

Time-45 mins.

Q1)a) i)What is cell cycle? (1)

ii)What is the significance of crossing over? (1)

iii)Draw an animal cell of anaphase stage of Mitosis and label i)Aster

ii)Spindle fibre iii)centromere

iv)chromatid(1+2)

b) i)What is a nucleotides? (1)

ii)Name the purine and pyrimidine bases in DNA. (2)

iii)If father is a colourblind and mother is a carrier.

a)Write the genotype of both the parents. (1)

b)What will be the phenotypic expression of the offspring? (1)

Q3)Answer briefly in one word:-(5)

a)The part of interphase where replication of DNA takes place.

b)The protein found in Eukaryotic DNA.

c)The coloured beaded structures found in chromonemata.

d)The longest phase in Karyokinesis.

e)The bond between the complementary nitrogenous bases in DNA.

Q4)a)What are autosomes? (1)

b)How many sex chromosomes are

there in adult male? (1)

c) Name a sex linked disorder. (1)

d) What is interphase? (1)

e) What is genetic counselling? (1)
