

BIOLOGY

BOOKS - PEARSON IIT JEE FOUNDATION

REACHING THE AGE OF ADOLESCENCE

Master Your Test

1. When do noticeable changes begin in human in adolescence?



2. Do both girls and boys grow on same rate?



3. Name two female hormone.



4. Define adolescence.



5. State true (T) or false (F).

The sebaceous glands become less active during puberty.



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6. State true (T) or false (F).

Once it starts, puberty lasts the whole life for an individual.



7. State true (T) or false (F).

Mammary glands develop in females during puberty.



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8. State true (T) or false (F).

During puberty, the shoulders broaden in males and hips broaden in females.



9. Do you also observe similar changes in yourself? What do you think this phase of life is called?



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10. Discuss some changes that a person goes through during adolescence.



11. What is the age of adolescence in human according to WHO?



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12. Which organ is called voice box?



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13. Why adolescence is also called teenage?



14. Explain why some boys and girls have disproportionate body structure during adolescence.



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15. What do you understand by puberty?



16. What are primary and secondary sexual characteristics?



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17. Name the male and female reproductive organ.



18. What are mammary glands responsible for in human body?



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19. What is Adam's apple?



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20. How long does it take a boy's voice to change?



21. Name the following : The male sex hormone



22. Name the following : The primary sexual characteristic in females _____



23. Name the following: The first menstrual flow experienced by a woman at the beginning of puberty ____



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24. Name the following: The master gland is



25. Name the following : The hormone that facilitates metamorphosis in frogs ____



26. Name the inadequate production of the hormone which can cause diabetes?



27. What do you mean by ductless glands?



28. What is the largest endocrine gland present in human body?



29. Which is the smallest endocrine gland?



30. Which hormone is known as emergency hormone in our body?



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31. What gland prepares the body for fight or flight?



32. Name the gland which is also called the master gland.



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33. Name the gland which is responsible for maintaining the optimum salt levels in the blood.



34. Mention one function of growth hormone.



35. What hormones does the thyroid gland produce?



36. What is the main cause of diabetes?



37. Mention few symptoms of insulin deficiency generally observed in human body.



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38. What do you think can diabetes go away?



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39. What are pheromones?



40. What do you understand by metamorphosis?



41. Why are endocrine glands called ductless glands?



42. How do you know if you have growth hormone deficiency?



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43. What is menstruation?



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44. What do you understand by menopause?



45. What are chromosomes?



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46. What is reproductive phase?



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47. What is menarche?



48. How the sex of an unborn child is determined?



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49. What are sex hormones? Why are they named so? State their function.



50. Explain how a zygote turns into a female child?



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51. ____(a)____ present in the nucleus of cells are responsible for the sex of a person. If a sperm containing ____(b)___ fertilizes an egg, the zygote will develop into a girl child.On the other hand, if a sperm containing ____(c)__

fertilizes an egg, the zygote will develop into a boy child



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52. What type of chromosomes occurs in sperms?



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53. Name any two forms of exercise that adolescents can practice for good health.



54. How we can keep ourselves healthy?



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55. Why it is important to take a balanced diet?



56. Why you should say no to drugs?



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57. Why junk food should be avoided?



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Track Your Learning I

1. The beginning of the process of sexual maturity in the body of a human being is called

A. Puberty

B. Growth

C. Development

D. Both (b) and (c)

Answer: A



2. Out of human males and females, the human ____ experience an increase in muscle mass at the time of puberty.

A. Female

B. Males

C. Both of them

D. None of them

Answer: B



3. The female gametes are produced in a pair of organs called ____

A. Ovaries

B. Testes

C. Uterus

D. Fallopian tube

Answer: A



- **4.** ____characteristics include the development of pubic hair in both sexes, breasts in females and facial hair such as moustaches and beards in males.
- (a) Primary Sexual
- (b) Secondary Sexual
- (c) Primary
- (d) Both (a) and (b)
 - A. Primary sexual
 - B. Secondary sexual
 - C. Primary

D. Both (a) and (b)

Answer: B



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5. Sexual characteristics that are present in a person since the time of his/her birth are called ____ sexual characteristics.

A. Primary sexual

B. Secondary sexual

- C. Primary
- D. Both (a) and (b)

Answer: A



- **6.** The female sex hormone is
 - A. Estrogen
 - B. Progesterone
 - C. Testosterone

D. Both (b) and (c)

Answer: A



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7. Match the following.

