

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

4th Semester Summative Assessment

ئەم پەراوەى بەردەستت بەيارمەتى زۆرىنەى خويندكارانى قۇناغى دووهم
كۆكراونەتەو و ئەم خويندكارانە رېكيان خستوونە و وەلامى
پرسيارەكانيان داووتەو.

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وەك پاداشتىك بۇ ماندووبوونيان صەلاواتىك بنىرە بۇ پىغەمبەرى خوشەويست.

اللَّهُمَّ صَلِّ عَلَى مُحَمَّدٍ وَآلِ مُحَمَّدٍ

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Gastrointestinal Tract Short Answer Questions



1- Enumerate anomalies of the biliary system? (Embryology)

Ans/

- Duplication of the gallbladder
- Biliary hypoplasia
- Extrahepatic biliary atresia

2- Write notes about the gallbladder? (Liver, gallbladder & portal vein)

Ans/

The gall bladder lies adherent to the undersurface of the liver at the junction of the right and quadrate lobes. It acts as a reservoir for bile which it concentrates. The pear-shaped gallbladder can hold up to 50 mL of bile. The gall bladder comprises a fundus, a body and a neck in which Peritoneum completely surrounds the fundus of the gallbladder and binds its body and neck to the liver. The hepatic surface of the gallbladder attaches to the liver by connective tissue of the fibrous capsule of the liver.

3- Outcome of H.pylori? (Physiology of Stomach)

Ans/

- Gastric cancer
- Gastric ulcer
- Gastritis
- Peptic ulcer

4- Write about anatomical surface and line of abdominal wall? (Symptomatology)

Ans/

- **Subcostal plane** passes through the inferior border of the 10th costal cartilage on each side & the body of the third lumbar (L3) vertebra.
- **Transtubercular plane** passes through the iliac tubercles and the body of the fifth lumbar (L5) vertebra.
- **Mid-clavicular plane** passes from the midpoint of the clavicle to the mid-inguinal point.
- The abdomen can also be divided into 4 quadrants (upper left & right and lower left & right) which are defined two planes one horizontal (transumbilical) and one vertical (median).
- **Transumbilical plane** passes through the umbilicus and the intervertebral disc between the third (L3) and the fourth (L4) lumbar vertebrae.
- **Median plane** passes longitudinally through the body dividing it into right and left halves.

5- Write a short note about the anti-reflux mechanisms that prevent GERD? (Salivation & swallowing)

Ans/

- Muscle of the lower 2-5 cms. of esophagus. Above its junction with the stomach is slightly thickened & function as lower esophageal sphincter (LES).
- Short portion of esophagus below the diaphragm before reaching the stomach has a valve like action as it becomes curved during any increased intra-abdominal pressure (as coughing, straining or hard breathing) so preventing reflux of acidic stomach contents to lower esophagus.

6- Enumerate factors keeping the liver in position ? (Liver, gallbladder & portal vein)

Ans/

- Hepatic veins connecting the liver to the IVC.
- Intra-abdominal pressure maintained by the tone of abdominal muscles.
- Peritoneal ligaments connecting the liver to the abdominal walls

7- Enumerate features of small bowel on Plain radiography? (GIT investigations)

Ans/

	Small bowel
valvulae conniventes	Present
number of loops	many
Distribution of loops	central
haustra	absent
diameter	3-5 cm
radius of curvature	small
Solid feces	absent

8- Classify salivary glands according to their type of secretion? (Salivation & swallowing)

Ans/

- Serous Glands mainly made up of serous cells. secrete thin and watery saliva containing enzymes.
Eg/ Parotid glands
- Mixed Glands made up of both serous and mucus cells. Eg: Submandibular, labial glands are mixed
- Mucus Glands mainly made up of mucus cells. secrete thick, viscous saliva with high mucin content.
Eg/ Sublingual glands, Lingual mucus glands

9- Write short note about the involuntary stage of swallowing ? (Salivation & swallowing)

Ans/

Automatic (involuntary) stage: it is automatic & can not be stopped voluntarily. Consist of 2 stages

- Pharyngeal stage: The food enters the pharynx stimulates the swallowing receptors around the pharyngeal opening & impulses pass to the brain stem to initiate a series of automatic pharyngeal contractions.
- Esophageal stage: Esophagus conducts food from pharynx to the stomach. (9 sec) Normally it has 2 types of peristaltic movements(PMs): primary & secondary

10- Write short note about liver lobes? (Liver, gallbladder &portal vein)

Ans/

The lobes of the liver are classified into two types:

- Anatomical Lobes: On the diaphragmatic surface, the liver is divided into two lobes, right and left, by the attachment of the falciform ligament and on the visceral surface, the liver is divided into four lobes: (a) right lobe. (b) left lobe, (c) quadrate lobe, and (d) caudate lobe
- physiological lobes: The liver is divided into right and left physiological lobes by an imaginary sagittal plane/line (Cantlie's plane/line), on the posteroinferior surface this plane passes through the fossa for gallbladder, to the groove for inferior vena cava (IVC).

11- Enumerate 5 features of ileum? (Anatomy of small & large intestine)

Ans/

Features	Ileum
Position and length	3.5 m in length (distal three-fifths) and is mostly in the right lower quadrant
Walls	Thinner and less vascular
Lumen	Narrower (diameter 3.5 cm)
Plicae circulares	Smaller and sparsely set
Villi	Less, shorter, thinner, and finger-like
Aggregated lymph follicles	Large oval and more in number, and found throughout the extent of ileum being maximum in the distal part (Peyer's patches)
Mesentery	Attached below and to the right of the aorta
Arterial arcades	Four or five rows with short vasa recta

12- Enumerate boundaries of the inguinal canal? (Anatomy of abdominal wall & peritoneal cavity)

Ans/

Anterior wall: Aponeurosis of obliquus externus abdominis and Obliquus internus abdominis (lateral third of wall).

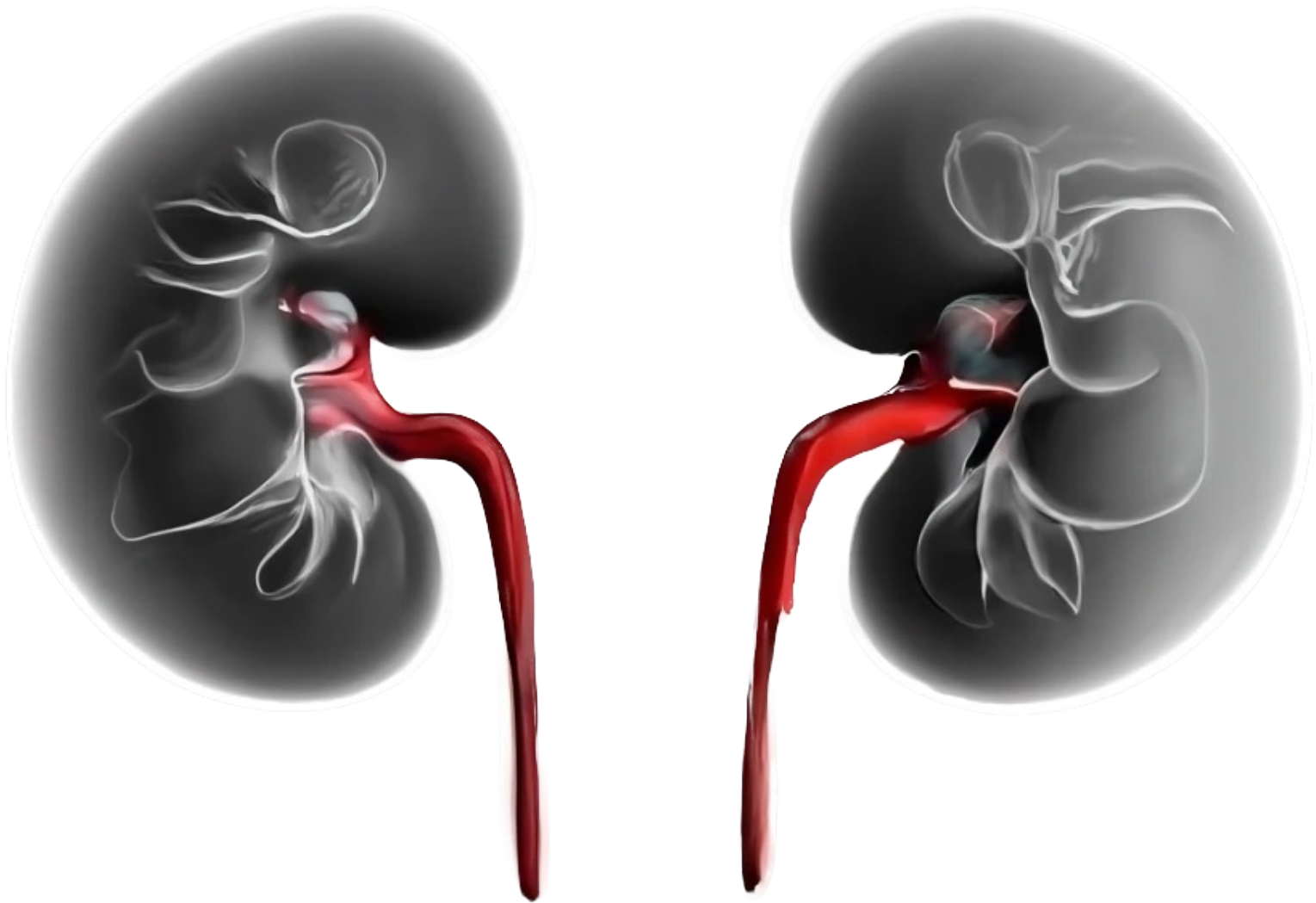
Posterior wall: Transverse fascia and conjoint tendon medially.

