

**Question 38**

a) Identify the structures **A-D**

A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

D \_\_\_\_\_

b) Indicate true (T) of false (F)

- i) The heart starts to beat as early as the third week
- ii) Sinoatrial node is the first to develop in the conducting system
- iii) Head fold results in pericardium becoming dorsal to the heart tube
- iv) Transposition of the great arteries is usually accompanied by patent ductus arteriosus

**Question 39**

a) Name the anomalies **A-D**

A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

D \_\_\_\_\_

b) Name two anomalies which may result from failure of obliteration of vitelline duct

\_\_\_\_\_  
\_\_\_\_\_

**Question 40**

a) State the stages of lung maturation

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) Indicate true (T) or false (F)

- i) Alveoli at birth are one sixth of adult alveoli

- ii) Respiratory distress syndrome is due to abundant surfactant
- iii) Pulmonary hypoplasia results from diaphragmatic hernia
- iv) Laryngeal cartilages are derived from the second pharyngeal arch

**Question 41**

Name anomalies **A-D** and state one possible mechanism for each one

Anomaly	Mechanism
<b>A</b>	
<b>B</b>	
<b>C</b>	
<b>D</b>	

**Question 42**

a) Identify anomalies **A** and **B**

**A** \_\_\_\_\_

**B** \_\_\_\_\_

b) Indicate true (T) or false (F)

- i) Viability of sperms lasts for two weeks
- ii) Only 300 out of half million sperms reach the fertilization site
- iii) Capacitation is removal of glycoprotein coat of the sperm head
- iv) Secretions of seminal vesicles constitute 60% of the seminal fluid

**Question 43**

a) Name anomalies **A** and **B**

**A** \_\_\_\_\_

**B** \_\_\_\_\_

b) Indicate true (T) or false (F)

- i) Gartner's duct is a remnant of mesonephric duct in female
- ii) Secondary oocyte undergoes second meiotic division during fertilization
- iii) Secretory phase of endometrium is controlled by estrogen
- iv) Turner's syndrome is characterized by a 47, XXX chromosome

**Question 44**

a) Name the structures labeled **A-D**

**A** \_\_\_\_\_

**B** \_\_\_\_\_

**C** \_\_\_\_\_

**D** \_\_\_\_\_

- b) Name two techniques used in prenatal diagnosis of chromosomal abnormalities during the first trimester

\_\_\_\_\_  
\_\_\_\_\_

**Question 45**

- a) Name anomalies **A-B**

**A** \_\_\_\_\_

**B** \_\_\_\_\_

- b) Indicate true (T) or false (F)

- i) Sacrococcygeal teratoma is a remnant of the primitive streak
- ii) Congenital aphakia is absence of the iris
- iii) Middle ear cavity develops from the second pharyngeal pouch
- iv) Erector pili muscle is ectodermal in origin