- Oestrogen (a) Testes
- 2. Growth hormone (b) Pituitary gland
- Insulin (c) Metamorphosis
- 4. Thyroxine (d) Ovaries
- Testosterone (e) Pancreas



8. According to the World Health Organization
adolescence is defined as the period between
•

- A. 8 to 10 years of age
- B. 10 to 19 years of age
- C. 20 to 15 years of age
- D. 25 to 28 years of age

Answer: B



9. Oil glands also become active and give out an oily, wax like secretion called

- A. Sebum
- B. Estrogen
- C. Progesterone
- D. None of them

Answer: A



10. The process through which a living organism produces more of its own kind is called ____

A. Species

B. Reproduction

C. Fertilization

D. Adolescence

Answer: B



Track Your Learning Ii

1. Hormones are the substances that are produced by special organs present in the body called ____

A. Exocrine glands

B. Endocrine glands

C. Eccrine gland

D. Both (b) and (c)

Answer: B

2. The generation of all hormones in our body is controlled by a master gland, called the located near the brain.

A. Pituitary gland

B. Thyroid gland

C. Adrenal gland

D. Pancreas

Answer: A

3. ____ gland is present in the throat of both males and females.

A. Thyroid

B. Adrenal gland

C. Pancreas

D. Pituitary

Answer: A



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4. A lack of iodine in the body causes this gland to swell, leading to a deficiency disease called

A. Growth disorder

B. Goitre

C. Diabetes

D. Pancreatic cancer

Answer: B

5	hormone	is	responsible	for	
regulating th	e utilization	n of	nutrients suc	h as	
proteins, carbohydrates and fats in the body.					

- a) Thyroxine
- b) Growth
- c) Calcitonin
- d) Triiodothyronine
 - A. Thyroxine
 - B. Growth

- C. Calcitonin
- D. Triiodothyronine



- **6.** ____ produces a hormone called insulin.
 - A. Pancreas
 - B. Thyroxine
 - C. Calcitonin

D. Adrenal glands

Answer: A



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7. _____ maintains the level of blood sugar in our body.

A. Adrenal gland

B. Pancreas

C. Pituitary

D. Insulin

Answer: D



- 8. Insulin hormone is not secreted in enough levels, the blood sugar levels will go beyond the normal range, leading to a disease called a) Cushing syndrome
- b) Thyroid

- c) Diabetes
- d) Gigantism
 - A. Cushing syndrome
 - B. Thyroid
 - C. Diabetes
 - D. Gigantism

Answer: C



9. ____ help these insects to track more of their kind and to raise alarms during danger ous situations.

A. Pheromones

B. Thyroxine

C. Calcitonin

D. Triiodothyronine

Answer: A



10. Deficiency of growth hormone can lead to
stunted growth, leading to a condition called
·

- a) Gigantism
- b) Dwarfism
- c) Metamorphosis
- d) Diabetes
 - A. Gigantism
 - B. Dwarfism
 - C. Metamorphosis

D. Diabetes

Answer: B



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Track Your Learning Iii

- **1.** Every cell present in the body of a human being has a dense central core called the ____.
- a) Nucleus
- b) Nucleolus

- c) Nucleoplasm
- d) Chromosomes
 - A. Nucleus
 - B. Nucleolus
 - C. Nucleoplasm
 - D. Chromosomes



2. The life of a l	human	being	begins	as a	a sing	ξle
celled called						

- A. Chromosomes
- **B.** Gametes
- C. Zygote
- D. None of them

Answer: C



3. The information present in the is what
determines the characteristics of this human
being.
a) Chromosomes
b) DNA
c) Gene
d) Gametes
A. Chromosomes
B. DNA
C. Gene
D. Gametes



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- **4.** The nucleus of every cell of a human being contains ____ pairs of chromosomes.
- a) 46
- b) 23
- c) 22
- d) 21

A. 46

- B. 23
- C. 22
- D. 21

Answer: B



- 5. Each cell in the body of a male contains one
- X chromosome and ____.
 - a) one Y chromosome
- b) one X chromosome

c) one XY chromosome

d) one YY chromosome

A. one Y chromosome

B. one X chromosome

C. one XY chromosome

D. one YY chromosome

Answer: A



1. ____ has low nutritive value, should be avoided as it would do more harm than good to the body.