Roof: arched lower fibers of obliquus internus and transversus abdominis.

Floor: inguinal ligament, and medially is lacunar ligament.

Urinary System

Short Answer Questions



1- what are the indications of the initiation of the dialysis? (Chronic kidney disease)

Ans/

Indications for the Initiation of Dialysis include uraemic symptoms, acidosis, pericarditis, fluid overload and hyperkalaemia.

2- Paraphrase short discussion about factors which are important in urinary K excretion?

(Potassium)

Ans/

- **Aldosterone secretion:** This is increased directly by hyperkalaemia (and hypovolaemia) and suppressed by hypokalaemia, causes controlling K^+ in the normal range (3.5 -5.0mmol/L). Aldosterone enhances Na^+ absorption through the epithelial sodium channel (ENaC). As luminal electronegativity increases with Na^+ absorption, Cl^- uptake is enhanced along paracellular pathways, with secretion of K^+ and H^+ back into the lumen.
- **Flow in the distal tubule** activates stretch-sensitive K^+ channels causes increase urinary K^+ loss.
- **Increase tubular sodium delivery** causes increase luminal sodium-activating ENaC directly.
- **ADH or vasopressin** may stimulate (some) sodium reabsorption, so increase K^+ loss.
- **Alkalosis.**

3- CT-KUB and CT-urography how use in kidney disease? (Radiological imaging of the urinary tract)

Ans/

Uses of both CT-KUB and CT-urography:

1. Investigation of renal and ureteric stone, Assessment of stone size, location and stone density.
2. Investigation of renal and ureteric tumors, differentiating between malignant and benign renal masses.
3. Detection and localization of the site of intrarenal and perirenal collections of pus.
4. "Staging" (grading) of renal injury.
5. Investigation and staging of bladder tumors.

4- Categorise the hormones that act on kidney? (Urinary Introduction)

Ans/

The main hormones that act on the kidney are:

- 1- **Antidiuretic hormone (ADH)** – Peptide which is released from the posterior pituitary gland and promotes water reabsorption in the collecting duct.
- 2- **Aldosterone** – Steroid hormone that is produced by the adrenal cortex and promotes sodium and water reabsorption in the collecting ducts.
- 3- **Natriuretic peptides (NPs)** – These are produced by cardiac myocytes and promote sodium and water excretion in the collecting ducts.
- 4- **Parathyroid hormone (PTH)** – This protein is produced by the parathyroid gland and promotes phosphate excretion and calcium reabsorption, as well as vitamin D production.

5- write the neurological control of urinary bladder? (Anatomy of the lower urinary tract)

Ans/

Neurological control is complex, with the bladder receiving input from both the autonomic (sympathetic and parasympathetic) and somatic arms of the nervous system:

- Sympathetic – hypogastric nerve (T12 – L2). It causes relaxation of the detrusor muscle, promoting urine retention.
- Parasympathetic – (S2-S4). Increased signals from this nerve cause contraction of the detrusor muscle, stimulating micturition.
- Somatic – pudendal nerve(S2-4). It innervates the external urethral sphincter, providing voluntary control over micturition.

6- Genetic and epigenetic abnormalities may promote tumor development or growth in a number of ways? (Basic pathology and molecular biology)

Ans/

- Activation of oncogenes encoding transcription factors
- Inactivation (reduced expression) of tumour suppressor genes
- Overexpression of peptide growth factors, e.g. IGF type 1 in prostate cancer or the highly angiogenic VEGF in renal cancer
- Promoter methylation or acetylation inactivating genes encoding detoxification enzymes
- Gene fusions: a translocation occurs during mitosis to bring a promoter gene adjacent to a transcription factor gene on a particular chromosome, resulting in overexpression of this factor and abnormal positive growth control
- MicroRNA: tissue- specific, non- coding, short single- stranded RNA; regulates gene expression by interacting with messenger RNA

7- what is urinary tract host defence? (Urinary tract infection)

Ans/

1- Urine

- Acidic pH: intolerable by pathogens
- High urine osmolality
- Urinary inhibitors of bacterial adherence
- Competitive inhibitors of attachment to uroepithelial cells
- Mechanical flushing of urine flow

2- Mucosal immunity

- Urothelial secretion of cytokines and chemokines
- Mucopolysaccharide lining: increases difficulty of bacterial penetration
- Mucosal IgA
- In men: prostatic secretions contain bactericidal zinc and urethra is longer

8- From pathophysiology of nephrotic disease. Correlate how proteinuria cause clinical syndrome? (Acute kidney injury)

Ans/

1. The cause of hypoalbuminaemia is not as straightforward as one might think. The liver is actually capable of synthesizing 25g albumin day: much higher than urinary losses
2. Hypoalbuminaemia itself is not usually severe enough to directly explain the profound oedema of the nephrotic syndrome
3. Hyperlipidaemia is caused by increase hepatic lipoprotein synthesis secondary to reduced plasma oncotic pressure
4. Thrombotic tendency is caused by increase hepatic synthesis of procoagulant factors, increase platelet aggregation, and increase urinary losses of anticoagulant factors

9- Define paraneoplastic syndrome.categorize four paraneoplastic syndrome related to renal cell carcinoma? (Basic pathology and molecular biology)

Ans/

Paraneoplastic syndromes due to ectopic hormone secretion by the tumour occur in 30% of patients, Anaemia 30%, Hypertension 25%, polycythemia 5%, Hypercalcaemia 10-20%.

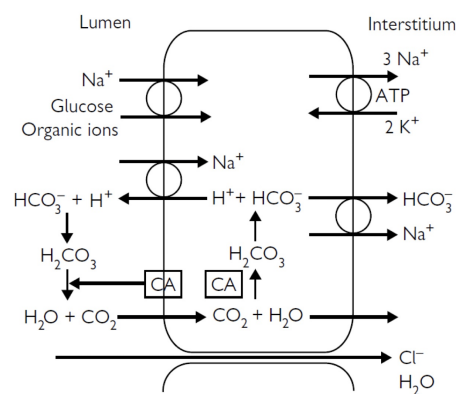
10- Discuss RAS in pathogenesis of hypertension? (Acid and Hypertension)

Ans/

- When blood flow to the kidneys decreases, renin is released, which converts angiotensinogen into angiotensin I
- Angiotensin I is converted into angiotensin II by ACE in lungs. angiotensin II can lead to increased blood pressure by causing vasoconstriction, increases Na^+ reabsorption, stimulates the release of aldosterone and adrenaline
- angiotensin II inhibits renin release, forming a negative feedback loop. However, in conditions leading to hypertension, this feedback mechanism might be disrupted, leading to sustained high levels of A2 and high blood pressure
- Aldosterone, regulated by the RAS, promotes Na^+ retention and K^+ excretion. This increases blood volume, which can raise blood pressure. It can also lead to inflammation and fibrosis, contributing to hypertension

11- Draw a diagram showing reabsorption of Na and other ions in the early part of PCT? (Urinary System Physiology)

Ans/



Early PCT

12- label the following? (Renal Microanatomy)

