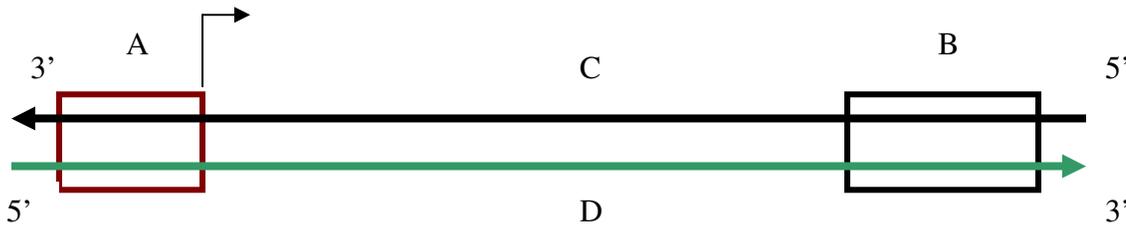


PART B

- 1 Note the relationship between first two words and suggest a suitable word for the fourth place.
 - (a) Monohybrid ratio- 3:1 ; ; Dihybrid ratio-
 - (b) Visible characters of an organism- Phenotype ; ;
Genetic constitution of an organism-..... (1)
2. IUDs are the ideal contraceptive for female .
 - (a) Name two IUDs.
 - (b) Name the surgical method of sterilization in male and female. (2)
3. Given below are the names of two pairs of organs. Categorise them into homologous and analogous organs by giving reasons.
 - (a) Human Arm and flipper of whale.
 - (b) Wings of bat and wings of insects. (2)
4. Observe the figure given below and answer the questions.



- (a) Identify the diagrammatic representation?
 - (b) Label A,B, C,& D
 - (c) What is the significance of B. (3)
5. Match the following.

Disease	Pathogen
Common cold	Plasmodium
Pneumonia	Microsporium
Malaria	Haemophilus influenza
Ringworm	Wuchereria
	Rhino virus

6. Death rate due to cancer is high nowadays.
 - (a) Name the genes which cause cancer.
 - (b) Differentiate between malignant tumour and Benign tumour.
 - (c) Write any two treatment methods of cancer. (3)
7. Microbes are harmful to human being.
 - (a) As a biology student do you agree with the above statement ? Why?
 - (b) Give two reasons.
8. Accelerated rates of species extinctions that the world is facing now are largely due to human activities. There are four major causes or The Evil Quartet is used to describe them. What are they? (2)
9. Human chromosome taken together will measure up to 2m. Such a large amount of chromatin material is located inside a nucleus, which is no bigger than 5µm in diameter.
 - (a) How a long DNA molecule is packed within the chromosome?
 - (b) Distinguish between euchromatin and heterochromatin. (3)

10. When a cross is made between a dominant and recessive, the F1 offspring do not show dominant trait but are intermediate between the dominant and recessive.
- (a) Name this phenomenon.
 - (b) Write an example of plant which show this type of inheritance.
 - (c) Write the ratio obtained in F2 generation in this phenomenon. (3)
- 11 Spermatogenesis takes place in testis.
- (a) How many sperms are developed from a primary spermatocyte?
 - (b) What could be the number of chromosome in secondary spermatocytes?
 - (c) Write the function of Sertoli cells in spermatogenesis. (3)
12. According to 2001 census report the population growth rate was still 1.7 percent i.e., 17/1000/year, a rate at which our population could double in 33 years.
- (a) Write any two bad effects related with this population explosion.
 - (b) Write any two suggestions to control this population growth. (4)

ATTINGAL CLUSTER