

CITY SCHOOL OF EDUCATIONAL INSTITUTE PANDHURNA
OPEN BOOK EXAMINATION 2020-21
CLASS-11TH
SUBJECT :-BIOLOGY

Time :- 3hr

Marks :- 70

Q.1. Multiple choice questions.

(5 Mark)

1. How many functional sperms and how many ova will be formed by a primary spermatocyte and a primary oocyte, respectively?

- (a) One, One
- (b) One, Four
- (c) Four, One
- (d) Four, Four

2. In higher plants, meiosis occurs?

- (a) During formation of gametes
- (b) During fertilization
- (c) During embryogenesis
- (d) In seeds

3. Budding is the example of :

- (a) Vegetative reproduction
- (b) Tissue culture
- (c) Sexual production
- (d) Dispersal

4. Which of the following is ART?

- (a) IUDs
- (b) GIFT
- (c) ZIFT
- (d) Both (b) & (c)

5. Each gametes carry

- (a) Only recessive allele
- (b) Glucose
- (c) Only one of the alleles
- (d) Only dominant allele

Q.2. Fill in the blanks.**(5 Mark)**

1. The part of the fallopian tube, which is closer to the ovary and is funnel-shaped, is called _____ .
2. A diploid parent plant body produces _____ gametes and a haploid parent plant body produces _____ gametes.
3. Game togenesis and gamete transfer are _____ events.
4. _____ results in the formation of zygote.
5. ABO blood grouping in human beings cites the example of.....

Q 3. True/ False**(5 Mark)**

1. Oxytocin, necessary for parturition, is secreted by the fully-developed foetus and the placenta.
2. The fusion of two haploid gametes produced blastocyst. ()
3. The Amoeba is called as Immortal because it does not undergo natural death.()
4. Androgens are produced by Sertoli cells.
5. Mendel used apple plant to study inheritance of two genes.

Q.4 Match the column**(5 Mark)**

Column I	Column II
Family	Tuberosum
Kingdom	Polymoniales
Order	Solanum
Species	Plantae
Genus	Solanaceae

Q 5.Very short answer type question :-**(ANY FIVE 2 MARK)**

- i.) Name three botanists who contributed to the field of plant taxonomy.
- ii) What is a couplet in the taxonomic key?
- iii). . Define a monograph.
- iv.) Define metabolism.
- v) The mitotic cell division in amoeba represents growth or reproduction?
- vi.) What are the Taxonomic keys?

Q 6.Short answer type question :-**(Any five 4 MARK)**

- i.) What is diatomaceous earth? Why are diatoms referred to as 'pearls of the ocean'?
- II) Why is Neurospora an important genetic tool?
- III) What features of Trypanosoma make it fall under the kingdom Protista?
- IV) What do you understand by 'phycobiont' and 'mycobiont'?
- V) Discuss the phylogenetic relationship of Cycas with any other group of plants.
- VI) Describe the life cycle and nature of a fern prothallus.
- VII) What is the importance of Algae?

Q 7.Long answer type question:-**(Any four 5 Mark)**

- i.)** Describe the modifications of the stem. Give examples for the same. Trisomy at chromosome 21
- ii.)** . Differentiate between open and closed circulatory system.
- iii)** How is gametophyte a dominant phase in the life cycle of bryophytes?
- iv)** Differentiate between the male and female gametophytes of pteridophytes and gymnosperms.
- v)** . Give an account of the asexual reproduction by spores in algae.
- vi)** . Enlist the various algae and fungi that have commercial values in medicines, food, and chemicals.
- vii.)** How many types of bacteria are there?