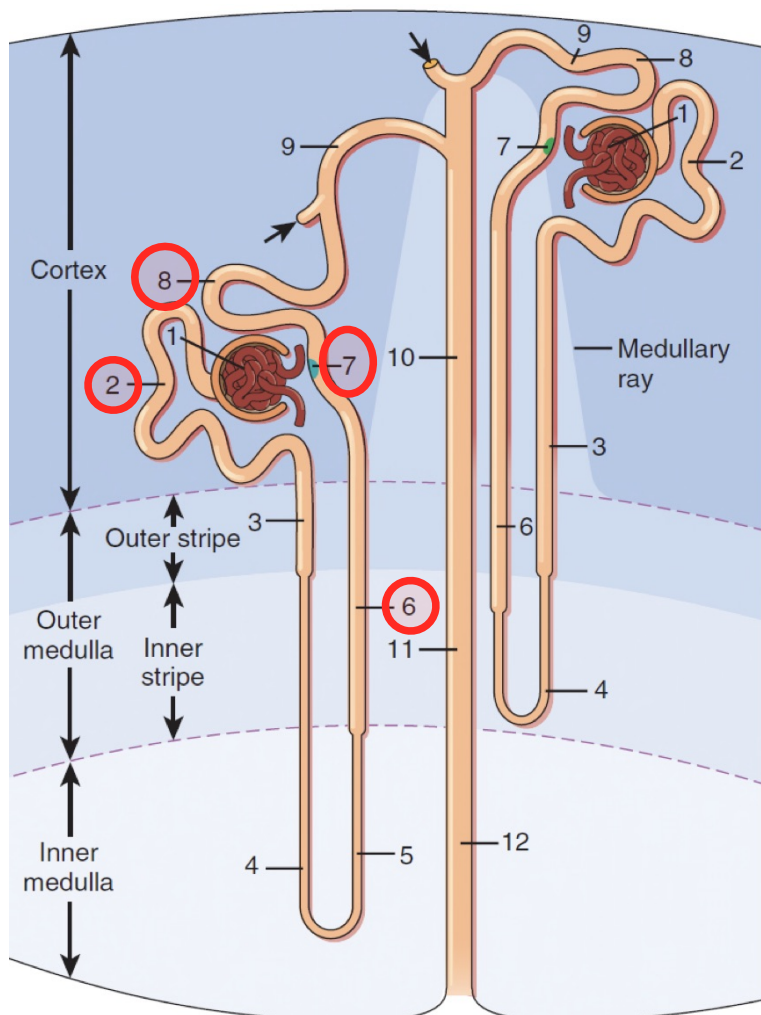
Ans/

2: Proximal convoluted tubule

6: thick ascending limb of loop of Henle

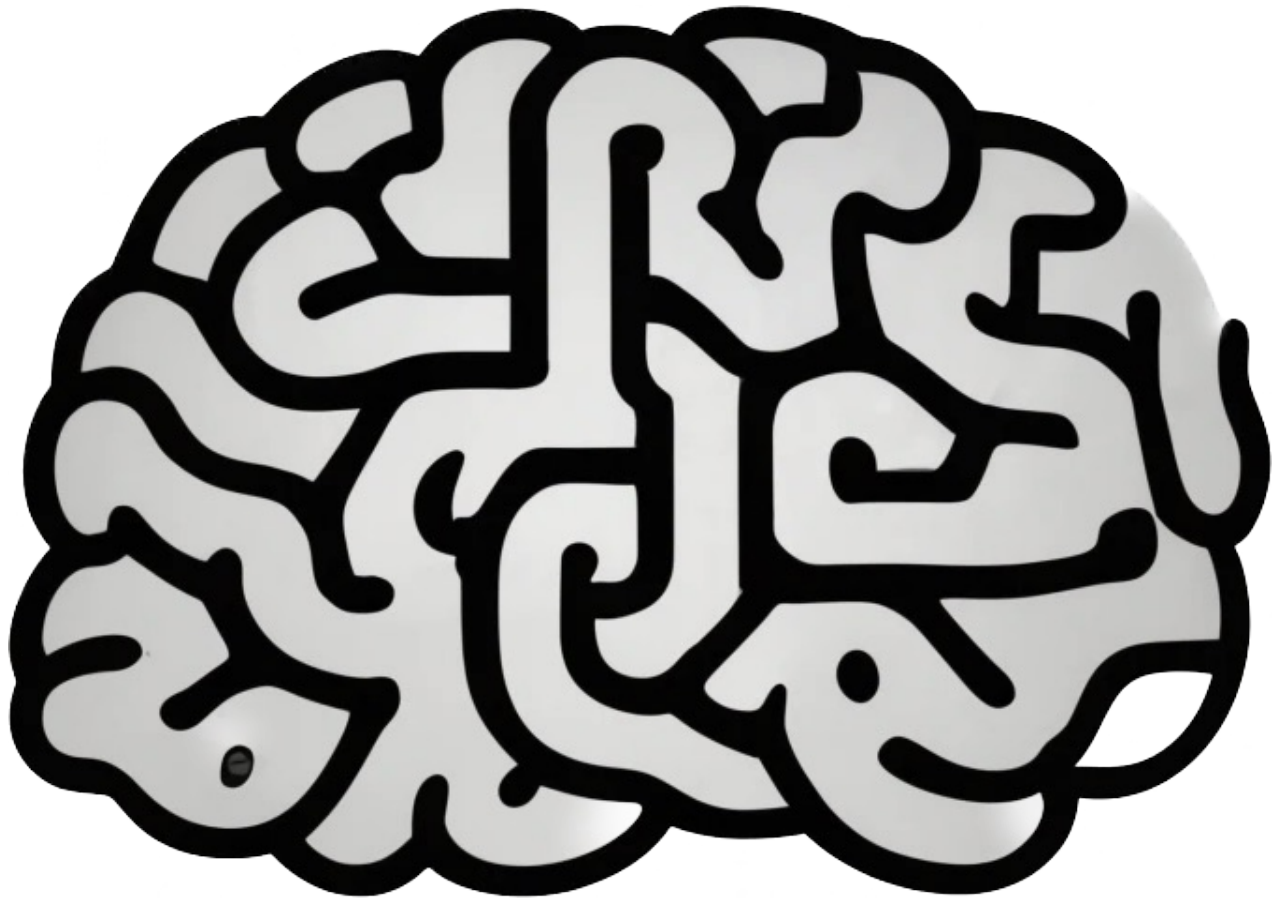
7: Macula densa

8: Distal convoluted tubule



Psychology

Short Answer Questions



1- Define human diversity and its impacts on healthcare? (Psychology: S1)

Ans/

Human diversity encompasses variations in race, ethnicity, culture, language, socioeconomic status, gender, sexual orientation, religion, and other characteristics.

1. Health Disparities:

- Differences in health outcomes and access to healthcare among various population groups.
- Factors contributing to disparities include socioeconomic status, discrimination, cultural barriers, and limited access to healthcare services.

2. Patient-Physician Relationship:

- Trust and rapport between patients and physicians are influenced by cultural competence and understanding.
- Effective communication, empathy, and respect for cultural beliefs enhance patient satisfaction and treatment adherence.

3. Health Beliefs and Practices:

- Cultural beliefs and practices influence health behaviors, treatment preferences, and decision-making.
- Understanding patients' cultural backgrounds facilitates shared decision-making and patient-centered care.

2- Main factors influencing health behaviour? (Psychology: S2)

Ans/ 1- Individual Factors. 2- Social Factors. 3- Environmental Factors.

3- write about Cognitive change of aging? (Psychology: S2)

Ans/

- 1- Memory: Aging is associated with changes in memory function, including declines in episodic memory (recall of specific events).
- 2- Executive Functioning: Older adults may experience declines in problem-solving, decision-making, and cognitive flexibility.
- 3- Wisdom: characterized by a deeper understanding of life experiences with aging.

4- describe the Importance of compliance and adherence? (Psychology: S3)

Ans/

1- Treatment Effectiveness: Non-compliance or poor adherence can significantly impact treatment effectiveness, leading to disease progression, treatment failure, and increased healthcare costs.

2- Patient Outcomes: Enhanced compliance and adherence are associated with improved patient outcomes, including reduced morbidity and mortality rates, better disease management, and enhanced quality of life.

3- Healthcare Resources: Optimal compliance and adherence contribute to the efficient utilization of healthcare resources, minimizing hospital readmissions, preventing complications, and reducing healthcare expenditure.

5- Enumerate the types of coping strategies, with a short note? (Psychology: S4)

Ans/

1- Problem-Focused Coping:

resolve the underlying stressor directly. Individuals engage in problem-solving.

