

# Rep 8 – Cell to Embryo



## Development of the Embryo

- A. mature ovum
- B. fertilization of ovum by sperm cell
- C. cleavage (cell division at the cell stage)
- D. morula (multi-cell stage of development)
- E. embryonic vesicle
- F. developing embryo about 21 days
- G. much-enlarged embryo about 5<sup>th</sup> week

## Maternal and Embryonic Structures

- 1. ovary (coronal section, stroma and associated components)
- 2. primary oocyte (developing ovum)
- 3. oocyte with corona radiate
- 4. developing fluid-filled vesicular follicles
- 5. ovulating follicle
- 6. corpus luteum
- 7. corpus albicans (degenerative product of corpus luteum)
- 8. mature ovum discharged from follicle
- 9. fimbriated end of oviduct (fallopian tube)
- 10. ovum in fallopian tube with sperm ready to penetrate
- 11. fallopian tube
- 12. cleavage of fertile ovum
- 13. morula or multi-celled stage (third day)
- 14. embryonic vesicle enters uterus (fourth or fifth day)
- 15. implantation of vesicle begins in the wall of the uterus of endometrial epithelium (seventh day)
- 16. corpus of uterus (frontal, mid-line section)
- 17. fundus of uterus
- 18. myometrium or muscle layers of uterus
- 19. cervix
- 20. endometrium
- 21. vagina (frontal section)
- 22. nucleus of ovum
- 23. zona pellucida of ovum
- 24. corona radiate of ovum
- 25. sperm cell
- 26. yolk sac of developing embryo
- 27. embryonic disk
- 28. amnion of developing embryo
- 29. embryonic placenta
- 30. body of embryo
- 31. amnion and amniotic cavity
- 32. developing heart
- 33. yolk sac
- 34. yolk sac stalk
- 35. allantoic diverticulum
- 36. body stalk
- 37. extra embryonic coelom
- 38. chorion
- 39. placental villi
- 40. belly stalk (developing umbilical cord)
- 41. forebrain area
- 42. midbrain area
- 43. hindbrain area
- 44. eye
- 45. developing outer ear
- 46. heart prominence
- 47. liver prominence
- 48. differentiating somites
- 49. tail
- 50. notches between digital rays of hand
- 51. toe rays (may be in evidence)
- 52. embryo with membranes in situ