Mention: **2** functions of progesterone during pregnancy……..

7) Endocrine system:

a) Define: gigantism & myxedema……

b) Mention: **4** physiological effects of insulin on carbohydrate metabolism……

c) Mention**: 4** effects of parathormone on bone……

d) Discuss briefly **2** physiological effects of diabetes insipidus……..

8) The Kidney:

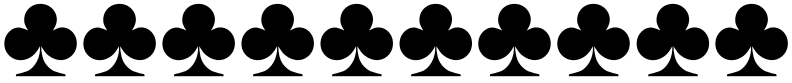
a) Mention: Role of vasa recta in the mechanism of urine concentration……

9) Hearing & Taste:

a) Mention briefly: Types & causes of deafness……..

b) Mention: Taste puds & their location……..

……



مادة السلوكيات

يناير 2004

أذكر بإيجاز (بدون شرح) مايلي:

1- المجالات التطبيقية لعلم النفس.

2- العوامل التي تؤثر على نمو الشخصية.

3- مراحل النمو النفسي الجنسي عند فرويد.

4- مميزات الشخصية الناضجة.

5- اسباب الهلاوس.

6- الأعراض المرضية التي تنشأ من اضطرابات الانتباه.

7- مراحل نمو الارتباط.

8- تقسيم الدوافع.

9- الطرق المختلفة للتعلم.

10- عرف مايلي:

أ – الأدراك.

ب- الهوا (Id).

ج- الشخصية .

د- النمو.

يونيو 2004

أجب بإيجاز عما يلي:

1- تعريف الأحلام **(deames)** ووظيفتها وتركيب الحلم.

2- عرف الحيل اللاشعورية **(defense mechanisms)** الأتية مع ذكر امثلة لها:

أ- تكوين الإستجابة المضادة**(Reaction formation)** .

ب- التقمص**(Identification)** .

3- مراحل النمو المعرفي(**Cognitive development**) (بياجيه).

4- تشوه الذاكرة**(Distortion of memory)**.

5- الأعراض المرضية التي تنشأ من إضطراب محتوى التفكير **(Disorders of content of thinking)**.

6- تعريف الذكاء**(Intelligence)**مع ذكر ثلاثة من الأختبارات التي تقيس الذكاء.

7- الصفات المميزة للشخصية المضادة للمجتمع**(Antisocial personality)**.

8- عرف الاتجاهات **(Attitudes)** مع ذكر العوامل المؤثرة في تغيير الاتجاهات.

9- اضطرابات الإنفعالات**(Emotions)**.

10- أذكر نظريات العدوان**(Aggression)** مع شرح نظرية واحدة فقط.

سبتمبر 2004

أجب عن الأسئلة الأتية:

==========

1- أذكر بدون شرح:

أ- أنواع الضلالات

ب- استخدامات اختبارات الذكاء.

ج- انواع فقدان الذاكرة (النساوة).

د- التمويه.

هـ- خطأ الادراك أو التأويل.

2- أذكر بإيجاز (بدون شرح):

أ- تعريف العدوان.

ب- الطرق المختلفة للتعلم.

ج- تعريف الأنفعالات.

د- اضطرابات الخبرة الإنفعالية.

3- أكتب بإيجاز فيما يلي:

أ- تعريف النكوص.

ب- تعريف الإسقاط.

ج- النوم الإنتيابي.

د- صفات الأم التي تؤذي طفلها.

هـ- المشاكل النفسية المصاحبة للشيخوخة.

4- أذكر فقط بدون تفصيل:

أ- مراحل النمو النفسي الجنسي عند فرويد.

ب- المكونات التي يتكون منها بناء الإتجاه.

ج- المجالات التطبيقية لعلم النفس.

د- الخصائص المميزة للشخصية الوسواسية.

هـ- العوامل التي تؤثر على نمو الشخصية

يوليو 2005

أذكر بإيجاز مايلي:

1- اضطرابات الذاكرة.(Disturbances of memory)

2- استخدامات اختبارات الذكاء.

3- الأعراض المرضية التي تنشأ من اضطرابات محتوى التفكير.

4- الموصلات العصبية الكيميائية التي لها علاقة بالنوم.(Neurotransmitters)

5- الفرق بين الكابوس والفزع الليلي.

6- نظرية السمات لتفسير الشخصية (ايزيك).

7- المجالات التطبيقية لعلم النفس.

8- النظريات المختلفة للعدوان مع شرح واحدة منهم.

9- اضطرابات الأنفعالات.

10- عرف الحيل الدفاعية اللاشعورية الاتية:

أ- التبرير.

ب- الإسقاط.

ت- النكوص.

ث- التعويض.

يوليو 2006

أذكر بإيجاز مايلي:

1- استخدامات اختبارت الذكاء.

2- انواع الضلالات.

3- عرف ما يلي:

أ- الهوا.

ب- الأحاسيس.

ت- الأحلام.

ث- العدوان.

4- اسباب الهلاوس.

5- مميزات الشخصية الناضجة.

6- العوامل المؤثرة في تغيير الأتجاهات.