2- Emotion-Focused Coping: focus on regulating emotional responses to stressors. Individuals may employ techniques such as seeking social support.

3- Avoidant Coping:

escape or avoid confronting the stressor.

6- Write about key principles in behavioral theory? (Psychology: S5)

Ans/

1. Classical Conditioning

involves the association of a neutral stimulus with a meaningful stimulus to elicit a response.

2. Operant Conditioning focuses on the consequences of behavior to strengthen or weaken future behavior.

3. Stimulus Discrimination and Generalization characteristics.

Discrimination: Learning to respond differently to similar stimuli based on their unique

Generalization: Applying learned responses to similar stimuli.

7- Write about encoding as a first step of memory? (Psychology: S5)

Ans/

Encoding refers to the process of converting sensory input into a form that can be stored in memory.

Various encoding strategies facilitate these three processes:

1- Semantic Encoding, Focusing on the meaning of information to enhance memory retention.

2- Visual Imagery, Creating mental images to represent information, aiding in memory recall.

3- *Organizational Encoding*, Structuring information into meaningful categories or hierarchies, facilitating storage and retrieval.

8- Discuss ethical considerations in breaking bad news? (Psychology: S6)

Ans/

1- Truth-Telling: Uphold the ethical principle of truth-telling, providing honest and accurate information to patients and families while respecting their preferences for how information is delivered.

2- Cultural Sensitivity: Recognize and respect cultural differences in how individuals perceive and cope with bad news, adapting communication strategies to meet patients' and families' cultural needs.

3- Privacy and Confidentiality: Ensure patient privacy and confidentiality throughout the process of breaking bad news, respecting their right to control who has access to their medical information.

9- write about common paraphilips? (Psychology: S6)

Answer/

- 1- *Exhibitionism*: Deliberate exposure of one's genitals to others, often without their consent, for sexual arousal.
- 2- *Voyeurism*: Obtaining sexual arousal by observing unsuspecting individuals who are naked, disrobing, or engaging in sexual activity.
- 3- *Fetishism*: Sexual arousal or gratification from nonliving objects, specific body parts, or materials.
- 4- *Sadomasochism*: (BDSM): Engaging in consensual sexual activities involving dominance, submission, and/or the infliction or receipt of pain or humiliation.
- 5- *Pedophilia*: Sexual attraction to prepubescent children, which may involve sexual fantasies, urges, or behaviors.

10- Describe Styles of attachment in children? (Psychology: S7)

Ans/

Styles of attachment in children, primarily fall into two categories:

A/ Secure Attachment (safe base): Children feel safe and secure with their caregivers.

B/ insecure attachment: is three parts:

- 1- Avoidant Attachment(withdrawn): Children appear emotionally distant from their caregivers.
- 2- Anxious resistance(over-dependent) : Children are often very anxious and unsure.
- 3- disorganized attachment: to describe infants who seem confused, hazy or anxious in the presence of their attachment figures, very inconsistent caregiver (parents or caregivers).

11- describe/ write about role of play in cognitive, social and emotional development. (Psychology: S7)

Ans/

Importance of play for cognitive, social, and emotional development.

Types of play (physical, pretend, constructive, games with rules).

Encouraging and facilitating play in different developmental stages.

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12- Enumerate four types of dichotomies myers-briggs type indicator (MTBI)? (Psychology: S5)

Ans/

- 1- Extraversion (E) vs. Introversion (I)
- 2- Sensing (S) vs. Intuition (N)
- 3- Thinking (T) vs. Feeling (F)
- 4- Judging (J) vs. Perceiving (P)

Respiratory System

Short Answer Questions



1- Enumerate upper respiratory and lower respiratory system? (Session 1)

Ans/

- upper Respiratory Tract the parts of the respiratory system lying outside the thorax
 - Nasal Cavity
 - Pharynx
 - Larynx
- Lower parts of the respiratory system lying inside the thorax
 - Trachea
 - Main/primary bronchi
 - Bronchiol
 - Alveoli

2- Natural defence of respiratory system against infection? (Session 6)

Ans/

- o Cough and sneezing reflex
- o Muco-ciliary clearance mechanisms
- o Ciliated columnar epithelium o Nasal hairs
- o Respiratory mucosal immune system
- o Lymphoid follicles of the pharynx and tonsils
- o Alveolar macrophages
- o Secretory IgA and IgG

3- Mention the BCG vaccine and its role? (Session 7)

Ans/

The BCG vaccine is a vaccination against tuberculosis that is prepared from a strain of the Attenuated Live Bovine Tuberculosis Bacillus.

The bacteria retain a strong enough antigenicity to act as a vaccine for human tuberculosis.

Efficacy only lasts 15 years at most.

4- describe the asthma in children and their characteristics? (Session 5)

Ans/

Asthma is a chronic inflammatory disorder of the airways.

Defining characteristics

- Chronic Inflammatory Process
- Susceptibility
- Variable airflow obstruction
- Airway hyper-responsiveness
- Reversibility

5- Define bronchoscopy? (Session 2 & 7)

Ans/

Bronchoscopy is used in the diagnosis of bronchial carcinoma to visualize the tumour and obtain a tissue sample for histology.

6- Clarify the thoracic ribs to attachment the sternum? (Session 2)

Ans/

1- True ribs (1st-7th ribs) : Attach directly to the sternum via their own costal cartilages.

2- False ribs (8th-10th ribs) : Attach to the cartilage of the rib above them, indirectly attach to sternum.

3- Floating ribs (11th-12th ribs) : not connect to the sternum, directly or indirectly.

7- Define dead space in lungs? (Session2)

Ans/

Dead space: refers to the portion of the respiratory system where air does not participate in gas exchange with blood ,it includes both anatomical and alveolar dead space.

8- Enumerate the factors that are changing during ventilation? (Session 1)

Ans/

- Tidal volume
- Respiratory rate
- Quiet versus forced Breathing

9- Mention characteristics of pulmonary circulation? (Session 1)

Ans/

- low resistance
- low pressure
- receives entire cardiac output

10- How hyperventilating cause tetany? (Session 5)

Ans/

Hyperventilation cause decrease in CO_2 so pH increase the Ca^{2+} only soluble in acid ,so when pH increase the Ca^{2+} cannot remain in blood , so nerve become hyperexcitable. Thus lead to tetany.

11- define hypoxia and it's type? (Session 5)

Ans/

Hypoxia means decreased oxygen level in tissues.

- 1- Hypoxemic Hypoxia: decreased breathable O₂.
- 2- Anemic Hypoxia: decreased functional Hb.
- 3- Stagnant Hypoxia: decreased blood flow- HF.
- 4- Histotoxic Hypoxia: unable to make proper use of O₂.

