

Chapter: 10

Gaseous Exchange

Objective

- A disease involving the breakdown of air sacs of the lungs is:

(A) Asthma (B) Bronchitis (C) Pneumonia (D) Emphysema
- What type of blood vessels surrounds the alveoli?

(A) Vein (B) Arteriole (C) Artery (D) Capillary
- Which process does NOT occur in the nasal cavity?

(A) Humidification of the inhaled air (B) Exchange of gases
 (C) Trapping of large dust particles (D) Warming of the inhaled air
- Stomata are present in:

(A) Phloem (B) Xylem (C) Endodermis (D) Epidermis
- Taking in oxygen and giving out of CO₂ is called?

(A) Respiration (B) Gaseous exchange
 (C) Anaerobic respiration (D) Aerobic Respiration
- Venule unit to form:

(A) Alveoli (B) Trachea (C) Pulmonary artery (D) Pulmonary vein
- A muscular passage common to both food and air is:

(A) Trachea (B) alveoli (C) pharynx (D) larynx
- Place of gaseous exchange in lungs is called:

(A) esophagus (B) alveoli (C) larynx (D) Trachea
- The gift of speaking is given only to:

(A) man (B) parrot (C) crow (D) monkey
- A thick muscular layer beneath lungs is called:

(A) Ureter (B) Diaphragm (C) Kidney (D) Bladder
- Which structure helps in taking air out of lungs:

(A) Bronchus (B) Bronchiole (C) Diaphragm (D) Nasal Cavity
- The cavity in which lungs are located is called:

(A) Abdominal cavity (B) Buccal cavity (C) Oral cavity (D) Thoracic cavity
- The number of lobes in right lung is:

(A) 4 (B) 1 (C) 2 (D) 3
- Number of Ribs in man are:

(A) 22 Pairs (B) 20 Pairs (C) 12 Pairs (D) 10 Pairs
- The chest wall is made up of pairs of ribs.

(A) 20 (B) 12 (C) 16 (D) 8
- The muscles of ribs are called:

(A) costal muscles (B) smooth muscles
 (C) intercostal muscles (D) cardiac muscles
- Percentage of Oxygen in inhaled air during breathing is:

- (A) 0.04% **(B) 21%** (C) 4% (D) 79%
18. In normal condition human respiration rate is:
(A) 15 to 20 (B) 12 to 15 **(C) 16 to 20** (D) 20 to 25
19. Mesophyll cell are found in:
(A) Fishes **(B) Plants** (C) Birds (D) Animals
20. It is a form of, Allergy in which there is inflammation of the bronchi occurs:
(A) Amphysema (B) Pneumonia **(C) Asthma** (D) Bronchitis
21. Rate of breathing depends upon concentration of which gas in the blood:
(A) Hydrogen (B) Nitrogen (C) Oxygen **(D) Carbon dioxide**
22. Percentage of carbon dioxide in the exhaled air is:
(A) 10% (B) 8% (C) 5% **(D) 4%**
23. Which gas is absorbed through stomata of plants during night?
(A) hydrogen (B) nitrogen **(C) oxygen** (D) Carbon dioxide
24. Glottis is a narrow opening at the floor of:
(A) Larynx **(B) Pharynx** (C) Nostril (D) Nasal cavity
25. The length of trachea is approximately.
(A) 12cm (B) 16cm (C) 14cm (D) 10cm
26. Percentage of Oxygen in expired air is:
(A) 22% (B) 30% **(C) 16%** (D) 80%
27. The Sound Production Box is called:
(A) Alveoli **(B) Larynx** (C) Bronchi (D) Trachea
28. A narrow opening present at the floor of Pharynx is called:
(A) Nostril (B) Trachea **(C) Glottis** (D) Larynx
29. Larynx is a box made up of:
(A) Muscles (B) Adipose (C) Bone **(D) Cartilage**
30. After larynx, air enters into:
(A) esophagus (B) bronchi (C) pharynx **(D) trachea**
31. The acute bronchitis usually lasts about:
(A) four weeks (B) three weeks **(C) two weeks** (D) one week
32. The empty space present in nose is called:
(A) Eardrum **(B) Nasal Cavity** (C) Pharynx (D) Bronchi
33. Stoma are abundantly present:
(A) In Xylem cells (B) In Phloem cells
(C) on stem **(D) on upper epidermis of leaf**
34. If both lungs are infected the disease is called:
(A) Double Pneumonia (B) Gout (C) Arthrites (D) Typhoid
35. In non-smokers who are exposed to second hand smoke increase their heart diseases risk by:
(A) 30-45% **(B) 25-30%** (C) 20-30% (D) 15-20%

36. Major types of Bronchitis are:

- (A) 4 (B) 3 (C) 2 (D) 1

37. The Larynx is also called this:

- (A) Voice Box (B) Alveoli (C) Bronchioles (D) Trachea

38. In human larynx is made up of:

- (A) hard bones (B) alveoli (C) bronchi (D) cartilage

39. Many chemicals in smoke increase the production of blood cells.

- (A) Red (B) Osteocytes (C) Platelets (D) White

40. The cartilaginous rings in the wall of trachea are:

- (A) N-Shaped (B) C-Shaped (C) V-Shaped (D) U-Shaped

41. Disease in which destruction of walls of Alveoli is found:

- (A) Bronchitis (B) Emphysema (C) Pneumonia (D) Asthma

42. Total chemicals in tobacco smoke are:

- (A) 2000 (B) 3000 (C) 4000 (D) 1000

43. Cigarette smoke contains at least carcinogens.

- (A) 20 (B) 70 (C) 80 (D) 50

44. Every "World no Tobacco Day" is celebrated on:

- (A) 22 March (B) 30 May (C) 31 March (D) 31 May

45. Bronchitis may be caused by:

- (A) ascaris (B) plasmodium (C) bacteria (D) yeast

46. In the developing countries smoking rate is rising by per year.

- (A) 3.4% (B) 4.3% (C) 34% (D) 43%

47. Nasal cavity opens into:

- (A) Lungs (B) Trachea (C) Esophagus (D) Pharynx

48. The amount of nitrogen in expired air is:

- (A) 59% (B) 89% (C) 79% (D) 69%

49. In aerobic respiration is used.

- (A) Hydrogen (B) Oxygen (C) Carbon (D) Nitrogen

50. Lungs are enclosed by membranes which are called:

- (A) Pleural (B) Bronchi (C) Diaphragm (D) Alveoli

51. Pneumonia is an infection of:

- (A) Blood (B) Lungs (C) Heart (D) Kidneys

52. The patient's skin colour may change and become dusky or purplish in which disease?

- (A) Asthma (B) Bronchitis (C) Pneumonia (D) Emphysema

53. The lenticels allow to pass through them:

- (A) Glucose (B) Water (C) Air (D) Lipids

54. Asthma is actually:

- (A) Allergy (B) Hepatitis (C) Cancer (D) Tuberculosis

55. Energy produced in cellular respiration is transformed into?
 (A) ATP (B) NADP (C) ADP (D) AMP
56. The Respiratory center is sensitive to the concentration of Gas in the blood.
 (A) N₂ (B) O₂ (C) NH₃ (D) CO₂
57. Most of the gaseous exchange in a leaf occurs through:
 (A) Stomata (B) Cuticle (C) Lenticels (D) General surface
58. How many bronchi are there in the air passageway?
 (A) Many (B) Two (C) One (D) None of these
59. Where does the gaseous exchange occur in humans?
 (A) Trachea (B) Bronchi (C) Alveoli (D) Pharynx
60. Which structure actively helps in taking the air out of lungs?
 (A) Bronchiole (B) Bronchus (C) Nasal cavity (D) Diaphragm
61. The primary chemical stimulus for breathing is the concentration of:
 (A) Carbon dioxide in muscles (B) Carbon dioxide in blood
 (C) Oxygen in muscles (D) Oxygen in blood
62. Which disease is caused by streptococcus pneumonia?
 (A) Emphysema (B) Pneumonia (C) Asthma (D) Bronchitis
63. Which disease is not related to lungs:
 (A) Myopia (B) Pneumonia (C) Emphysema (D) Asthma
64. All the Alveoli of one combine to form:
 (A) Liver (B) Testes (C) Lung (D) kidney
65. The respiratory center is present in:
 (A) Nose (B) Brain (C) Muscles (D) Lungs
66. The rate of breathing during exercise or death hard physical work is:
 (A) 30-40 times (B) 40-50 times (C) 20-30 times (D) 10-20 times

Chapter : 10

Gaseous Exchange



★ Subjective ★

Q1: **How lenticels are different from stomata?**
Or, What are lenticels?

