

Name: Index no
Adm No.....Class.....

School: Candidate's sign

Date:

231/3
BIOLOGY
PAPER 3
JULY-2026
TIME:1 $\frac{3}{4}$ HOURS

R.C.E.A JONT EXAMS
Kenya Certificate of Secondary Education (K.C.S.E.)
BIOLOGY
PRACTICAL

INSTRUCTIONS TO CANDIDATES:

- Write your **name** and **index number** in the spaces provided.
- Sign and write **date** of examination in the spaces provided above
- Answer **all** the questions in the spaces provided.

For Examiner's Use Only:

QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
1	13	
2	15	
3	12	
TOTAL	40	

1. You are provided with 8cm³ solution Q. Iodine solution, Benedict's solution, dil HCL, sodium hydrogen carbonate, means of heating test tube rack, 3 dry test tube and a water bath.

Use the provided reagents and apparatus to establish food substances present in solution Q. Fill the observation and conclusion in the table provided.

(a) Take sample of solution **Q** and test them for the food substances present using the reagents provided. Record in a table, the food substance tested, the procedure of the test, the observations and conclusions.
(9mks)

Food Substance	Procedure	Observations	Conclusions

(b) How would you test for the presence of vitamins in solution Q

(2mks)

.....

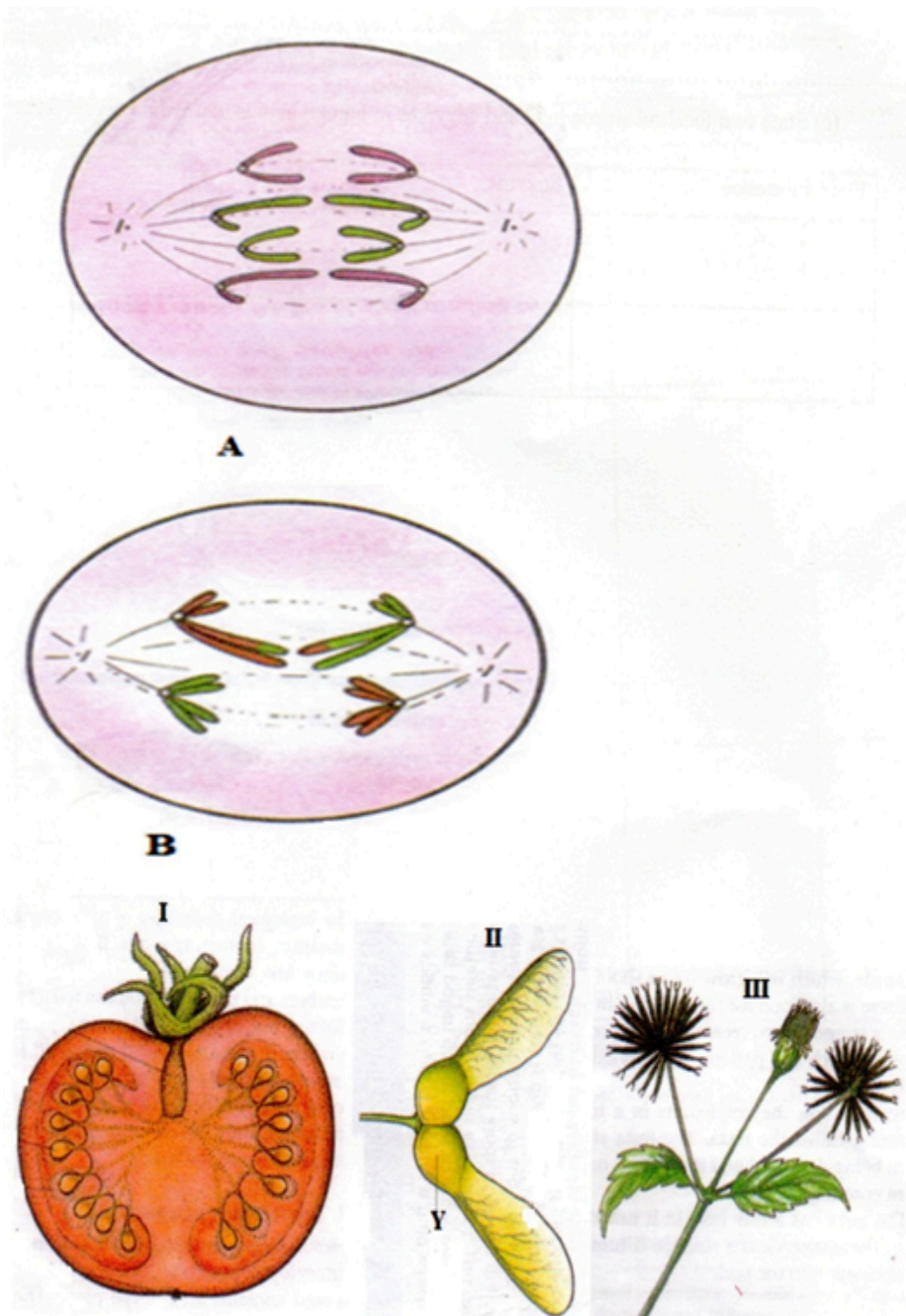
.....

