10 Reaching the Age of Adolescence

Multiple Choice Questions

1. The belief that the mother is completely responsible for the sex of the child is wrong because the child
   (a) gets sex chromosome only from the mother.
   (b) develops in the body of the mother.
   (c) gets one sex chromosome from the mother and the other from the father.
   (d) gets sex chromosome only from the father.

2. AIDS can spread from an infected person to another person through
   (a) sharing food
   (b) blood transfusion
   (c) sharing comb
   (d) a mosquito bite

3. Given below are events that lead to pregnancy and development of embryo.
   (i) Fertilization of egg
   (ii) Maturation of egg
   (iii) Release of egg
   (iv) Embedding of embryo in thickened uterine wall.

   Which of the following options gives the correct order of sequence in which they occur?
   (a) i, ii, iii, iv,
   (b) ii, i, iii, iv
   (c) i, iv, ii, iii
   (d) ii, iii, i, iv.

4. For the metamorphosis of tadpoles which of the following elements must be available in water?
   (a) chlorine
   (b) carbon
   (c) sulphur
   (d) iodine

5. The most conspicuous visible change that occurs in boys during puberty is:
   (a) development in voice box.
   (b) increase in height.

(c) production of sperms.
(d) increased sweating.

6. Structures present in a cell which is responsible for determination of the sex of a baby is
   (a) cytoplasm
   (b) cell membrane
   (c) nucleus
   (d) chromosome

VERY SHORT ANSWER QUESTIONS

7. Unscramble the underlined words in the following sentences.
   (a) Reproductive life of a woman lasts from hacreemn to spauoemen.
   (b) The development of a caterpillar to an adult butterfly is termed as poommertaissh.
   (c) The overgrowth of sumselc in xalnyr leads to the hoarse voice in adolescent boys.
   (d) Dannalier helps the body to adjust and fight the stress.

8. Complete the following sentences.
   (a) In females, the uterine wall thickens to receive the _____.
   (b) Endocrine glands release hormones directly into_____for transportation to the _____.
   (c) The sex hormones,_____ and estrogen are responsible for the development of _____ characters.
   (d) Release of sex hormones is under the control of a hormone secreted from the _____.

9. Give a suitable word for each of the following statements.
   (a) The site which responds to a hormone.
   (b) Name of a gland which transports secretions through ducts.
   (c) Chemicals which control changes at adolescence stage.
   (d) It marks the beginning of reproductive period.

10. Name the hormone that is released by testes at the onset of puberty.

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

SHORT ANSWER QUESTIONS

12. Match the hormones given in **Column A** with their deficiency disease given in **Column B**.

Column A	Column B
(a) thyroxine	(i) salt imbalance
(b) growth hormone	(ii) diabetes
(c) Insulin	(iii) goitre
(d) Adrenal hormone	(iv) Dwarfism

13. Lila always eats only *dal* and rice in every meal. She often falls ill and has become prone to diseases. Can you suggest changes in her diet which can make her healthy and free from disease?

14. Mention any two features each that are seen in boys and girls each to distinguish them from each other at puberty.

15. We should avoid taking medicines/drugs unless prescribed by a doctor. Give reasons.

16. A few of Paheli's classmates eat potato chips and burgers regularly during the recess at school. Are they healthy eating habits? Give reasons.

17. Read the statements given below and fill up the blanks with the correct words listed in the box.

deep, ductless, nutrients, thyroxine

(a) The meal that includes all _____ is a balanced diet.

(b) Insufficient production of _____ in the tadpoles leads to their incomplete development.

(c) Endocrine glands are also called _____ glands.

(d) After attaining puberty boys develop a_____ voice.

18. Fill the blank circles in figure 10.1 and identify the sex of child A and B.

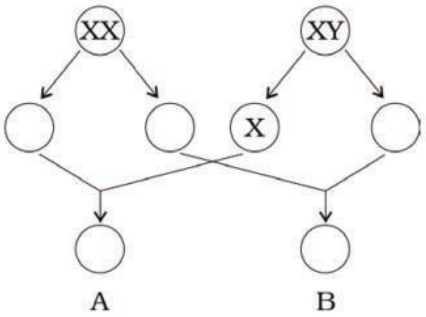


Fig. 10.1

LONG ANSWER QUESTIONS

19. During adolescence, the body of boys and girls undergoes certain changes. Given below are a few of those changes.
    (a) Broad shoulders
    (b) Wider chests
    (c) Wider region below waist
    (d) Development of muscles
    (e) Development of mammary glands
    (f) Growth of facial hair
    (g) Acne and pimples on face
    (h) Development of sex organs
    (i) High-pitched voice
    (j) Growth of pubic hair.