Ans: **Lenticels:**

Lenticels are the pores in the layer of bark in woody stems and mature roots for the exchange of gases.

Q2: **Define cellular respiration.**

Ans: **Cellular respiration:**

Respiration is the process in which the C-H bond in food is broken by oxidation reduction reaction and energy is transformed into ATP.

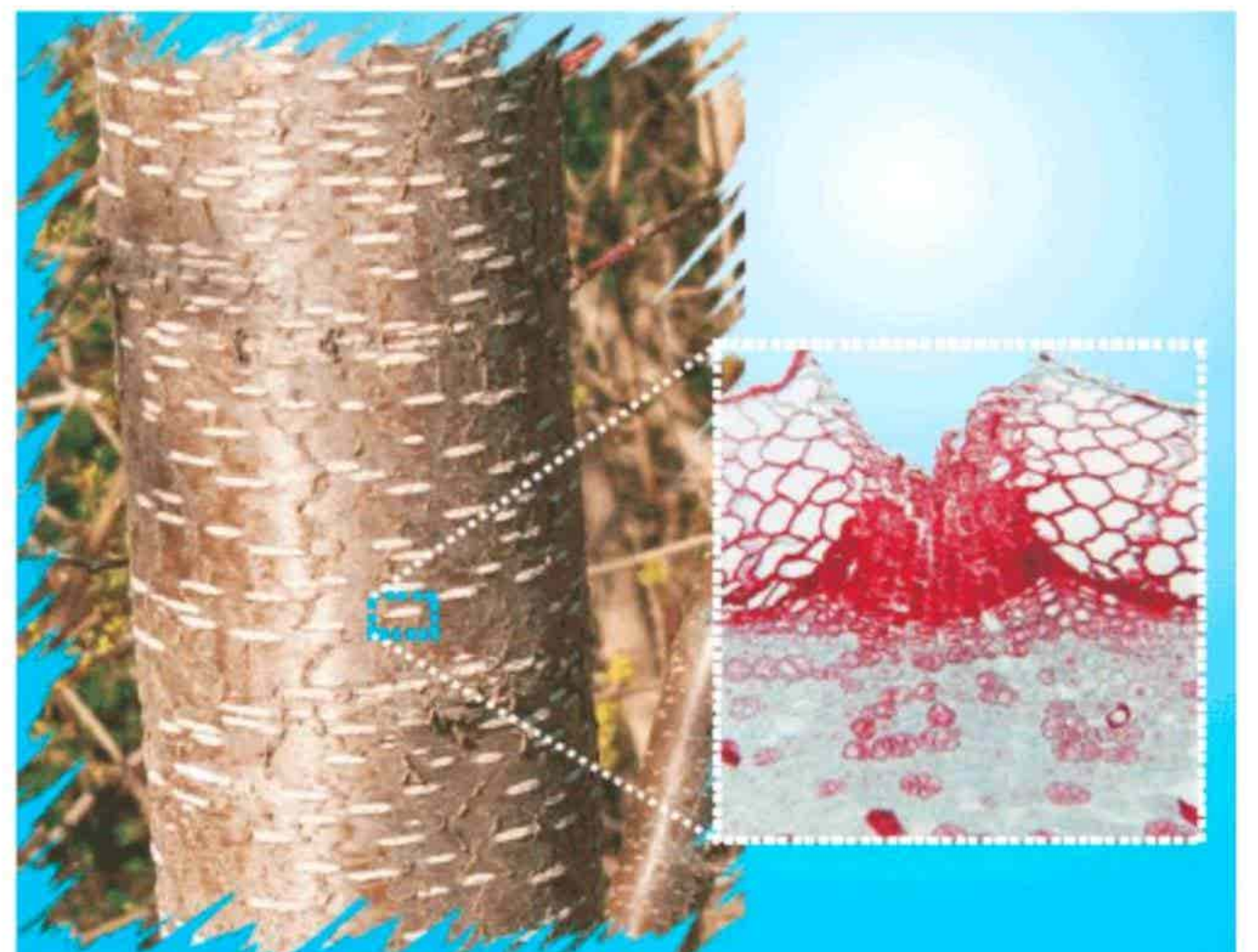


Figure Lenticels on a stem and the internal view of a lenticel

Q3: **What is Aerobic Respiration?**

Ans: **Aerobic Respiration:**

The type of Respiration in which oxygen is used and there is complete oxidation of food material is called aerobic respiration.

Q4: **What is meant by gaseous exchange?**

Ans: **Gaseous exchange:**

Taking in oxygen and giving out of carbon dioxide is called gaseous exchange.

Q5: **Differentiate between respiration and breathing.**

Ans: Difference between respiration and breathing is:

Respiration	Breathing
Respiration is the process in which the C-H-bond in food is broken by oxidation reduction reaction and energy is transformed into ATP.	The breathing is used for the process through which animal takes air in their bodies to get oxygen from it and then give out the air for getting rid of carbon dioxide.

Q6: **Write a short note on gaseous exchange in Plants.**

Ans: Plants have no organ or system for exchange of gases with the environment. Every cell of the plant body exchanges gases with the environment by its own.

Q7: **What is the difference between daytime respiration and night time respiration?**

Ans: Difference between daytime respiration and night time respiration:

Daytime respiration	Night time respiration
During the daytime when the mesophyll cells of leaves are carrying out photosynthesis and respiration side by side, the O_2 produced in photosynthesis is utilized in cellular respiration. Similarly the CO_2 produced during cellular respiration is utilized in photosynthesis	During night when there is no photosynthesis occurring the leaf cells get O_2 from the environment and release CO_2 through stomata.

Q8: **Differentiate between stomata and air spaces.**

Ans: Difference between stomata and air spaces:

Stomata	Air spaces
The leaves and young stems have stomata in their epidermis. The gaseous exchange occurs through these stomata.	The inner cells of leaves (mesophyll) and stems also have air spaces among them, which help in the exchange of gases.

This diagram is just for understanding.