A. Vegetable

B. Junk food

C. Cereals

D. Pulses

Answer: B



2	are	illegal	and	highly	harmful
chemical substances that induce a momentary					
feeling of ha	ppin	ess and	chan	ge of mo	ood.
a) Drugs					
b) Sedatives					
c) Tranquiliz	ers				
d) None of t	hem				
A. Drugs					
B. Sedati	ves				

C. Tranquilizers

D. None of them

Answer: A



- **3.** What will happen if personal hygiene is not taken care during menstruation?
- a) Reproductive tract infection
- b) Cramps
- c) Infertility
- d) Pregnancy

- A. Reproductive tract infection
- B. Cramps
- C. Infertility
- D. Pregnancy

Answer: C



- **4.** Aerobics and ____ can help increase stamina and maintain good health in adolescents.
- a) Yoga

D) Gym	
c) Running	
d) All of these	
A. Yoga	
B. Gym	
·	
C. Running	
D. All of these	
Answer: D	

1. Do both girls and boys grow on same rate?



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2. One day Rohan's uncle visited his place. Rohan prepared dinner for him. When he was about to put rock salt on the salad, his uncle interrupted him and asked to put iodised salt instead of rock salt. He also advised him to prefer iodised salt instead of rock salt. Why

our think Rohan's uncle advised him to have iodised salt instead of rock salt?



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3. It is said that height of a child depends upon the genes inherited from the parents. Are there factors other than genes that causes variation in height?



4. Is a woman responsible for the birth of a girl child? Explain.



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5. Why we should not take medicines or drugs unless prescribed by a doctor?



6. What is the most important change marked by puberty?



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Classroom Corner Very Short Answer Mcqs

1. Larynx is called _____

A. Voice box

B. Music box

- C. Respiratory organ
- D. None of these



- **2.** The egg is _____
 - A. Male gamete
 - B. Female gamete
 - C. Both of these

D. None of these

Answer: B



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3. Thyroxin produced by _____

- A. Pituitary gland
- B. Adrenal gland
- C. Thyroid gland
- D. Testes

Answer: C



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4. There are pairs of chromosome in human cell.

A. 23

B. 46

C. 22

D. All are wrong



- 5. Initially, girls grow ____ than boys.
- a) Faster
- b) Slower
- c) Both of these
- d) None of these
 - A. Faster
 - **B. Slower**

- C. Both of these
- D. None of these



- **6.** The period of maturity of reproductive organs is called ____.
 - A. Adolescence period
 - B. Mensuration

- C. Gestation period
- D. None of these



- **7.** Fertilization is called ____.
- a) To produce sperm
- b) To produce eggs
- c) Fusion of sperms and eggs
- d) All of these

- A. To produce sperm
- B. To produce eggs
- C. Fusion of sperms and eggs
- D. All of these

Answer: C



- **8.** Puberty age in females is ____.
- a) 10-12 years
- b) 12-14 years

- c) 8-10 years
- d) More than 14 years
 - A. 10-12 years
 - B. 12-14 years
 - C. 8-10 years
 - D. More than 14 years



- 9. The number of chromosomes are present in human cella) 22 pairsb) 23 pairs
- c) 24 pairs
- d) 26 pairs
 - A. 22 pairs
 - B. 23 pairs
 - C. 24 pairs
 - D. 26 pairs

Answer: B



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- **10.** The male hormone is ____
 - A. Estragon
 - B. Progesterone
 - C. Testosterone
 - D. All of these

Answer: C

11. Which of these is a primary sexual characteristic in human males?

A. Development of facial hair

B. Presence of a penis

C. Development of mammary glands

D. Broadening of shoulders

Answer: B



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12. The menstrual cycle repeats itself in human females every ____

A. 1 week

B. 28-30 days

C. 4 months

D. 1 year

Answer: B



13. Which of these combinations would result in a zygote that would develop into a male child?

- A. Egg containing X chromosome and sperm containing Y chromosome
- B. Egg containing X chromosome and sperm containing X chromosome
- C. Egg containing Y chromosome and sperm containing X chromosome

D. Egg containing Y chromosome and sperm containing Y chromosome

Answer: A



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14. Which of these is a change one might notice in a girl going through puberty?

A. Widening of chest

B. Increase in muscle mass

- C. Broadening of shoulders
- D. Widening of hips

Answer: D



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15. Which of these is not advisable during puberty?

