

**SUMMER HOLIDAY HOME WORK 2017**

**XII A BIOLOGY**

- 1. Complete the Assignments for chapter 1 & 2**
- 2. Complete Practical record work 1-15(Record with neat labeled diagrams, and subheadings neatly underlined.**
- 3. Complete worksheets 1 & 2**
- 4. Complete the Investigatory project and submit report in the format given on the reopening day**
- 5. Go outdoors every day to relax yourself and enjoy Nature. Narrate your experiences in any form. (picture, article, poem, painting ,cartoon).**
- 6. Acquire a new skill that interests you.**
- 7. Spend quality 'real' time with your family & friends.**
- 8. Keep in touch with what is happening around the world**

## CH - 1 REPRODUCTION IN ORGANISMS

1. What is the life span of crow-----

Ans- 15 years

2. Whether asexual reproduction involves gametes----- (yes/ no)

Ans-yes

3. The genetically identical offsprings are called -----

Ans-clones

4. Asexually reproducing structure of sponges called-----

Ans-gemmule

5. Asexually reproducing forms of penicillium is called-----

Ans-conidia

6. Name any one vegetative propagules of vegetative propagation under asexual reproduction-----

Ans-runner, rhizome

7. ----- Plant is called terror of Bengal

Ans-water hyacinth

8. Adventitious buds arise from the notches present at margins of leaves

Of ----- plant

Ans-bryophyllum

9. The period of growth before sexual maturity in animals is -----

Ans-juvenile phase

10. The period of growth before sexual maturity in plant is -----

Ans-vegetative phase

11. Under the unusual flowering phenomenon, ----- species flower only once  
In their life time, generally after 50-100 years.

Ans-bamboo

12. Name the botanical name of Neelakuranji----- Which flowers once in  
12 years

Ans-strobilanthus kunthiana

13.-----and-----animals shows Oestrous cycle of reproductive phase

Ans-dogs ,deer

14.-----is the technical name the of the mammals which reproduce during favorable seasons

Ans-continous breeders

15.-----and ----- are the example of continuous breeder of mammals.

Ansmonkey,apes

16.----- is the other name of Isogametes which are similar in appearance.  
homogametes

17.Cucurbit and coconut are ----- plants(monoecious/dioecious)

18.Diploid organisms has specialized cells to produce gametes called-----

Ans-meioocytes

19.The female gametes undergoes development to form new organism without fertilization called-----

Ans-parthenogenesis

20.During embryogenesis the zygote undergoes-----and-----

Ans-cell division and differentiation

21.The ovary develops to-----which develops a thick wall called-----

Ans-fruit,pericarp

## CH 2 - SEXUAL REPRODUCTION IN FLOWERING PLANTS

1.The microsporangia develop further and become

- a. **Pollensacs** b.pollengrain c. tetrad d. male gamete

ans-pollen sac

2.When the anther is young a group of compactly arranged homogenous cells called

- a.**Tetrad** b.female gamete c.pistil d.staminode

ans-tetrad

3.One microspore mother cell can give -----male gametes

- a. **8** b. 16 c 20 d.4

ans-8

4.One megaspore mother cell can produce ----- female gamete

- a.1 b.2 c.4 d.6

ans-1

5.The region on the pollen grain where the sporopollenin absent called

- a.Pectin b cellulose c germ pore d. intine

ans-germpore

6.The composition of intine is -----

- a.cellulose pectin, b.cellulose hemicelluos c.lignin ,pectin

ans-cellulose pectin

7.A pollen grain contain-----

- a.vegetative cell and generative cell b.mitosis meiosis

ans-vegetative cell and generative cell

8.The ovule has small structure attached to placenta by means of stalk called-----

- a.Funicle b.integument c. chalasa d. chalasa

ans-funicle

9.Enclosed within the integument is a mass of cells called-----

- A chalasa b integument c nucellus d micropyle

Ans-nucellus

10.the egg apparatus of the angiosperm contain -----

A 3 cells      b.4cells      c.5 cells      d.9 cells

Ans-3 cells

11.cleistogamous flower has -----pollination

a.self pollination    b. cross pollination    c.pollination    d. inter pollination

ans-cross pollination

12.Pollen grains of ----- flowers is ribbon like submerge in water

a.sea grass      b.carrot grass    c. lemon grass      d.zosteria

ans-sea grass

13.Continued self pollination leads to-----

a.Self pollination      b. inbreeding depression      c cross pollination

ans-inbreeding depression

14.Emasculation and bagging are techniques of-----

a.plant breeding    b. cross pollination    c tissue culture    d.meristemculture

ans-plant breeding

15.Embryo of monocot plant possess single large cotyledon called-----

Ans-scutellum

a.meristem      b scutellum      c platellum      d.syngamy

16.The residual endosperm that found in black pepper and beet-----

Ans-persperm

a.perisperm      b.endosperm    c. nucellus      d .nucleus

17.apple is a -----fruit

a.true fruit      b .false fruit      c.soft fruit      d .red fruit

ans-false fruit

18.Fruits that develops without fertilization is called-----

A .parthenocarpic fruit      b. false fruit      c.yellow fruit    d.meritem fruit