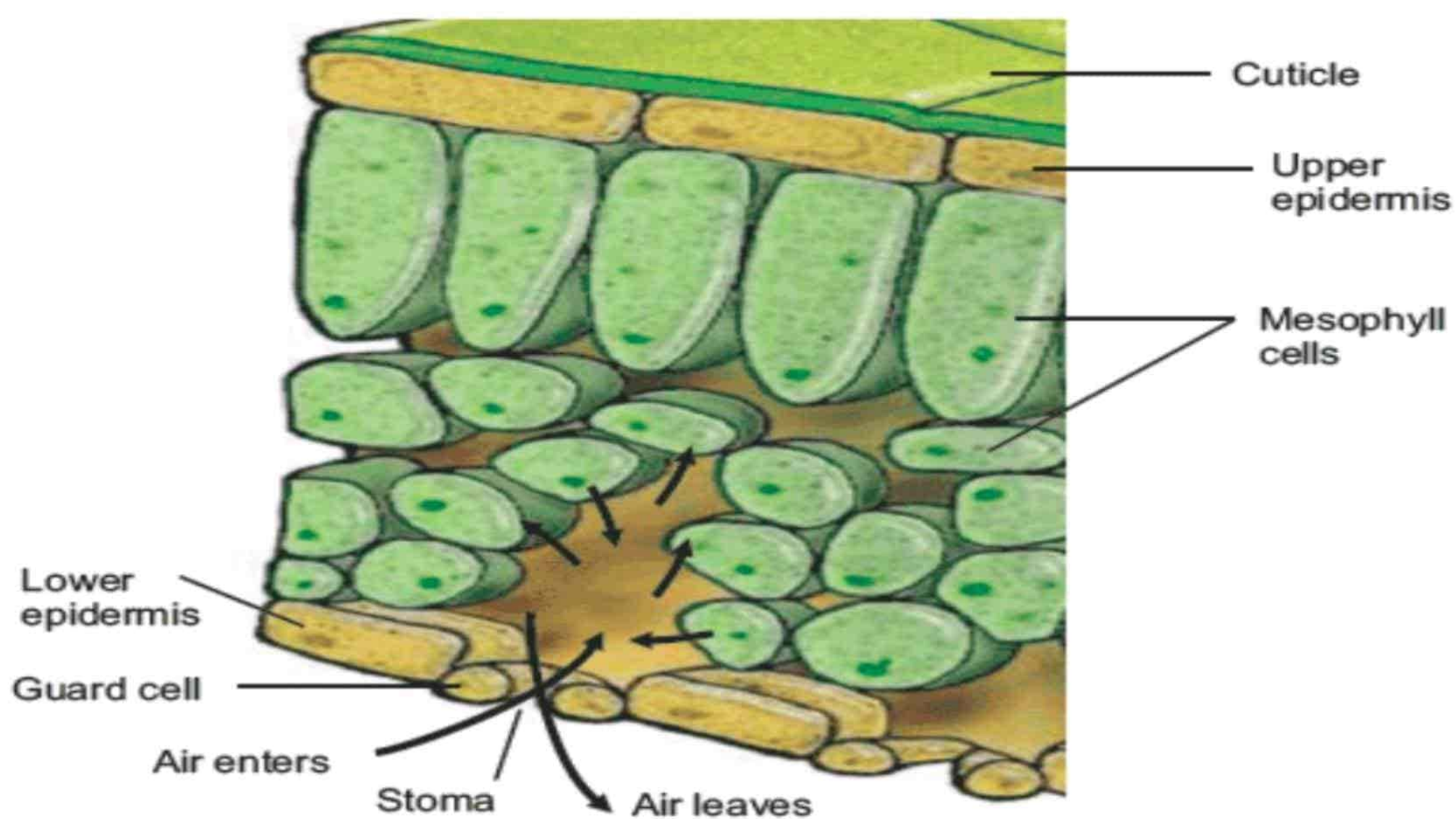


Figure : Gaseous exchange in a leaf

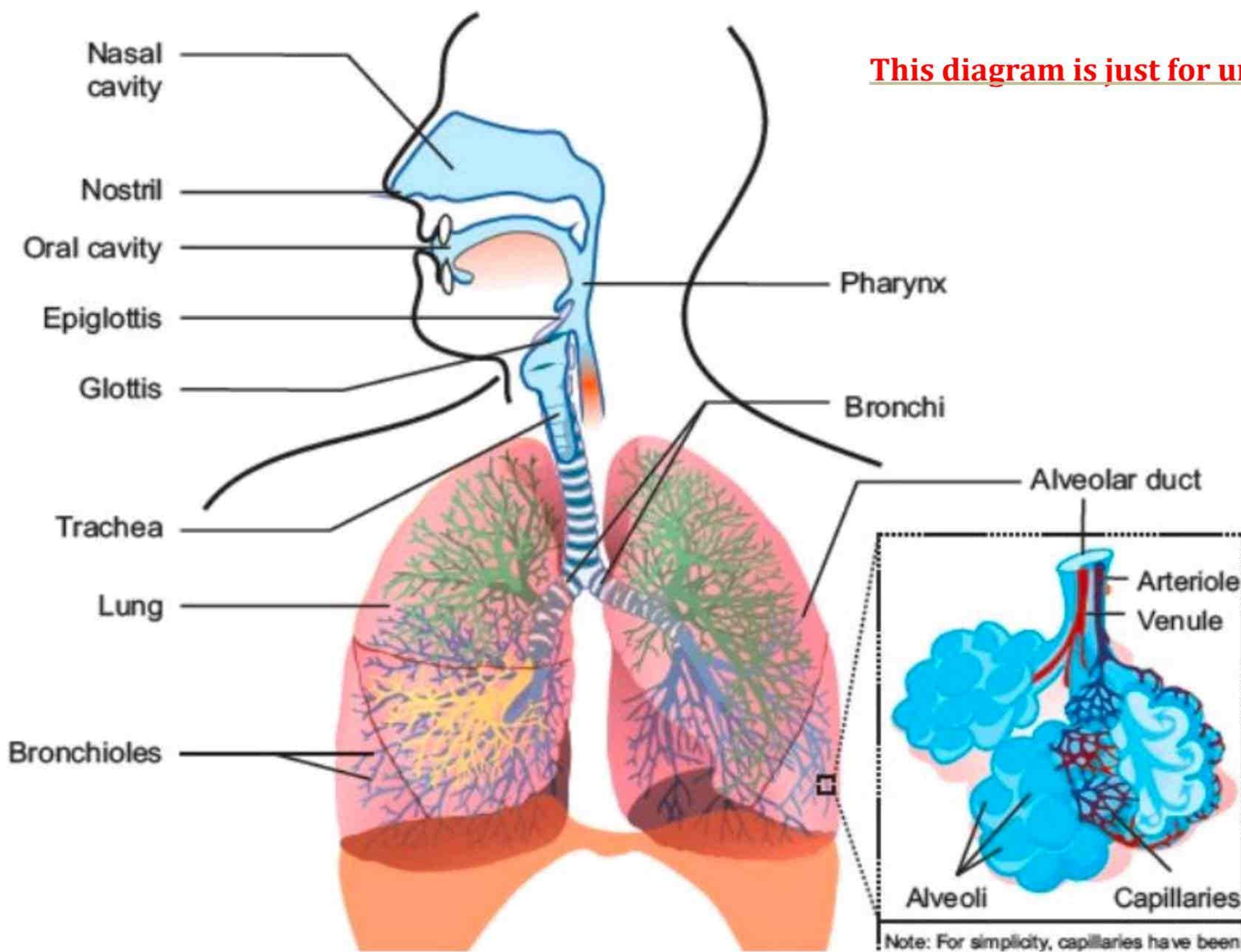


Figure : The air passageway and the lungs

Q9: **Define nasal Cavity.**

Ans: **Nasal Cavity:**

The nose encloses the nasal cavity. It opens to the outside through the openings called the nostrils. Nasal cavity is divided into two halves by a wall.

Q10: **What is the function of mucous present in nasal cavity?**

Ans: Nasal cavity contains mucous which filter the dust particles from air. The mucous also warms the incoming air and keeps its temperature nearly equal to that of body.

Q11: **Define epiglottis. Write its function.**

Ans: **Epiglottis:**

Glottis is guarded by a flap of tissue called epiglottis.

Function:

❖ Its function is to protect the glottis.

Q12: **Differentiate between glottis and epiglottis.**

Ans: Difference between glottis and epiglottis:

Glottis	Epiglottis
Glottis is a narrow opening at the floor of pharynx which leads into larynx.	Glottis is guarded by a flap of tissue called epiglottis. Its function is to protect the glottis.

Q13: **What is the role of epiglottis in the respiration?**

Ans: The role of epiglottis in the respiration is:

It is just like a lid which covers the glottis during swallowing the food.

Q14: **Differentiate between bronchi and bronchioles.**

Ans: Difference between bronchi and bronchioles:

Bronchi	Bronchioles
On entering the chest cavity, the trachea divides in two smaller tubes called bronchi.	The Bronchi continue dividing in the lungs until they make several fine tubes called bronchioles.

Q15: **What is role of pharynx in the respiration?**

Ans: The role of pharynx in the respiration is:

Pharynx is a muscular passage and is common to both food and air. It extends to the opening of the esophagus and the larynx. The air goes from the pharynx into larynx.

Q16: What are Alveoli?

Ans: Each alveolar duct opens into a cluster of pouches called Alveoli. The alveoli form the respiratory surface in human body.

Q17: Describe trachea.

Ans: Larynx continues to the trachea, which is also called the windpipe. It is about 12 cm long tube which lies in front of the esophagus. There are C-shaped cartilaginous rings in the wall of trachea. The cartilages keep the trachea from collapsing even when there is no air in it.

Q18: Write the structure and function of alveolus.

Ans: Alveolus:

Each alveolar duct opens into a cluster of pouches called alveolus (Singular: Alveoli). Each alveolus is a sac like structure lined by a single layer of epithelial cells.

Q19: Write the importance of trachea in the respiratory system.

Ans: The importance of trachea in the respiratory system is:

- ❖ The trachea is also lined with ciliated and glandular cells.
- ❖ These cells secrete mucous which moistens the air.

Q20: What are Alveolar ducts and Alveoli?