(c) State two food substance in Q and enzymes in human beings that would digest them.

(2mks)

Food substance	Enzyme

2. Use the photographs provided to answer the questions that follow.



(a) (i) Identify the type of cell division represented in the photographs A and B (2mks)

A

B

(ii) with a reason, name the stage of cell division represented in each case (4mks)

A

Reason

.....

.....

B

Reason

.....

.....

(iii) Name the parts of human body where the process B represented above occur. (2mks)

.....

.....

(b) (i) What type of fruits is represented by photograph I? Give two reasons.

Type

Reason

.....

.....

(ii) Name the agent of dispersal for fruits II and III (2mks)

I

II

(iii) How are the fruits adapted for the mode of dispersal stated in (b) (ii) above? (2mks)

I

.....

.....

II

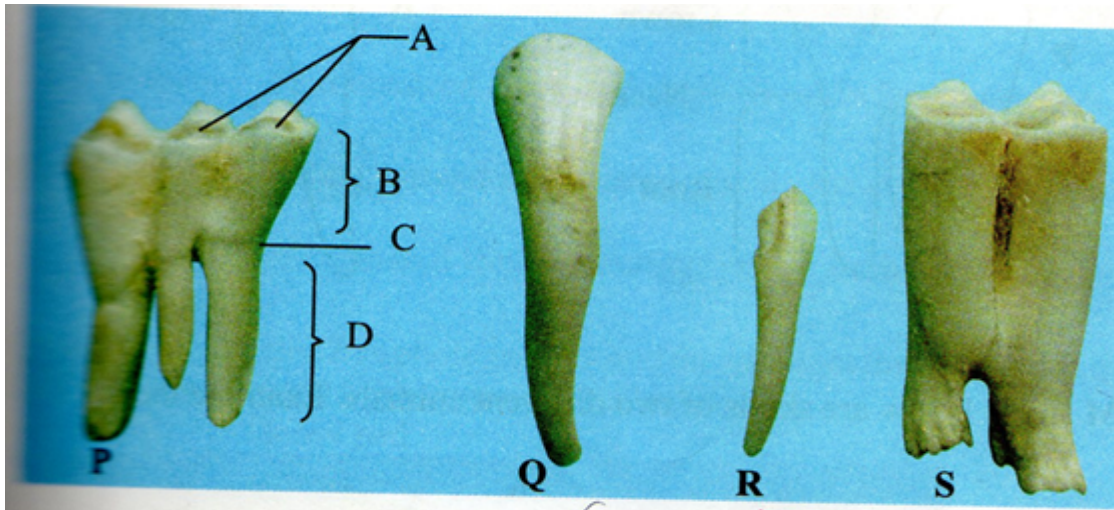
.....

.....

(iv) Identify the type of placentation shown by photograph I (1mk)

.....

3. The photography below shows four specimens labelled **P, Q R** and **S** which were obtained from the same animal. Examine them.



(a) With reasons identify P and Q

(5mks)

P

Two reasons

.....

Q

Reasons

.....

(b) Based on their structure, suggest the functions of specimens P and Q.

(2mks)

P

.....

Q

.....

(c) In specimen P name the part labelled A

(1mk)

A

(d) Explain how specimen s is adapted for its functions.

(2mks)

.....

(g) Using observable features only, state

(i) One similarity between specimens Q and R

(1mk)

.....

(ii) One difference between specimens Q and R .

(1mk)

.....

.....