**Assignment for viva**

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 **SECTION:- B**

Q1. Write the names and function of different equipments used in microbiology lab.

Ans :- 8 basic laboratory equipment used in microbiology.

 - Equipment 1 .Balance.

 - Equipment 2 .Centrifuge.

 - Equipment 3 . Hot air oven.

 - Equipment 4 . Incubators.

 - Equipment 5 . Water bath.

 - Equipment 6 . Microscope .

 - Equipment 7 . Autoclave .

 - Equipment 8 . Laminar flow.

1. Balance:- An analytical balance is a class of balance designed to measure small mass in the sub milligram range. The measuring pan of an analytical balance is inside a transparent enclosure with doors so that dust does not collect and so any air currents in the room do not affect the balance operation.

 2 .Centrifuge:- A laboratory centrifuge is a piece of laser equipment driven by a motor which spins which spins liquid samples at high speed. There are various types of centrifuge.

 3 .Hot air oven:- Hot air oven are electrical devices which use dry heat to steralize . They were originally developed by pasteur. Generally they use a thermostat to control the temperature. Their double walled insulation keeps the heat in and conserve energy the inner layer being a poor conductor and outer layer being metallic .

 4 .Incubator:- Laboratory oven incubators for dual purpose which is forced air convection can direct assistance as well as reliable guarantee to collage scientists research institute and laboratory.

5 . Water bath:- A water bath is laboratory Equipment made from a container filled with heated water. It is used to incubate samples in water at a constant temperature over a long period of time . It is also used to enable certain chemicals reaction to occur at high temperature.

 6 .Laminar flow:- Laminare as air moving at the same speed and in the same direction with no or minimal cross over of air streams. ( or lamina ) .By contrast turbulent flow creates swirls and eddies that deposits particles on surface randomly and unpredictably

 7 .microscope :- Application of laboratory microscope. The goal of any laboratory microscope is to produce clear high quality images whether an optical microscope which uses light to generate the image a scanning or transmission electron microscope or scanning probe microscope .

 8 . Autoclave :- An auto clave is used to sterilize surgical equipment laboratory instruments pharmaceutical items and other materials. It can sterilize solid, liquid, hollows , and instruments of various shapes and sizes. Autoclave vary in size, shape and functionality.

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Q2. What are the different chemical and physical methods of sterilization and disinfection?

 Ans :- Sterilization can be achieved through various means, including heat , chemical, irradiation, high pressure, and filtration. Sterilization is disinfection, sterilization and pasteurization , in that those methods reduce rather than eliminate all from of life and biological agents present

Sterilization refers to any process that remoe that removes kills? Or deactivates all from of life in particular referming too Microorganisms such as fungi, bacteria, viruses,spores , unicellular eukaryotic organisms such as plasmodium etc . And other biological agents like prion present in a specific surface object for example food or biological culture medium sterilization can be achieved . Including heat chemical irradiation, high pressure, and filtration. Sterilization is distint from disinfection sanitization , and pasteurization in that those methods reduce rather than eliminate all from of life and biological agents present. After sterilization an object is referred to as being sterile or aseptic.

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