# **QB365** Question Bank Software Study Materials

## Bio - Zoology - Respiration 50 Important 1 Marks Questions With Answers (Book Back and Creative)

11th Standard

Biology

Total Marks : 50

 $50 \ge 1 = 50$ 

### **Multiple Choice Question**

1)	Breathing is controlled by
	(a) cerebrum <b>(b) medulla oblongata</b> (c) cerebellum (d) pons
2)	Intercostal muscles are found between the
	(a) vertebral column (b) sternum <b>(c) ribs</b> (d) glottis
3)	The respiratory structures of insects are
	(a) tracheal tubes (b) gills (c) green glands (d) lungs
4)	Asthma is caused due to
	<ul><li>(a) Inflammation of bronchus and bronchioles</li><li>(b) Inflammation of bronchiole</li><li>(c) Damage of diaphragm</li><li>(d) Infection of lungs</li></ul>
5)	The Oxygen Dissociation Curve is
	(a) sigmoid (b) straight line (c) curved (d) rectangular hyperbola
6)	The Tidal Volume of a normal person is
	(a) 800 mL (b) 1200 mL (c) 500 mL (d) 1100 - 1200 mL
7)	During inspiration, the diaphragm
	(a) expands (b) unchanged (c) relaxes to become domed-shaped (d) contracts and flattens
8)	CO <sub>2</sub> is transported through blood to lungs as
	(a) carbonic acid (b) oxyhaemoglobin <b>(c) carbamino haemoglobin</b> (d) carboxy haemoglobin
9)	When 1500 mL air is in the lungs, it is called
	(a) vital capacity (b) tidal volume (c) residual volume (d) inspiratory reserve volume
10)	Vital capacity is
	(a) TV + IRV (b) TV + ERV (c) RV + ERV (d) TV + IRV + ERV

<sup>11)</sup> After a long deep breath, we do not respire for some seconds due to \_\_\_\_\_

(a) more  $CO_2$  in the blood (b) more  $O_2$  in the blood (c) less  $CO_2$  in the blood (d) less  $O_2$  in the blood

## <sup>12)</sup> Which of the following substances in tobacco smoke damage the gas exchange system?

(a) carbon monoxide and carcinogens (b) carbon monoxide and nicotine (c) carcinogens and tar (d) nicotine and tar

### 13)

Column I represents diseases and column II represents their symptoms. Choose the correctly paired option.

Co	Column I		Column II			
(P)	Asthma	i)	Recurring of bronchitis			
(Q)	Emphysema	ii)	Accumulation of W.B.C in alveolus			
(R)	Pneumonia	iii)	Allergy			

(\_) (1\_) (\_) (\_)

(a)	(D)	(C)	(a)	
P QR	P QR	PQR	PQR	
iiiii i	iiii ii	iiiiii	iii iii	

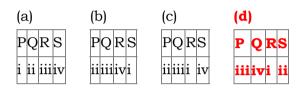
- 14) Which of the following best describes the process of gas exchange in the lungs?
  - (a) Air moves in and out of the alveoli during breathing.
  - (b) Carbon dioxide diffuses from deoxygenated blood in capillaries into the alveolar air.

### (c) Oxygen and carbon dioxide diffuse down their concentration gradients between blood and alveolar air.

(d) Oxygen diffuses from alveolar air into the deoxygenated blood.

#### 15) Make the correct pairs.

Col	umn I	Column II			
(P)	IC	i)	Maximum volume of air breathed in after forced inspiration.		
(Q)	EC	ii)	Volume of air present after expiration in lungs		
(R)	VC	iii)	Volume of air inhaled after expiration.		
(S)	FRC	iv)	Volume of air present after inspiration in lungs.		



#### 16) Make the correct pairs.

Column I			Column II			
(P)	Tidal volume	i)	1000 to 1100 ml			
(Q)	Residual volume	ii)	500 ml			
(R)	Expiratory reserve volume	iii)	2500 to 3000 ml			
(S)	Inspiratory reserve volume	iv)	1100 to 1200 ml			

(a)	(b)	(c)	(d)
PQRS	P QRS	PQRS	P QRS
iiivi iii	iiiiii ivi	iiiviiii	iiiiivi ii

17) The \_\_\_\_\_\_ lack cartilaginous rings.

(i) Trachea (ii) Bronchi (iii) Bronchioles (iv) Alveoli

(a) (a) i and iii (b) ii and iii (c) i, ii and iii (d) iii and iv

- 18) An healthy human breathes \_\_\_\_\_
  - (a) 12 16 times / minute (b) 7 times / minute (c) 2 times / second (d) 20 times / minute
- 19) Haemoglobin has a molecular weight of \_\_\_\_
  - (a) 70,000 (b) 68,000 (c) 60,000 (d) 65,000
- 20) One of the following is not a occupational respiratory disorder.

(a) Silicosis (d) Emphysema (b) Asbestosis (c) Fibrosis

21) Under normal conditions every 100mL of oxygenated blood can deliver about \_\_\_\_\_\_ of oxygen to the tissues.

(a) 8 mL (c) 10 mL (d) 50 mL (b) 5 ml

### 22) Find the incorrect statement.

(a) Gaseous exchange continues in the lungs because some air remains inside the lungs even after deepest exhalation

(b) The blood is the tissue capillaries contains higher  $pO_2$  than tissue fluid.

(d) All the above (c) Deoxygenation of blood promotes the release of carbon di oxide from the blood in the lungs.

