

Figure A

What type of cell is this? How do you know?
 Identify part I. What is its use?
 Identify part J. What is its use?
 Identify part G. What is its use?

Figure B

What is a codon?
 Find the amino acid sequence for ACCGAG

Figure C

The diagram shows populations of pine trees in the area. The area is too large for scientists to count every tree
 How can scientists use sampling to get a good estimate of the number of trees per 10,000 square meters?
 How could this process be used to estimate species diversity?

Figure D

What is ATP?
 What process produces ATP?
 How many ATPs are made in each type of this process?

Figure E

Label water, glucose, oxygen, and carbon dioxide.
 What is this process?
 What are three factors that could slow this process?
 What are the products? What are the reactants?

Figure F

Name the process.
 Why did the dark molecules not move to the left?
 How is a semi-permeable membrane like a cell membrane?
 If the dark molecule is starch, one which side is starch concentration greatest?

Figure G

Put the steps in order.
 What process is this?
 What kinds of cells do this?

Figure H

What type of cell is this? How do you know?
 Identify part 5. What is its use?
 Identify part 1. What is its use?
 Identify part 8. What is its use?

Figure I

What kinds of molecules were found in the flask after this experiment?
 What was the significance of their experiment?

Figure J

What kind of growth is the human population experiencing?
 What is carrying capacity?
 What factors affect birth rates and death rates?

Figure K

If T=tall and t=short, give the phenotypes of the parents
 Write the phenotypic ratio for the offspring
 Write the genotypic ratio for the offspring.

Figure L

According to the cladogram, which pairs of organisms are most closely related?
 Which organism is most closely related to the rayfinned fish?
 Which organisms are the mammals most closely related to?

Figure M

What inheritance pattern is shown by this pedigree? How do you know?
 Using A,a, what is the genotype of person II 4?
 What is the genotype of person I 3?

Figure N

Could the defendant be the rapist?
 Which fragments of DNA are the longest?
 How do you know?
 What other ways can DNA fingerprinting be useful?

Figure O

What is molecule Y?
 Which molecule represents the enzyme?
 Which molecule represents the substrate?

Figure P

Which of these would be at the bottom of the pyramid?
 Which of these is a secondary consumer?
 Which one needs the largest territory?

Figure Q

What would the letter "p" look like under a microscope?

Figure R

What is structure A? What is its purpose?
 What is structure B? What is its purpose?

Figure S

Which number part is responsible for regulating the amount of light on the specimen? What is it called?

Figure T

What does A represent?

What type of subunit is this?

What would the complementary one be?

How type of bond connects them?

What are the other monomers we discussed in class? What are their polymers?

Figure U

Which is the control group?

What is/are the variable(s)?

What are two controlled variables?

Figure V

What happened in test tube 6?

What process is occurring in the test tubes?

Why is bubble content low at 0°C?

Figure X

What pH is best for intestinal protease?

Where would you find gastric protease?

What type of macromolecule is protease?

Figure Y

What gas is produced?

What would happen to the number of bubbles if the water were boiling hot?

Figure Z

What is the optimal (best) temperature for yeast enzymes?

What is produced by flask A (2 products)?

Figure A2

What process is occurring in II?

What process is occurring in III? Where does this occur?

What is A? What are the monomers? Polymer?

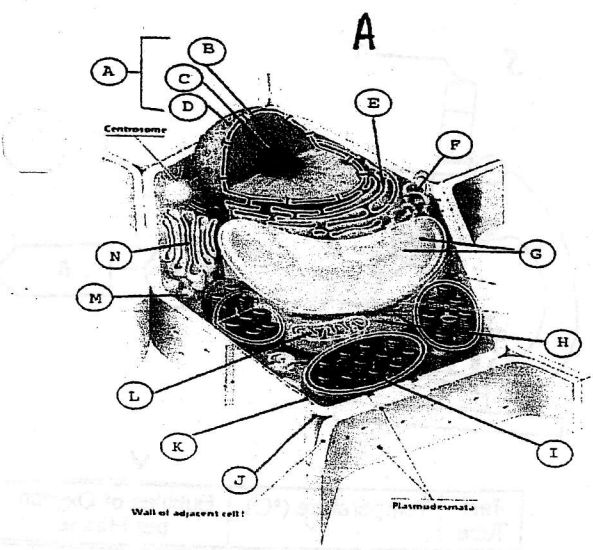
Figure B2

What is 1?

