RS-Mid-019

Microbiology

1- Which of the following statements regarding the prevention and treatment of influenza is correct?
A) Booster doses of vaccine are not recommended.
B) Drugs that inhibit neuraminidase are active only against influenza A.
C) As with some other live vaccines, the attenuated influenza vaccine should not be given to pregnant women.
D) The influenza vaccine contains several serotypes of virus.
E) The virus strains in the influenza vaccine do not vary from year to year.

2- Which of the following symptoms is not typical of influenza?
A) Fever
B) Muscular aches
C) Malaise
D) Dry cough
E) Rash

3- Which of the following infectious agents is most likely to cause a pandemic?
A) Influenza A virus
B) Streptococcus pyogenes
C) Influenza B virus
D) Respiratory syncytial virus
E) Influenza C virus

4- A primary mechanism responsible for the pathogenesis of AGN?
A) A net increase in intracellular cyclic adenosine monophosphate
B) Action of M protein
C) Action of IgA1 protease
D) Action of enterotoxin A
E) Inactivation of elongation factor 2

5- An 18-month-old boy has been playing with a child who develops *Haemophilus influenzae* meningitis. The boy's parents consult his pediatrician, who says she is comfortable that the child will be fine because he has been fully immunized with the polyribitol ribose phosphate (PRP)–protein conjugate vaccine. For what reason is it necessary to immunize infants of 2 months to 2 years of age with polysaccharide–protein conjugate vaccines?
A) The conjugate protein is diphtheria toxoid, and the goal is for the infant to develop simultaneous immunity to diphtheria.
B) Infants 2 months to 2 years of age do not immunologically respond to polysaccharide vaccines that are not conjugated to a protein.
C) The conjugate vaccine is designed for older children and adults as well as infants.
D) Maternal (transplacental) antibodies against *Haemophilus influenzae* are gone from the infant's circulation by 2 months of age.
E) None of the above.

6- An 8-year-old boy, who recently arrived in the United States, develops a severe sore throat. On examination, a greyish exudate is seen over the tonsils and pharynx with oral membrane that bleeds profusely when touching it, he also has lymphadenopathy The cause of the boy's pharyngitis is most likely:
a) Gram negative aerobic non encapsulated bacteria
b) Gram positive anaerobic encapsulated bacteria
c) Gram negative anaerobic encapsulated bacteria
d) Gram positive aerobic non encapsulated bacteria

7- All of the following statements regarding acellular pertussis vaccines are correct *except*?

A) All formulations of the vaccine contain at least two antigens.
B) The acellular vaccine has replaced the whole cell vaccine in the childhood vaccine series.
C) All children should receive five doses of the vaccine before school entry.
D) The vaccine is approved only for young children and adolescents.
E) The vaccine is safer than and as immunogenic as whole cell vaccines.

8- The definition of extensively drug-resistant (XDR) tuberculosis includes?

A) Resistance to isoniazid
B) Resistance to a fluoroquinolone
C) Resistance to capreomycin, amikacin or kanamycin
D) Resistance to rifampin
E) All of the above

9- A 13-year-old boy develops infection with *Mycoplasma pneumoniae*. What is the risk for infection in other members of his household?

A) None; it is sexually transmitted
B) 1–3%
C) 10–15%
D) 20–40%
E) 50–90%

10- A patient presents with paranasal swelling and bloody exudate from both his eyes and nares, and he is nearly comatose. Necrotic tissue in the nasal turbinates show nonseptate hyphae consistent with Rhizopus, Mucor, or Absidia. What is the most likely compromising condition underlying this infection ?

a) Chronic sinusitis
b) Ketoacidotic diabetes
c) Neutropenia
d) B-cell defects
e) AIDS

11- Clinical case about a patient with skin rash and red tongue, which describes the causative agent?

a) Gram + , α hemohytic , catalase-
b) Gram + , β hemolytic , catalase-
c) Gram - , β hemolytic , catalase +
d) Gram- , α hemolytic , catalase +
e) Gram +, γ hemolytic , catalase +

12- Mechanism of action of toxin for bacteria grow Bordet-Gengou medium is?

a) ADP ribosylation of GTP binding protein
b) ADP ribosyl of Gi
c) inhibition of acetylcholine
d) Inactivation of elongation factor 2

"شرحه الدكتور بس مش موجود بالشيت"

Answers

1	D	7	D
2	E	8	E
3	A	9	E
4	B	10	B
5	B	11	B
6	D	12	B

Anatomy

1- An tumer superior to the root of the lung , the structure that is mostly getting affected?
a) SVC
b) azygous arch
c) Aortic arch
d) IVC
e) oesophagus

2- Clinical case about man had an injury above the clavicle which cause bulging of the skin, the main cause beyond pulging of the skin over the clavicle?
a) Parietal pleura
b) visceral pleura
c) Suprapleural membrane
d) Sibson's fascia

