

MODEL ENTRANCE TEST PAPER
BRITISH SECTION

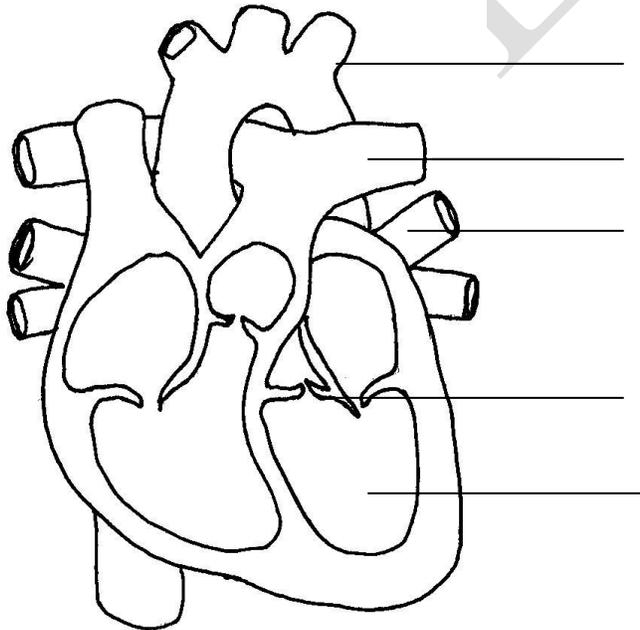
SUBJECT: BIOLOGY

GRADE: 11

TOTAL MARKS: 25

Q1. The diagram below shows the human heart. [5marks]

Label the parts.



Q2. Fill in the blanks: - [5marks]

Carpel in the female reproductive organ in plants. It consists of ovary, style and stigma. During pollination, _____ fall on the stigma and then develop on tube which grows and enters the ovule through _____ carrying the male gametes. One male gamete combines with egg nucleus forming _____ and the other combines with polar nuclei forming _____. Eventually ovules ripen into _____.

Q3. Choose the correct option. [5marks]

- (i) Humans can either be males or females. This is an example of
- (a) Variation (b) heredity
(c) Continuous variation (d) Discontinuous variation.
- (ii) Dwarfism is a recessive characteristic. It expresses itself if the genotype is
- (a) Homozygous dominant (b) Homozygous recessive
(c) Heterozygous (d) None of above.
- (iii) If two heterozygous tall plants (Tt) cross with each other what will be the possible.
- (A)** Phenotypic ratio of offspring
- (a) 1:2:1 (b) 3:1
(c) 1:1 (d) None.
- (B)** Genotypic ratio of offspring
- (a) 1:2:1 (b) 3:1
(c) 1:1 (d) None.
- (iv) The restriction endonucleases are chemically
- (a) Carbohydrates (b) Protein
(c) Lipids (d) Minerals.
- (v) Any sudden change in a gene or chromosome is
- (a) Variation (b) Change
(c) Mutation (d) Co dominance
- (vi) The characteristics which expresses itself in homozygous as well as heterozygous Condition is called as
- (a) Dominant (b) Recessive
(c) Both A&B (d) None.
- (vii) Self pollination can take place between
- (a) Stamen and carpel of the same flower.
(b) Stamen and carpel of two different flower of same plant

- (c) Both a and b
- (d) None of above.

(viii) The alternative form of gene is called as

- (a) Allele (b) locus
- (c) Co-dominant (d) genotype.

(ix) Which of the following may cause mutation?

- (a) Radiation (b) chemicals
- (c) Free radicals (d) All of above.

Q4. Answer the following questions. [10marks]

(i) “Enzymes are specific” what do you understand by this statement.

(ii) Give two examples of diffusion occurring in the human body.

(iii) Define Genetic Engineering.

(iv) Write down any two adaptations of the arteries. Which help them to carry at their Function.

(iv) Give any two differences between the human sperm and egg.