What is 2?

What is 3?

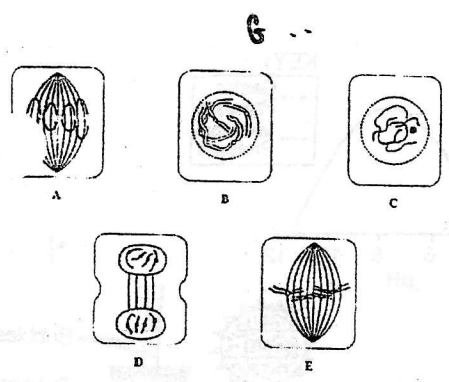
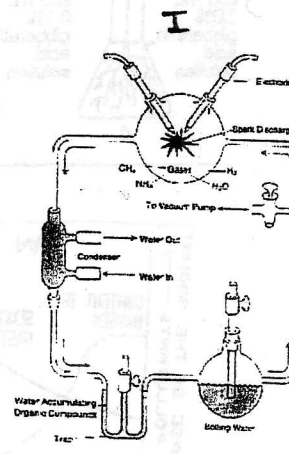
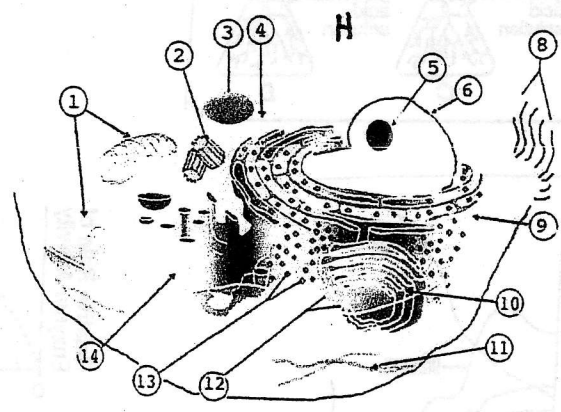
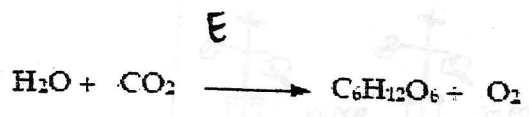
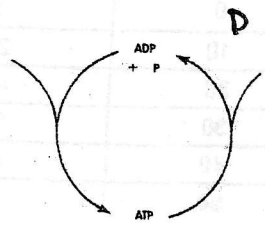
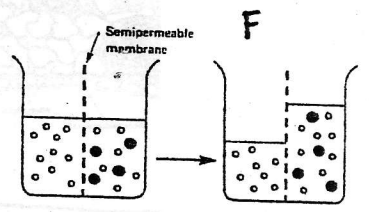
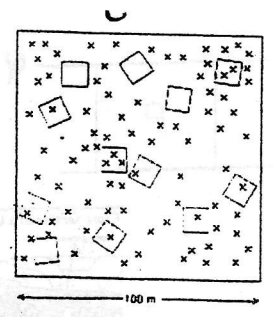
What is 4?



