

# **RS Mid Exam**

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## **MicroBiology:**

1- Infant, wheezing and crackles, cyanosis, and retractions:

Answer: RSV.

2- Red eyes, non-purulent discharge, red throat, and pain during swallowing:

Answer: Adenovirus.

3- Outbreak among school students, high fever, persistent malaise, and headache:

Answer: Influenza.

4- Severe stridor, toxic appearance, and croup symptoms, The Causative organism:

Answer: Gram positive bacteria.

5- Symptoms of AOM, The initial treatment:

Answer: Oral amoxicillin.

6- Grayish white pseudomembranes:

Answer: Diphtheria.

7- High fever, difficulty breathing, and sitting upright with neck extended, drooling, the diagnosis and management:

Answer: Epiglottitis – Tracheostomy.

8- Hot potato muffled voice, and Deviated uvula:

Answer: Peritonsillar abscess.

9- Sneezing, runny nose, and history of URT viral infection, The treatment:

Answer: Amoxicillin-clavulanate.

10-Barking "seal like" cough:

Answer: Parainfluenza virus.

11- Strep throat clinical findings, splenomegaly, positive heterophile antibodies, and negative for strep. Pyogenes, The possible complication:

Answer: Splenic rupture.

12-Fever, absence of cough, swollen tonsils, and swollen cervical lymph nodes, Based on centor score, what's the next step?

Answer: Treat with oral amoxicillin

## **Physiology:**

1- Tidal volume=500, PaCO2=50, PmixE=40, find PDSV:

Answer: PDSV=100.

2- Tidal volume=500, PaCO2=50, PmixE=40, find minute alveolar ventilation:

Answer: 6L/min.

3- What does a decrease in V/Q ratio lead to:

Answer: Increases pulmonary resistance.

4- Which of the following decreases in obstructive but not in restrictive disease:

Answer: FEV1/FVC.

5- What decreases in emphysema:

**Answer: FEV1** 

6- This equation can be used to calculate:

Answer: PDSV.

- $\frac{VT\ X\ (P_{A}CO2-P_{\hat{\mathbb{E}}}CO2)}{P_{A}CO2} =$
- 7- What is incorrect about residual volume:

Answer: It represents the resting state of the pulmonary-thorax system.

8- One of the following changes doesn't occur at high altitudes:

Answer: A decrease in O2 concentration.

9- (Using the lung volume diagram), Which one represents the resting volume of the pulmonary-thorax system:

Answer: FRC, The Answer Key C.

10- What is incorrect about respiratory distress syndrome:

Answer: It involves increased lung compliance.

11- (Using the lung volume diagram), Which volumes represent vital capacity and residual volume?

Answer: C and F, The Answer Key A.

12-TV=350, PDSV=100, RR=15, find PCO2 after increasing TV by 75mL:

Answer: 30mmHg.

13- (Using the lung volume diagram), Which point represents the highest compliance:

Answer: FRC.

14- The incorrect statement about gas diffusion:

Answer: CO2 is affected first in respiratory diseases.

#### **Anatomy:**

1- Which of the following is not found in the pterygopalatine fossa:

Answer: Maxillary vein.

2- Which of the following connects the pterygopalatine fossa with nasopharynx:

Answer: Palatovaginal.

3- Injury in the middle cranial fossa caused damage to the pterygoid canal, which of the following nerves will be affected:

Answer: Deep and greater petrosal.

4- One of the following paranasal sinuses does not drain into the middle meatus:

Answer: Posterior ethmoidal sinus.

5- The structure that makes the vocal ligament is:

Answer: Conus elasticus.

6- When inserting a needle into the cricothyroid membrane it will be positioned in the:

Answer: Infraglottic cavity.

7- The most dangerous type of recurrent laryngeal nerve injury:

Answer: Bilateral partial.

8- Which of the following nerves doesn't supply the lateral wall of the nasal cavity:

Answer: Nasopalatine nerve.

9- What is the cause of epistaxis?

Answer: A branch of facial artery.

10- In recurrent laryngeal nerve injury, which muscle narrows the Rima glottidis:

Answer: Posterior cricoarytenoid.

11- Incorrect about maxillary sinus relations:

Answer: It is laterally related to the pituitary gland.

### **Histology:**

1- Which region contains bowman's glands:

Answer: Olfactory region.

2- Which structure contains spiral smooth muscles with no cartilage:

Answer: Terminal bronchioles.

3- False statement about bronchioles:

Answer: They are lined by pseudostratified ciliated columnar epithelium.

## **Pathology:**

1- Which of the following statements is true:

Answer: Pleural effusion causes compression atelectasis.

2- The incorrect statement about emphysema:

Answer: Involves decreased compliance.

3- Which of the following statements is true:

Answer: Infection does not initiate chronic bronchitis.

4- Which of the following statements is incorrect:

Answer: Centriacinar emphysema is associated with a1-antitrypsin deficiency.

5- What happens during the organization phase of ARSD:

Answer: Proliferation of type 2 pneumocytes.