





## Homework Summer Vacation

### CLASS – 12<sup>th</sup> Medical

**Subject**

❖ **Music Hind Vocal**

✚ Learning  
+  
✚ Writing

1. ताल परिचय – रूपक ताल, झपताल, धमार ताल,
2. परिभाषाएं – अंलकार, ग्राम, कण स्वर, वर्ण, आलाप, खटका, मुर्की, मूर्च्छना, गमक, मींड़, तान
3. ग्रंथ परिचय –  संगीत रत्नाकर  संगीत परिजात
4. रागो का शास्त्रीय परिचय –  राग भैरव  राग मालकौस  राग बागेश्री
5. रागों के समय सिद्धांत के बारे में आप क्या जानते हैं? वर्णन कीजिए।

**Subject**

❖ **Physical Education**

✚ Learning  
+  
✚ Writing

Unit 1 planning in sports  
Unit 2 children and women in sports

✚ Activity

Prepare daily routine exercise for 21<sup>st</sup> June

**Subject**

❖ **Mathematics**

✚ Learning  
+  
✚ Writing

- ❖ Holiday Homework 12th Sp Maths
  1. Relation and Functions
  2. Inverse trigonometric functions
  3. Matrices
  4. Determinants
  5. Quadratic equation
  6. Sets
  7. Binomial Theorem
  8. Permutation and combination
  9. Sequence and series
  10. Straight Line

( For all the above mentioned chapters - complete each and every pyq of jee main of last 5 years)



# Homework Summer Vacation

## CLASS – 12<sup>th</sup> Medical

*Subject*

❖ **Chemistry**

### **XII SP (NEET)**

1. Concentration term (Theory + exercise of Allen module + NCERT + NEET PYQ)
2. liquid solution (Theory + exercise of Allen module + NCERT + NEET PYQ)
3. Electrochemistry (Theory + exercise of Allen module + NCERT + NEET PYQ)
4. Chemical kinetics (Theory + exercise of Allen module + NCERT + NEET PYQ)

### **XII SP1 (JEE - MAINS)**

1. Concentration term (Theory + exercise S1 and O1 + NCERT + NEET PYQ)
2. liquid solution (Theory + exercise S1 and O1 + NCERT + NEET PYQ)
3. Electrochemistry (Theory + exercise S1 and O1 + NCERT + NEET PYQ)
4. Chemical kinetics (Theory + exercise S1 and O1 + NCERT + NEET PYQ)

*Subject*

❖ **Physics**

### **XII SP (NEET)**

1. Coulomb's law
2. Electric field, potential
3. Gauss law, properties of conductor
4. Capacitor
5. Ohm's law
6. KVL, KCL
7. Combinations of resistors, capacitors
8. Combinations of battery, RC circuits.

Do all numericals from NCERT, DC PANDEY, HC VERMA on above mentioned topics.

Also practice all previous year questions of NEET

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6. KVL, KCL
7. Combinations of resistors, capacitors
8. Combinations of battery, RC circuits.

Do all numericals from NCERT, DC PANDEY, HC VERMA, CENGAGE on above mentioned topics.

Also practice all previous year questions of IITJEE MAINS, ADVANCED.





# Homework Summer Vacation

## CLASS – 12<sup>th</sup> Medical

### • BIOLOGY

- Do this Holiday homework in your homework note book.
- All parts are compulsory.
- Submission of both hard copy as well as soft copy of holidays H.W must be necessary to the concerned subject teacher after completion of holidays.
- Make neat and clean properly labeled diagrams.

#### Part- A:-

#### (Multiple Choice Questions)

- \_\_\_\_\_ is a lytic enzyme released by the sperm.
  - Hyaluronidase
  - Trypsin
  - Helicase
  - None of the above
- How many autosomes does a human primary spermatocyte have?
  - 34
  - 44
  - 54
  - 33
- Where does the ovum receive the sperm?
  - Animal pole
  - Vegetal pole
  - Zonapellucida
  - None of the above
- \_\_\_\_\_ is an organelle that helps the sperm to penetrate the ovum.
  - Acrosome
  - Zonapellucida
  - Megalis
  - None of the above
- Umbilical cord contains \_\_\_\_\_.
  - Pluripotent stem cells
  - Cord blood stem cells
  - Blood stem cells
  - None of the above
- How does human sperm locomote?
  - Flagella
  - Cilia
  - Neutrophils
  - None of the above
- Cryptorchidism is a condition where \_\_\_\_\_.
  - One of both testes are not developed
  - One or both testes fail to descend into the scrotum
  - One or both testes are not formed
  - None of the above
- Bidder's canal receives \_\_\_\_\_.
  - Eggs
  - Sperms
  - Ammonia
  - Oxygenated blood
- The hormone that is released from the testes is \_\_\_\_\_.
  - Progesterone
  - Vasopressin
  - Testosterone
  - None of the above
- Wolffian duct is also known as \_\_\_\_\_.
  - Mesonephric duct
  - Ejaculatory duct
  - Major sublingual duct
  - Cystic duct
- Acrosome is filled with \_\_\_\_\_.
  - Lipids
  - Hormones
  - Digestive enzymes
  - None of the above
- \_\_\_\_\_ is an example of a viviparous animal.
  - Goat
  - Duck
  - Crocodile
  - None of the above
- \_\_\_\_\_ is an example of an oviparous animal.
  - Pigeon
  - Elephant