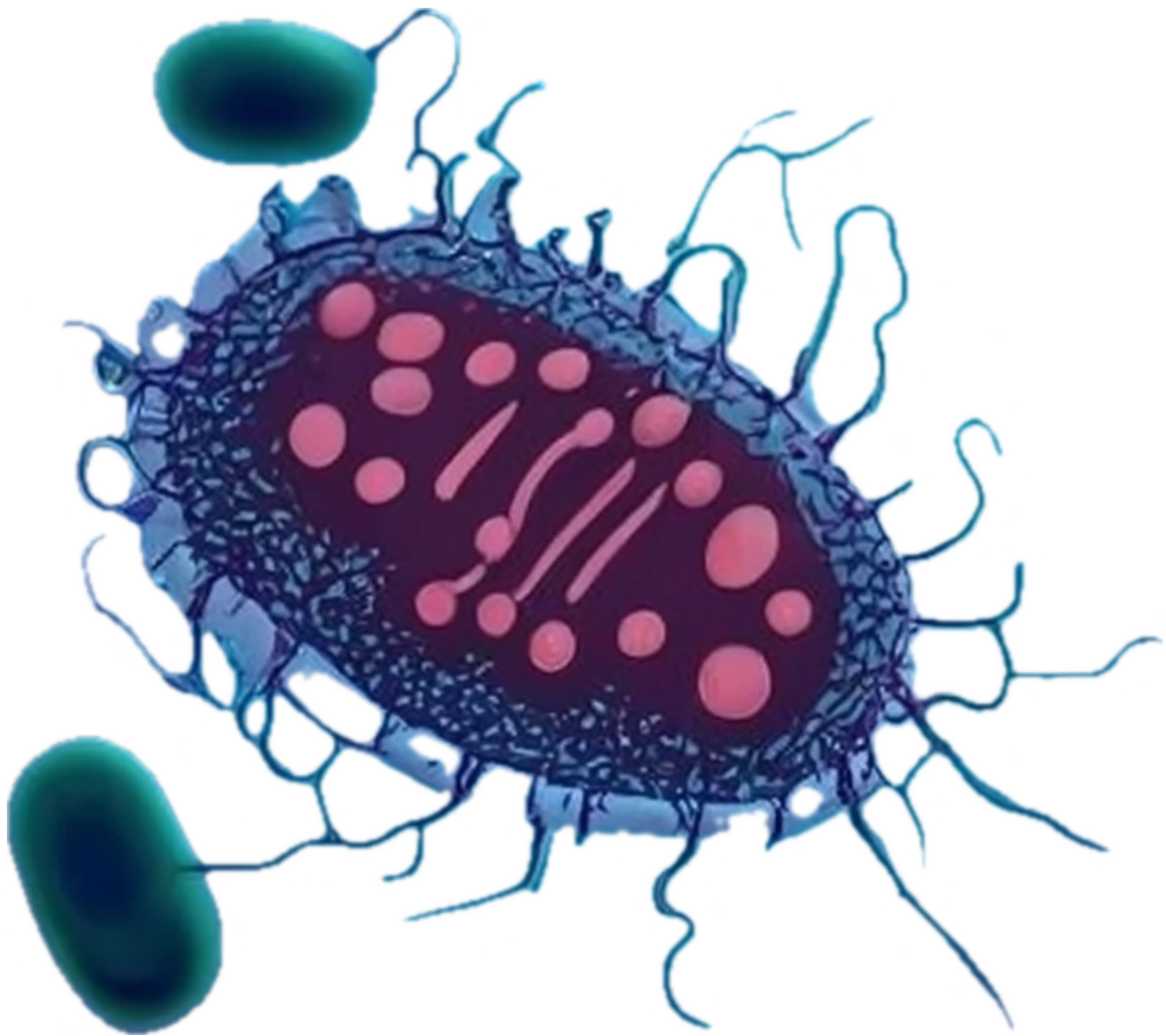
12- Hb O₂ dissociation curve with temperature and pH? (Session 4)

Ans/

- Increasing temperature decrease affinity Hb for O₂, so the O₂ dissociation curve shifts to the right.
- Increasing PH increase affinity Hb for O₂, so O₂ dissociation curve shifts to the left.

Immunity & Infection

Short Answer Questions



1- write the virulence factor of bacteria?

Ans/

Antimicrobial resistance
Serum resistance
Sequestration of iron
Molecular protein syringes
Antigenic phase variation
Exotoxins
Flagella
Polysaccharide capsule
endotoxin

2- Enumerate the ways of preventing microbial microbiota that may cause hospital acquired infection?

Ans/

The most important way of preventing exogenously acquired infection is

- 1- hand hygiene(include hand-washing, alcohol gel hand rubs and sterile gloves)
- 2- high standards of environmental cleanliness
- 3- judicious antibiotic prescribing
- 4- disposable gowns, aprons and gloves
- 5- sterile surgical instruments

Endogenously acquired infection can be minimised by

- 1- disinfection of skin
- 2- Prophylaxis

3- compare briefly between antigen drift and antigen shift and their playing viral evolution and immune evasion?

Ans/

- Antigenic drift the accumulation of point mutations in the viral surface resulting in new strain
- Antigenic shift results in a new subtype of virus

Gastrointestinal Tract Multiple Choice Questions



1- Saliva is responsible in all except?

- A- Help in deglutitation
- B- Is essential in complete digestion of starch
- C- Prevent dental caries
- D- prevent decalcification of teeth
- E- defence mechanism

2- Regarding to islets of pancreas which one is false?

- A- Alpha cells produce glucagon
- B- PP cells produce pancreatic polypeptide
- C- Delta cells produce somatostatin
- D- Beta cells produce pepsin

3- According to large intestine which one is true?

- A- poor reabsorption of water and electrolytes
- B- sacculum is one of the three cardinal features
- C- majority of appendix is post iliac part
- D- internal anal sphincter is voluntary
- E- supplied by superior mesentery artery

4- According to Saliva?

- A- During Ductal modification K concentrate decrease
- B- Saliva is hypotonic solution with relatively Low concentrations of Na⁺ and Cl⁻
- C- Mucous cells are same in structure to serous cells
- D- Stimulated saliva is low volume
- E- Neutral once stimulated become acidic

5- Normal swallowing is dependent on the integrity of?

- A- 9th and 10th cranial nerve
- B- pyramidal tract
- C- Trigeminal nerve
- D- appetite center of hypothalamus
- E- accessory nerve

6- which of the following is true?

- A- adenocarcinoma arise in Barrett's esophagus
- B- in United States , chronic alcoholism increase risk 10-to 20 fold
- C- plummer-Vinson syndrome high risk of squamous carcinoma
- D- all of them

Answers

1- B 2- D 3- B 4- B 5- A 6- A

7- which of the following is true?

- A- Intestinal-type adenocarcinoma this advanced carcinoma presented as a large, exophytic, polypoid mass.
- B- Linitus plastica. the gastric wall is markedly thickened, firm, and fibrotic. In contrast to the intestinal-type carcinoma, the mucosa appears relatively normal.
- C- Early gastric cancer. In this example, the adenocarcinoma presents as a small of mucosal
- D- all of them

8- Liver , spleen and pancreas develop from?

- A- foregut
- B- Midgut
- C- hindgut

9- which one inccorect about Ulcerative Colitis?

- A- proctitis (involving rectum only)
- B- Mucosa is reddened, granular, and friable with inflammatory pseudopolyps, and easy bleeding
- C- Mucosal inflammation limited to the mucosa; there are crypt abscesses
- D- Skip lesion

10- Regarding H pylori which one is true?

- A- gram positive
- B- Round shaped
- C- Production of urease produce ammonia which creates acidic environment for survive
- D- serology is the most sensitive test
- E- damage to epithelia accur through enzymes released and through induction of apoptosis

11- Which one is true about salivary glands?

- A- saliva is secreted by major salivary glands
- B- make between 0.5-1 litres/day saliva
- C- parotid glands secrete about 25% of saliva by volume
- D- parotid gland is a type of minor salivary glands
- E- none

12- which one is not true about chronic gastritis?

- A- type A is associated with pernicious anemia
- B- type B which primarily involves the antrum and is associated with Helicobacter pylori infection
- C- Patients with pernicious anemia have a decreased incidence of gastric carcinoma
- D- type A which is an autoimmune gastritis

Answers

7- D 8- A 9- D 10- E 11- C 12- C

13- Fluid levels are abnormal if?

- A- very numerus
- B- Associated dilation of bowel
- C- a,b
- D- none of them

14- Gas in the peritoneal cavity (pneumoperitoneum)?

- A- viscus perforated
- B- post-surgical
- C- none of them
- D- a,b

15- Which is not true about inguinal triangle?

- A- indirect hernia arises from hasselbach triangle
- B- boundary with inguinal ligament inferiorly
- C- lateral border of recuts abdominis medially
- D- inferior epigastric artery laterally

16- About midgut rotation, which one is incorrect?

- A- 270 degree counterclockwise
- B- Counterclockwise rotation
- C- first 90° bring back loop into abdominal cavity
- D- failure of clockwise rotation may result in left sided cecum, appendix and ascending colon

17- which one is true?

- A- The SMA emerge dorsal to the uncinate process
- B- The SMA emerge ventral to the uncinate process
- C- The SMA emerge Ventral to the body process
- D- The SMA emerge dorsal to the body and uncinate process

18- which one is Incorrect?

- A- chief cells secrete pepsin
- B- For every mol of H⁺ secreted into the stomach, 1 mol of HCO₃⁻ enters the blood
- C- parietal cells secrete HCO₃
- D- Stomach secretions come from Gastric Pits

Answers

13- C 14- D 15- A 16- D 17- B 18- C

19- choose the correct one?

- A- esophagus conducts food from pharynx to stomachs (19 sec)
- B- long portion of esophagus below the diaphragm before reaching the stomach
- C- esophageal stage of swallowing has 2 types of peristaltic movements(PMs) primary & secondary
- D- smoking is not factor for the antireflux mechanisms of lower esophagus.

20- which one is false?

- A- The mucous membrane of the duodenum is thick
- B- the remainder of the duodenum, it is thrown into numerous circular folds called the plicae circulares
- C- Bile duct and the main pancreatic duct pierce the third part of duodenum
- D- major duodenal papilla is below minor duodenal papilla

21- which one is incorrect?

