



# BIOLOGY

# **AAKASH INSTITUTE ENGLISH**

# **MOCK TEST 07 ZOOLOGY**



1. At which level does trachea divide into two

primary bronchi in humans?

(a) 5th cervical vertebra

(b) 7th cervical vertebra

(c) 5th thoracic vertebra

(d) 5th lumbar vertebra

A. 5th thoracic vertebra

B. 8th thoracic vertebra

C. 10th thoracic vertebra

D. 2th thoracic vertebra

Answer: A

2. which of the following structures of respiratory passage is devoid of incomplete cartilaginous rings?

A. primary bronchi

B. secondary bronchi

C. Tertiary bronchi

D. Alveolar bronchi

# Answer: D

**3.** which of the following is not a function of conducting zone of respiratory tract?

A. conduction of air

B. clears the air of foreign particles

C. humidification of air

D. gaseous exchange

# Answer: D

**4.** Find the incorrect match.

A. Pharynx- common passage for food and

air

- B. Larynx-helps in sound production
- C. Epiglottis-part of trachea
- D. Trachea- a tube like structure extending

upto the mid thoracic cavity

Answer: C

**5.** which of the following is true regarding the cartilage of the larynx?

A. 3 paired and 3 unpaired

B. 4 paired and 2 unpaired

C. 6 paired and 1 unpaired

D. 2 unpaired and 2 paired

Answer: A

**6.** A: true vocal cord are located above the false vocal cords and participate in sound production.

B: false vocal cord are located above the true vocal cords do not participate in sound production.

- 1) both [A] & [B] are correct
- 2) only [A] is correct
- 3) Only [B] is correct
- 4) both [A] & [B] are incorrect

A. both [A] & [B] are correct

B. only [A] is correct

C. Only [B] is correct

D. both [A] & [B] are incorrect

Answer: C

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7. during inspiration

A. Diaphragm and external intercostal

muscles contract

B. Diaphragm	rela	relaxes		external				
intercostal muscles contract								
C. Both diaphragm and external intercostal								
muscles relax								
D. Diaphragm	and	inter	nal	intercostal				

muscles contract

Answer: A

8. the breathing rate is an adult humans is

A. 12-16 times/second

B. 12-16 times/ minute

C. 12-18 times/ second

D. 18-20 times/ minute

Answer: B

**9.** In earthworms, the respiration takes place through

A. Moist skin

B. Gills

C. Lungs

D. Tracheal System

# Answer: A

10. Expiratory capacity is

# A. TV+ERV

## B. TV+IRV

# C. VC+RV

D. ERV+IRV+TV

#### Answer: A



**11.** What is functional residual capacity?

A. volume of air that remains in the lungs

after maximum forceful expiration

B. volume of air that remains in the lungs

after normal expiration

C. volume of air that remains in the lungs

after normal inspiration

D. volume of air that remains in the lungs

after maximum forceful inspiration

Answer: B

**12.** residual volume of lungs in humans is normally

A. 1100ml - 1200ml

B. 1000ml - 1100ml

C. 500 ml

D. 2500ml - 3000ml

Answer: A

13. which of the following cannot be measured

by spirometer?

(i)FRC. (ii)RV (iii)TLC

A. only (i)

B. (i),(ii) & (iii)

C. only (ii) &(iii)

D. only(i) &(iii)

Answer: B

14. Abdominal muscles play a role in breathing

mainly during

A. normal inspiration

B. normal expiration

C. forceful expiration

D. forceful inspiration

#### Answer: C

**15.** which of the following statements is/ are correct regarding normal expiration? (A) it is a passive process (B) it is an active process (C) The volume of thoracic cavity increases (D) The lower ends of the lungs are pulled downwards by the contraction of diaphragm

1) (A),(C) only

2) (A),(B) & (C) only

3) only (A)

4) (A),(C) & (D) only

A. (A),(C) only

B. (A),(B) & (C) only

C. only (A)

D. (A),(C) & (D) only

# Answer: C

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# 16. Name the primary site of exchange of gases

in our body?

