

Follow us on all social media as ICT SHIKSHA SCIENCE

For any query contact at - ictshikshascience@gmail.com

Follow this link to join WhatsApp group:

<https://chat.whatsapp.com/JV81yNEDIA6EcSsTS9CQSQ>

Follow this link to join Telegram group:

https://t.me/+49aPLIYL_DkxNDVI

CLASS: XII Sec _____

Biology

MM. 40

St Name: _____

Examination Paper

Time: 90 Mins

GENERAL INSTRUCTIONS:

General Instructions:

Section A Consists of Multiple Choice Questions carrying 1 mark each.

Section B Consists of Short Answer Type Questions carrying 2mark each.

Section –C Consists of Case Study Based Questions carrying 5 mark each.

Section A

- Plants with ovaries having only one or a few ovules are generally pollinated by
a. Bees b. Butterflies c. Birds d. Wind
- Which of the following is not a water pollinated plant ?
a. Zostera b. Vallisneria c. Hydrilla d. Cannabis
- Spiny or sticky pollen grains and large, attractively coloured flowers are associated with
a. hydrophily b. entomophily c. ornithophily d. anemophily
- Identify the correct statement from the following:
a. High levels of estrogen trigger the ovulatory surge.
b. Oogonial cells start to proliferate and give rise to functional ova in regular cycles from puberty onwards.
c. Sperms released from seminiferous tubules are highly motile.
d. Progesterone level is high during the postovulatory phase of the menstrual cycle
- Spot the odd one out from the following structures with reference to the male reproductive system:
a. Rete testis b. Epididymis c. Vasa efferentia d. Isthmus
- Seminal plasma, the fluid part of semen, is contributed by.
a. Seminal vesicle b. Prostate gland c. Urethra d. Bulbourethral gland
- Condoms are one of the most popular contraceptives because of the following reasons:
a. These are effective barriers for insemination b. They do not interfere with coital act
c. These help in reducing the risk of STDs d. All of the above
- Match between the following representing parts of the sperm and their functions and choose the correct option.

Column I	Column II
A. Head	i. Enzymes
B. Middle piece	ii. Sperm motility
C. Acrosome	iii. Energy
D. Tail	iv. Genetic material

- a. A-ii, B-iv, C-i, D-iii b. A-iv, B-iii, C-i, D-ii c. A-iv, B-i, C-ii, D-iii d. A-ii, B-i, C-iii, D-iv

Follow us on all social media as ICT SHIKSHA SCIENCE

For any query contact at - ictshikshascience@gmail.com

Follow this link to join WhatsApp group:

<https://chat.whatsapp.com/JV81yNEDIA6EcSsTS9CQSQ>

Follow this link to join Telegram group:

https://t.me/+49aPLIYL_DkxNDVI

Section-B

1. The path of sperm transport is given below. Provide the missing steps in blank boxes?



2. Why are menstrual cycles absent during pregnancy?

3. Give the names and functions of the hormones involved in the process of spermatogenesis. Write the names of the endocrine glands from where they are released.

4. Mention the importance of LH surge during the menstrual cycle.

5. Mention two advantages of lactational amenorrhea as a contraceptive method.

Case Study Based Questions :

1. Read the following passage and answer questions: The process of formation of a mature female gamete is called oogenesis. Oogenesis is initiated during the embryonic development stage when a couple of million gamete mother cells (oogonia) are formed within each fetal ovary; no more oogonia are formed and added after birth. These cells start division and enter into prophase-I of the meiotic division and get temporarily arrested at that stage, called primary oocytes. Each primary oocyte then gets surrounded by a layer of granulosa cells and is called the primary follicle. A large number of these follicles degenerate during the phase from birth to puberty. Therefore, at puberty only 60,000-80,000 primary follicles are left in each ovary..

I. Find out the correct statement

a)Primary follicle is with oogonia

b)Primary follicle is with primary oocyte

c)Secondary follicle is with secondary oocyte

d)Tertiary follicle is with primary oocyte without antrum

II. Read the following:

i.Primary follicles are surrounded by many layers of granulosa cells & theca

ii.Secondary follicles are surrounded by theca.

iii.Antrum is formed at Tertiary follicle stage The correct combinations.....

a) Only I b) Only ii c) Only iii d) i, ii & iii only

III. Assertion (A) : Primary oocyte completes its first meiotic division in tertiary follicle Reason

(R) :Antrum develops during secondary follicular stage .

a) A and R are true and R is the correct explanation of A b) A and R are true and R is not the correct explanation of A c) A is true , R is false d) A is false , R is true

IV. Read the following & arrange them in a sequence

a) Ova b) Oogonia c) Primary oocyte d) Secondary oocyte e) Graffian follicle

a)a-c-b-d-e b)c-d-e-a-b c)b-d-c-e-a d)b-c-d-e-a

Follow us on all social media as ICT SHIKSHA SCIENCE

For any query contact at - ictshikshascience@gmail.com

Follow this link to join WhatsApp group:

<https://chat.whatsapp.com/JV81yNEDIA6EcSsTS9CQSQ>

Follow this link to join Telegram group:

https://t.me/+49aPLIYL_DkxNDVI