HANDOUTS (CHAPTER -15)

Class - VIII Subject -BIOLOGY

Section A: Multiple Choice Questions (MCQs)

1. What is the transitional stage of physical and mental human development occurring between childhood and adulthood called?

a) Infancy
b) Adolescence
c) Metamorphosis
d) Senescence

2. The word 'adolescence' is derived from a Latin word 'adolescere' which means:

a) To become a child
b) To reproduce
c) To grow into maturity
d) To age rapidly

3. According to the text, the period of adolescence spans from about _____ years of age of a human being.

a) 5 to 10
b) 12 to 18
c) 18 to 25
d) 10 to 15

4. The early adolescent period, which marks the onset of puberty, typically ranges between:

a) 9 to 11 years
b) 12 to 15 years
c) 16 to 18 years
d) 14 to 17 years

5. The word 'puberty' is derived from the Latin word 'pubertas', which specifically means:

a) Period of growth
b) Age of manhood
c) Change of voice
d) Chemical messenger

6. On average, the 'onset of puberty' is at around _____ years of age for girls and _____ years for boys.

a) 12, 10
b) 10, 12

c) 14, 12

d) 11, 14

7. A person's individual 'time table for puberty' is influenced primarily by which of the following?

a) Diet alone

b) Exercise alone

c) Heredity

d) Atmospheric pressure

8. The sudden and visible growth spurt in physical height is most evident in girls between which ages?

a) 8-10 years

b) 11-13 years

c) 13-15 years

d) 15-18 years

9. During puberty, the diameter of the heart increases by about _____ and the weight of the lungs almost _____.

a) 25%, triples

b) 50%, doubles

c) 10%, triples

d) 100%, stays same

10. The voice box in the throat, responsible for producing characteristic pitch, is scientifically known as the:

a) Pharynx

b) Trachea

c) Larynx

d) Esophagus

11. What is the protruding or highlighting part of the larynx in front of the neck in boys called?

a) Thyroid gland

b) Goitre

c) Adam's apple

d) Vocal cord

12. Common skin conditions like acne and pimples among adolescents are primarily due to increased production of sebum from which glands?

a) Thyroid glands

b) Pituitary glands

c) Sebaceous glands

d) Adrenal glands

13. In boys, mature sex organs (testes) begin to produce which reproductive fluid?

a) Ovum
b) Semen
c) Thyroxine
d) Insulin

14. Hormones are chemical substances produced and secreted by which specific types of glands?

a) Exocrine glands
b) Endocrine glands
c) Salivary glands
d) Lymph glands

15. The hormonal balance shifts strongly towards an adult state during adolescence under the triggers of which master gland?

a) Thyroid gland
b) Adrenal gland
c) Pituitary gland
d) Pancreas

16. The first menstrual flow that begins in a girl at puberty is termed as:

a) Menopause
b) Menstruation
c) Menarche
d) Ovulation

17. The permanent stoppage of the menstrual cycle in women, occurring around 45-50 years of age, is known as:

a) Menarche
b) Adolescence
c) Menopause
d) Puberty

18. Human beings have _____ chromosomes in the nuclei of their cells, consisting of 44 _____ and 2 sex chromosomes.

a) 23, gonads
b) 46, autosomes
c) 46, gametes
d) 22, zygotes

19. A deficiency of iodine in the diet can cause a swelling in the neck region due to the malfunction of the thyroid gland, a condition called:

a) Diabetes
b) Goitre

c) Obesity

d) Osteoporosis

20. The hormone 'thyroxine' is essential to carry out the process of metamorphosis in frogs, and its production requires the presence of:

a) Calcium

b) Iron

c) Iodine

d) Vitamin D

Section B: Fill in the Blanks

1. Growth is measured biologically as an increase in _____.

2. The life cycle of human beings consists of three main stages of development: childhood, _____, and old age.

3. An adolescent is neither a _____ nor an adult.

4. The physical growth spurt during puberty is more evident in boys between _____ years of age.

5. Before puberty, the larynx is small and vocal cords are _____ and thin.

6. Males have longer vocal cords, whereas females have _____ vocal cords.

7. Secondary sexual characters in boys start with the appearance of pubic and _____ hair.

8. Pituitary secretes hormones that influence the production of _____ in boys and estrogen/progesterone in girls.

9. Maturation of the sex organs, which are also known as _____, is initiated by blood-borne hormones.

10. The male gametes produced over a longer duration in life are called _____.

11. In females, one ovum becomes mature once in about _____ days.

12. The mature ovum enters the _____, where it may get fertilised.

13. If fertilisation does not occur, the egg disintegrates and the lining of blood vessels is shed off in a process termed _____.

14. Menstruation occurs regularly at intervals of _____ days on average.

15. All of a woman's egg cells contain an _____ chromosome.

16. An egg cell fertilised by a sperm containing a Y chromosome develops into a _____.

17. Endocrine glands are also known as _____ glands as they pour secretions directly into the blood stream.

18. The pituitary gland releases the _____ hormone, which regulates the overall growth and development of the body.

19. If _____ is not secreted in sufficient quantities by the pancreas, the person suffers from diabetes.

20. The adrenal glands release _____, a hormone which controls the body's response to stressful situations.

21. The transformation of a tadpole to a frog is known as _____.

22. Excessive fat intake and poor nutrition in adolescence increases the risk of _____ in adulthood.

23. A deficiency of calcium, riboflavin, and Vitamin D during growth phases can lead to _____ during old age.

24. Once a girl has started menstruating, her nutritional need for _____ increases significantly.

25. Experimentation with alcohol, tobacco, and drugs during adolescence often takes place under _____ pressure.

Answer Key

Part 1: MCQs Answers

Question 1 b) Adolescence

Question 2 c) To grow into maturity

Question 3 b) 12 to 18

Question 4 b) 12 to 15 years

Question 5 b) Age of manhood

Question 6 b) 10, 12

Question 7 c) Heredity

Question 8 b) 11-13 years

Question 9 b) 50%, doubles

Question 10 c) Larynx

Question 11 c) Adam's apple

Question 12. c) Sebaceous glands

Question 13 b) Semen

Question 14 b) Endocrine glands

Question 15 c) Pituitary gland

Question 16 c) Menarche

Question 17 . c) Menopause

Question 18 b) 46, autosomes

Question 19. b) Goitre

Question 20 c) Iodine

Part 2: Fill in the Blanks Answers

Blank Number	Correct Word / Phrase
Blank 1	mass
Blank 2	adulthood
Blank 3	child
Blank 4	13-15
Blank 5	short
Blank 6	shorter
Blank 7	facial
Blank 8	testosterone
Blank 9	gonads
Blank 10	sperms
Blank 11	28
Blank 12	oviduct
Blank 13	menstruation
Blank 14	28-30
Blank 15	X
Blank 16	boy
Blank 17	ductless
Blank 18	growth
Blank 19	insulin
Blank 20	adrenaline
Blank 21	metamorphosis
Blank 22	obesity
Blank 23	bone fractures / osteoporosis

Blank 24	iron
Blank 25	peer