



**BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI-110034**

CORE ASSIGNMENT- CLASS8-BIOLOGY

### **Reaching the age of adolescence**

Q1. What is adolescence?

A1. It is the period of life when the body undergoes changes, leading to reproductive maturity.

Q2. Define puberty.

A2. The stage when human body becomes sexually mature.

Q3. Enlist the changes occurring in males and females during puberty.

A3.

Type of change	In girls	In boys
Increase in height	Sudden increase	Sudden increase
Body shape	Waist widens	Shoulders broaden
Voice change	High pitched	Voice becomes deeper
Development of sex organs	Ovaries mature and release eggs.	Testes mature and produce sperm

Q4. What is Adam's apple?

A4. The growing voice box in boys can be seen as a protruding part of the throat called Adam's apple.

Q5. What are secondary sexual characters?

A5. These are the features that help to distinguish males from females.

Q6. Define the following terms.

1. Hormone- they are chemical messengers for various processes and activities in the body
2. Endocrine glands- the ductless glands which secrete hormones directly into blood.

Q7. What is the role of hormones in initiating reproductive function?

A7. 1. Hormones from pituitary stimulate testes and ovaries to release testosterone and estrogen respectively.

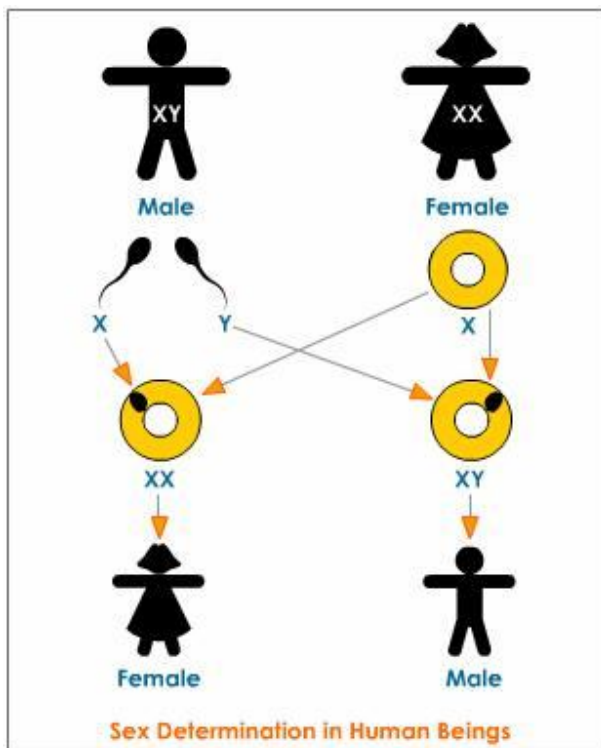
3. These sex hormones reach to target sites via blood.
4. Then stimulate changes in the body at the onset of puberty.

Q8. Discuss reproductive phase of life in women.

A8. In females the reproductive phase of life begins at puberty and continues till they reach the age of 45-50 years. The egg begins to mature with the onset of puberty. One mature ovum is released by one of the ovaries every month. The process is called ovulation. During this period, the walls of the uterus become thick so as to receive fertilized egg. Then this egg gets implanted in the uterus resulting in pregnancy.

Q9. How is the sex of a baby determined?

A8.



Q9 Give reasons for the following :

1. Tadpoles growing in iodine deficient water have retarded growth.
  - A. The process of growth and development is regulated by thyroxine hormone which is produced by thyroid gland. Iodine is required for thyroxine production. That is why retarded growth is seen in tadpoles living in iodine deficient water.

2. Voice becomes hoarse in adolescent boys.
  - A. Sometimes the muscles of the growing voice box go out of control and the voice becomes hoarse.
3. Adolescents experience acne and pimples.
  - A. This is due to increased activity of sebaceous (oil) glands in the skin.
4. Females have no role in determining gender of a child.
  - A. Y- chromosomes that leads to a boy offspring is contributed by male parent. That is the sperms are of two types, having either X or Y chromosome.

Q10. Name the hormone secreted by the following glands, write their functions as well.

A10

Gland	Hormone	Function
Pituitary	Growth hormone	Controls the activities of other glands and helps in growth
Thyroid	Thyroxine	Metabolism of carbohydrates, fats
Pancreas	Insulin	Regulates sugar metabolism of sugar, deficiency causes diabetes.
Adrenal	Adrenaline	Helps body to fight stress

Q11. Write short note on reproductive health of adolescents.

A11. 1. Nutritional needs of adolescents

2. personal hygiene

3. physical exercise

Refer page no. 121 and 122 of the textbook.

Q12. What are the causes of AIDS?

A12. 1. Sharing needle of the syringe

2. unprotected sex with infected person.

3. blood transfusion from infected person to healthy one.
4. infected mother can pass HIV through milk to an infant.