B

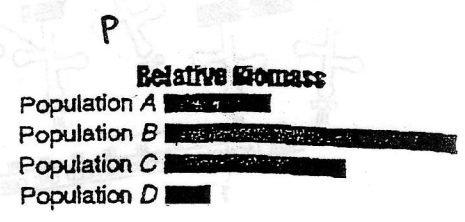
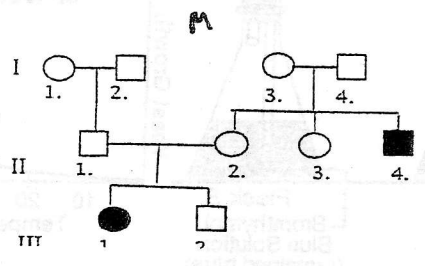
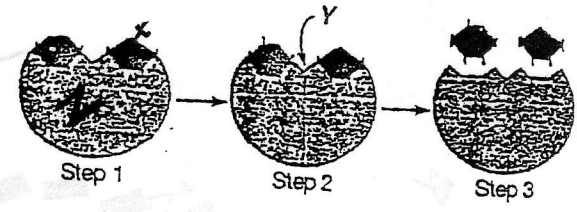
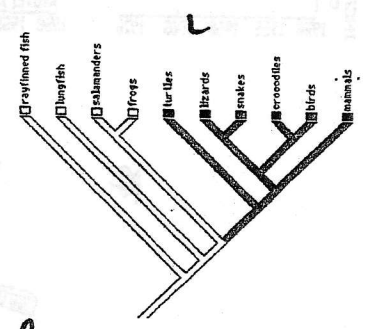
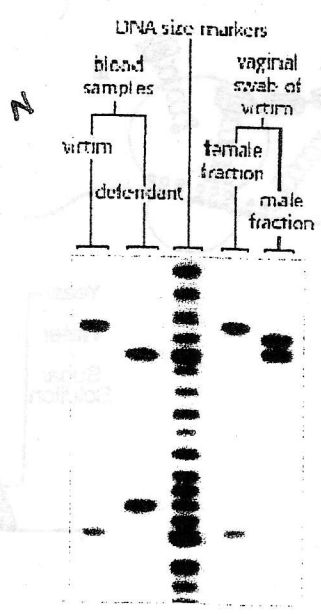
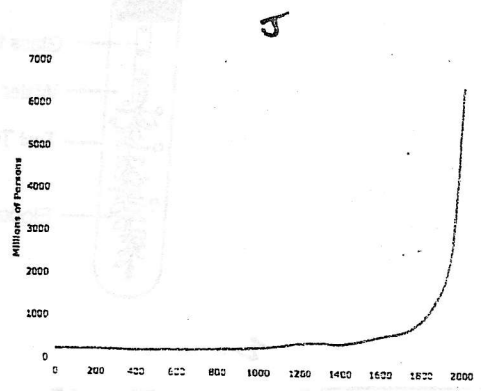
2nd base in codon

