

**M.D. DEGREE EXAMINATION
BRANCH XXIII – ANATOMY
PAPER II – EMBRYOLOGY AND GENETICS**

Q.P. Code: 202090

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Write an essay about the development of the kidney. Add a note on its anomalies.
2. Describe the development of right ventricle. Add a note on its congenital Anomalies.

II. Short notes:

(10 x 5 = 50)

1. Mutation.
2. Gene therapy.
3. Formation and derivatives of Branchial apparatus.
4. Hox genes.
5. Spermatogenesis.
6. Stages of foetal development.
7. Development of spinal cord.
8. Klinefelter's syndrome.
9. Development of tooth.
10. Chromosomal inversion.

III. Reasoning Out:

(4 x 5 = 20)

State whether each of the following statement is TRUE or FALSE and reason out.

1. The syncytiotrophoblast acts as placental barrier.
2. Mesonephric ducts give rise to uterine tubes.
3. A small part at the tip of male urethra is derived from ectoderm.
4. The circumvalate papillae is supplied by lingual nerve.
