Human Embryology Exam 2

SECTION A

1. The pre-embryonic stage is completed when
a) The blastocyst becomes implanted
b) The morula reaches the uterus
c) The placenta is formed
d) The primary germ layers are formed

2. A morula
a) Has 23 chromosomes
b) Is the term describing the developing structure during the pre-embryonic development
c) Is composed of 16 or more cells
d) Is in the stage of development following that of a blastocyst

3. Which event does not occur in the pre-embryonic stage?
a) Parturition
b) Mitotic divisions
c) Formation of the primodial embryonic disc
d) Implantation

4. The extra-embryonic membranes are the
a) Yolk sac,allantois, amnion, chorion
b) Chorion amnion, yolk sac, placenta
c) The yolk sac, amnion, placenta, allantois
d) Allantois, amnion, chorion, placenta

5. The yolk sac produces blood for the embryo until
a) The heart begins to function
b) The Kidneys develop
c) The liver develops
d) The placenta develops

6. Which of the following is not a function of the placenta?
a) Production of steroids and oxygen
b) Diffusion of nutrients and oxygen
c) Removal of waste products
D Means of blood transfer

7. Which of the following does not arise from the embryonic mesonephric duct
a) Epididymis
b) Duct of deferens
c) Seminal vesicle
d) Prostate gland

8. The deciduas basalis is
a) A component of the umbilical cord
b) The embryonic portion of the hilous chonion
c) The maternal portion of the placenta
d) A vascular membrane derived from the trophoblast

9. Which of the following can not diffuse a cross the palcenta
a) E. coli bacteria
b) Rubella virus
c) Nicotine
d) Heroine

10. The umbilical cord contains
a) One umbilical artery and two umbilical veins
b) Two umbilical arteries and one umbilical vein
c) One umbilical artery and one umbilical vein
d) Two umbilical arteries and two umbilical veins

11. Whartons jelly is found within the
a) Placenta
b) Pre-embryonic sac
c) Fetal heart
d) Umbilical cord

12. Induction occurs when
a) An osmotic gradient exists across the placental barrier
b) The mothers nutritional intake is not sufficient for both her and the fetus
c) A tissue stimulates the adjacent tissue to differentiate
d) The amniotic sac is ruptured

13. The human embryonic heart begins
a) 3 weeks after conception
b) 4 weeks after conception
c) 5 weeks after conception
d) 6 weeks after conception
e) 7 weeks after conception

14. Which of the following develops during the fifth week?
a) Head
b) Jaws
c) Heart
d) Digital rays

15. The embryo is the most susceptible to damage when the limbs undergo considerable change during the
a) Third week
b) Fifth week
c) Seventh week
d) Ninth week

16. Sex determination is possible in the
a) Fourth week
b) Fifth week
c) Sixth week
d) Seventh week

17.Twins that develop from two zygotes resulting from fertilization of two ova by two sperms in the same ovulatory cycle are referred to as
a) Monozygotic
b) Conjoined
c) Dizygotic
d) Identical

18. Placenta praevia
a) Is a premature separation of the fetus and placenta
b) Causes complications at birth due to placenta being delivered first
c) Is the clinical condition when the developing placenta blocks the cervical opening
d) Is a` sneak preview ´of the fetus using modern ultrasonography

19. Which of the following is not formed from the pharyngeal arches of the human embryo
a) Mandible
b) Hyoid
c) Palatine
d) Incus

20. The intestinal cells (cells of leydig)
a) Nourish sperm
b) Produce sperm
c) Secrete alkaline fluid
d) Produce testosteroine

SECTION B
1. Describe cleavage (5marks)

2. Write short notes on Turner`s syndrome.(5marks)

3. Explain zona reaction and the its significance (5marks)

4. Describe the malformations of the central nervous system (5marks)

5. Discuss male causes of infertility (5marks)

6. Define ectopic pregnancy and the various sites of ectopic pregnancy (5marks)

7. Describe the functions of the placenta (10marks)

SECTION C
1. Discuss the development of the respiratory system, (20marks)
2. Describe the process of spermatogenesis and the factors that may affect this process (20

marks)