23) The world T.B day is observed on \_\_\_\_\_

(a) Mar-24<sup>th</sup> (b) Feb-24<sup>th</sup> (c) Dec-1<sup>st</sup> (d) Mar-26<sup>th</sup>

24)	Insects respire through
	(a) body surface <b>(b) trachea</b> (c) gills (d) book lungs
25)	The lungs are protected ventrally by
	(a) vertebral column <b>(b) sternum</b> (c) ribs (d) diaphragm
26)	The amount of air inspired or expired with each normal breath is called the
	(a) residual volume (b) inspiratory reserve volume (c) dead space (d) tidal volume
27)	Carbon dioxide is carried in the RBCs as
	(a) bicarbonate ions (b) carbon dioxide (c) carbonic acid <b>(d) carbaminohaemoglobin</b>
28)	Which is known as the respiratory rhythm centre?
	(a) cerebellum (b) pons varoli <b>(c) medulla oblongata</b> (d) infundibulium
29)	When a person travels to higher elevations, he may develop the symptoms of acute mountain sickness. This is because of
	(a) nitrogen narcosis (b) high level of carbon dioxide in blood (c) low immunity
	(d) poor binding of O <sub>2</sub> with haemoglobin
30)	Gradual break down of the thin walls of the alveoli decreasing the total surface area of the gaseous exchange is
	(a) bronchitis <b>(b) emphysema</b> (c) asthma (d) tuberculosis
31)	Is Double membrane pleural sac is situated
	(a) Envelops the kidneys (b) Envelops the brain <b>(c) Envelops the lungs</b> (d) Lines the nasal passage
32)	Presence of large number of alveoli around alveolar ducts opening into bronchioles in mammalian lungs is
	(a) Inefficient system of ventilation with little of residual air
	(b) Inefficient system of ventilation with high percentage of residual air
	(c) An efficient system of ventilation with no residual air (d) An efficient system of ventilation with little residual air.
33)	CO <sub>2</sub> is transported
	(a) dissolved in blood plasma (b) As carbonic acid (c) In carbaminohaemoglobin
	(d) As carbaminolaemoglobin and carbonic acid
34)	Exchange of gases in lung alveoli occurs through

(a) Active transport (b) Osmosis (c) Simple diffusion (d) Passive transport

35) Bicarbonate formed inside erythrocytes moves out to plasma while chloride of plasma pass into erythrocytes. The phenomenon is called \_\_\_\_\_\_

(a) Bicarbonate shift (b) Carbonation (c) Hamburger phenomenon (d) None of the above

36) SARS is caused by a variant of \_\_\_\_\_

(a) Pneumococcus pneumonia (b) Common cold by Corona virus (c) Asthma (d) Bronchitis

37) Which is incorrect

(a) Presence of nonrespiratory air sacs increases efficinency of respiration in birds

### (b) In insects, circulation body fluids serve to distribute oxygen to tissues

- (c) Principle of counter current flow facilitates efficient respiration in gills of fishes
- (d) Residual air in lungs slightly decreases the efficiency of respiration in mammals

38) During inspiration \_\_\_\_\_

- (a) Pressure in thoracic cavity increases (b) Diaphragm is pulled down (c) Pressure in atmosphere decreases
- (d) Lungs deflat
- <sup>39)</sup> What is the primary site for the exchange of gases?
  - (a) Trachea (b) Bronchi (c) Lungs (d) Air sacs or alveoli
- 40) Carbonic hydrase (enzyme) is found in \_\_\_\_\_

(a) **RBCs** (b) Plasma (c) Tissue fluid (d) Blood

- 41) What would be the minimal volume of ERV?
  - (a) **30-120 mL** (b) 40-160 mL (c) 60-100 mL (d) 40-60 mL
- 42) The thoracic cavity is bound ventrally by \_\_\_\_\_
  - (a) Vertebral column (b) Sternum (c) Ribs (d) Dome shaped diaphragm
- 43) During inspiration the increase of volume of thoracic cavity in the \_\_\_\_\_
  - (a) Dorso-ventral axis (b) Posterio-dorsal axis (c) Antero-posterior axis (d) Ventro-posterior axis
- 44) Pulmonary embolism occurs in \_\_\_\_\_
  - (a) Lungs (b) Trachea (c) Bronchi (d) Brochioles
- 45) Atelectasis, a collapse of lungs or their lobe occur due to \_\_\_\_\_
  - (a) Alveoli become deflated (b) Alveoli become flated (c) Dilation of bronchioles (d) Narrowing of trachea
- 46) Tidal volume is approximately
  - (a) 2500 ml to 3000 ml (b) 1000 ml to 1100 ml (c) 500 ml (d) 1100 ml to 1200 ml
- 47) Hamburger shift is also known as
  - (a) bicarbonate shift (b) chloride shift (c) potassium shift (d) all of these
- 48) How many times per minute do new borns breathe?
  - (a) 20-40 (b) 30-60 (c) 60-90 (d) 70-90
- 49) The respiration is regulated by
  - (a) Cerebrum (b) Cerebellum (c) Apneustic and pneumotaxic centres of hypothalamus

### (d) Apneustic and pneumotaxic centres of medulla oblongata

- 50) Which of the following statement is incorrect about inspiration?
  - (a) Diaphragm leaves the pleura (b) The thoracic pressure decreases (c) Ribs move sidewards
  - (d) The thoracic pressure increases