Ans: Alveolar duct:

The Bronchioles progressively lose the cartilages as they became narrower. The bronchioles end as fine tubules called alveolar ducts.

Alveoli:

Each alveolar duct opens into a cluster of pouches called alveoli.

Q21: What are lungs?

Ans: Lungs:

All the alveoli on one side constitute a lung. There is a pair of lungs in thoracic cavity. The left lung is slightly smaller than that of right lung.

Q22: Define and give the function of diaphragm.

Ans: Diaphragm:

A thick muscular structure is called diaphragm present below the lungs which protects our lungs. It also goes up and down during inspiration and expiration.

This diagram is just for understanding.

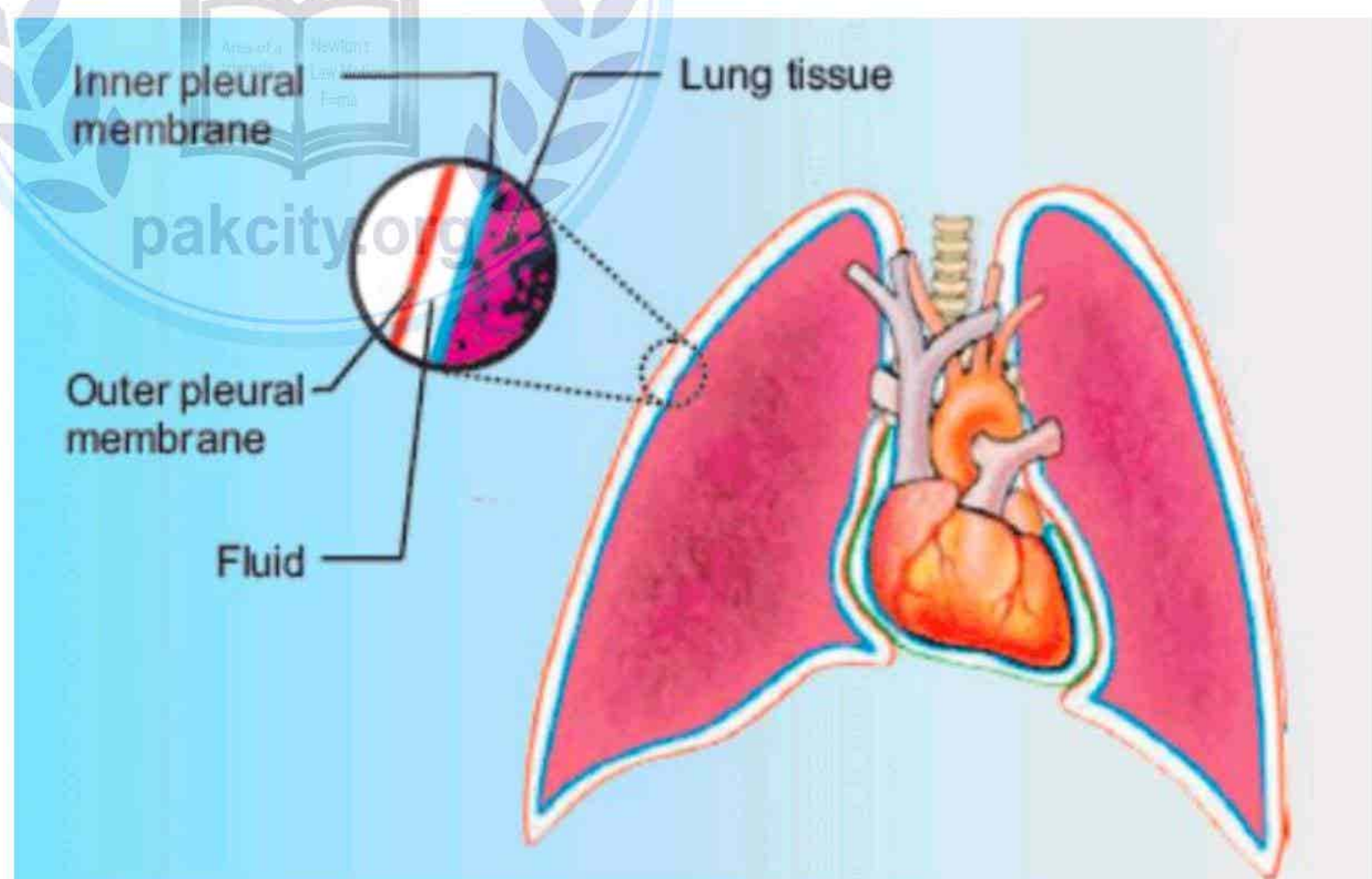


Figure Lungs and Pleural membranes

Q23: What are intercoastal muscles?

Ans: Intercoastal muscles:

The chest wall is made up of 12 pairs of ribs and the rib muscles called intercoastal muscles.

Q24: What are pleural membranes? Write down their function.

Ans: Each lung is enclosed by two membranes called:

- ❖ Inner pleural membrane.

- ❖ Outer pleural membrane.

Functions:

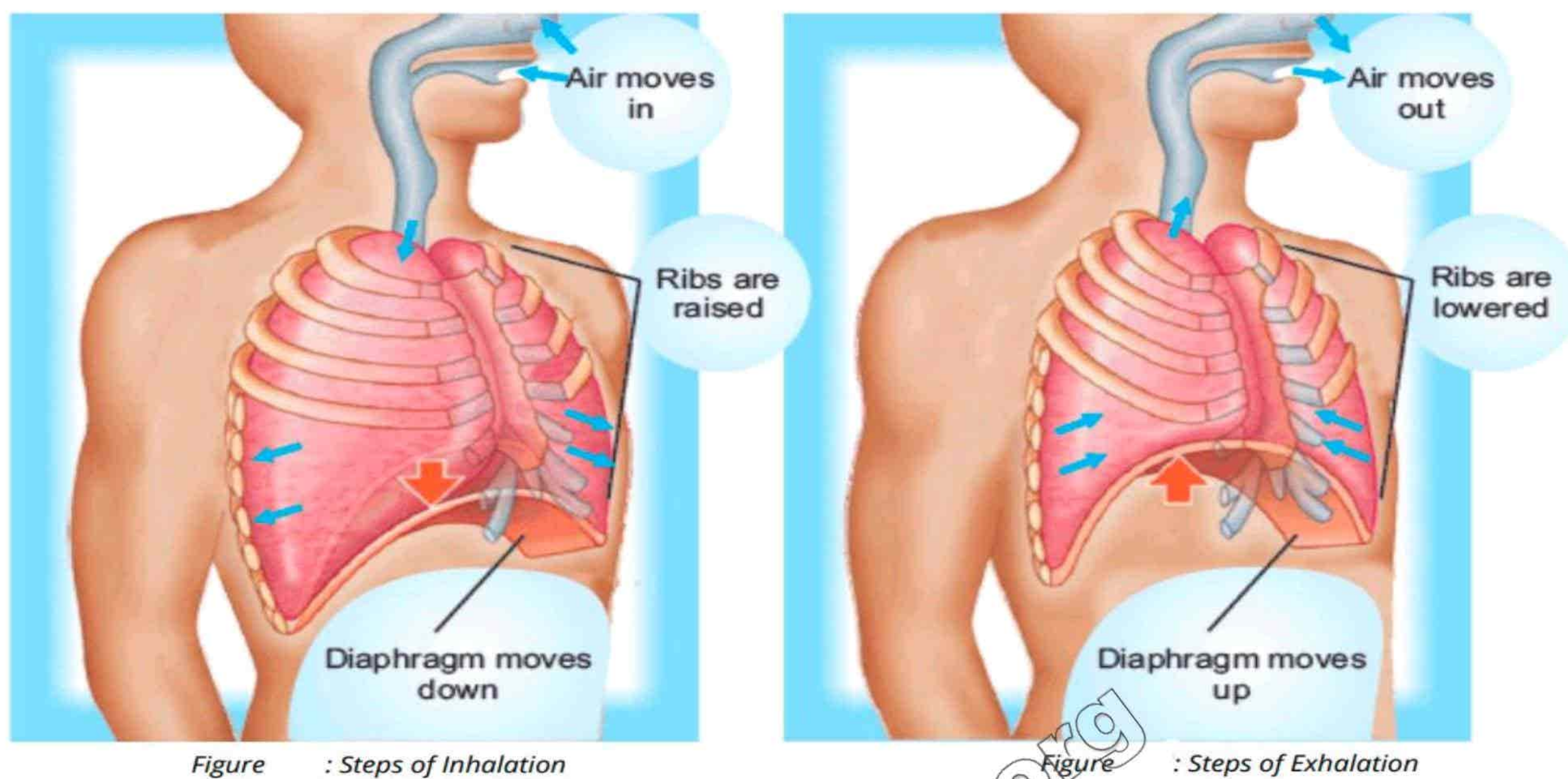
This membrane enclosed a fluid which provides lubrication for the free expanding of lungs.

