Name of stage	Observation	Inference
PROPHASE-I 1. Leptotene	1. Chromosomes are extremly slender with beaded appearence. 2. Nuclear membrane is present. 3. Presence of 'Bouquet stage'. 4. Chromosomes are not distinguished	Hence, it is the 'Leptotene' stage of Prophase-I of meiotic cell divison.-I
2. Zygotene	1. Chromosomes show certain degree of association. 2. Nuclear membrane present. 3. Chromosomes are still not distinguished and have less coiling.	Hence, it is the 'Zygotene' stage of Prophase-I of meiotic cell divison-I
3. Pachytene	1. Bivalent chromosomes are more condensed than zygotene. 2. Nuclear membrane partly present 3. Tetrad condition apparently visible	Hence, it is the 'Pachytene' stage of Prophase-I of meiotic cell division-I
4. Diplotene	1. Chiasmata visible 2. Tetrads are clearly visible	Hence, it is the 'Diplotene' stage of Prophase-I of meiotic cell divison-I
5. Diakinesis	1. Nuclear envelope breaks down 2. Terminalization of chiasmata occures. 3. Chromosomes are more condensed, distinct and deeply stained.	Hence, it is the 'Diakinesis' stage of Prophase-I of meiotic cell divison-I
METAPHASE-I	1. Bivalents are highly condensed. 2. Deeply stained chromosomes. 3. Chromosomes are situated at equal distance from equatorial line as well as the pole.	Hence, it is the 'Metaphase-I' stage of meiotic cell divison-I
ANAPHASE-I	1. Tetrads seperated into diad, each with 2 chromatids. 2. Chromosomes are 'V' shaped 3. 2 sets of chromosomes are seperated and move towards the 2 poles.	Hence, it is the 'Anaphase-I' stage of meiotic cell divison-I

Name of stage	Observation	Inference
TELOPHASE-I	1. Individual chromosome is not detectable, although a few 'V' shaped. 2. Counting of chromosomes is not possible. 3. Extreme polarisation of the chromosome which form a thick mass.	Hence, it is the 'Telophase-I' stage of meiotic cell divison -I

Name of stage	Observation	Inference
METAPHASE -II	1. Chromosomes split into 2 daughter chromatids. 2. Chromosomes are 'rod'-shaped and arranged equitorial. 3. Absence of chiasmata (termina-lization).	Hence, it is the 'Metaphase-II' stage of meiotic cell divison -II.
ANAPHASE -II	1. Both poles have same numbe r of chromosomes. 2. Chromatids with centromere directed toward the poles and with telomere toward the equator. 3. Sister - chromatids moves toward the opposite pole.	Hence, it is the 'Anaphase -II' stage of meiotic cell divison -II
TELOPHASE -II	1. Chromosomes are deeply stained 2. Extreme polarization of chromosomes. 3. Non-identical chromosomes.	Hence, it is the 'Telophase -II' stage of meiotic cell divison -II