



ADOLESCENCE

Short Answer Questions

Question 1.

What is Adam's apple?

Answer:

The protruding part of the throat in males is called Adam's apple.

Question 2.

Name the hormone in female that is produced by ovaries and helps in development of mammary glands.

Answer:

Estrogen

Question 3.

Whose height grow faster initially—boys or girls?

Answer:

Girls

Question 4.

Name a gland which transports secretions through ducts.

Answer:

Sweat glands/salivary glands

Question 5.

What is puberty?

Answer:

The age at which boys and girls become capable of reproduction.

Question 6.

What are hormones?

Answer:

The chemical substances produced by endocrine glands are called hormones.

Question 7.

How long is a woman's reproductive life lasts?

Answer:

Menarche to menopause.

Question 8.

Name the female hormone.

Answer:

Oestrogen, progesterone

Question 9.

Which gland is called master gland?

Answer:

Pituitary gland

Question 10.

What is a balanced diet?

Answer:

The meal that includes all nutrients is called a balanced diet.

Question 11.

What is menstruation?

Answer:

Extrusion of uterus lining and blood along with the unfertilised egg from the vagina is called menstruation.

Question 12.

What is menarche?

Answer:

The first menstrual flow begins at puberty and is termed as menarche.

Question 13.

What is menopause?

Answer:

Stoppage of menstruation is called menopause.

Question 14.

What causes goitre?

Answer:

Deficiency of thyroxine hormone.

Question 15.

Which gland secretes thyroxine?

Answer:

Thyroid gland

Question 16.

What are chromosomes?

Answer:

The thread-like structures in the nucleus are called chromosomes.

Question 17

How many chromosomes are present in human cell?

Answer:

23 pairs or 46 chromosomes.

Question 18.

How many sex chromosomes are there in human cell?

Answer:

Two, i.e., one pair.

Question 19.

Which hormone is necessary for normal growth of a person?

Answer:

Growth hormone.

Question 20.

Which gland secretes insulin?

Answer:

Pancreas

Question 21.

What causes diabetes?

Answer:

Deficiency of insulin.

Question 22.

Name the chromosome present in a female.

Answer:

X chromosome

Question 23.

Name the chromosome present in a male.

Answer:

X and Y chromosomes

Question 24.

Which chromosome does the unfertilised egg contain?

Answer:

X chromosome

Question 25.

Which hormone balances the proportion of salts in the blood?

Answer:

Adrenaline

Question 26.

What decides the sex of an unborn child?

Answer:

Sex chromosome of father.

Question 27.

Name the glands other than the pituitary gland.

Answer:

Thyroid, pancreas and adrenals.

Question 28.

When does the puberty ends?

Answer:

uberty ends when an adolescent reaches reproductive maturity.

Question 29.

Do the boys and girls undergo same physical changes at puberty?

Answer:

No

Question 30.

Why do we need to have a balanced diet?

Answer:

To keep the body healthy.

Short Answer Questions

Question 1.

What is meant by adolescence?

Answer:

Growing up is a natural process. The period of life, when the body undergoes several changes leading to reproductive maturity, is cabled adolescence. The adolescence period is 11 to 19 years of age.

Question 2.

What is puberty?

Answer:

The period during which adolescent boys and girls attain sexual maturity and become capable of reproduction is called puberty. Puberty age of female is 10 to 12 years while male puberty age is 12 to 14 years.

Question 3.

What is vital change which marks puberty in boys and girls?

Answer:

During puberty, the human body undergoes several changes, but the most important changes which marks puberty is that boys and girls become capable of reproduction

Question 4.

Why do boys have a hoarse voice at puberty?

Answer:

The voice box or larynx begins to grow at the onset of puberty. This growing voice box in boys can be seen as a protruding part of the throat called Adam's apple. This leads to voice becoming hoarse.

Question 5.

How does the body shape change at puberty?

Answer:

Body shape changes differently in boys and girls at puberty. Boys have broader shoulders and wider chests. Their muscles grow more prominently than girls. In girls, the region below the waist becomes wider.

Question 6.

Why is adolescence also called teenage?

Answer:

Adolescence period is generally 11 to 19 years of age. Because the period covers the teens, i.e., 13 to 19 years of age, adolescents are also called teenagers.

Question 7. Why do many young people have acne and pimples during adolescence?

Answer:

During puberty the secretion of sweat glands and sebaceous glands (oil glands) increases. It develops acne and pimples on the face of young boys and girls.

Question 8.

Why are endocrine glands also called ductless glands?

Answer:

Endocrine glands release hormones directly into the blood stream. So, they are termed as ductless glands. For example, pituitary, thyroid, pancreas, etc.