    Categorise these changes into those that occur in boys and those that occur in girls and fill in the table given below.

Body changes during Adolescence	
Boys	Girls

20. In Fig.10.2 mark the positions of the endocrine glands which release the hormones that:
    (a) controls the release of sex hormones.
    (b) is responsible for the secondary sexual characters in boys.
    (c) prevents diabetes.
    (d) maintains the correct salt balance in the blood.

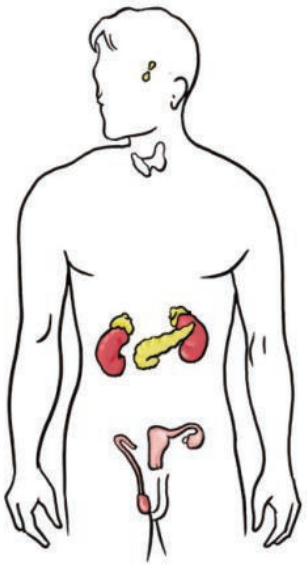


Fig.10.2

21. Given below are certain food items required for proper nourishment of adolescents. Name the nutrients present in the food items and write their functions.

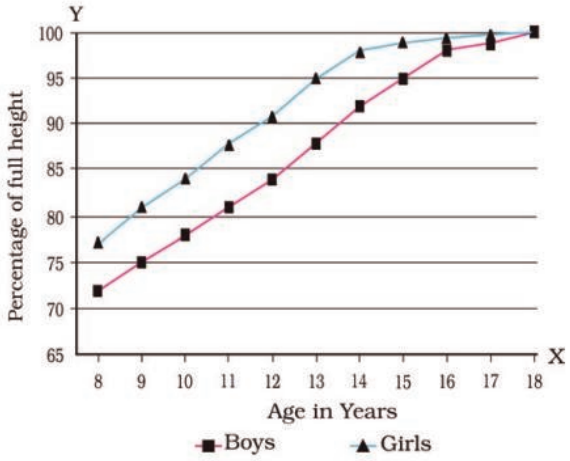
S. No.	Food items	Major Nutrient	Functions
1.	Pulses and nuts		
2.	Oranges and Amla		
3.	Sugar, Roti		
4.	Oils		
5.	Vegetables		

22. Name the hormone which would be released during the following situations:
    (a) a frightened person.
    (b) growth of a child to adult.
    (c) development of caterpillar to moth.
    (d) development of tadpole to frog.

23. In human females, each time during maturation and release of egg the inner wall of uterus thickens. Is this thickening permanent? Give reasons.

24. John and Radha were classmates since childhood. When Radha became eleven years old, she developed a little swelling on her neck. She visited the doctor who started medication for her. After a few years, John also developed a slight protrusion on his throat. He got worried and went to the doctor. But, the doctor assured him that it was a normal feature in boys while they are growing up. Can you think of any reasons for the difference in diagnoses?

25. Observe the chart and graph given in Fig. 10.3 carefully and answer the following questions.



Age in Years	% of full height	
	Boys	Girls
8	72%	77%
9	75%	81%
10	78%	84%
11	81%	88%
12	84%	91%
13	88%	95%
14	92%	98%
15	95%	99%
16	98%	99.5%
17	99%	100%
18	100%	100%

Fig.10.3

(a) Which of the line represents the height of boys?
(b) Which line represents the height of girls?
(c) What is the difference between the pattern of increase in the height of boys and girls?
(d) Is this pattern true for each individual?

26. Salma had a very soft and smooth skin during her childhood. As she entered adolescence, she developed pimples on her face. The skin specialist advised her to wash her face at regular intervals. Can you explain the reasons for the appearance of pimples on her face and suggest ways to prevent them?

27. Our government has legalised the age for marriage in boys and girls. Give reasons as to why one should get married after a certain age.

28. It is believed that height of a child depends upon the genes inherited from parents. However, it is often seen that tall parents may have short children and vice-versa. Are there factors other than genes, that can cause these variations?