

1. Please describe the defects and clinical features of the “Holoprosencephaly”. What kinds of gene mutations may cause “Holoprosencephaly”? (5 %)
2. Prenatal ultrasound reveals an infant with an enlarged head and expansion of both lateral ventricles. What is this condition called, and what might have caused it? (2 %)
3. Please name three vesicles of cranial part of the neural tube. Please describe the brain structures which are originated from each of these vesicles. (6 %)
4. Please describe the difference of blood circulation before and after birth, and describe the changes occurring in the vascular system after birth which cause the difference. (10 %)
5. Please state the formation of arterial system defect with a double aortic arch, and its clinical features. (5 %)
6. Please briefly describe the development of atrial septa. (8 %)
7. Please describe the development of follicle and the involvement of hormones. (7 %)
8. Please compare the similarity and difference between mitosis and meiosis. (7 %)
9. Please describe the (1) A.E.R. and it's function (4%) and (2) canine congenital hip joint dysplasia (3%).
10. Which smooth muscle cells are derived from ectoderm? (5%)
11. What teratological results were happened in fetal diaphragm? (7%)
12. What is TEFs? (3%) What are the final results in the TEFs? (4%)
13. Please describe the reasons of gastric duplications happened. (7%)
14. Please describe how to form the collecting system? (7%)
15. When and where the primordial germ cells are appeared and come from? (3%)
What is the function of the Sertoli cell? (2%)
16. What dermal layer was derived from to the enamel and dentine, Pulp of a tooth? (5%)