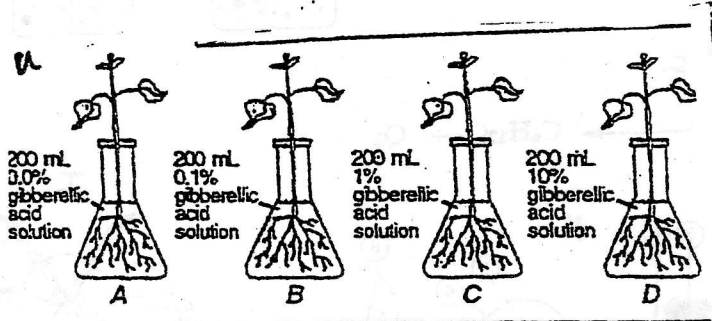
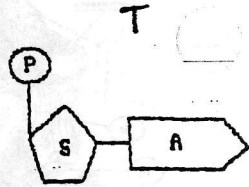
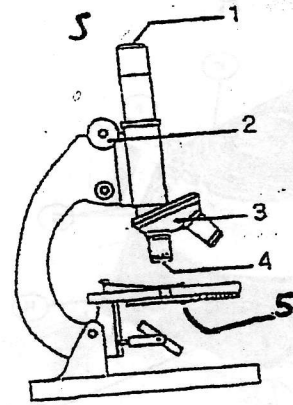
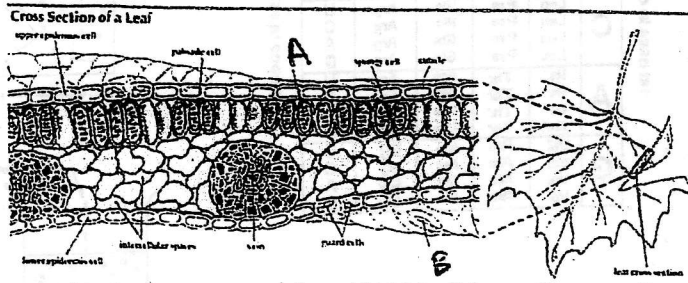
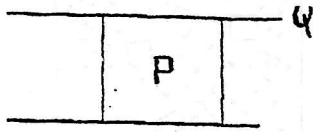
	U	C	A	G		
1st base in codon	U	Phe Ser Leu	Ser Tyr Cys	Tyr His Arg	Cys Cys STOP Trp	U C A G
	C	Leu Leu Leu	Pro Pro Pro	His His Gln	Arg Arg Arg	U C A G
	A	Ile Ile Ile Met	Thr Thr Thr Thr	Asn Asn Lys Lys	Ser Ser Arg Arg	U C A G
G	Val Val Val Val	Ala Ala Ala Ala	Asp Asp Glu Glu	Gly Gly Gly Gly	U C A G	
						3rd base in codon



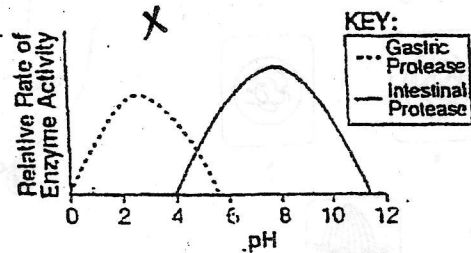
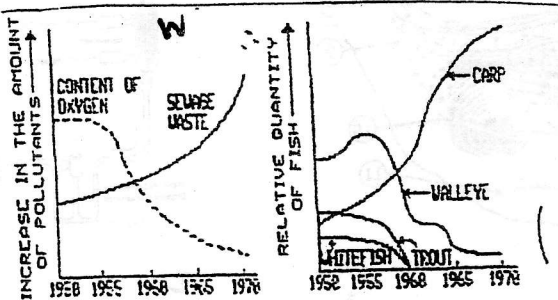
K

T	t
TT	Tt
tT	tt

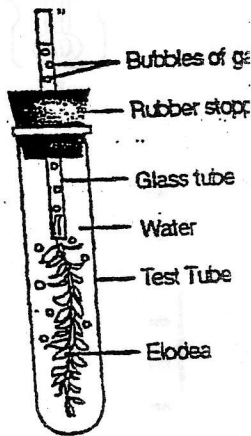
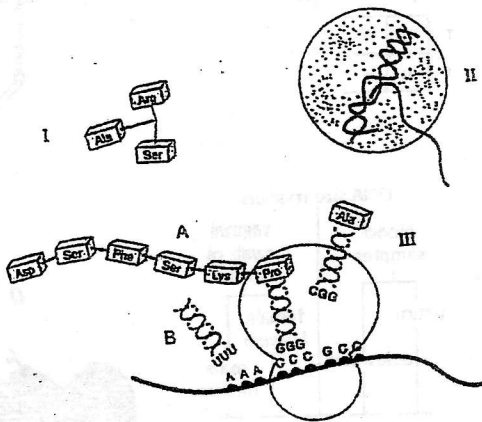




Test Tube	Temperature (°C)	Bubbles of Oxygen per Minute
1	0	3
2	10	22
3	20	40
4	30	58
5	40	71
6	50	2



R



R2