- A- porta hepatis, or hilum of the liver, is found on the anteroinferior surface and lies between the caudate and quadrate lobes
- B- gall bladder lies adherent to the undersurface of the liver at the junction of the right and quadrate lobes
- C- gall bladder comprises a fundus, a body and a neck
- D- Peritoneum completely surrounds the fundus of the gallbladder and binds its body and neck to the liver
- E- The cystic duct is about 3.8 cm long and connects the neck of the gallbladder to the common hepatic duct to form the common bile duct

22- Stimulated saliva?

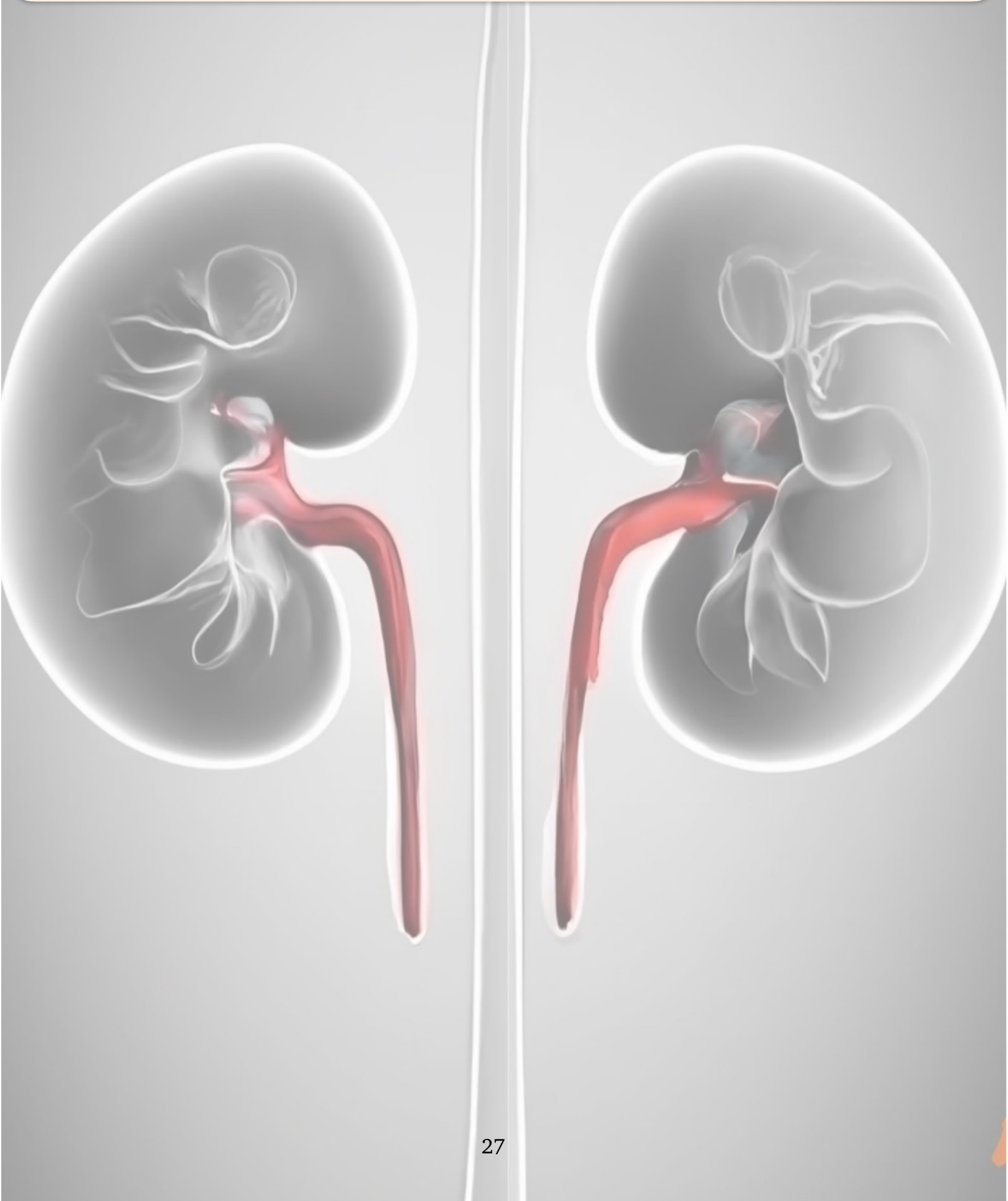
- A- Low volume
- B- Very hypotonic
- C- Neutral or slightly acidic
- D- Alkaline
- E- Few enzymes

Answers

19- C 20- C 21- A 22- D

Urinary System

Multiple Choice Questions



1.The kidneys of the human body extend from?

- A- 5 thoracic vertebrae to 3 lumber vertebrae
- B- 8 thoracic vertebrae to 12lumber vertebrae
- C- 10 thoracic vertebrae to 5 lumber vertebrae
- D- 12 thoracic vertebrae to 3 lumber vertebrae

2- proper sequence of nephron structure?

- A- DCT, glomeruli, PCT, nephron loop
- B- PCT, gomeruli, nephrone loop, DCT
- C- glomeruli, PCT, nephrone loop, DCT

3- Location of kidney relation to peritoneal in the abdominal?

- A- retroperitoneal
- B- retroabdominal
- C- intraperitoneal
- D- Non of them

4- which term used to describe the glomerular lesion most but not all the glomerular in the renal biopsy?

- A- focal
- B- segmental
- C- global
- D- crescent
- E- proliferative

5- which is not cause of acute kidney injury (AKI)?

- A- severe dehydration
- B- diabetic nephropathy
- C- contrast induced nephropathy
- D- sepsis
- E- acute tubular necrosis

6- Regarding renal covering one of them is true?

- A- Fibrous capsule located close to the outer surface of kidney
- B- perirenal fat cover both kidney and suprarenal gland
- C- fascia is condensation of CT lies above pararenal fat
- D- fibrous capsule forms the retroperitoneal fat

Answers

1- D 2- C 3- A 4- C 5- B 6- A

7- Mechanism of thiazide like drug?

- A- inhibit Na^+ K^+ co transporter
- B- inhibit Na^+ Cl^- co transporter and decrease Ca^{2+} re absorption
- B- lead to hyperkalemic acidosis
- D- thiazide like agents differ in several of these action include duration of action
- E- have no role in prevention of renal stone

8- what is the area between the two ureteric orifices and the internal urethral orifice?

- A- internal urethral sphincter
- B- External urethral sphincter
- C- Detrusor muscle
- D- Trigone

9- when the receptor of bladder muscle wall is not work properly?

- A- urination is distrupted
- B-urine continue to collate in bladder
- C- there is not micturation

10- The kidney is responsible for?

- A- Co_2 excretion
- B- water and electrolytes balance
- C- nitrogen poison excretion
- D- a,b
- E- b,c

11- which one about risk of bladder cancer is Incorrect?

- A- Chronic inflammation of bladder mucosa
- B- Race, not ethnicity, black people have a lower incidence than white people
- C- Pelvic radiotherapy
- D- Occupational exposure linked to 37% of the cases
- E- Smoking

12- which one is true?

- A- ureteric bud arises from the metanephric cap
- B- metanephric cap form the glomerulus, PCT, DCT and the collecting tubules
- C- each distal convoluted tubule forms from the metanephric cap directly joined to collecting tubule derived from ureteric bud
- D- the surface of the kidney stays is lobulated throughout the life
- E- the developing kidney receives its blood supply from....

Answers

7- D 8- D 9- A 10- E 11- D 12- C

13- The primitive bladder?

- A- The urachus persists throughout life as the median umbilical ligament
- B- The smooth muscle of the bladder wall is derived from the endoderm
- C- The primitive bladder is now divided into an upper dilated portion, the bladder, and lower narrow portion, the urethra
- D- The apex of the bladder is continuous with the allantois

14- Describe the characteristics of the mesangium?

- A- mesangial/endothelial:podocyte cell ratio is 2:1:3 ,...
- B- Mesangial cells are polygonal in shape, with many processes extending from the cell body toward the-GBM in these processes, dense assemblies of microfilaments are found, containing d-smooth muscle actin, myosin, and d-actinin
- C- mesangial cells have limited variety of receptors, including those for angiotensin II , vasopressin , atrial natriuretic factor
- D- the mesangial matrix fills the spaces between the mesangial cells and the GBM, it contains several glycoproteins most abundantly fibroactins

15- which of the following statements about clinical manifestation and limitations of ultrasound for urinary tract imaging is true?