- A. Balanced diet
- B. Smoking cigarettes

- C. Maintaining personal hygiene
- D. Exercising

Answer: B



- **16.** Which of the following marks the end of the reproductive phase of a woman's life?
 - A. Ovulation
 - B. Menarche

- C. Menopause
- D. Menstruation

Answer: C



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17. Which of the following is released by insects such as ants when they are in danger?

- A. Insulin
- B. Adrenalin

C. Pheromones

D. Thyroxine

Answer: C



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18. The deficient production of hormones from which of these body parts can lead to dwarfism?

A. Adrenal glands

- B. Pancreas
- C. Thyroid gland
- D. Pituitary gland

Answer: D



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19. Adolescence should be careful about what they eat, because

A. proper diet develops their brains.

B. proper diet is needed for the rapid growth taking place in their body.

C. adolescents feel hungry all the time.

D. testes buds are well developed in teenagers

Answer: B



- **20.** Reproductive age in women starts when their
- a) menstruation starts
- b) breasts start developing
- c) body weight increasing.
- d) height increases.
 - A. menstruation starts
 - B. breasts start developing.
 - C. body weight increasing.
 - D. height increases.

Answer: A



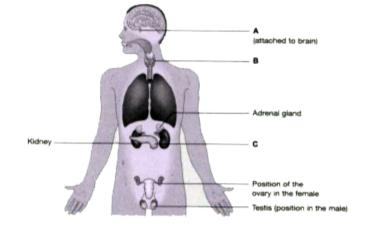
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- 21. The right meal for adolescents consists of:
 - A. chips, noodles, cake
 - B. chapati, dal, vegetable.
 - C. rice, noodles and burger.
 - D. vegetable cutlets, chips and lemon drink.

Answer: B

Classroom Corner Very Short Answer Comprehension Based Questions

1. Hormones play a vital role in regulating the growth, development, behavioral development and reproduction. Our body produces about 30 hormones that remain active in our body. Kindly check the diagram and try to answer the questions below:

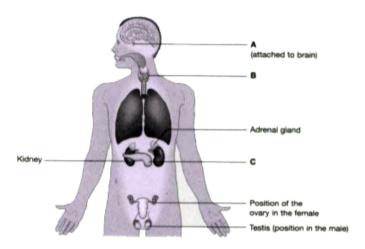


Label the parts A, B, and C in the given figure.



2. Hormones play a vital role in regulating the growth, development, behavioral development and reproduction. Our body produces about 30 hormones that remain active in our body.

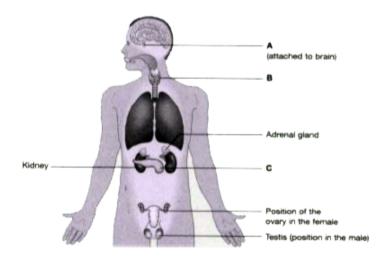
Kindly check the diagram and try to answer the questions below:



Name the gland which is present in the throat of both males and females and produces a hormone called thyroxine.

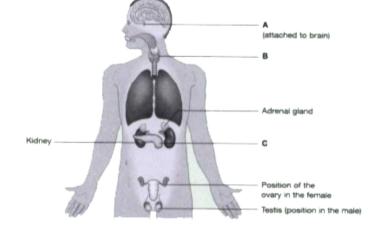


3. Hormones play a vital role in regulating the growth, development, behavioral development and reproduction. Our body produces about 30 hormones that remain active in our body. Kindly check the diagram and try to answer the questions below:



Name the hormone produced by label (C).
Also, state its function.

4. Hormones play a vital role in regulating the growth, development, behavioral development and reproduction. Our body produces about 30 hormones that remain active in our body. Kindly check the diagram and try to answer the questions below:



Name the disease which is caused due to lack of iodine in the body.



5. In today's day and age, there are several harmful substances prevalent in society that can be destructive for the well-being of

individuals. One of the most harmful of these substances is drugs. Drugs are illegal and highly harmful chemical substances that induce a momentary feeling of happiness and change of mood in an individual, leaving the person craving for more.

Read the passage and try to answer the following questions



Explain why it is strictly advised not to indulge in drugs intake?



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6. In today's day and age, there are several harmful substances prevalent in society that can be destructive for the well-being of individuals. One of the most harmful of these substances is drugs. Drugs are illegal and highly harmful chemical substances that induce a momentary feeling of happiness and

change of mood in an individual, leaving the person craving for more.

Read the passage and try to answer the following questions



Discuss few serious consequences in people due to prolonged consumption of drugs.



