Name:	Subject: Biology	Class: 10 th	Time: 80 minutes	Total Marks:	40
Chapter No.6	MJDexpert.com			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

Objective-Section

Q. 1 Encircle the correct answer.

(10x1=10)

- 1. Branch of Biology in which we study about inheritance:
 - A) Pharmacology B) Physiology C) Ecology D) Genetics
- 2. Genes consist of:
 - A) RNA B) mRNA C) Protein D) DNA
- 3. In a nucleosome, DNA is wrapped around a protein named:
 - A) Insulin B) Interferon C) Histone D) Hemoglobin
- 4. James Watson and Francis Crick proposed the structure of DNA in:
 - A) 1953 B) 1963 C) 1933 D) 1922
- 5. ____ hydrogen bonds are present between cytosine and guanine:
 - A) 2 B) 3 C) 4 D) 5
- 6. Inherited characters are called:
 - A) Traits B) Genetics C) Fertilization D) Genes
- 7. The process of protein formation:
 - A) Combination B) Replication C) Transcription D) Translation
- 8. Expression of gene in the form of trait is called:
 - A) Phenotype B) Karyotype C) Genotype D) Physical power
- 9. What is the meaning of the term "true breeding"?
 - A) Heterozygous B) Homologous C) Homozygous D) Heterologous
- 10. The book "Natural Selection" written by Darwin was published in:
 - A) 1859 B) 1860 C) 1959 D) 1960

Subjective-Section

Q.2 Write short answers of any ten of the following questions: (10x2=20)

- i. Define Genetics.
- ii. Write the chemical structure of a chromosome.
- iii. How does DNA of a chromosome work?
- iv. Define Allele and give an example.
- v. What is meant by Genotype? Write the names of its types.
- vi. Differentiate between dominant allele and recessive allele.
- vii. Define Monohybrid and Dihybrid cross.
- viii. What is the Punnett square? Tell its use.
- ix. Explain Continuous and Discontinuous Variations.
- x. What is the theory of special creation?
- xi. What is the importance of artificial selection (or selective breeding)?
- xii. How many important processes take place in organic evolution?

Q.No.3 Long Question:

(5+5=10)

- a) Write a note on replication of DNA.
- b) Prove that variations lead to evolution.