- c. Sheep  
d. None of the above
14. The \_\_\_\_\_ is an ovoviviparous animal.
- a. Basking shark  
b. Bonobo  
c. Blue shark  
d. None of the above
15. The \_\_\_\_\_ is a temporary organ that connects a mammalian mother to its foetus.
- a. Placenta  
b. Chorion  
c. Endometrium  
d. None of the above
16. A typical angiosperm anther is
- (A) bilobed and monothecous  
(B) bilobed and ditheous  
(C) bilobed and athecous  
(D) monolobed and ditheous
17. The wall of a typical microsporangium which nourishes the developing pollen grains is
- (A) Tapetum (B) endothecium  
(C) Middle layers (D) epidermis
18. Somatogenic reproduction is nothing but
- (A) Asexual reproduction  
(B) Sexual reproduction  
(C) Parthenogenesis  
(D) None of these
19. Asexual reproduction takes place in
- (A) Monera (B) Protists  
(C) Sponges (D) all of these
20. Which one of the following layer of the anther wall helps in its dehiscence?
- (A) Epidermis (B) Middle layer  
(C) Endothecium (D) Tapetum
21. Product of sexual reproduction generally generates
- (A) Longer viability of seeds  
(B) Prolonged dormancy  
(C) New genetic combination leading to variation  
(D) Large biomass
22. The outer wall and inner wall of the pollen grain are \_\_\_\_\_ respectively.
- (A) Intine and exine  
(B) Exine and intine  
(C) Epidermis and endodermis  
(D) None of the above
23. When both types of reproductive organs are present in separate parents, such animals are called
- (A) Dioecious  
(B) Monoecious  
(C) Hermaphrodite  
(D) Both (B) and (C)
24. Pollen grain can withstand high temperature, acid and alkaline conditions due to presence of exine made up of
- (A) pectocellulose (B) sporopollenin  
(C) Cellulose (D) lignocelluloses
25. Select the CORRECT statement from the following.
- (A) Sporogenous tissue is haploid.  
(B) Endothecium of microsporangium nourishes the developing pollen grains.  
(C) The outer three wall layers of microsporangium help in dehiscence of anther.  
(D) Epidermis of microsporangium is followed by sporogenous tissue.
26. In pollen grain, sporopollenin is absent in
- (A) intine (B) exine  
(C) Germ pores (D) both (A) and (C)
27. Which of the following has proved helpful in preserving pollen as fossils?
- (A) Oil content (B) Cellulosic intine  
(C) Pollenkitt (D) Sporopollenin
28. Banana is an example of
- (A) parthenocarpy  
(B) apomixis  
(C) parthenogenesis  
(D) polyembryony
29. During embryonic development, the baby starts moving, and hair starts appearing on the head during embryonic development.
- (A) Fourth month  
(B) Fifth month  
(C) Eight month  
(D) Ninth month
30. Which of the following hormones are involved in the process of oogenesis?
- (A) Estrogen  
(B) Testosterone  
(C) Follicle-stimulating hormones (FSH)  
(D) Both (A) and (C)



## Part- B

Make a PowerPoint presentation/ small size model according to your roll no/Name on the topic given below:-

General instructions:-

- It should be eco-friendly and light weight.
- No thermocol or polythene should be used.
- Size should be near about 16x20 inches.

Name	Topic
ROLL NO 1-5	T.S OF AN ANther, MALE GAMETOPHYTE AND 7 CELLED- 8 NUCLEATE CONDITION
ROLL NO 6-10	EMBYROGENY IN DICOTS, MALE REPRODUCTIVE SYSTEM
ROLL NO 11-15	FEMALE REPRODUCTIVE SYSTEM AND GRAPH OF M.C
ROLL NO 16-20	STRUCTURE OF SPERM, EGG AND HUMAN FETUS WITHIN UTERUS
ROLL NO 21-25	GRAPH OF MC, FORMATION OF BILAMINAR AND TRILAMUNAR DISC
ROLL NO 25-30	T.S OF AN ANther, GRAPH OF MC

## Part- C

Learn all the Questions OF Reproduction given in your N.C.E.R.T book and Effectual book from the chapters which had been done till our last class.

## Part- D

Answer the following questions:-

1. What is the reason for the absence of menstrual cycles during conception or pregnancy?
2. State the role of the epididymis in male fertility.

3. a. How many spermatozoa does one secondary spermatocyte produce?  
b. Where in zygote does the first cleavage division occur?
4. Why does corpus luteum stay active throughout pregnancy and in the absence of fertilization, is active only for 10-12 days?
5. What is foetal ejection reflex? How does it cause parturition?
6. Describe the structure of a seminiferous tubule.
7. What is oogenesis? Give a brief account of oogenesis.
8. Why is breastfeeding recommended during the initial stages of infant growth?
9. Define self-incompatibility. How do self-incompatible plants pollinate?
10. Explain the pollination occurring in the chasmogamous flowers.