

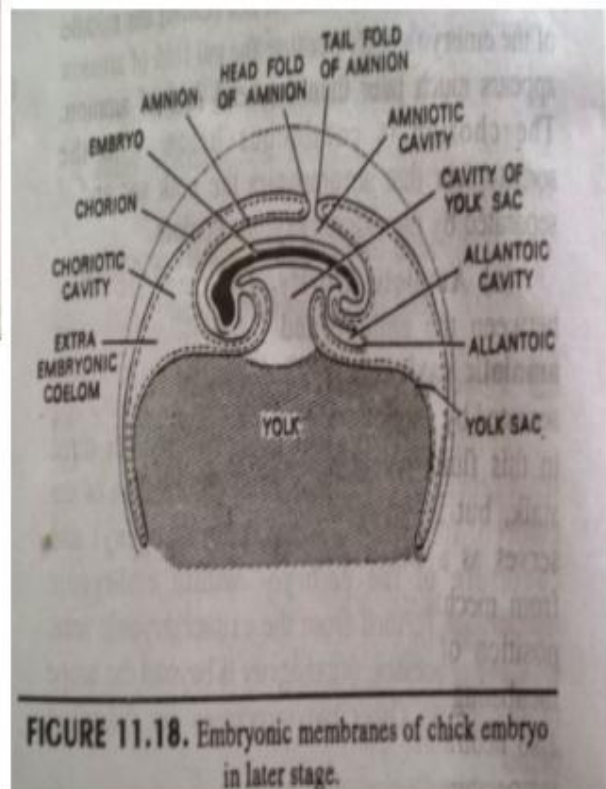
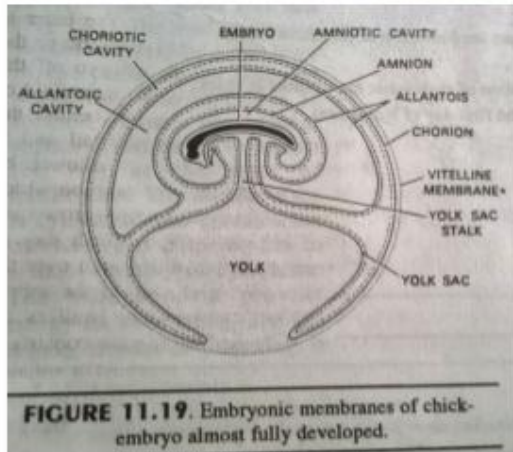
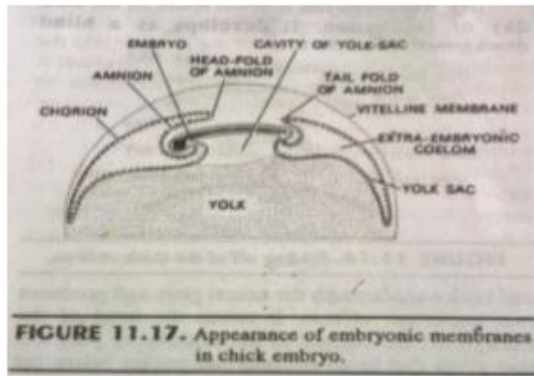
INTRODUCTION

- **structures** that appear parallel to the **embryo**
- important roles in **embryonic** development
- from the **embryo** but do not become part of organism after its birth.
- The embryos of reptiles, birds, and mammals produce 4 extraembryonic membranes.
- amnion
- yolk sac
- chorion,
- Allantois

YOLK SAC IN CHICK

- **-Formed of extraembryonic splanchnopleur with endoderm inner and splanchnic mesoderm outer side. At first , yolk sac has a wide opening into the midgut.**
- **-As development proceeds ,its passage into the midgut is reduced to a narrow **YOLK SAC STALK** or **UMBILICAL STALK**, whose opening is called **UMBILICUS**.**
- **-Formed completely on 9th day of incubation**

EXTRA EMBRYONIC MEMBRANE -1



- **-Serves to digest the yolk and to transfer the products of digestion to the embryo.**
- **-Digestion by endodermal cells**
- **-At first distribution by diffusion , then by vitelline veins and arteries on development of AREA VASCULOSA.**
- **-As the yolk is digested, yolk sac becomes small and before hatching is withdrawn into body cavity.**

EXTRA EMBRYONIC MEMBRANE -1