Q25: **Define oxygenated blood.**

Ans: **Oxygenated blood:**

Blood which contains oxygen is known as oxygenated blood. During blood circulation oxygenated blood moves from lungs to heart.

This diagram is just for understanding.



Q26: **Define breathing and write name of its two processes.**

Ans: **Breathing:**

The physical movement associated with the gaseous exchange is called breathing.

Name of the breathing processes are:

- ❖ Inhalation or inspiration.
- ❖ Exhalation or Expiration.

Q27: **What is difference between the terms Inhalation and exhalation?**

Ans: Difference between Inhalation and exhalation:

Inhalation or inspiration	Exhalation or Expiration
During inspiration, the phase of breathing in which the air is drawn into the lungs.	The phase of breathing in which the air is expelled from the lungs.

Q28: **What is Bronchitis? Write the names of its two types.**

Ans: **Bronchitis:**

Bronchitis is the inflammation of the bronchi or bronchioles.

The name of its two types is:

- ❖ Chronic bronchitis.
- ❖ Acute bronchitis.

Q29: **Define acute bronchitis.**

Ans: **Acute bronchitis:**

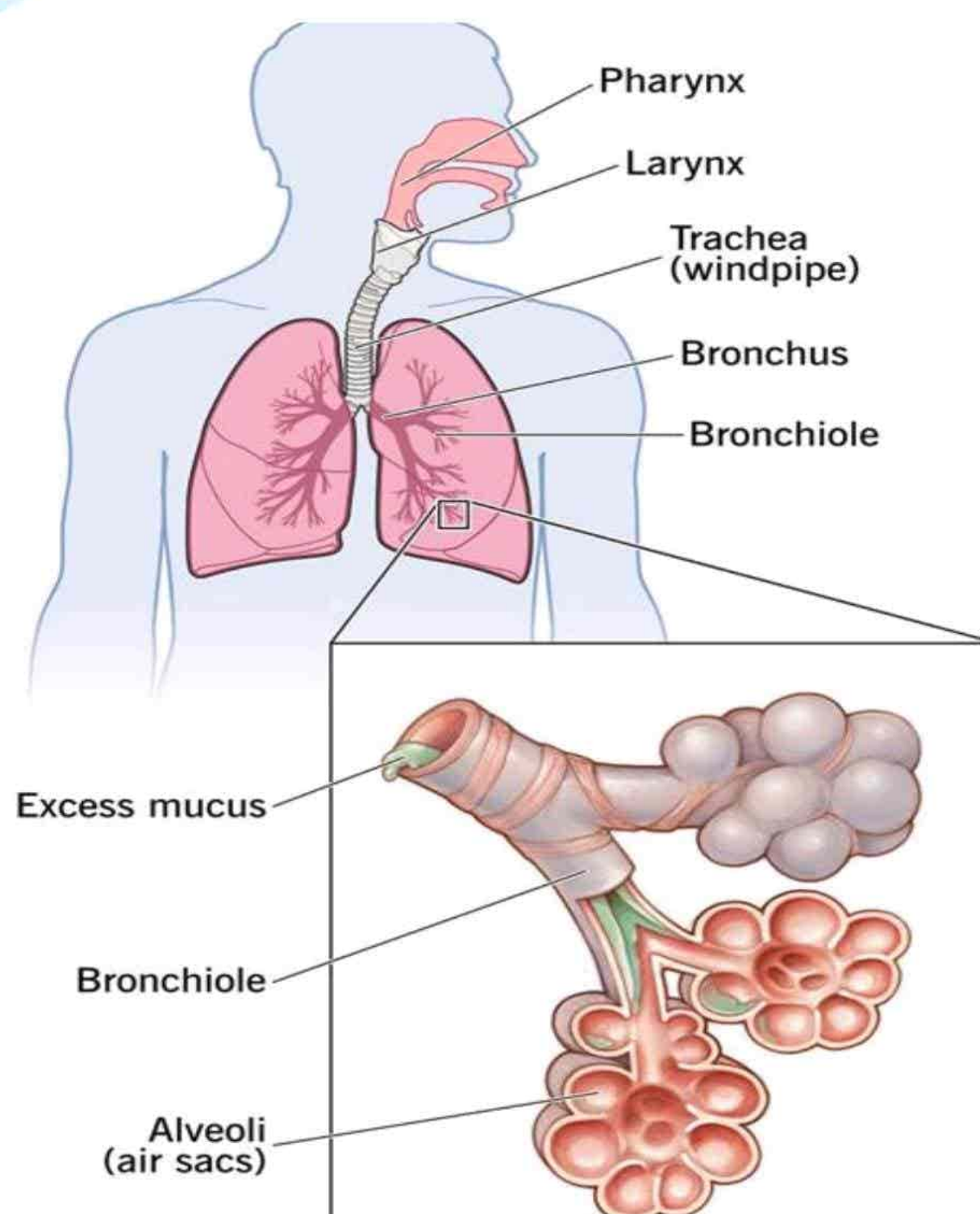
It usually lasts about two weeks and patient recovers with no permanent damage to bronchi.

Q30: **Define Chronic bronchitis?**

Ans: **Chronic bronchitis:**

In this the bronchi develop chronic inflammation. It usually lasts about 3 months to 2 years.

This diagram is just for understanding.



Q31: What are the causes and symptoms of bronchitis?

Ans: Bronchitis:

Bronchitis caused by viruses, bacteria or exposure to chemical irritants.

Example:

❖ Tobacco smoke.

Symptoms:

Symptoms of bronchitis include a cough, mild, wheezing, fever and shortness of breath (especially when doing hard job).

Q32: What is emphysema? Write its symptoms.

Ans: Emphysema:

Emphysema is the destruction of the walls of the Alveoli. It results in larger sacs but with less surface area for gaseous exchange.

Symptoms:

Its symptoms shortness of breath, fatigue, recurrent respiratory infections and weight loss.

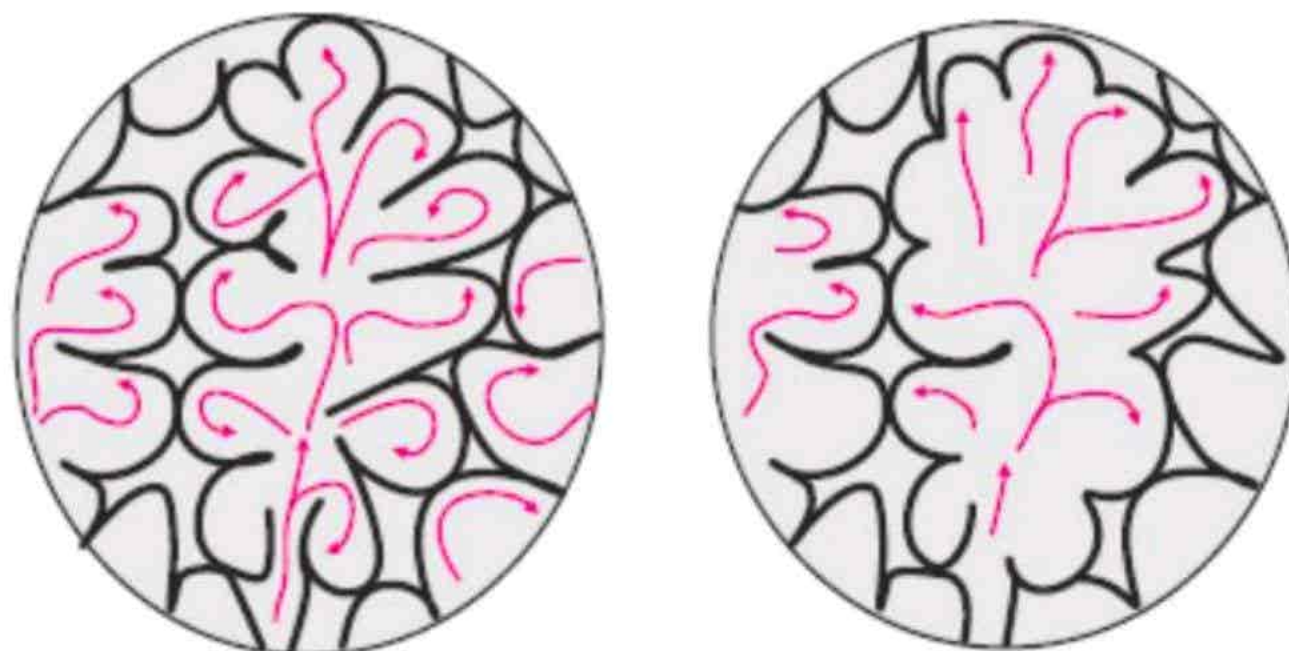


Figure : The Alveoli; normal (left) and emphysema (right)

Q33: What is difference in Pneumonia and double Pneumonia?