7. In today's day and age, there are several harmful substances prevalent in society that can be destructive for the well-being of individuals. One of the most harmful of these substances is drugs. Drugs are illegal and highly harmful chemical substances that induce a momentary feeling of happiness and change of mood in an individual, leaving the person craving for more.

Read the passage and try to answer the following questions



Name two illegal drugs that causes hallucinations.



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8. In today's day and age, there are several harmful substances prevalent in society that can be destructive for the well-being of

individuals. One of the most harmful of these substances is drugs. Drugs are illegal and highly harmful chemical substances that induce a momentary feeling of happiness and change of mood in an individual, leaving the person craving for more.

Read the passage and try to answer the following questions



List few ways which help people from refraining drugs consumption?

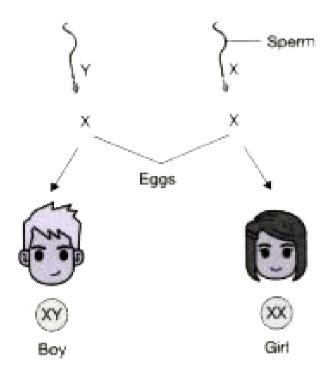


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9. The life of a human being begins as a single celled zygote. The information presents in the chromosomes in this cell is what determines the characteristics of this human being. Each cell in the body of a male contains one X chromosome and one Y chromosome (XY).

Read the passage and try to answer the

questions

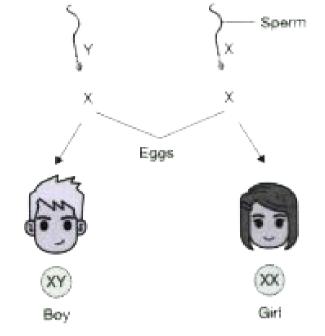


What are sex chromosomes?



10. The life of a human being begins as a single celled zygote. The information presents in the chromosomes in this cell is what determines the characteristics of this human being. Each cell in the body of a male contains one X chro mosome and one Y chromosome (XY).

Read the passage and try to answer the questions



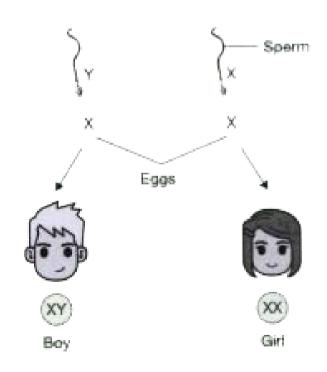
Name the two types of chromosomes.



11. The life of a human being begins as a single celled zygote. The information presents in the

chromosomes in this cell is what determines the characteristics of this human being. Each cell in the body of a male contains one X chromosome and one Y chromosome (XY).

Read the passage and try to answer the questions

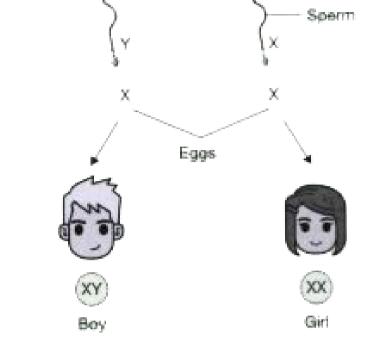


How the sex of unborn child is determined?

12. The life of a human being begins as a single celled zygote. The information presents in the chromosomes in this cell is what determines the characteristics of this human being. Each cell in the body of a male contains one X chromosome and one Y chromosome (XY).

Read the passage and try to answer the

questions



What chromosomes do females have?



Classroom Corner Very Short Answer Subjective

1. Define 'Adolescence'.



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2. Define the secondary sexual characteristics



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3. Menstrual Cycle



4. Discuss why endocrine glands are called ductless glands?



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5. The voice of adolescent boys sometimes cracks and becomes hoarse for a few days.



6. Adolescents undergoing puberty experience a sudden increase in their heights. Discuss why people experience sudden increase in their heights? Justify your answer.



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7. Adrenaline is also called the emergency hormone. Justify your answer.



8. Explain why tadpoles that do not live in salt water do not develop into frogs. Comment.



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9. How the sex of an unborn child is determined?



10. What do you understand by target site in human body?



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11. Name the disease caused due to lack in insulin secretion.