- A- ultrasound- guided intervention, for example nephrostomy insertion in patients with hydronephrosis
- B- US can be used for imaging midureter
- C- can determine presence/absence of hydronephrosis (dilatation of the collecting system)and differentiating between malignant and benign renal masses
- D- use sound waves for evaluation of functional detail of urinary system

16- important relation of kidney?

- A- spleen,stomach and pancreas contact with anterior part of left kidney
- B- only 12th rib contact with the left kidney posteriorly
- C- suprarenal gland and hepatic flexure contact with anterior part of left kidney

Answers

13- B 14- D 15- A 16- A

17- Development and vascularization of kidney?

- A- the interlobar arteries divide and pass over into the arcuate arteries
- B-
- C-
- D-

18- which of the following statements about ureter s anatomical relation and physiology is correct?

- A-
- B-
- C-
- D-

19- which one is correct about systemic factors?

- A- The sympathetic nervous system is a key mediator of vasoconstriction of the efferent arteriole
- B- Angiotensin 2 with its potent vasoconstrictive effects at the efferent arteriole
- C- Vasodilator prostaglandins like PGE 1 , PGE 2 , and prostacyclin cause dilation in both afferent and efferent arterioles
- D- ANP and BNP cause efferent dilatation

Answers

17- 18- 19- B

Psychology

Multiple Choice Questions



1- based on General Adaptation syndrome (GAS) the stage that involves immediate response to the stressor and activates the hypothalamic-pituitary-adrenal (HPA) causing secretions of glucocorticoids and epinephrines hormones?

- A- Alarm stage
- B- Resistance stage
- C- Exhaustion stage
- D-

2- which one is NOT a psychological factor that contributes to sexual dysfunction?

- A- Anxiety and stress
- B- Depression and mood disorders
- C- body image reflections
- D- Trauma and abuse
- E- Relationship problems

3- which one is not the consequences of sexual dysfunction?

- A- ramp up self-esteem
- B- decrease relationship and sexual satisfaction
- C- increase Intimacy and communication breakdown
- D- strain intimate relationships

4- based on psychodynamic perspective which one is the component of personality that operates on the pleasure principle?

- A- Id
- B- ego
- C- superego
- D- conscious

5- humanistic perspective of personality traits?

- A- Maslow and Roger's emphasize the inherent drive for self-actualization and personal growth
- B-
- C-
- D-

6- trait perspective, which one is accurate?

- A- the Big Five models are (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism)
- B- Trait stability: personality traits are stable and not affected by external factors
- C-
- D-

Answers

1- A 2- C 3- A 4- A 5- A 6- A

7- regarding amnesia, the correct one?

- A- Anterograde: loss of memories prior to the onset of amnesia
- B- Retrograde: Inability to form new memories following brain injury or disease
- C- Anterograde Amnesia: Inability to form new memories following brain injury or disease
- D- Alzheimer's disease
- E-

8- patient-related factors that influence compliance and adherence?

- A- complexity of the treatment regimen
- B- Health literacy
- C-
- D-

9- what should a healthcare professional do if the patient is not adherent to the treatment because of their cultural and beliefs?

- A- increase the dose of the treatment
- B- educate the patient about the efficacy of the treatment
- C- tailor the treatment plan based on patient's culture background and beliefs
- D-

10- psychology of aging, Correct one?

- A- Biological Theories of aging highlights the interaction between psychological and social factors in the aging process
- B- The programmed aging theory posits that cumulative damage to cells and tissues leads to aging
- C- wear-and-tear theory suggests that aging is genetically determined
- D- Psychosocial Theory of aging delve into the physiological processes that contribute to aging
- E- The socioemotional selectivity theory proposes that as individual's age, they prioritize emotionally meaningful goals and relationships over time

11- Which of the following statements describes accuracy change of health positive behavior?

- A- Health belief model describes a series of stages of behavior changes (precontemplation, contemplation, preparation, action, maintenance)
- B- social cognitive theory emphasizes the role of cognitive factors in shaping health behavior
- C- Transtheoretical Model posits that behavioral intentions are influenced by attitudes toward the behavior, subjective norm and perceived behavioral control
- D- Health belief model posits that individuals' health-related decisions are influenced by their perceptions of susceptibility to illness

Answers

7- C 8- B 9- C 10- E 11- D

12- Which of the following strategies are accurate about promoting positive health behavior?

- A- behavioral interventions strategies Strategies such as goal setting, motivational interviewing and cognitive-behavioral techniques
- B-
- C-
- D-

13- Understanding Human Diversity in Medicine, correct one?

- A- Human diversity encompasses variations in race, ethnicity, culture, language, socioeconomic status, gender, sexual orientation, religion and physical abilities
- B- Understanding human diversity is treating all exactly the same
- C-
- D-

14- about Strategies for understanding human diversity which one is Incorrect?

A- Cultural Awareness:

- Reflect on personal biases and cultural assumptions
- Recognize the diversity within patient populations and avoid stereotypes

B- Cultural Knowledge:

- Learn about different cultural practices, beliefs, and healthcare customs
- Utilize cultural resources and seek guidance from cultural liaisons or interpreters

C-Effective Communication:

- Use clear and simple language, avoiding medical jargon
- Confirm understanding and encourage questions from patients

D- Respect for Patient Autonomy:

- Respect patients' cultural values and treatment preferences
- Involve patients in decision-making processes and honor their autonomy

E- Collaboration and Advocacy:

- Collaborate with interdisciplinary teams to address diverse patient needs.
- Ensure that the patient taking medication without deviation.

15- which theory focuses on social development?

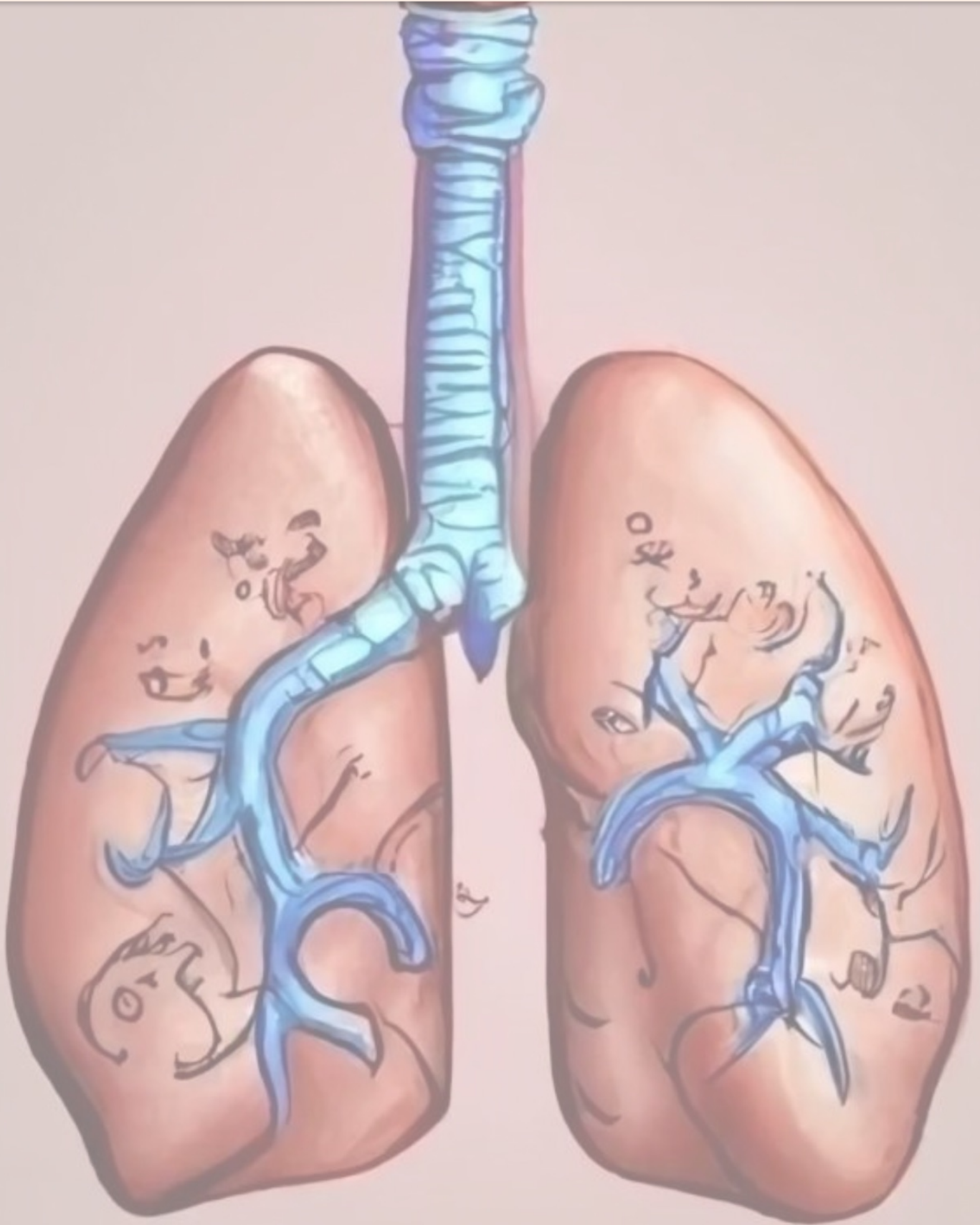
- A- piaget's theory of cognitive development
- B- Erikson's Psychological theory
- C-
- D-
- E-

