

[LJ 1016]

OCTOBER 2016

Sub. Code: 0401

**FELLOWSHIP IN MEDICAL GENETICS EXAMS
FIRST YEAR
PAPER I – BASICS OF GENETICS**

Q.P. Code :230401

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Mosaicism and its clinical implications.
2. Gene mapping.

II. Write notes on:

(10 x 6 = 60)

1. Genomic Imprinting.
2. HLA gene cluster.
3. Linkage disequilibrium.
4. Hardy Weinberg law.
5. Types of mutations.
6. Recombinant DNA technology.
7. Oligogenic inheritance.
8. Gene expression and its regulation.
9. Cell cycle.
10. Mitochondrial inheritance.

[LL 1017]

OCTOBER 2017

Sub. Code: 0401

**FELLOWSHIP IN MEDICAL GENETICS EXAMS
FIRST YEAR
PAPER I – BASICS OF GENETICS**

Q.P. Code: 230401

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Genomic imprinting and its clinical effects.
2. What are the modes of inheritance? Describe each type with their salient features.

II. Write notes on:

(10 x 6 = 60)

1. Robertsonian translocation.
2. Classify chromosomes.
3. Structure of nucleic acids.
4. Microarray and how it might be used.
5. Comparative genomic hybridisation.
6. Nucleotide repeats.
7. Newborn screening.
8. Fish.
9. Genotype phenotype correlation in mutations of FGFR genes.
10. 'X' chromosome inactivation.
