

KCP SIDDHARTHA ADARSH RESIDENTIAL PUBLIC SCHOOL

KANURU :: VIJAYAWADA - 520 007.

UNIT TEST- III 2014 - 2015

Class : XII
Sub : Biology

Time : 90 Min.
Marks : 30

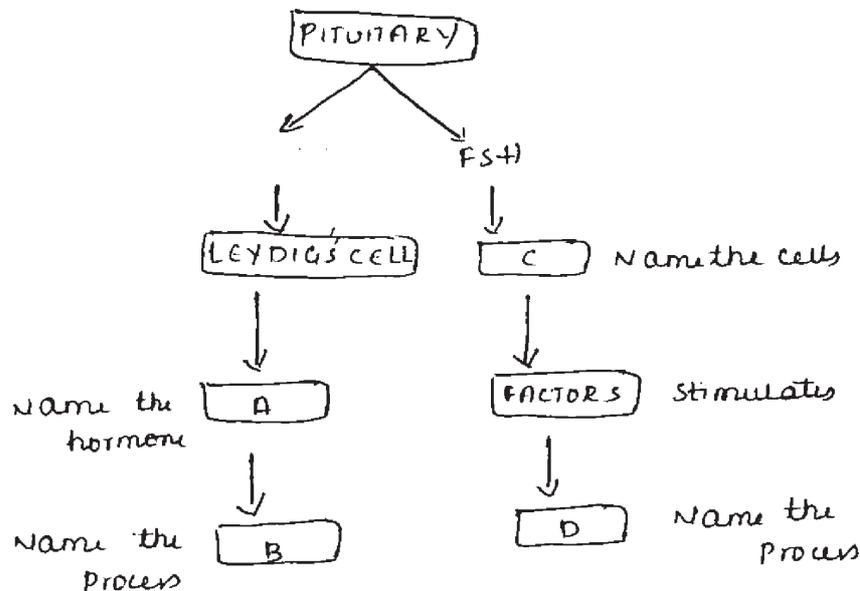
GENERAL INSTRUCTIONS:

- All questions are compulsory
- This question paper consists of four Sections A, B, C and D. Section-A contains 5 questions of one mark each, Section B is of 3 questions of two marks each, Section-C is of 3 questions of three marks each and Section D is of 2 questions of five marks each.
- Wherever necessary, the diagrams drawn should be neat and properly labeled.

SECTION - A

5 x 1 = 5M

- Normally one embryo develops in one seed but when an orange seed is squeezed many embryos of different shapes and sizes are seen. Mention how it has happened.
- Given below is an incomplete flow chart showing influence of hormones on gametogenesis in males. Observe the flow chart carefully and fill in the blanks A, B, C, D



- A pregnant human female was advised to undergo M.T.P. It was diagnosed by her doctor that the foetus she is carrying has developed from a zygote formed by an xx-egg fertilized by y-carrying sperm. Why was she advised to undergo M.T.P?
- What is perisperm?
- Where are fimbriae present in human female reproductive system give their function.

SECTION - B

3 x 2 = 6M

- A mother of one year old daughter wanted to space her second child. Her doctor suggested CUT. Explain its contraceptive actions.
- Differentiate between albuminous and non-albuminous seeds, giving one example of each.
- Mention the fate of corpus luteum and its effect on the uterus in absence of fertilization of the ovum in a human female.

SECTION - C

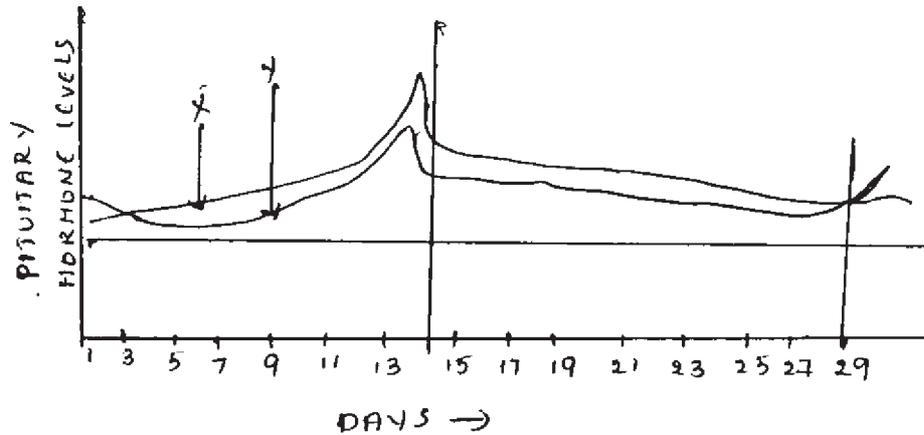
3 x 3 = 9M

9. Give a schematic representation of oogenesis in human female indicating the chromosomal number at each step. Mention at what stage of female life does each phase occur.
10.
 - i) Describe the Endosperm development in coconut.
 - ii) Why is tender coconut considered a healthy source of nutrition?
 - iii) How are pea seeds different from castor seeds with respect to Endosperm?
11.
 - i) Describe the lactational Amenorrhoea method of birth control.
 - ii) Amniocentesis for sex determination is banned in our country. Is this ban necessary? Comment.
 - iii) Is sex education necessary in schools. Why?

SECTION - D

2 x 5 = 10M

12. Study the graph given below and answer the questions that follow:



- i) Name the hormone 'x' and 'y'.
 - ii) Identify the ovarian phases during a menstrual cycle.
 - a) 5th to 12th day of the cycle.
 - b) 14th day of the cycle.
 - c) 16th to 25th day of the cycle
 - iii) Explain the ovarian events (a), (b) and (c) under the influence of hormones 'x' and 'y'.
- (or)
- a) Draw a labelled diagram of male reproductive system.
 - b) Explain the role of accessory glands in human male reproductive system.
 - c) What is parturition? Which hormones are involved in induction of parturition.
13. Give reasons why:
 - i) Most zygotes in angiosperms divide only after certain amount of endosperm is formed.
 - ii) Micropyle remains as a small pore in the seed coat of a seed.
 - iii) Integuments of an ovule harden and water content is highly reduced as the seed matures.
 - iv) Apple and cashew are not called true fruits.
 - v) What is apomixis and what is its importance.

(or)

How are assisted reproductive technologies helpful to humans?

How are zygote and embryo different from intrauterine transfers? Explain.