

St. Andrews Scots School

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I.P. Extension, Patparganj, Delhi – 110092
Session: 2025-2026 – Answer Key

Class: VIII

Subject: Science

Chapter: Reaching the Age of Adolescence

CHECK POINT 1

1. 11–13 years
2. Throat region of boys
3. Puberty
4. Pituitary gland
5. Endocrine glands

CHECK POINT 2

1. (T) 2. (T) 3. (F) 4. (F) 5. (T)

PRACTICE TIME

A. Tick (✓) the correct answer:

1. (b) 2. (a) 3. (d) 4. (c) 5. (a) 6. (b)

B. Assertion-Reason Type Questions:

1. (a) 2. (d) 3. (c) 4. (b)

C. Match the Columns:

1. (c) 2. (e) 3. (a) 4. (f) 5. (b) 6. (d)

D. Very Short Answer Type Questions:

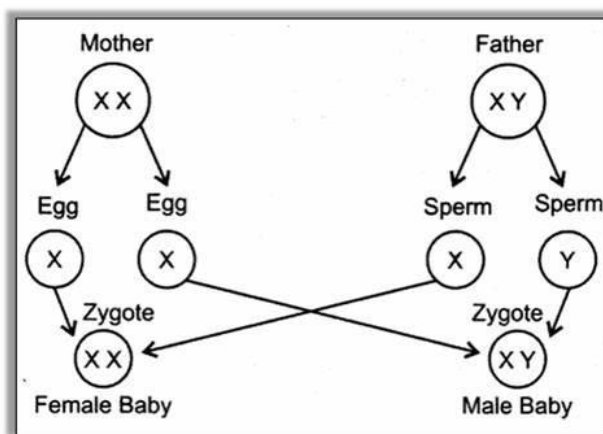
1. Hormones
2. Junk food
3. Pituitary glands
4. Puberty
5. Adrenal gland
6. Testosterone

E. Short Answer Type Questions:

1. During adolescence, the muscles grow, shoulders become broad and waistline becomes wider in boys whereas in girls, their pelvic region becomes broad and development of breasts takes place.
2. The external features in the body of males and females which help to distinguish a male from a female are called secondary sexual characters.
3. A cyclic period of 28 days in which the uterus of female undergoes periodic changes involving discharge of broken blood capillaries and lining of uterus, is called menstrual cycle.
4. Personal hygiene at adolescence is important because during this period, the increased activity of sweat glands makes the body smelly and increases the growth of bacteria and fungus in underarms and groin areas.
5. Iodine is an important mineral required by the thyroid gland to produce thyroxine hormone. Lack of iodine in food causes thyroid gland to enlarge in size resulting in swelling in the neck region, which is termed as goitre.
6. The pituitary hormone FSH stimulates testes to release testosterone in males and ovaries to release estrogen in females. The testosterone and estrogen produce secondary sexual characters in the body of boys and girls respectively.

F. Long Answer Type Questions:

1. The sex of a child is determined at the time of fertilisation. The sperm carries either X or Y sex chromosome, whereas ovum carries only X type of sex chromosome. Now, if the
 - Sperm carrying X chromosome fuses with the ovum, the resulting zygote will have XX sex chromosomes and the child will be a female child.
 - Sperm carrying Y chromosome fuses with the ovum, the resulting zygote will have XY sex chromosomes and the child will be a male child.



Sex determination in human beings

2. (a) Endocrine glands are called ductless glands because they do not have any ducts and pour their secretions directly into the blood.

(b) (i) Insulin (ii) Thyroxine (iii) Growth hormone (iv) Progesterone

3. (a) Adolescence is the period of intense growth of the body. Any disease during this period leads to retarded growth. Therefore, to keep the body healthy, an adolescent needs a balanced diet which includes right amount of carbohydrates, fats, proteins, minerals and vitamins to provide complete nutrition to the body.

(b) An adolescent should avoid junk food to prevent diabetes, obesity, cardiac problems and deficiency diseases.

G. HOTS Questions:

1. It is the genes which determine the specific characters of an individual. As the offspring inherit genes from both the parents, they resemble the mother in certain characters and the father in some other characters.

2. During adolescent period, the sweat glands and sebaceous glands become more active, especially on the face. This leads to acnes and pimples.

3. No, woman is not responsible for the birth of a girl child but the father is responsible for it. If the sperm containing X chromosome fertilises the egg, a girl child is born and if the sperm containing Y chromosome fertilises the egg, a boy child is born.

Passage/Case-based Questions:

1. Testosterone

2. The period between childhood and adulthood, during which growth and physical differentiation occurs in boys and girls is called adolescent period.

H. Science Quiz/ Puzzle:

1. TESTIS

2. TADPOLE

3. SPERM

4. MENOPAUSE

5. OVA

6. INSULIN

7. OVARY

8. LARYNX

9. PITUITARY

10. DIABETES

11. ACNE

12. IODINE

13. ESTROGEN