12. Discuss why it is important to maintain personal hygiene?



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Classroom Corner Very Short Answer Assertion Reason

1. Assertion: Puberty is the age at which an individual becomes sexually mature.

Reason: In girls, puberty occurs at younger age than boys.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: B



2. Assertion: The first menstrual flow begins at puberty and is called menopause.

Reason: At 45 to 50 years, the menstrual cycle stops. The stoppage of menstruation is called menarche.

a) If both assertion and reason are true and reason is the correct explanation of assertion.

b) If both assertion and reason are true but reason is not the correct explanation of assertion.

- c) If assertion is true but reason is falsed) If both assertion and reason are false.
 - A. If both assertion and reason are true and reason is the correct explanation of assertion.
 - B. If both assertion and reason are true but reason is not the correct explanation of assertion.
 - C. If assertion is true but reason is false
 - D. If both assertion and reason are false.

Answer: D



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3. Assertion: In humans, sex chromosomes determine the sex and various sex linked characteristic.

Reason: In humans, female sex chromosomes are XY while in males, sex chromosomes are XX.

a) If both assertion and reason are true and reason is the correct explanation of assertion.

- b) If both assertion and reason are true but reason is not the correct explanation of assertion.
- c) If assertion is true but reason is falsed) If both assertion and reason are false.
 - A. If both assertion and reason are true and reason is the correct explanation of assertion.
 - B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: C



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4. Assertion :- Hormones are said to be similar to enzyme in action and chemical nature.

Reason:- Hormones and enzymes are proteinaceous in nature and act as informational nature.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false

D. If both assertion and reason are false.

Answer: D



Classroom Corner Short Answer

1. Write three differentiating points between the sweat glands and the sebaceous glands present in the human body.

Sweat glands	Sebaceous glands	
	A second second second	



2. Name the human male sex hormone released by their reproductive organ. What role does this hormone play in the body of human males?



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3. Explain the below points: Name the human female sex hormone released by their reproductive organ. What role does this hormone play in the body of human females?

4. Explain the role of adrenal glands in our body in brief.



5. Why should we say no to drugs? Also, explain the side-effects of prolonged consumption of drugs.



6. Discuss do male body also have mammary glands? Justify your answer.



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7. Define the puberty



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8. Define the hormones



9. Define the endocrine system



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10. What factors stimulate mammary glands to produce milk?



11. Explain different roles sweat glands play in the human functioning?



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12. Explain which hormone is responsible for sweating in human body.



13. What triggers sebaceous glands to act? Also discuss the importance of sebum.



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14. Discuss why are endocrine glands known as ductless gland?



15. Which hormone is known as emergency hormone in our body?



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16. How it helps in coping with during emergency?



17. Explain why pituitary gland is called master gland? Justify your answer.



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18. Mention few symptoms of insulin deficiency in human body.



19. Which hormonal imbalance causes dwarfism in human body?



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20. What happens when egg gets fertilized? Comment.



21. Explain the sex determination of a baby in human. Justify your answer.



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22. How are the terms puberty and adolescence different from each other?



23. Why are we advised to always consume iodised salt in our diets?



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24. Prepare a table having two columns depicting names of endocrine glands and hormones secreted by them.



25. Explain why prolonged consumption of drugs causes hallucination.



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26. Name the hormone produced by pituitary gland also discuss its functions in brief.



27. Discuss two changes that occur in both male and female body at the onset of puberty.



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28. A girl is 9 years old and 120 cm tall. At the end of the growth period, she is likely to attain what height?



1. Discuss the menstrual cycle experienced by females in detail. Give detailed explanation.



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2. Write any six points of difference between adolescent males and females based on their primary and secondary sexual characteristics.

Adolescent females
Charles Made and Co.

3. Explain how a zygote is formed through the fertilization of an egg cell by a sperm cell? Give reason.



4. Discuss why do the hips of human females broaden during puberty? Justify your answer.



5. A belief still prevalent in many Indian homes is that the birth of a girl or a boy is in the hands of the mother who bears the child. Due to this, families who dislike the birth of a girl child blame the mother and treat both the mother and the child badly. Do you think this is a cor rect judgement? Give a reason for your answer.



6. How are the sweat and sebaceous glands present in our body different from endocrine glands? What are such glands called? Name any one other gland of this type.



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7. Would a human female undergo menstruation during pregnancy? Give a reason for your answer.



