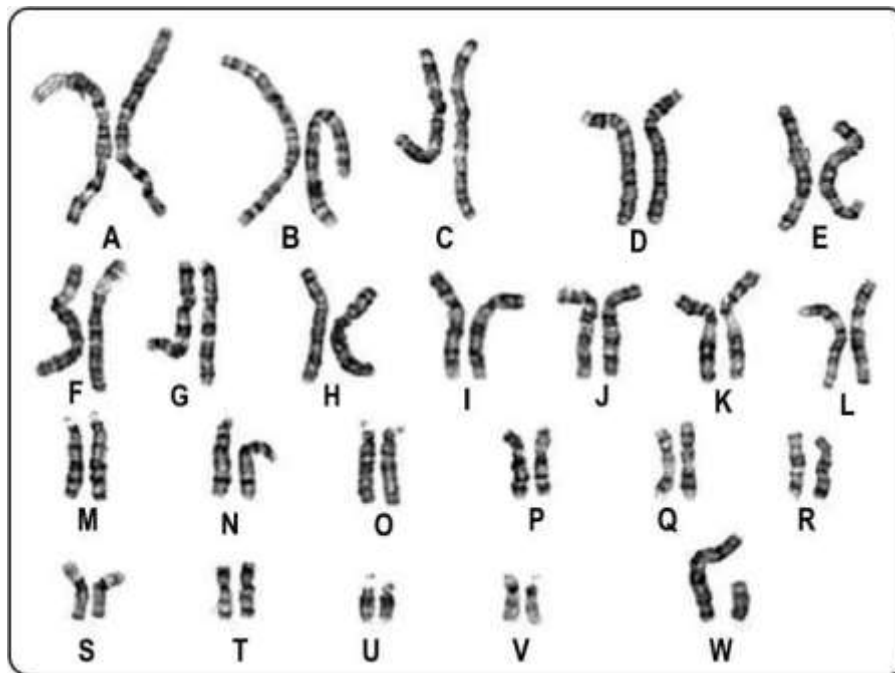


6. HEREDITY AND EVOLUTION

Q. No	Question	Marks
Multiple Choice Question		
Q.19	<p>Manisha is an Indian actress. She was born in Delhi to a homemaker mother and an engineer father. She is around 5 feet tall. She has naturally curly hair. She has trained in contemporary and ballet dancing.</p> <p>Which of these is MOST LIKELY to be true about her children?</p> <p>A. They may dance well.</p> <p>B. They may grow up to have curly hair.</p> <p>C. They may be born to an engineer father.</p> <p>D. They may become famous actors one day.</p>	1
Q.20	<p>Study the diagrams given below that depict the analogy/homology of organs and answer the questions that follow.</p> <div style="text-align: center;"> <p style="text-align: center;">P Q</p> </div> <p>Which diagram represents evolution of homologous organs?</p> <p>A. only P</p> <p>B. only Q</p> <p>C. both - P and Q</p> <p>D. neither - P nor Q</p>	1
Free Response Question/ Subjective Question		
Q.21	<p>The farmer concludes that the allele for green seeds shows dominance over that of yellow seeds.</p> <p>Is he right? Justify your answer.</p>	1
Q.22	<p>What is the genetic basis of the increase in number of the black peppered moth after the Industrial Revolution?</p>	1
Q.23	<p>The picture below is of the chromosome pairs present in a cell of a person.</p>	2



- (a) Identify the sex of the person. Give reasons for your answer.
- (b) State the number of chromosomes present in a male or female gamete.

Answer Key & Marking Scheme

Q. No	Answers	Marks
Q.19	B. They may grow up to have curly hair.	1
Q.20	A. only P	1
Q.21	Yes, he is right. [0.5 marks] Since the offspring pod has all green seeds, the allele for green seeds is dominant even if present in heterozygous state. [0.5 marks]	1
Q.22	During sexual reproduction, the genes determining darker colour of moths get selected and their frequency increased in the population.	1
Q.23	(a) male. 23rd pair has X and Y chromosomes. (b) 23	2