



GCE



Past-Year Examination Series

LEVEL

PURE

5090

BIOLOGY

TOPICAL ANALYSIS

1986-1997

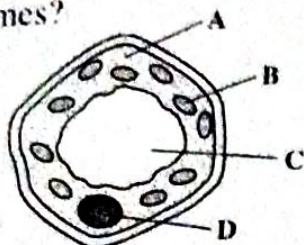
PURE BIOLOGY

Additional Past-Year Questions
June 1998 and November 1998

**UNIT 1 – CELL ORGANISATION,
 DIFFUSION AND OSMOSIS**

Paper 1 – Multiple Choice Questions

43. Which structure in the plant cell contains chromosomes?



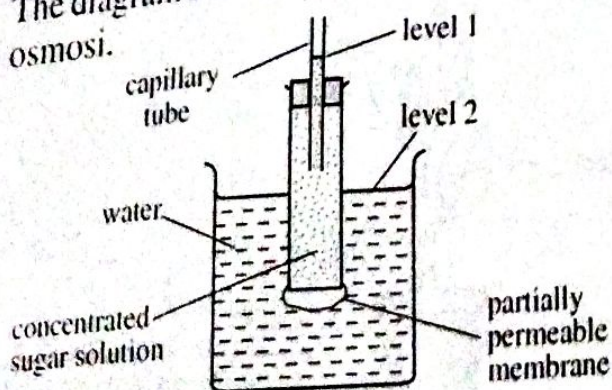
[JUNE 98/P1/Q1]

44. Which structures are present in animal cells?

	cell membrane	cell wall	chloroplasts	cytoplasm
A	X	✓	✓	✓
B	✓	X	X	✓
C	✓	X	✓	X
D	✓	✓	X	✓

key: ✓ = structure present X = structure absent
 [NOV. 98/P1/Q1]

45. The diagram shows apparatus used to investigate osmosis.

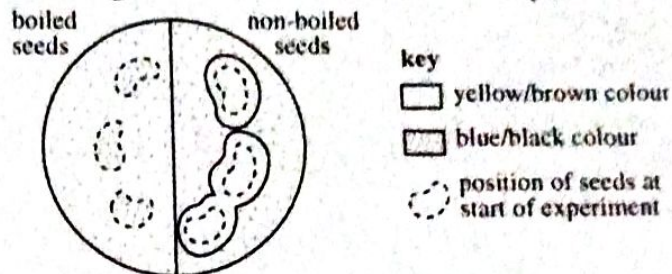


After four hours, which changes in levels will occur and which molecules will move across the membrane?

	level 1	level 2	molecules
A	fall	rise	sugar
B	fall	rise	water
C	rise	fall	sugar
D	rise	fall	water

[NOV. 98/P1/Q4]

After two days, all the seeds were removed and the jelly was flooded with iodine solution. The diagram shows the result of the experiment.



What does the experiment show about non-boiled bean seeds?

- A They absorb iodine.
 B They absorb starch.
 C They secrete acid.
 D They secrete amylase.

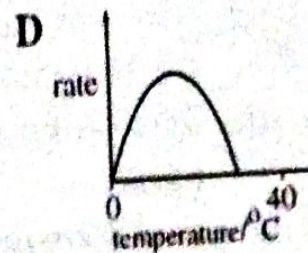
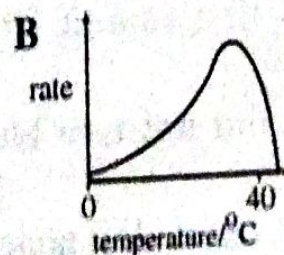
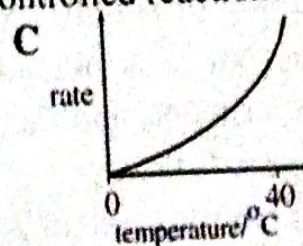
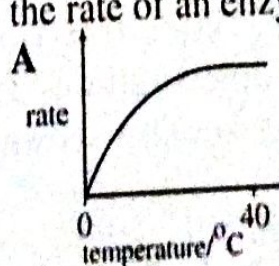
[JUNE 98/P1/Q5]

37. Which chemical elements are combined to make molecules of starch and cellulose?

- A carbon, hydrogen and nitrogen
 B carbon, hydrogen and oxygen
 C carbon, nitrogen and oxygen
 D carbon, hydrogen, nitrogen and oxygen

[JUNE 98/P1/Q6]

38. Which graph shows how temperature affects the rate of an enzyme-controlled reaction?



[NOV. 98/P1/Q7]

39. Which combination of chemical elements is present in carbohydrate molecules?

carbon	hydrogen	nitrogen
✓	✓	X

UNIT 2 – NUTRIENTS AND ENZYMES