Question 9.

What are secondary sexual characters?

Answer:

At puberty, in girls, breasts begin to develop, the region below the waist become wider, voice become shriller. Boys begin to grow facial hair, i.e., moustache and beard. Boys also develop hair on their chest, the muscles of the body grow more prominently, develop larger voice box which can be seen as a protruding part of the throat called Adam's apple. In both boys and girls, hair grows under the arms and in the pubic region. As these features distinguish the male from the female they are called secondary sexual characters.

Question 10.

Explain the development of sex organs in male and female.

Answer:

The male and the female sex organs develop completely at puberty. Male sex organ like testes and penis develop completely. The testes begin to produce the male

gametes or sperm. Similarly in girls the ovaries enlarge and egg begins to mature. Ovaries start releasing matured eggs or ovum.

Question 11.

Why do changes occur in human body at puberty?

Answer:

The changes in human body at puberty occur due to release of hormones by different types of glands. Hormones are chemical substances secreted from endocrine glands or endocrine system. Male hormone or testosterone are responsible for changes in male whereas female hormone or estrogen are responsible for changes in female.

Question 12.

What is a pituitary gland?

Answer:

Different types of hormones are secreted by different types of glands. The product of all these hormones is under the control of another hormone secreted from an endocrine gland called pituitary gland.

Question 13.

How do hormones work in human body?

Answer:

Endocrine glands release hormones into the blood stream to reach a particular body part called target site. The target responds to the hormone. There are many endocrine glands or ductless glands in the body.

Question 14.

What are sex hormones? How do they work in the human body?

Answer:

Sex hormones help boys and girls develop sex organs to enable them for reproduction. These hormones lead them to reproductive maturity.

In girls, estrogen makes the breasts develop. Milk secreting glands or mammary glands develop inside the breasts. Ovaries begin to produce eggs. In boys, testosterone is released by testes. Testes begin to release sperms. Changes in boys is also seen due to this hormone.

Question 15.

What is menstruation?

Answer:

At puberty, in girls the ovaries get enlarged and start producing eggs (ovum). One egg matures and is released by one of the ovaries once in about 28 to 30 days. During this period, the wall of the uterus becomes thick so as to receive the egg. If the egg is fertilised then it begins to develop and results in pregnancy. If this egg is not fertilised, the released egg and thickened lining of the uterus along with its blood vessels are

shed off causing bleeding in female which is called menstruation. It occurs once in about 28 to 30 days.

Question 16.

What are the changes in female at the onset of puberty?

Answer:

There are several changes in females at the onset of puberty. They are:

growth of hair in armpit and pubic region.

development of breasts and mammary glands.

ovaries get enlarged and begin producing eggs.

menstruation cycle starts; and

increased activity of sweat and sebaceous glands.

Question 17.

Explain the terms menarche and menopause.

Answer:

The first menstrual flow begins at puberty and is termed as menarche.

At 45 to 50 years of age, the menstrual cycle stops. Stoppage of menstruation is called menopause.

Question 18.

What happens when the egg is fertilised?

Answer:

When the egg is fertilised, it begins to divide and then gets embedded in the uterus for further development. Finally the fertilised egg develops into a foetus.

Question 19.

What are the changes in males at puberty?

Answer:

There are various changes in males at puberty. They are:

sudden increase in height.

growth of hair at different parts of body like face, armpit and pubic region, development of moustache and beard.

development of Adam's apple in throat, voice becomes hoarse.

shoulders become broader and chest wider.

growth of size of reproductive organs like penis, testes begin to produce sperms, etc.

Question 20.

What do you mean by reproductive health?

Answer:

The physical and mental well being of an individual is regarded as an individual's health. To keep the body healthy, every human being, at any age, needs to have a balanced diet. The person must also observe personal hygiene and undertake adequate physical exercise.

Thus, reproductive health refers to the diseases, disorders and conditions that affect the functioning of the male and female reproductive system during all stages of life.

Question 21.

What is the role of hormones in completing the life history of insects and frogs?

Answer:

Hormones play an important role in the completion of life cycle of insects and frogs. Metamorphosis in insects is controlled by insect hormones. In a frog, it is controlled by thyroxine, the hormone produced by thyroid gland. Thyroxine production requires the presence of iodine in water. Water in which iodine is not, present, the tadpoles cannot become adult.

Question 22.

Which hormone is released by pancreas? What is its function?

Answer:

Insulin is released by pancreatic gland. It regulates sugar metabolism. If insulin is deficient in the body, sugar level becomes high in blood causing diabetes.