Answers

12- A 13- A 14- E 15- B

Respiratory System

Multiple Choice Questions



1- All are type of hypoxia except?

- A- polythemic hypoxia
- B- stagnant hypoxia
- C- hypoxemic hypoxia
- D- anemic hypoxia
- E- histotoxic hypoxia

2- Viral Cause of Upper Respiratory Tract Infection?

- A- Hemophilus influenza
- B- para influenza
- C- klebsiella
- D- staphylococcus Aureus
- E- legionella

3- About pneumonia which one is false?

- A- Severity can be assessed using (CURB65) score
- B- Pneumococcal infection has very good prognosis
- C- Legionella Pneumonia can be test by Urine antigen
- D- Oral penicillin to patients with higher risk of Lower Respiratory tract infection
- E- Aspiration Pneumonia can occur in debilitated patients

4- complications of COPD include?

- A- Recurrent chest infection
- B- Cor pulmonale
- C- Pneumothorax
- D- Respiratory failure
- E- All of the above

5- Regarding the Surfactant which one false?

- A- increases lung compliance by increasing surface tension
- B- Stabilize the lungs
- C- preventing small alveoli collapsing into big ones
- D- Prevents the surface tension in alveoli creating a suction force tending to cause transudation fluid from pulmonary capillaries

6- about the thoracic cage all are true except?

- A- Continuous with neck superiorly
- B- The thoracic vertebrae located posteriorly
- C- Consist of sternum and costal cartilage laterally
- D- Open indirectly to the abdomen

Answers

1- A 2- B 3- B 4- E 5- A 6- C

7- All of the following about paranasal sinus all true except?

- A- Are air filled space
- B- they named according to the bones they located in
- C- The maxillary sinus is the largest one
- D- All of them present since birth

8- About respiratory failure?

- A- type has better prognosis
- B- patient's can do daily activity
- C- bounding pulse and flapping tremor are signs of Co2 retention
- D- clinical suspicion is of no significant
- E. no need for oxygen

9- All true except one about the pleural space?

- A- Is normally filled with a few litters of fluid
- B- Forms a pleural seal
- C- Holding the outer surface of the lungs to the inner surface of the thoracic wall
- D- Help to to maintain the volume of the lung if the volume of the thorax cage changes

10- All the following true about the airways except?

- A- The trachea and bronchi have cartilage in their wall
- B- Bronchioles have skeletal muscles in their wall
- C- Bronchioles draw air into the lungs by increasing their volume
- D- Alveoli provide the single cell thickness membrane for diffusion

11- About diaphragm what is false?

- A- The diaphragm is a dome shaped muscle which divides the thoracic cavity from the abdominal cavity.
- B- The marked convexity (dome) of the diaphragm means that the thoracic cavity is much larger than the bony thorax would suggest
- C- The right dome of the diaphragm lies at the level of the 5th rib, and left dome is slightly lower at the level of the 5th intercostal space

12- About trachea chose the false one?

- A- The trachea commences at the lower border of the cricoid cartilage in the neck
- B- terminates by dividing, into the right and left main bronchi (at the level of the sternal angle)
- C- The angle between the right and left main bronchi is known as the carina
- D- The trachea is held open by 16- 22 U shaped cartilages

Answers

7- D 8- C 9- A 10- B 11- B 12- D

13- The cause of consolidation include all of them except?

- A- pneumonia
- B- pneumothorax
- C- effusion
- D- cancer
- E- haemorrhage

14- Which one is not correct about intercostal muscle?

- A- They are 3 intercostal muscle
- B- The external intercostal muscles the fibres of these muscles run Downwards & superiorly from the inferior margin of the rib above to Superior margin of the rib below
- C- These muscles are responsible for 30% of chest expansion during
- D-

15- In control of hypoxia which one is false?

- A- Kidney has no role
- B- Fall of arterial pO₂ detected by peripheral chemoreceptor
- C- Increase of tidal volume and rate of respiration
- D- Change in circulation and directing more blood to the brain and kidney
- E- Increased pumping of blood by heart

16- Signs of COPD on chest x-ray include all except?

- A- flattening of diaphragm
- B- hyperlucency of the chest
- C- anteroposterior lung
- D- all of them
- E- none of them

17- Prognosis of lung cancer by?

- A- Cell type
- B- Comorbidity
- C- Stages
- D- All of them

18- What cause asthma exacerbation?

- A- Non-adherent to drugs
- B- In cold environment
- C- Allergy or trigger drug (NSAID)
- D- All of them

Answers

13- B 14- B 15- A 16- E 17- D 18- D

19- which one of the following about nervous supply of lung is true?

- A- The lung receives fibers from vagi and trigeminal nerve the sympathetic trunk via the pulmonary plexuses which are situated at each hilum
- B- the parasympathetic fibres from the vagus are motor to the bronchial smooth muscle (bronchoconstrictor) inhibitory to pulmonary vessels (vasodilator) and secretory motor to mucous glands
- C- The vagal efferent fibres are those for the cough reflex and some subserving pain
- D- the sympathetic afferents are bronchodilator and vasoconstrictor

20- Drug for TB except?

- A- Pyrazinamide
- B- isoniazid
- C- Rifampin
- D- Ethambutol
- E- Trimethoprim

Answers

19- B 20- E

Immunity & Infection

Multiple Choice Questions



1- Cationic peptides are a group of antimicrobials peptides, they play roles in?

- A- Killing microbes through free radicals production
- B- Killing microbes through oxygen dependent mechanism
- C- Killing microbes through destruction of microbial cell wall
- D- All of the above
- E- None of the above

2- which of the following fungal infections occur in previously healthy people?

- A- aspergillosis
- B- blastomycosis
- C- cryptococcus
- D- pneumocysticosis
- E- None of the above

3- Causative agent of the following, Whooping cough, pseudomembranous colitis, watery diarrhoea

- A- Bordetella pertussis, C.Difficile, Enteric bacteria

4- Fleming in 1928 discover which of them?

- A- antiviral
- B- antiprotozoa
- C- antiparasite
- D- antifungal
- E- none of them

5- First mutation of coronavirus?

- A- D614G
- B- N617Y
- C- Oc43
- D- K546T

6- Which SARS-CoV-2 variant of concern does not contain the N501Y mutation?

- A- Alpha
- B- Delta
- C- Beta
- D- Gamma
- E- Omicron

Answers

1- C 2- B 3- A 4- E 5- A 6- B

7- CD40 receptor for?

- A- T lymphocyte
 - B- Macrophage
 - C- Dendritic cell
 - D- B lymphocyte
- (a, la session

8- Which of the following is auto-antibody for uptake of vitamin B12 in Pernicious anaemia?

- A- auto - TSH
 - B- auto - Parietal cell
 - C- auto - Intrinsic factor
 - D- auto - Acetylcholine
 - E- auto - B12
- (c)

9- which of the following colonal medication is used in sever asthmatic attacks?

- A- Infilimab
 - B- Epiphirne
 - C- Alemtuzumab
 - D- Omalizumab
 - E- a+b
- (d)

10- which of the following cause retinitits?

- A- cmv
 - B- ebv
 - C- vzv
 - D- echo
- (a)

11- which of the following picornavirus cause encephelitits?

- A- Echo
- B- Coxsakie
- C- Adeno
- D- Rhino

Answers

7- A 8- C 9- D 10- A 11- A