

Class: XIIth Date:

**Solutions** 

**Subject : BIOLOGY** 

**DPP No.: 6** 

# **Topic:- Reproduction in Organisms**

### 3 **(d)**

Production of plant by culturing the cells in laboratory is called micropropagation It is also called **tissue culture**. In this technique the plants are genetically similar to parent one. That's why called somaclonal plants

### 5 **(a)**

Presence of diploid zygote is universal in all sexually reproducing organism. Irrespective of the fact that, the parents are haploid or diploid. In haploid parent condition, the diploid zygote undergoes meiosis and become haploid body again, while in diploid organisms, the diploid zygote changes to diploid individual after undergoing mitosis

#### 6 **(d)**

Heterothallic/dioecious/unisexual term used when the sexes present on different organisms called male and female

The archegonia and antheridia term used in case of lower organism

### 7 **(c)**

In cell division the cell divides into two parts having same genetic constituent. Only Monera and Protista are the organisms, which are single celled in five kingdom of classification.

That's why cell division is the common mode of reproduction in Monera and Protista

## 9 **(d)**

Sequential events in the sexual reproduction are

Pre-fertilisation (event before the fertilisation)

Gametogenesis

Gamete transfer

Fertilisation

Union of male and female gametes

Post-fertilisation (event after the fertilisation)

Zygote

Embryogenesis

#### 12 **(c)**

Syngamy and fertilization both the terms are used interchangeably, for the fusion of male and female gametes

# 15 **(d)**

#### **Propagation by plant Tissue Culture**

(micropropagation) includes propagation of plants by culturing the cells, tissue, etc. Initially the culturing of cells or tissue results in the formation of an undifferentiated mass of cell called **callus**, which differentiate to produce large number of plantlets

# 16 **(c)**

In micropropagation (tissue culture) there is the origin of an individual plant from few cells, so in laboratory many plants could be propagated in little time.

This technique basically used for the plants, which are endangered

#### 18 **(a)**

Embryogenesis refers to the development of embryo from the zygote. During embryogenesis, zygote undergoes cell division (mitosis) and cell differentiation. Cell division of zygote is called **cleavage** 

### 19 **(d)**

All are correct

Strobilanthus kunthiana also called Neela Kuranji in local language. It is found in Kerala, Maharashtra, Tamil Nadu. It reproduce once in 12 yr

Last time it was reproduced in Sept-Oct, 2006 and produced blue flower in massive quantity. It attracted tourist because all of the area appeared blue

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	A	В	D	D	A	D	C	A	D	D
Q.	11	12	13	14	15	16	17	18	19	20
A.	В	C	D	В	D	C	C	A	D	A

