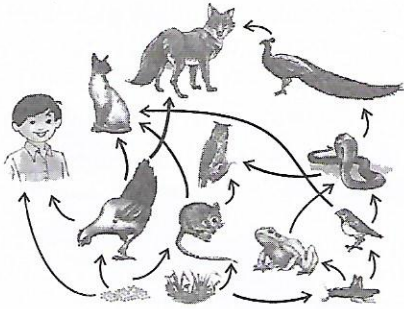


37. Refer to the given food web.



Number of primary consumers (P) and tertiary consumers (Q) in this food web are

	P	Q
A.	3	4
B.	4	2
C.	3	2
D.	3	3

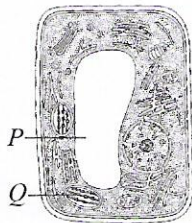
38. Respiratory quotient for three different substrates was calculated and tabulated as shown here.

Substrate	R.Q.
X	0.9
Y	1
Z	1.3

Identify X, Y and Z and select the correct option regarding them.

	X	Y	Z
A.	Protein	Fats	Glucose
B.	Glucose	Protein	Organic acid
C.	Protein	Glucose	Organic acid
D.	Organic acid	Protein	Fats

39. In the given figure, showing the ultrastructure of a plant cell, identify the parts marked as P and Q and select the correct option regarding them.



- (i) Part P helps in osmoregulation.
 (ii) Cellular respiration occurs in part Q.
 (iii) Synthesis of sugars occurs in part Q.
 (iv) Part P provides colour to flowers and fruits.
- A. (i) and (ii) only B. (i) and (iii) only
 C. (iii) and (iv) only D. (ii) and (iv) only

40. Refer to the given table and select the correct option.

Mode of seed dispersal by plants	Example
Wind	a
b	Berries
c	Coconut
Explosion	d

- A. a could be *Urena* whereas d could be *Acer*.
 B. b could be animal whereas c could be water.
 C. c could be insects whereas d could be *Xanthium*.
 D. a could be castor whereas d could be *Hiptage*.

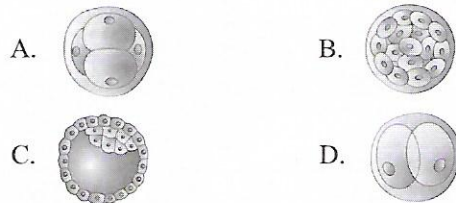
41. P is the largest of all leucocytes. Its nucleus is bean shaped. It is phagocytic in nature and engulfs bacteria. Q has two lobed nucleus and its granules take acidic stain. Its number increases during allergies. Identify P and Q in the given paragraph and select the correct option.

	P	Q
A.	Lymphocyte	Monocyte
B.	Monocyte	Basophil
C.	Lymphocyte	Basophil
D.	Monocyte	Eosinophil

42. Select the incorrect match.

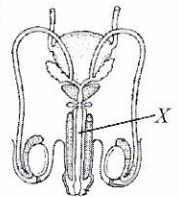
	Disease	Causative organism	Mode of transmission
A.	Tuberculosis	Bacterium	Contaminated air
B.	Polio	Virus	Contaminated water or food
C.	Hepatitis B	Fungus	Contaminated air
D.	Cholera	Bacterium	Contaminated water or food

43. At which of the following stages embryo gets implanted in the uterus?



44. Which of the following is correct about the labelled part X?

- A. It gives protection to the penis.
 B. It is a structure that produces sperms.
 C. It is a narrow duct that acts as a passage for urine only.
 D. It is a narrow duct that acts as a passage for both urine and sperms.



45. Read the given statements and select the correct option.
 Statement 1 : Great Indian bustard is categorised as an endangered species in Red Data Book.

Statement 2 : Endangered species are those that exist in small numbers and may soon enter vulnerable category of IUCN Red List.

- A. Both statements 1 and 2 are true and statement 2 is the correct explanation of statement 1.
 B. Both statements 1 and 2 are true but statement 2 is not the correct explanation of statement 1.
 C. Statement 1 is true but statement 2 is false.
 D. Both statements 1 and 2 are false.