Cell Cycle and synthesises its constituents and eventually divide to into Here, genome set of gentlic information for organism (ell Coll Cytle Interphose - (Sphase) Cell growth: - Einerease in cytoplasm is a continuous process.

DNA synthesis: takes place only during Sphase of Interphase Phases of Cell Gale: Interphase S M- Phase Stokyrois Preparatory phase: - all prepares to divide · Most decemplic phase because actually takes place during M-phase Also known as Resting phase (because cellish't dividing, only preparation for division hoppen) because cell diversion takes place) a 95% of the total cell divistion time cytokinesis . 51 of the total cell division time M-phoise 3 Anaphase (5/1) Anaphase Prophase GI Gr. Interphase (95%)

Not all cells the undergo cell division Such cells while escape the cell cycle & enter Goto phase (a nott) In Gophase :- (Resting phase) The cells rest in this phase either temporarily permanently. The cells here may perform specialized functions without undergoing replication. Interphase: 1. Gy phase :- (growth 1 phase) · cell growth (cytoplusm)
· Organelle duplication of ER
· Synthesis of proteins, necleotides etc 2. Sphorse :- (Syntheses phase)

cell growth (cytoplasm)

In (ytoplasm) -> Contrioles of centrosome duplicates

-> Synthesis of specific proteins (Histories) · In Nucleus, DNA replication takesplace without changing number of chromosomes. Though and cell cell (has 2 sets of chromosomes)

In Gy: - (2) = 2 C [In Gy, these 2 sets remain unchanged)

Two complete uto for C [C - Anomarones]

2n - 246 shremosomes In S:- 33 Each 3 is going to produce one more copy of utself
altached to sample centramere

an (chromatin) point of attachers 3 = 40 of two chromating

In Gy & (38) = 40 Around of ONA in Cry interies of Gy However, No. of Aromorous review some in Interplace, G, - 18 - 7 (40) To Go phase is resting place but all just exactly resting from Grophase is called resting place because the cells for this grave the cells and enter this place where the cells are not depreparing to divide. trevener, it doesn't wanth all are inactive. In Go phase, allo are metabolically active and takes part in producing parties, maintaining homestable and responding to signals. The cells mouseven on re-enter their cell cycle in response to certainstimetic such as growth factors or environmental changes, Birary fission (in Bacteria) 1. The bacterium restricted copies its chromosome () - ())
and attaches each identical copy to separate breation on ill
membran Intice encaryetic cells, partiria does not dissolve it moher mention.

Instead, the cell plongates and the attached diremensiones requeste

from each other. (\$ 3) - (\$) (\$) 2 The lacturium pinetes of at the center and forms a septem?