8. Both enzymes and hormones are produced by the glands present in our bodies. Find out how enzymes and hormones are different from each other



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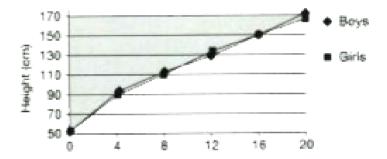
9. Discuss different kinds of harmful drugs prevalent in the society today and their harmful effects on people. Why its consumption should be avoided?

10. The table below shows the data on likely heights of boys and girls as they grow in age.

Draw graphs of height and age for both boys and girls on the same graph paper. What

conclusions can be drawn from these graphs?

Age	Height (cm)	
Year	Boys	Girls
0	53	53
4	96	92
8	114	110
12	129	133
16	150	150
20	173	165





11. What do you understand by puberty? Discuss few changes occur during puberty.



Competition Corner Mcqs

1. Which of the following substance is addictive and is harmful to mental and physical health?

A. Carbohydrates

B. Vitamins

C. Drugs

D. Water

Answer: C



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2. What should we avoid eating to have a balanced diet?

A. Dairy products

B. Junk food

C. Grains

D. Cereals

Answer: B



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3. What are drugs?

- A. Illegal harmful chemicals
- B. Natural hormones
- C. Natural vitamins
- D. Beneficial organic substances

Answer: A



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4. What helps in increasing stamina and good health?

A. Physical exercise

B. Medicines

C. Junk food

D. Drugs

Answer: A



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5. How many chromosomes are present in the nucleus of a human?

A. 13

B. 21

C. 23

D. 46

Answer: D



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6. If X chromosome of sperm fertilizes an egg, what will be the chromosomes of the zygote?

A. XX

B. XY

C. XO

D. YO

Answer: A



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7. How many pair(s) of sex chromosome is found in a human male?

A. 1

B. 3

C. 5

D. 7

Answer: A



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8. Which chromosome set represents a female child?

A. XO

B. YO

C. XX

D. XY

Answer: C



- **9.** Which hormone is responsible for gigantism?
 - A. Epinephrine
 - B. Thyroxine
 - C. Emergency hormone
 - D. Growth hormone

Answer: D



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10. Which is also known as the emergency hormone?

- A. Epinephrine
- B. Noradrenaline
- C. Adrenaline
- D. Norepinephrine

Answer: C



- **11.** What is the function of pheromones in insects?
 - A. To reach sexual maturity
 - B. To attract their own kind
 - C. To increase body growth
 - D. To secrete other hormones

Answer: B



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12. Which of these secretes insulin?

A. Testes

B. Thyroid gland

C. Pituitary gland

D. Pancreas

Answer: D



13. In how many days does menstrual cycle repeats?

A. 28 to 30 days

B. 15 to 20 days

C. 20 to 22 days

D. 10 to 12 days

Answer: A



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14. What is ovulation?

A. Fertilization of ovum by sperm

B. Release of egg into oviduct

C. The first menstrual cycle

D. The onset of puberty

Answer: B



15. Where is zygote implanted in the female body?

A. On the uterine wall

B. In the oviduct

C. In the fallopian tube

D. On the ovarian wall

Answer: A



16. What is a zygote?

A. Fertilized egg

B. Female gamete

C. Male gamete

D. Menstrual flow

Answer: A



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17. What is sebum?

- A. Secretion from oil glands
- B. Male reproductive organ
- C. Female reproductive organ
- D. Release of blood

Answer: A



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18. Where is Adam's apple present in the body?

A. Leg

- B. Hand
- C. Neck
- D. Stomach

Answer: C



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19. Which of the following is known as the female gamete?

A. Ovum

- B. Ovary
- C. Testes
- D. Sperm

Answer: A



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20. Which of the following is a secondary sexual characteristic in males?

A. Reduction in the size of voice box

- B. Development of mammary glands
- C. Release of gamete every month
- D. Development of pubic hair

Answer: D



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21. The age at which males and females attain sexual maturity is called ____

A. ageing

- B. growth
- C. puberty
- D. spurt

Answer: C



- 22. What is the normal puberty age for girls?
 - A. 3 to 5 years
 - B. 10 to 15 years

- C. 18 to 20 years
- D. 25 to 30 years

Answer: B



- **23.** Which development is marked by the beginning of adolescence?
 - A. Development of cells
 - B. Development of heart tissues

- C. Development of nails and hair
- D. Development of reproductive organs

Answer: D



- **24.** What is the adolescence period in humans?
- a) Between 10 to 19 years
- b) Between 0 to 10 years
- c) Between 25 to 30 years
- d) Between 40 to 50 years

- A. Between 10 to 19 years
- B. Between 0 to 10 years
- C. Between 25 to 30 years
- D. Between 40 to 50 years

Answer: A



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25. The deficient production of hormones from which of these body parts can lead to dwarfism?