Ans: Difference between Pneumonia and double Pneumonia is:

pakcity.org Pneumonia	Double Pneumonia
<ul style="list-style-type: none"> ❖ Pneumonia is an infection of lungs. ❖ Its symptoms include a cold that is followed by a high fever, shivering and a cough with sputum production. 	<ul style="list-style-type: none"> ❖ Pneumonia is an infection of lungs. If these infections affect both lungs then it is called double pneumonia. ❖ The most common cause of pneumonia is a bacterium, streptococcus pneumonia.

Q34: What is pneumonia? Write down its symptoms.

Ans: Pneumonia:

Pneumonia is an infection of lungs.

Symptoms:

Its symptoms include a cold that is followed by a high fever, shivering and a cough with sputum production.

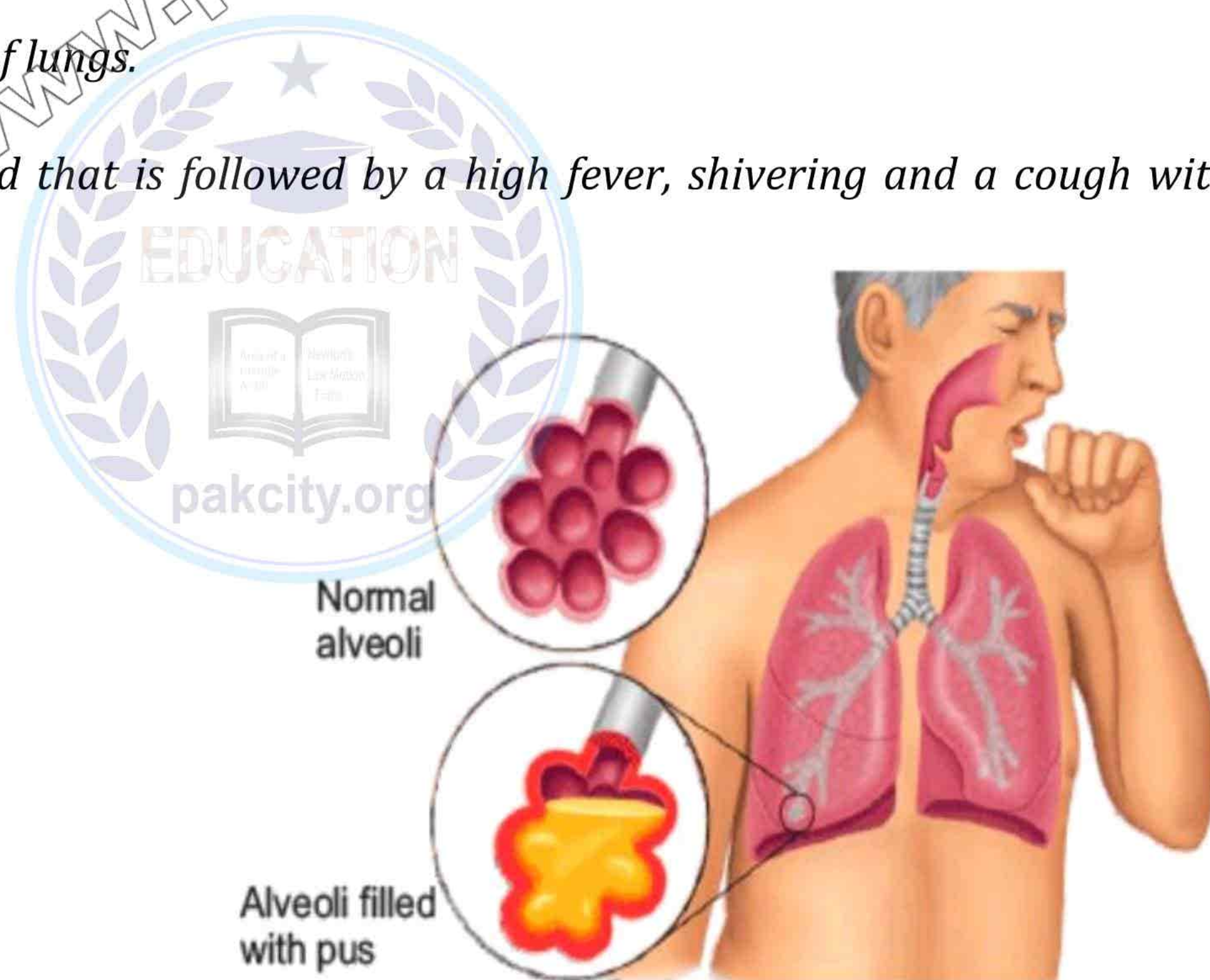


Figure : Pneumonia

Q35: What is double pneumonia?

Ans: Double pneumonia:

Pneumonia is an infection of lungs. If these infections affect both lungs then it is called double pneumonia.

The most common cause of pneumonia is a bacterium, streptococcus pneumonia.

Q36: **What is Asthma? Write its symptoms.**

Ans: **Asthma:**

Asthma is a form of allergy in which there is inflammation of bronchi, more mucous production and narrowing of airways.

Symptoms:

The major symptoms include shortness of breath, wheezing, cough and chest tightness.

Q37: **Write treatment of a asthma.**

Ans: **Treatment of asthma:**

The chemicals with ability to dilate bronchi or bronchioles are used in the treatment of Asthma. Such medicine is given in the form of inhalers.

Q38: **What is lung cancer? Give its two causes.**

Ans: Lung cancer is a disease of uncontrolled cell divisions in the tissues of the lungs.

Causes:

- ❖ Smoking.
- ❖ Ionizing radiations.
- ❖ Viral infection.
- ❖ Carcinogens.

Q39: **What is meant by Passive Smoking?**

Ans: **Passive Smoking:**

The Inhalation of smoke from another's smoking is called passive smoking.

Q40: **What are Carcinogens?**

Ans: **Carcinogens:**

The Compounds that causes Cancer Such as those in cigarette smoke are called Carcinogens.

Q41: **What is Nicotine?**

Ans: **Nicotine:**

It is a powerful poison and was widely used as an insecticide in the past.

Q42: **What is primary goal of WHO regarding prevention of Lung cancer?**

Ans: Eliminating Tobacco smoking is a primary goal in the prevention of lung cancer. The WHO has called for governments to stop tobacco advertising to prevent young people from taking up smoking.

Q43: **What are the bad effects of smoking?**

Ans: These are the following bad effects of smoking:

- ❖ Smoking lead to cancer in kidney, oral cavity, larynx, breast, bladder and pancreas.
- ❖ It is responsible for weakening and staining of teeth.
- ❖ It is also effect on circulatory system.
- ❖ It creates infection in lungs.

