

Class : XIth

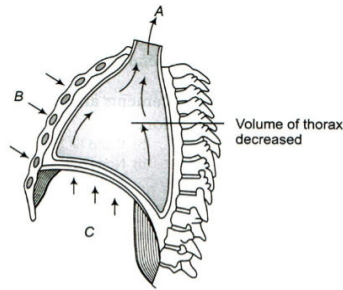
Subject : BIOLOGY

Date :

DPP No. : 5

Topic :- Breathing and Exchange of Gases

- Blood is a medium to transport O_2 and CO_2 . About ...A... per cent of O_2 is transported by ...B... in the blood and the remaining ...C... per cent of O_2 is carried in a dissolved state through the ...D...
Select the right options for A, B, C and D to complete the given statement
a) A-50, B-RBC, C-50, D-plasma
b) A-97, B-RBC, C-3, D-plasma
c) A-90, B-RBC, C-10, D-plasma
d) A-80, B-RBC, C-20, D-plasma
- Name the artery which carries deoxygenated blood
a) Pulmonary artery b) Pulmonary trunk c) Systemic artery d) Vena cava
- Receptors associated with the aortic arch and carotid artery can recognize the changes in ...A... and H^+ concentration and send necessary signals to the ...B... for remedial actions
Select the right choice for A and B to complete the given NCERT statement
a) A- OH^- ; B-rhythm centre
b) A- O_2 ; B-rhythm centre
c) A- CO_2 ; B-rhythm centre
d) A-blood circulation; B-rhythm
- The factor which does not affect the rate of alveolar diffusion is
a) Solubility of gases
b) Thickness of the membranes
c) Pressure gradient
d) Reactivity of the gases
- How much amount of air can be inspired or expired during normal breathing?
a) 0.5L b) 2.5L c) 1.5L d) 5.5L
- The partial pressure of CO_2 (pCO_2) is the highest in
a) Trachea b) Alveoli c) Tissues d) Bronchi
- Dissociation of CO_2 from carbamino haemoglobin takes place when
a) pCO_2 is less in alveoli and pO_2 is high
b) pCO_2 is low and pO_2 is high in alveoli
c) pCO_2 is equal to pO_2 in lungs, *i.e.*, low
d) pCO_2 is equal to pO_2 in tissue, *i.e.*, high
- Pneumotaxic centre of the brain can
a) Moderate the function of respiratory system
b) Decrease the heart rate
c) Increase the heart rate
d) Increase the flow of blood
- In the given diagram, what A, B and C depicts?



- a) A-Air goes inside to lungs, B-Ribs and sternum returned to original, position, C-Diaphragm contracted
 b) A-Air expelled from lungs, B-Ribs and sternum returned to original position, C-Diaphragm relaxed and arched upward
 c) A-Air expelled from lungs, B-Ribs and sternum goes upward, C-Diaphragm relaxed and arched upward
 d) A-Air goes inside to lungs, B-Ribs and sternum goes upward, C-Diaphragm relaxed and arched upward
10. Effect of 2-3 DPG on the human blood is that
 a) It increases the affinity of O_2 to haemoglobin b) It decreases the affinity of O_2 to haemoglobin
 c) It increases in the blood in plane areas d) None of the above
11. Two friends are eating together on a dining table. One of them suddenly starts coughing while swallowing some food. This coughing would have been due to improper movement of
 a) Diaphragm b) Neck c) Tongue d) Epiglottis
12. The thoracic chamber is formed dorsally by the ...A..., ventrally by the ...B..., laterally by the ...C... and on lower side by the dome-shaped ...D...
 Select the right choices for A, B, C and D to complete the given NCERT statement
 a) A-vertebral column, B-sternum, C-ribs, D-diaphragm
 b) A-vertebral column, B-ribs, C-sternum, D-diaphragm
 c) A-diaphragm, B-ribs, C-sternum, D-vertebral column
 d) A-ribs, B-diaphragm, C-sternum, D-vertebral column
13. Which structure of the lungs is directly involved in O_2/CO_2 exchange between air and blood capillary?
 a) Bronchi b) Trachea c) Alveoli d) Secondary bronchi
14. If the level of carboxyhaemoglobin in blood reaches upto....., the functioning of central nervous system is severely affected which results in death.
 a) 1 to 2% b) 0.20 to 0.30% c) 0.30 to 0.40% d) 0.1 to 5%
15. When the body is rapidly oxidizing fat, excessive ketone bodies gets accumulated in the body, resulting in the formation of
 a) Pyruvic acid b) Lactic acid c) Ketoacidosis d) ATP
16. Which portion of the human respiratory system is called sound box?
 a) Larynx b) Trachea c) Nasopharynx d) Glottis
17. Binding of O_2 with haemoglobin is primarily depended upon
 I. partial pressure of O_2
 II. partial pressure of CO_2