3- all of these considered relations to the trachea in the superior mediastinum except?
a) Aortic arch
b) Left common carotid artery
c) Right phrenic nerve
d) right recurrent laryngeal nerve

4- The origin of the pulmonary embolus is commonly from?
a) Femoral vein
b) Right ventricle
c) Right atria
d) cephalic vein

5- a needle inserted into the cricothyroid ligaments; in which laryngeal compartment will you find it?
a) Rima glottides
b) Rima vestibuli
c) Infraglottic part
d) Vestibule
e) glottic part

6- if there is an injury to the nerve accompanies the superior thyroid artery, what will happen?
a) hoarseness of voice
b) loss of sensation above the vocal cord
c) tension of vocal cords
d) adduction of vocal cords

7- the structure that pierces the cricothyroid ligaments inferior to the constrictor muscles is?
a) internal laryngeal nerve
b) external laryngeal nerve
c) inferior laryngeal artery
d) superior thyroid artery

8- Wrong about the nerve supply of the pleura cavity?
a) Cervical pleura by cervical nerves
b) costal pleura by costal nerves
c) diaphragmatic pleura by phrenic nerve
d) mediastinal pleura by phrenic nerve
e) visceral pleura by autonomic nerves

9- all of these arteries supply the lateral wall of the nasal cavity except?
a) Anterior Ethmoidal
b) Posterior Ethmoidal
c) Sphenopalatine
d) Greater palatine
e) Lesser palatine

10- all of these structures will be affected if there's a tumour lateral to the cavernous sinus except?
a) Ophthalmic nerve
b) Abducent nerve
c) trochlear nerve
d) Mandibular nerve
e) oculomotor nerve

11- a tumour in the superior meatus, the drainage of which sinus will be affected?
a) Sphenoidal sinus
b) Posterior ethmoidal sinus
c) Middle ethmoidal sinus
d) Maxillary sinus
e) frontal sinus

12 -an injury to the greater petrosal nerve results in?
a) Loss of secretion from parotid gland
b) Loss of taste sensation from anterior tongue
c) dryness of nasal cavity & the palate
d) Loss of secretion from submandibular gland

13- In emergency tracheotomy, which of the following is most likely to be injured?
a) superior thyroid artery
b) inferior thyroid artery
c) superior thyroid vein
d) inferior thyroid vein
e) inferior laryngeal artery

14- which of the following is not true about the lung?
a) If a foreign body enters the trachea in erect position it goes to the right lung, posterior segment in the lower lobe.
b) when inserting a needle in the 9th midaxillary intercostal space we insert it in the upper part
السؤال انحذف لأنه فرع (أ) كان مكتوب ضمن السؤال

Answers

1	**B**	**8**	**A**
2	C	9	E
3	D	10	D
4	A	11	B
5	C	12	C
6	A	13	D
7	C	14	B

Histology

1- Pseudo stratified columnar epithelium with goblet cell found in all of these regions except?
a) internal epiglottis
b) intrapulmonary secondary bronchus
c) terminal bronchi
d) trachea

2- Macrophages, all of the following is correct except?
a) They are transported from the bronchioles into the pharynx via the ciliary action of the respiratory epithelium
b) They are the most numerous of all cell types
c) Often noted in the respiratory membrane
d) They are derived from monocytes, enters the lungs via the blood stream
e) They are found also in the connective tissue around the blood vessels and in the pleura

3- All of the following cells is found in the interstitium except?
a)Endothelium
b) Fibroblasts
c) mast cells
d) dust cells
e) Type 1 pneumocytes
بالسلايدات كلهم صح بس حسب شرح الدكتور الأخير غلط

Answers

1	C	2	C	3	E

Pathology

1-which of the following is true regarding ARDS?
Poor prognosis in case of bacteraemia

2- which of the following is true about atelectasis?
Chronic bronchitis cause resorption atelectasis

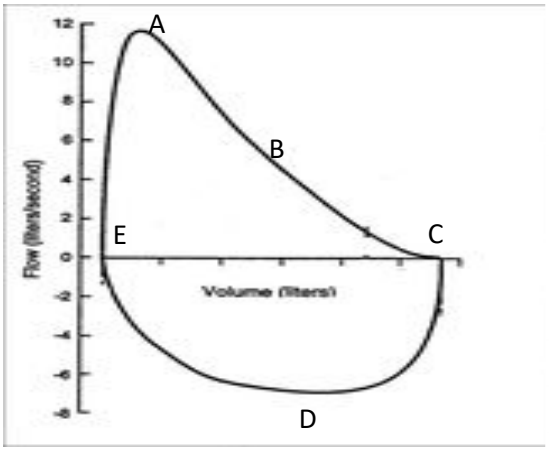
Physiology

1- The region which has the highest PO_2 of the following is?
a) Aorta
b) Pulmonary vein
c) Pulmonary artery
d) Mixed expired air
e) systemic venous blood

