

THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

Standard X

BIOLOGY SAMPLE QUESTION PAPER-2

(Chemical messages For Homeostasis & Keeping Diseases Away)

Score:20

Time:45 minutes

I Questions 1 to 2 carries 1 score each (2x1=2)

1. Identify the word pair relationship and fill in the blanks.

- a) Alpha cells : Glucagon
Beta cells :

- b) Civet cat :
Silk worm : Bombycol

2. Analyse the table and identify the correct pair.

a. Decrease of somatotropin during growth phase	Dwarfism
b. Increase in somatotropin after growth phase	Gigantism
c. Increase in somatotropin during growth phase	Acromegaly

II. Questions 3 to 6 carries 2 score each (4x2=8)

3. Plant hormones and their functions are given in two boxes below. Pair them suitably.

HORMONE
a. Auxin
b. Ethylene
c. Abscisic acid
d. Gibberellin

FUNCTIONS
i. Break down of stored food in the seed
ii. Cell division and cell differentiation
iii. Promoting the growth of terminal buds
iv. Helps in ripening of leaves and fruits
v. Dropping of ripened leaves and fruits

1/2+1/2+1/2+1/2

4. Honey bees and termites live in colonies.

- a) Name the chemical substance which helps them to live together. 1
- b) Mention two uses of these chemical substances. 1/2+1/2

5. You are invited to present a seminar about the Cancer awareness, conducted by the Health Club. What explanation will you give to the ideas given below?

- a) Reasons for cancer 1
b) Treatment of cancer 1

6. Examine the case sheet given below and answer the questions.

Case I

symptom

Excess blood is lost
even through minor wounds

- a) Identify the disease mentioned in the case sheet. 1/2
b) Why the patient lose blood excessively through minor wounds? 1
c) How can temporary relief be brought about for the disease? 1/2

Questions 7 to 8 carries 3 score each. (2x3=6)

7. Given below are the major symptoms of diseases seen in two persons A and B.

A

Persistent cough,
loss of body weight
Fatigue

B

High fever with shivering,
Profuse sweating

- a) Identify the diseases of both A and B 1/2+1/2
b) Write the pathogens which cause the diseases of A and B. 1/2+1/2
c) Write the vector of B's disease. 1/2
d) Name the vaccine used to prevent A's disease. 1/2

8.

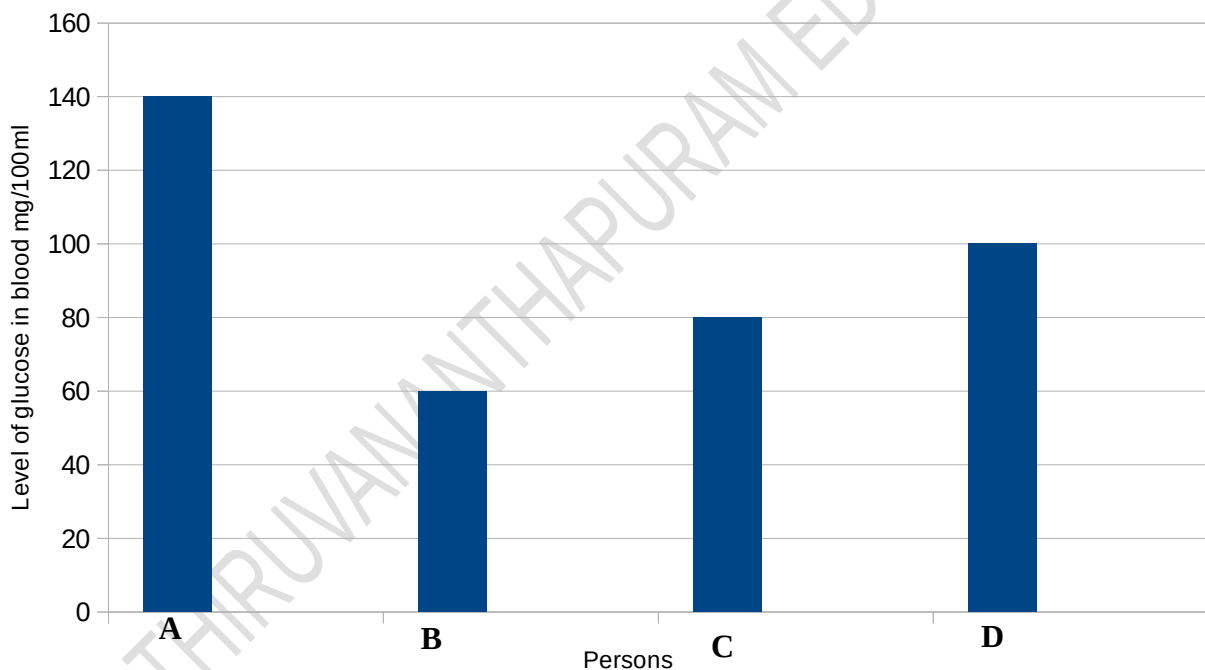


Shown above is one of the presentation slides prepared by Aravind ,as a part of Science club activity.

- a)Which is the microbe mentioned in the slide?Name the disease caused by this microbe 1/2+1/2
- b)How does this affect the immunity of the body? 1
- c)Write any two ways by which one get infected with this microbe? 1/2+1/2

IV.Question 9 carries 4 score (4x1=4)

9.Examine the graph indicating the blood glucose level of different individuals before breakfast.



- a)Which individual is affected by diabetes?Name the gland which regulate the glucose level in blood. 1/2+1/2
- b)Write any one reason for diabetes. 1
- c)Write the major symptoms of diabetes. 1
- d)Write two actions of insulin to prevent the rise in level of glucose in the blood. 1/2+1/2