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SUBJECT:MICROBIOLOGY

Q NO1:FILL IN THE BLANKS:

ANSWERS:

- 1)MICRO ORGANISM
- 2)PHYCOLOGY
- 3)PATHOGENES
- 4)RIBOSOMES
- 5)MITCHONDRIA
- 6)BINARY FUSSION
- 7)LOGARITHMIC INCREASE
- 8)LOG PHASE
- 9)PLASMALYSIS
- 10)PROTEIN

QNO2 SHORT NOTES ON THE FOLLOWING

1)MITCONDRIA:

MITCHONDRIA ARE BOUNDED BY DOUBLE MEMBRANE

- 1)outer membrane
- 2) inner membrane

The outer membrane controll the entry and exit of chemicals

The inner membrane is folded inwards giving rise to extension called cristae

Mitchondria also known as power house of cell due to storage of high energy (ATP) during cellular respiration.

2)Nucleus:

Nucleus is one of the important organelle of cell

Nucleus is an organelle found in eukaryotic cell

It contains majority of the cell's genetic materials,the DNA which is respondiing for controlling and directing all the activities of cell.

Nucleus produce ribosomal RNA which makes ribosomes.

3)Budding:

Is a form of bacterial division and also type of asexual reproduction

In which new organism develops an outgrowth or bud due to cell division at Particular site

Budding is type of mitotic cell division

When the budding reaches to the size of parent cell it separates.

4) Culture media:-

Culture media is special medium used in Microbiological labs to grow different types of Micro organisms

The solid culture media is composed of brown jelly like substance called agar

There are two major types of culture media is

1) Cell culture which use specific cell types derived from plants or animals

2) Microbiological Culture which are used for growing of micro organisms such as bacteria and fungia

5) Growth factors:-

Growth factors are typically act as a signalling molecules between cells

Growth factors are important for regulating a cellular process

Organisms having complex nutritional requirments and needing many growth factors

To be fastidious.

QNo3:- what is bacterial growth ? Discuss the different phases of bacterial growth?

Answer:

Bacterial growth is increase in bacterial growth leading to an increase in size of bacterial population

Or

Bacterial growth is increase bacterial numbers doesnot refer to an increase in size of individuals cells

Phase of Bacterial growth

1) LAG PHASE:

Can be last for 1 hous or several days

During this phase the cell are not dormant

During this phase cell change very little because cells do not imediatly reproduce in new medium

2) LOG PHASE:

In this phase population grows in logarithmic fashion

Sometimes It is called as exponential growth or logarithmic phase

Period Chacteriized by cell doubling

Sensitive to adverse condition

Exponential increase in the number of living bacterial cells.

Cellular respiration is most active in during this period

3) STATIONARY PHASE:

Period of equilibrium

Continous culture used in industrial fermentation.

Stationery phase is result from a situation in which growth rate and death rate are equal.

The result is a Smooth horizontal linear part of the curve during Stationary phase.

Metabolic activity of surviving cells slows down

Death phase.:

Also know as logarithmic decline phase.

At death phase bacteria die.This could be caused by lack of nutrients,environmental temperature Above or below.

Other retain surviving cells indefinitely while other only retain for a few days.

THE END.....