2- Which of the following is not correct about FRC?
a) It is about 75% TLC.
b) The elastic recoil of the chest wall is outward.
c) The elastic recoil of the lung is inward.
d) The lung-thorax system is at rest.
e) pulmonary vascular resistance is the lowest

3- Which of the following is false concerning airway resistance (R) ?
a) In the later generations, the radii are smaller, increasing the total resistance at each successive generation.
b) Under normal condition, R resides mainly in the large airways
c) whenever R is increased $FEV_{1.0}$ / FVC is below normal
d) Airway resistance can be increased by loss of tissue elasticity and contraction of bronchial smooth muscles

4- How do we calculate alveolar minute ventilation?
a) subtract the alveolar and anatomical dead space from VT
b) multiply the VT with the respiratory rate
c) subtract anatomical dead space from VT and then multiply with respiratory rate
d) subtract the anatomical dead space from VT



5- In the figure which of the following points represent TLC?
a) A
b) B
c) C
d) D
E) E

6- Maximum volume in the lung after forced inspiration is called?
a) RV
b) TLC
c) FRC
d) IRV
e) ERV

7- Which of the following isn't normal finding with aging?
a) Increase in RV
b) Increase in FRC
c) Increase in ERV
d) Increase in closing volume

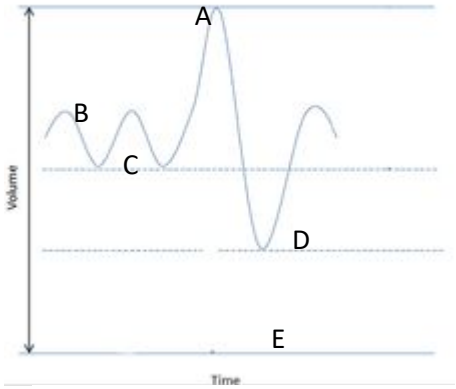
8- Which of the following is FALSE concerning the closing volume for the lung?
a) Measured using the single breath N2 washout curve.
b) Marks the point where the alveoli at the apex close.
c) Marks a sudden increase in nitrogen concentration in the expelled breath.
d) Marks when the overinflated, poorly ventilated alveoli at the apex expel their air with high N2 concentrations.
e) It increases in smokers and in chronic bronchitis

9- Which of the following is NOT true concerning respiratory distress syndrome in premature infants?
a) Their ability to synthesize surfactant is limited.
b) Higher pressures are required to ventilate the lungs.
c) Lung compliance is low.
d) Positive pressure respirators are often used to assist them in breathing.
e) Alveoli tend to over expand and sometimes burst at the end of inspiration

10- which of the following decrease during emphysema?
a) Available area for diffusion
b) TLC
c) closing volume
d) Pulmonary resistance

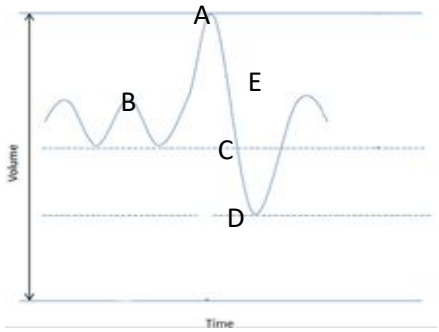
11- In the following figure which point represent the highest compliance?

a) A
b) B
c) C
d) D
e) E



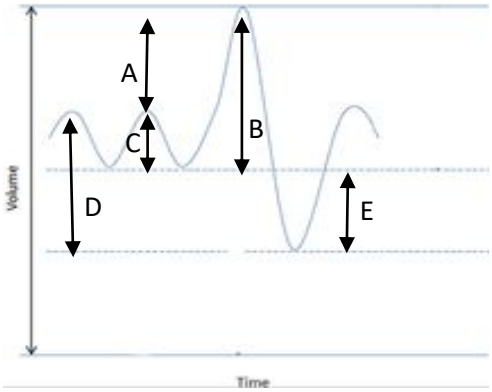
12- In the following figure which point represent the area with the highest resistance?

a) A
b) B
c) C
d) D
e) E



13- In the following figure which point represent the Inspired reserve volume and which represent the expired reserve volume?

a) IRV-A // ERV-E
b) IRV-B // ERV-D
c) IRV-A // ERV-D
d) IRV-E // ERV-A
e) IRV-E // ERV-D



14- which of the following is true regarding reversible asthma?

a)The total resistance increase
b) The $FEV_{1.0}$ increase by 12% by using bronchodilator
c) The FRC increase
d) decreased maximal flow rate

Bronchodilator بدل vasodilator انحذف لإنه كان مكتوب

Answers

1	D	8	B
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4	C	11	C
5	E	12	D
6	B	13	A
7	C	14	B

Collected by:

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