Ans-parthenocarpic fruit

19.Seeds that develop without fertilization is called-----

a.Apomictic seeds    b white seeds    c. multiple seed    d grain seed

ans-apomctic seed

20. Occurrence of more than one embryo in the seed is referred as-----

- a. polyembryony   b. apomixis   c. perisperm   d. scutellum

ans-polyembryony

### CH 3 - HUMAN REPRODUCTION

1. Each testis has about 250 compartments called-----

Ans-testicular lobules

2. The seminiferous tubule is lined by two types of cells called-----and -----

Ans-male germ cells and sertolicells

3.-----cells in the seminiferous tubule synthesise and secrete testicular hormone

Ans-interstitial cells or leydig cells

4. The cells that nourish the sperm in the seminiferous tubule is called-----

Ans-sertoli cells

5.-----cells undergo meiotic divisions and produce sperms in testes

Ans-male germ cells

6. The secretions of male accessory glands collectively called-----

Ans-seminal plasma

7. The part closer to the ovary is funnel shaped named-----

Ans-infundibulum

8. The wall of uterus is three layerd called-----,-----,and-----

Ans-perimetrium,myometrium,endometrium

9.-----is the tiny finger like structure that lies at the upper junction of the

Two labia minora above the urethral opening

Ans-clitoris

10. Fertilisation in human occur at -----of the oviduct

Ans-ampulla isthmus junction

11. A primary spermatocyte completes the first meiotic division leading to the formation of two equal haploid cells called-----

Ans-secondary spermatocytes

12.-----pituitary hormone acts on the Leydig cells and stimulate synthesisis

And secretion of androgens

Ans-LH

13. The sperm head contain an elongated haploid nucleus ,the anterior portion of which

Is covered by a cap like structure called-----

ANS-acrosome

14.The seminal plasma along with the sperms constitute-----

Ans-semen

15.The primary follicle get surrounded by more layers of granulose cells and new theca  
And are called-----

Ans-secondary follicles

16.The tertiary follicle is characterized by a fluid filled cavity called-----

Ans-antrum

17.The secondary oocyte forms a new membrane at the time of ovulation -----

Ans-----zona pellucida

18.The first menstruation begins at puberty is called-----

Ans-menarch

19.After the ovulation the ruptured graffian follicle changed into yellow mass of  
Cells that produce progesterone called-----

Ans-cprpus luteum-

20.On the 14 th day of menstrual cycle the pituitary hormones-----and-----are  
Peak in the blood

Ans-LH and FSH

21.The hormone(pituitary) that help in the ovulation is-----

Ans LH

22.The embryo with 8 to 16 blastomers called-----

Ans-morula

23.The blastomeres in the blastocyst are arranged into an outer layer called -----  
And an inner group of cells attached to trophoblast called-----

Ans-trophoblast and inner cell mass

24.The chorionic villai and uterine tissue become interdigitated with each other and  
jointly form a structural and functional unit between foetus and maternal body called  
-----

Ans-placenta

25.The placenta produces two hormones-----and -----

Ans-human chorionic gonadotrophin,placental lactogen

26.The inner cell mass contains certain cells called-----cells which have the  
Potency to give rise to all the tissues and organs

Ans-stem cells

27.The signal for parturition arise from -----and -----

Ans-fully matured foetus and placenta

28.The milk produced during the initial days of lactation is -----which contains  
Several antibodies essential for the child

Ans-colostrum

29.Why it is seen that the testis located out side the body wall?

Ans-The testes are located out side the abdominal cavity within a pouch called scrotum  
Which helps in maintaining the low temperature of testes 2 to 2.5oc lower than that  
Of the body that is very essential for spermatogenesis

30.Name the human male accessory glands

Ans-seminal vesicles,prostrate gland, bulbourethral glands

31.Mention the role of fimbriae in fertilization.

Ans-The edges of infundibulum possess finger like projections called fimbriae which help  
in collection of ova during ovulation

32. Mention the role of endometrium in fertilization

Ans-The endometrium undergoes cyclical changes during menstrual cycle ,this is highly  
Glandular in nature and implantation of embryo occur on it.

33.What is the composition of seminal plasma

Ans-fructose,calcium and certain enzymes

