

Assignment Topics

Subject: Genetics & Breeding

Code (Credit) : FSAQ 2111(1-1-0)

S.N.	Topic
1	Structure of Chromosome, DNA and RNA
2	Mendel's laws of Inheritance
3	Monohybrid and Dihybrid cross
4	Dominant and Recessive epistasis
5	Pleiotropism
6	Mutation and types
7	Lethal genes
8	Sex linked genes and inheritance pattern
9	Sex influenced genes and associated traits
10	Mitosis and Meiosis
11	Linkage and crossing over
12	Hardy-Weignberg law and its significance
13	Chromosomal structure and aberrations
14	Chromosome manipulation techniques
15	Polyploid formation techniques
16	Sex determination
17	Cross breeding and its types
18	Population genetics and associated Terminologies
19	Heterosis
20	Designs of cross breeding programmes
21	Hybridization in different fishes
22	Quantitative Genetics
23	Heritability
24	Quantitative and polygenic traits
25	Selective breeding and its types
26	Selective breeding programme in GIFT Tilapia
27	Selective breeding programme in Jayanthi rohu
28	Selective breeding programme in Vennamei
29	Monosex tilapia production techniques
30	Types of selection in breeding programmes
31	Inbreeding depression and its impacts
32	Mendel's laws on pea plant
33	Incomplete dominance
34	Sex determination techniques
35	Seed certification
36	Seed quarantine procedure
37	Present status of selective breeding programmes
38	Cryopreservation
39	Domestication methods
40	Mating designs
41	Hierarchal developments in Genetics

42	Terminologies in genetics
43	Punnet square
44	Test cross with example
45	Cell cycle
46	Environmental sex determination characteristics
47	Genetic sex determination
48	Abnormalities in chromosomal structure
49	X and Y Chromosome linked diseases
50	Chromosome banding techniques
51	Chromosome and its structure
52	Crossing over
53	Linkage genetics
54	Mutation and its types
55	Polyploidization techniques
56	DNA and its structure
57	RNA and its types
58	PCR
59	Gel electrophoresis
60	DNA and its types
61	Quantitative and qualitative traits
62	Cell structure
63	Methods of inducing mutation
64	Eukaryotic and prokaryotic cells
65	Chromosome banding techniques
66	Mutation and associated diseases
67	Gene expression
68	Historical developments in genetics
69	Application of genetics in aquaculture
70	Gene and chromosome as a basis of inheritance
71	Complete and incomplete dominance
72	Pleiotropism
73	Cryopreservation
74	Inbreeding and its consequences