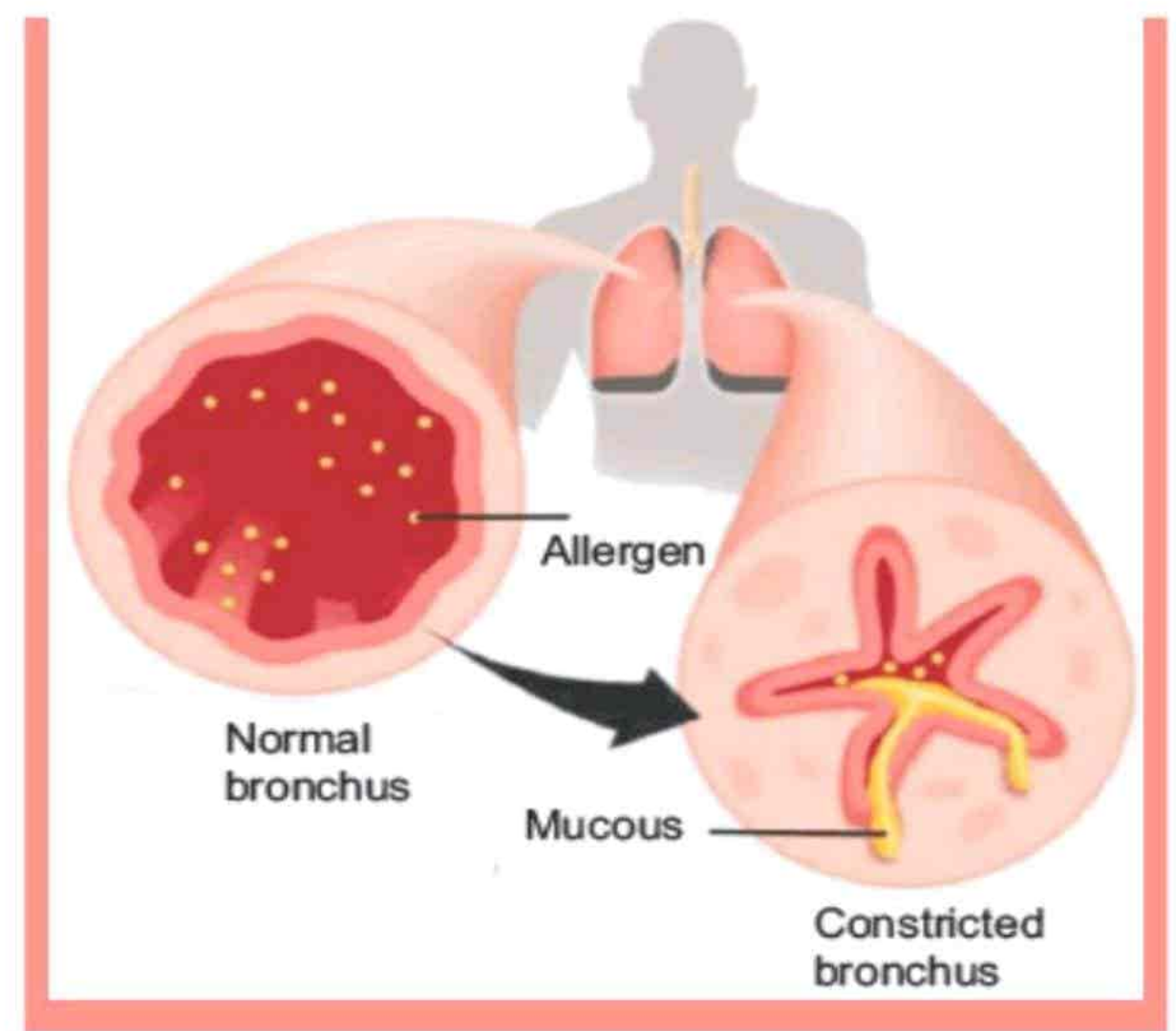


Figure : Asthma

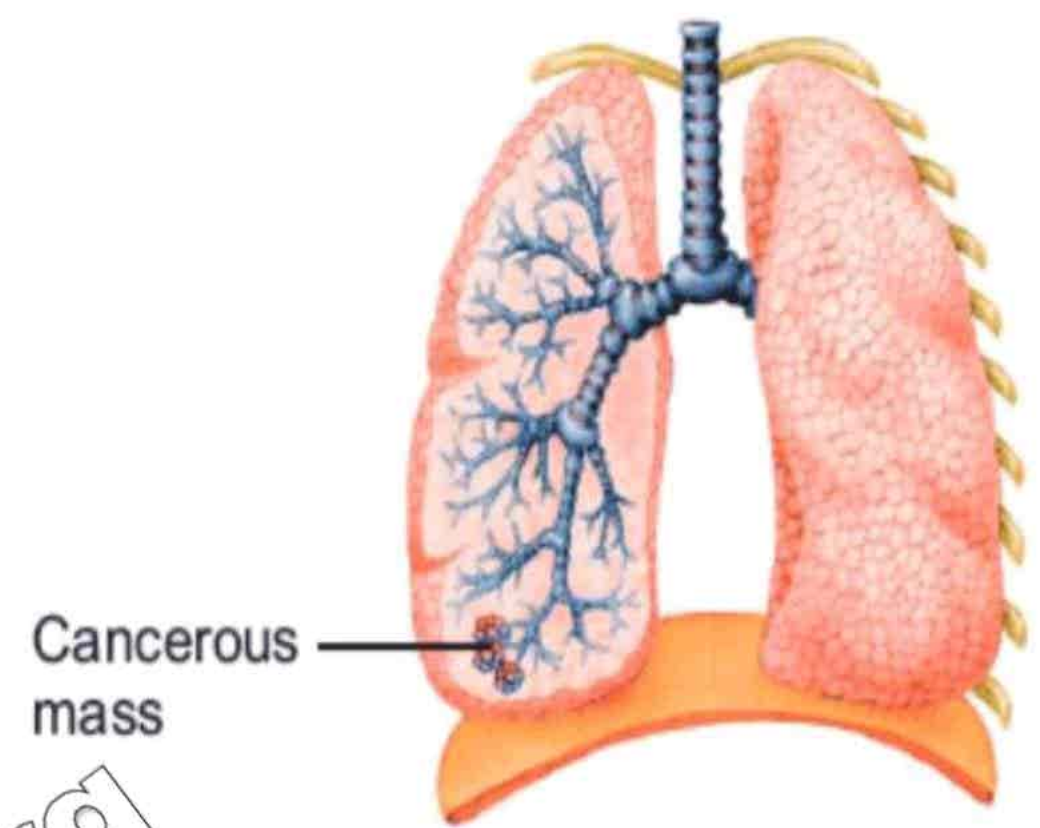
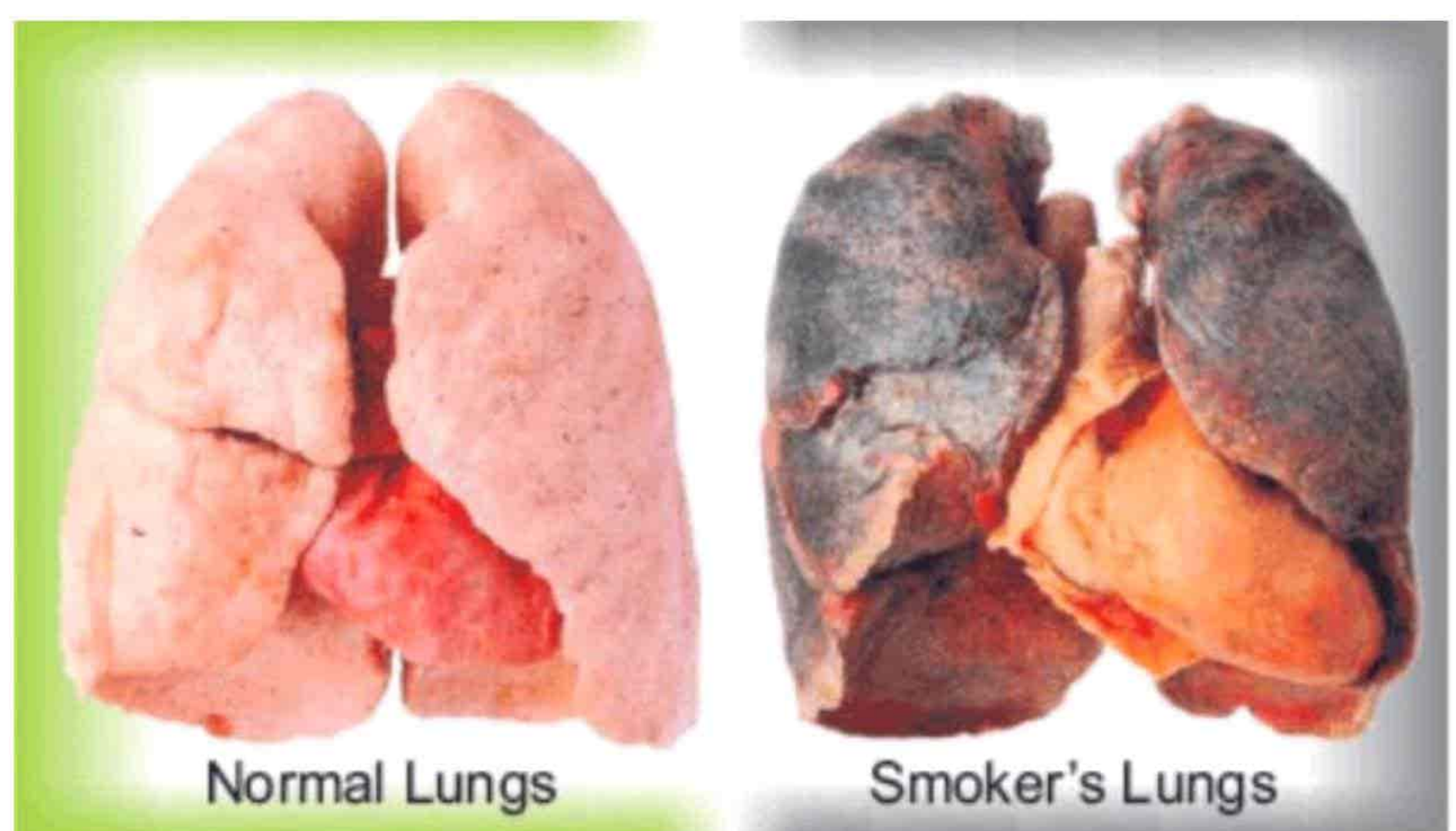


