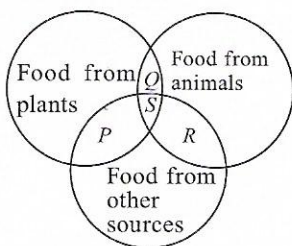


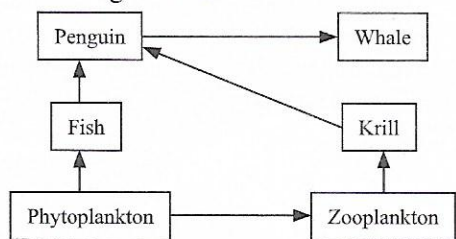
- A. Vitamin C should be replaced with vitamin E and goitre should be interchanged with beri-beri.  
 B. Goitre should be replaced with scurvy and positions of fat and water should be interchanged.  
 C. Iodine should be replaced with iron and beri-beri should be replaced with night blindness.  
 D. Water should be interchanged with iodine and goitre should be replaced with rickets.

43. The given Venn diagram shows different sources of food materials. A cup of milk with cocoa powder and sugar could be placed at

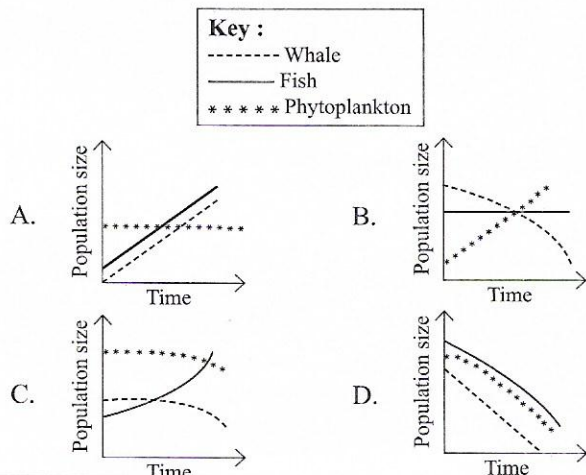


- A. P  
 B. Q  
 C. R  
 D. S

44. Refer to the given food web.



Which of the following graphs best illustrates changes in phytoplankton, fish and whale population over time if penguin population is removed from this community?



45. Refer to the items listed under different groups in the given table and select the option which correctly identifies X and Y.

Group I	Group II
Tapeworm	Vulture
Hookworm	Hyena
Liver fluke	Y
X	Jackal

- |             |            |
|-------------|------------|
| X           | Y          |
| A. Pinworm  | Crow       |
| B. Mosquito | Bison      |
| C. Leech    | Koala      |
| D. Bed bug  | Wildebeest |

### ACHIEVERS SECTION

46. Study the given table carefully :

Substance	Density (g/cm <sup>3</sup> )
P	20.70
Q	0.54
Water	1.00
R	12.45
Alcohol	0.79
S	11.83
Mercury	13.60
T	0.85

Read the given statements and fill in the blanks by selecting an appropriate option.

- I. Substance (i) will float on water as well as on mercury while it will sink in alcohol.  
 II. Substance (ii) will float on water, alcohol as well as on mercury.  
 III. Substances (iii) and (iv) will sink in water as well as in alcohol while they will float on mercury.  
 IV. Substance (v) will sink in water, alcohol as well as in mercury.

- |    |     |      |       |      |     |
|----|-----|------|-------|------|-----|
|    | (i) | (ii) | (iii) | (iv) | (v) |
| A. | T   | Q    | R     | P    | S   |
| B. | S   | P    | T     | Q    | R   |
| C. | T   | Q    | R     | S    | P   |
| D. | P   | Q    | R     | S    | T   |

47. Refer to the given dichotomous key and select the correct option.

- I. (a) Fibre obtained from natural sources. – Go to II  
 (b) Fibre obtained from chemicals. – [K]  
 II. (a) It is a cellulosic fibre. – Go to III  
 (b) It is a protein fibre. – Go to IV  
 III. (a) It is obtained from leaves. – [L]  
 (b) It is obtained from seeds. – [M]  
 IV. (a) It is obtained from mammals. – [N]  
 (b) It is obtained from an insect. – [O]
- A. Fabrics made up of K and N could be water proof.  
 B. When fibres L and M are burnt separately they give smell of burning paper and burning hair, respectively.  
 C. Fibre L is separated from leaves by retting process whereas fibre M is separated from seeds by ginning process.  
 D. N can be obtained from the same animal repeatedly whereas O can be obtained from source animal only once in its lifetime.