7- تقسيم الدوافع.

8- طرق التعلم المختلفة مع شرح واحدة منهم.

9- أغراض الحيل العقلية كأسلوب من أساليب التوافق السوي.

10- الفرق بين الكابوس والفزع الليلي.

سبتمبر-2006

أذكر بإيجاز مايلي:

1- عرف الإسقاط مع ذكر امثلة له.

2- سلس البول الليلي وطرق علاجه.

3- عرف:

أ- الإنفعالات.

ب- الدوافع.

ت- العوان.

ث- العلم.

ج- الأحلام.

4- النظريات المختلفة للدوافع مع شرح واحدة منهم.

5- نظرية التحليل النفسي للعدوان.

6- صفات الأم التي تؤذي طفلها.

7- محققات الذات عند روجرز.

8- اضطرابات الإدراك.

9- العوائل التي تساعد على رفع كفاءة التعلم والتذكر.

10- أنواع الضلالات.

يونيو-2007

أذكر بإيجاز مايلي:

1- مراحل الأضطراب الإنفعالي التي يمر بها الطفل نتيجة دخوله المستشفى.

2- عرف كلا مما يأتي:

أ- علم النفس.

ب- الأنا.

ت- الأنفعالات.

ث- العدوان.

ج- التعلم.

3- سمات الشخصية الوسواسية.

4- خصائص الإتجاهات.

5- وسائل تخفيف العدوان .

6- استخدامات اختبارات الذكاء.

7- أنواع الضلالات.

8- سلس البول الليلي.

9- العوامل الشخصية التي تؤثر على الإدراك.

10- أغراض الحيل العقلية كأسلوب من أساليب التوافق السوي.

سبتمبر - 2007

أذكر بإيجاز مايلي:

1- أنواع الضلالات.

2- أسباب الهلاوس.

3- اختبار وكسلر للذكاء.

4- الفرق بين الكابوس والفزع الليلي.

5- نظرية السمات لتفسير الشخصية (ايزنك).

6- النمو الأنفعالي.

7- النظريات المختلفة للعدوان.

8- اضطرابات الأنفعالات.

9- الطرق المختلفة للتعلم.

10- عرف الحيل اللاشعورية الأتية:

أ- التبرير.

ب- النكوص.

ت- الإسقاط.

ث- التعويض.

ج- الكبت.

يونيو -2008

أذكر بإيجاز مايلي:

1- العومل الشخصية التي تؤثر غلى الإدراك.

2- استخدامات اختبارات الذكاء.

3- العوامل التي تؤثر على اختزان الذاكرة مع تعريف الاختزان.

4- وسائل تخفيف العدوان.

5- سمات الشخصية المضادة للمجتمع.

6- مراحل الإضطراب الإنفعالي التي يمر بها الطفل عند دخول المستشفى.

7- الطرق المختلفة للتعلم مع شرح واحدة منها.

8- الفرق بين الكابوس والفزع الليلي.

9- اضطراب الإنفعالات.

10- عرف كلا من:

أ- الكبت.

ب- الإسقاط .

ت- الإعلاء.

ث- النكوص.

ج- التعويض.

سبتمبر-2008

أذكر بإيجاز مايلي:

1- أنواع الضلالات.

2- أسباب الهلاوس.

3- أختبار وكسلر للذكاء.

4- المجالات التطبيقية لعلم النفس.

5- المشاكل الرئيسية التي يواجهها المس.

6- مميزات الشخصية الناضجة .

7- تأثير الإنفالات على النفس والجسد.

8- النظريات المختلفة للدوافع مع شرح واحدة منها.

9- العوامل المرتبطة بالعدوان. 10- طريقة التعلم بالإستجابة الشرطية.

يونيو -2009

أجب عن الأسئلة الآتية:

1- حضر طفل إلى استقبال المستشفى للإصابات وتوجد به علامات الضرب المبرح على الرأس والجسد وحرق على الجلد بحديد ساخن وتم التعرف على أن هذه الإصابات تمت بواسطة الأم ، فما هى الصفات التى يمكن أن نجدها فى هذه الأم؟

2- عرف:

أ- فترة النمو الحرج .

ب- الانفعالات.

ت- الكبت.

3- أهم الاختبارات التى تستخدم فى قياس الذكاء. مع ذكر اثنان من استخداماتها.

4- سمات الشخصية شبه الفصامية.

5- الفارق بين النوم التقليدى ونوم الحركات العينين السريعة.

6- النظريات المختلفة للدوافع مع شرح واحد منها.

7- العوامل المرتبطة بالعدوان مع ذكر وسائل تخفيفه.

8- العوامل التى تحدد مدى اختيارنا وانجذاب اهتمامنا.

9- التعلم بالاستجابة الشرطية.

10- ثلاثة عوامل تساعد على رفع كفاءة التعلم والتذكر. 11- اثنين من العوامل البيولوجية التى تؤثر فى نمو الشخصية.

11- 12- العوامل التى تجعل التفكير فعالا. 13- الطرق المستخدمة فى التغلب على المنبهات المشتتة.

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GOOD LUCK