Figure Lung Cancer

This diagram is just for understanding.



Q44: What are the effects of smoking on teeth?

Ans: Smoking is harmful due to chemical in cigarette and smoke.

Effect on teeth:

- ❖ Smoking is responsible for the weakening.
- ❖ Staining of teeth.
- ❖ Tooth loss is 2 to 3 times higher in smokers than non-smokers.

Q45: What are endonuclease and Ligase?

Ans: Endonuclease and Ligase:

The enzyme which breaks, called endonuclease and the enzyme which is join is called ligase.

Q46: Define arterial-sclerosis.

Ans: Arterial-sclerosis:

It is the hardening of arteries. It occurs when calcium is deposited in the walls of arteries.

Q47: Increased number of platelets in the blood causes which disease?

Ans: Increase number of platelets in the blood cause arteriosclerosis.

Q48: How the chance to develop cancer decreases?

Ans: If a person stops smoking, the chance to develop cancer decreases as damage to the lungs is repaired and contaminant particles are gradually removed.

Q49: What is the percentage of Nitrogen inhaled and exhaled air?

Ans: The percentage of nitrogen inhaled is 79 % and exhaled is 79 %.

Q50: What is the percentage of carbon dioxide inhaled and exhaled air?

Ans: The percentage of inhaled carbon dioxide is 0.04 % and the percentage of carbon dioxide exhaled is 04 %.

Conceptual Question



Q1: How smoking affects the social life of a person?

Ans: Smoking also affects the social life of a person. Smokers may face social un-acceptance because other people may not want to be exposed to other's smoke.

Q2: Does smoking affect only lungs?

Ans: No, smoking may also affect other organs of body.

Examples:

- ❖ Kidneys
- ❖ Oral cavity
- ❖ Larynx
- ❖ Breast
- ❖ Bladder
- ❖ Pancreas etc.

Q3: How much risk of tuberculosis and pneumonia are increased by smoking?

Ans: Smoking increases the risk of Tuberculosis by two to four times and of pneumonia by four times.

Q4: What is normal rate of respiration in human? How it is controlled brain?

Ans: Human breathes 16-20 times per minute in normal circumstances (at rest). The rate of breathing is controlled by the respiratory centre in brain. The respiratory centre is sensitive to the concentration of carbon dioxide in blood.

Q5: What are pleural membranes? Write down their function.

Ans: Each lung is enclosed by two membranes called:

- ❖ Inner pleural membrane.
- ❖ Outer pleural membrane.

Functions:

This membrane enclosed a fluid which provides lubrication for the free expanding of lungs.

Q6: **Describe the function of Nasal Cavity?**

Ans: Nasal cavity is lined by fine hairs and mucus that filter the dust particles from air. The Mucus also moistens and warms the incoming air and keeps its temperature nearly equal to that of the body.

Q7: **Why we should not sleep under trees during night?**

Ans: During night the leaf of trees get oxygen from the environment and release carbon dioxide through stomata. So, the amount of oxygen decreases which may lead to death. That is the reason that we should not sleep under trees at night.

Q8: **Define Vocal Cords? OR**

How sound is produced in larynx? OR

Why larynx is called voice box?



Ans: The larynx is a box, made up of cartilage. It is present between pharynx and trachea. It is also called the voice box.

Two pairs of fibrous bands called vocal cords are stretched across the larynx. The vocal cords vibrate when the air passes through them. This vibration produces sounds.

Q9: **Describe the changes which take place during expiration or exhalation in the chest cavity? OR**

Describe the changes which take place, during inspiration or inhalation in the chest cavity.

Ans: **Inspiration:**

During inspiration, the rib muscles contract and ribs are raised. At the same time dome shaped diaphragm contracts and is lowered. These movements increase the area of thoracic cavity, which reduce the pressure on lungs. As a result, lungs expand and air pressure within them also decreases. The air from outside rushes into lungs to equalize the pressure on both sides.

Expiration:

After the gaseous exchange in lungs, the impure air is expelled out in exhalation. The rib muscle relaxes, bringing the ribs back to original position. The diaphragm muscles also relax and it gets rise its dome shape.

Q10: **Why dose blood become thick due to smoking? OR**

What is arteriosclerosis?

Ans: Many chemicals in smoking increase the production of blood platelets. When platelets are more than the normal numbers, they make the blood viscous and it can lead to arteriosclerosis.

Q11: **How passive smoking is injurious to health?**

Ans: Passive smoking (the inhalation of smoke from another's smoking) is also a cause of lung cancer. The smoke from the burning end of a cigarette is more dangerous than the smoke from the filter end.

Q12: **How smoking effects on circulatory system?**

Ans: Smoking also has effects on circulatory system. The carbon monoxide present in tobacco smoke lessens the oxygen carrying capacity of hemoglobin. Many other Chemicals in smoke increase the production of blood platelets when platelets are more than the normal numbers, they make the blood viscous and it can lead to arteriosclerosis.

Q13: **How specific sound for talking is produced?**

Ans: The vibrations in vocal cords and the movement of lips, cheeks, tongue and Jaws produce specific sounds which result in speech. Speech is an ability that only humans are gifted with and this is one of the characteristics which has put human beings superior to all.

Q14: **How does gaseous exchange occur in aquatic plants?**

Ans: The aquatic plants get the oxygen dissolved in water and release carbon dioxide in the water.

Q15: **How does gaseous exchange occur in stems and leaves of plants?**

Ans: The leaves and young stems have stomata in their epidermis. Maximum gaseous exchange occurs through these stomata.

Q16: **How many membranes in lungs? And describe its function.**

Ans: Each lung is enclosed by two membranes called the outer pleural membrane and the inner pleural membrane. The membranes enclose a fluid which provides lubrication for the free expanding and contracting of the lungs.

Chapter : 10**Gaseous Exchange****★ Imp.Long Questions ★**

- Q.1: Write a detail note. How gaseous exchanges take place in human?
- Q.2: Describe the functions of nasal cavity, voice box, pharynx and alveoli. V.imp
- Q.3: Explain Gaseous exchange in Plants.
- Q.4: How plants remove extra oxygen and carbon dioxide?
- Q.5: Give two features and two functions of human lungs.
- Q.6: What is Bronchitis? Write its types. V.imp
- Q.7: Describe the causes and symptoms of Bronchitis and Emphysema. V.imp
- Q.8: Write a complete note on lungs Cancer.
- Q.9: Write a note on emphysema and asthma. V.imp

www.pakcity.org