- A. Adrenal glands
- B. Pancreas
- C. Thyroid gland
- D. Pituitary

Answer: D



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26. Which of the following is released by insects such as ants when they are in danger?

- A. Insulin
- B. Adrenaline
- C. Pheromones
- D. Thyroxine

Answer: C



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27. Which of the following marks the end of the reproductive phase of a woman's life?

- A. Ovulation
- B. Menarche
- C. Menopause
- D. Menstruation

Answer: C



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28. Which of these is not advisable during puberty?

- A. Balanced diet
- B. Smoking cigarettes
- C. Maintaining personal hygiene
- D. Exercising

Answer: B



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29. Which of these is a change one might notice in a girl going through puberty?

- A. Widening of chest
- B. Increase in muscle mass
- C. Broadening of shoulders
- D. Widening of hips

Answer: D



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30. Which of these combinations would result in a zygote that would develop into a male child?

- A. Egg containing X chromosome and sperm containing Y chromosome
- B. Egg containing X chromosome and sperm containing X chromosome
- C. Egg containing Y chromosome and sperm containing X chromosome
- D. None of above

Answer: A



31. The menstrual cycle repeats itself in human

females every ____

- A. 1 week
- B. 28-30 days
- C. 4 months
- D. 1 year

Answer: B



32. Which of these is a primary sexual characteristic in human males?

- A. Development of facial hair
- B. Presence of a penis
- C. Development of mammary glands
- D. Broadening of shoulders

Answer: B



33. Which of these activities, when carried out in excess, could be detrimental to the health of adolescents?

- A. Jogging
- B. Sleeping
- C. Swimming
- D. Yoga

Answer: B



34. How many pairs of chromosomes are present in a single cell of the human body?

- A. 1 pair
- B. 10 pairs
- C. 23 pairs
- D. 46 pairs

Answer: C



35. While looking for food, an ant has lost its way back to its colony. With the help of which of these secretions would the ant be able to find its way back home?

- A. Thyroxine
- B. Sebum
- C. Adrenaline
- D. Pheromone

Answer: D



36. Malfunctioning of _____ gland in the human body could affect the proper working of all other glands.

- A. Pituitary
- B. Adrenal
- C. Thyroid
- D. Pancreas

Answer: A



37. Which of these is a good practice for a person with Goitre?

- A. Avoiding sweets
- B. Drinking lots of fluids
- C. Eating iodised salt
- D. Exercising daily

Answer: C



38. Which of these glands directly releases its secretions into the blood stream?

- A. Mammary glands
- B. Pituitary gland
- C. Sweat glands
- D. Sebaceous glands

Answer: B



39. In the female body, where is an egg fertilized by a sperm?

- A. Ovary
- B. Fallopian tube
- C. Uterus
- D. Vagina

Answer: B



40. Which of these changes experienced by a female during puberty cannot be observed externally?

- A. Increase in height
- B. Change in body shape
- C. Development of acne on face
- D. Development of sex organs

Answer: D



41. The wax-like secretion given out by the sebaceous glands is called ____

A. sweat

B. hormone

C. mucous

D. sebum

Answer: D



42. Which of these is a primary sexual characteristic in human females?

- A. Vagina
- B. Penis
- C. Breasts
- D. Facial hair

Answer: A



- 43. Which of these statements is not correct?
 - A. Upon reaching puberty, an individual becomes capable of reproduction.
 - B. All human beings of the same gender reach puberty at exactly the same age.
 - C. Puberty comes to an end once an individual attains sexual maturity.
 - D. The age at which puberty sets in is different for human

Answer: B



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44. Which of these age groups has been defined as the period of adolescence by the World Health Organisation?

A. 5-10 years

B. 7-12 years

C. 10-19 years

D. 18-25 years

Answer: C



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45. The life of a human being begins as a single celled _____

A. zygote

B. embryo

C. fetus

D. egg

Answer: A



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46. In every cell, within this nucleus lie the nucleolus and thread-like structures called

- A. DNA
- **B.** Chromosomes
- C. Genes
- D. Chromatophores

Answer: B