A. Alveoli

B. Secondary bornchi

C. Tertiary bornchi

D. Bronchioles

Answer: A

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**17.** value of  $pO_2$  in deoxygenated blood is equal to value of  $pCo_2$  in 1) systemic veins

2) systemic arteries

- 3) pulmonary arteries
- 4) atmosphere
  - A. systemic veins
  - B. systemic arteries
  - C. pulmonary arteries
  - D. atmosphere

Answer: B

**18.** which of the following is an incorrect statement regarding exchange of gases between alveoli and blood?

A. the amount of  $CO_2$  that diffusers across diffusion membrane per unit difference in Partial pressure is much higher as compared to that of oxygen

B. gases diffuses from the reason of their higher partial pressure to region of their

lower partial pressure

C. motor thickness of diffusion membrane,

## more will be the rate of diffusion

D.  $pO_2$  is higher in exhaled air as compared

to that in alveoli

Answer: C

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**19.** Which of the following factors is not favourable for the formation of oxyhaemoglobin ?

A. high DPG levels in blood

B. high  $pCO_2$  in tissues

C. high  $H^+$  in blood

D. low  $pCO_2$  in tissues

Answer: D

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20. In which form is maximum amount of oxygen transported in human blood from lungs?

- A. Bicarbonate ions
- B. oxyhaemoglobin
- C. Dissolved form in plasma
- D. carboxyhaemoglobin

Answer: B

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**21.** under normal physiological conditions 100

ml of venous blood returns how much amount

of  $O_2$  approximately?

- A. 5ml(A),4ml(B)
- B. 4ml(A),5ml(B)
- C. 20ml(A),15ml(B)
- D. 15ml(A),20ml(B)

Answer: A



# 22. which of the following is not correct

according to Bohr's effect?

A. low	temperature		favou	ırs	the			
dissoci	dissociation o		oxygei	n fr	rom			
oxyhaemoglobin								
B.a rise	in <i>pCC</i>	$D_2$ of	blood	decrea	ises			
oxygen affinity of haemoglobin								
C. low $p$	$OCO_2$ a	t alve	eoli fa	vour	the			
formation of oxyheamogolbin								
D. high $H^{+}$ concentration in blood causes								
dissociation of oxyhaemoglobin								

Answer: A



**23.** How many molecules of oxygne can associate with a molecule of haemoglobin in man?

A. 1

B. 3

C. 4

D. 2

Answer: C



**24.** Which of the following causes a leftward

shift in the oxygen dissociation curve?

A. high pCO\_20

B. high H<sup>+</sup> concentration

C. high pH

D. low pH

# Answer: C





**25.** in which of the following forms ,CO\_2 is not transported in the blood?

A. carbaminohaemoglobin

B. in dissolved state through plasma

C. carboxyhaemoglobin

D. Bicarbonates

# Answer: C

26. Haldane's effect explains

A. formation of sodium bicarbonate

B. formation of carbaminohemoglobin

C. dissociation of CO\_2 from hemoglobin in

the lungs

D. all of the above

Answer: C

**27.** HCO\_3<sup>^</sup>- ions formed inside RBCs diffuse out into the plasma an Cl<sup>^</sup>- ions enter into RBCs at tissue level. The above mentioned statement is correct description of

A. Hamburger's phenomenon

B. Haldane's effect

C. Chloride Shift

D. Both (1) &(3)

Answer: D

**28.** Statement A: carbonic anhydrase present in RBCs facililates the formation of bicarbonate ions at tissue level. Statement B: The same enzyme facilitates the formation of CO 2 in RBCs at alveoli level.

A. both statements are correct

B. statement A is correct and B is incorrect

C. statement A is incorrect and B is correct

D. both statements are incorrect





**29.** which of the following conditions will favour the formation of carbaminohemoglobin in tissue level?

A. Low  $pCO_2$ 

B. Low temperature

C. High pO\_2

D. High pCO\_2

# Answer: D

