



RAN - 1803000201030072



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**F. Y. B. Sc. (MLT) (Sem. - I) Examination**

**March - 2023**

**Medical Laboratory Technology : Paper - II**

**Equipments and Instruments in Medical Technology**

**સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
**Fill up strictly the details of signs on your answer book**

Name of the Examination:

**F. Y. B. Sc. (MLT) (Sem. - I)**

Name of the Subject :

**Medical Laboratory Technology : Paper - II Equipments and Instruments in Medical Technology**

Subject Code No.: **1803000201030072**

Seat No.:

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Student's Signature
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(2) All questions are compulsory.

***O.M.R. Sheet ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ  
O.M.R. Sheetની પાછળ છાપેલ છે.  
Important instructions to fillup O.M.R. Sheet  
are given on back side of the provided O.M.R. Sheet.***

## SET - II

- Q. 1.** What is the use of monochromator in colorimeter?
- a) It converts light into electric current
  - b) It transmits a narrow band of spectral region
  - c) It measures electric current
  - d) It holds the solution
- Q. 2.** Elaborate LAF.
- a) Laminar air flow
  - b) Laminar air fluid
  - c) Laminar asbestos flow
  - d) Laminar asbestos fluid
- Q. 3.** Which factor is not responsible for sedimentation of the particle in centrifugation?
- a) Size of the particle
  - b) Revolutions per minute
  - c) pH of the medium
  - d) Viscosity of the medium
- Q. 4.** Which microscope is used for the visualization of viruses?
- a) Bright field microscope
  - b) Dark field microscope
  - c) Fluorescence microscope
  - d) Electron microscope
- Q. 5.** Colorimeter works on which principle?
- a) Beer's Law
  - b) Lambert's Law
  - c) Both (a) and (b)
  - d) None
- Q. 6.** Autoclave is used to destroy \_\_\_\_\_.
- a) Bacteria & viruses
  - b) Fungi
  - c) Spores
  - d) All of above
- Q. 7.** Balance contains \_\_\_\_\_.
- a) Scale
  - b) Beam
  - c) Stirrup
  - d) All of these





- Q. 21.** Glass electrode and reference electrode are present in \_\_\_\_\_.
- a) Spectrophotometer                      b) pH meter  
c) Colorimeter                                d) Centrifuge
- Q. 22.** \_\_\_\_\_ is not used to sterilize moist sensitive compounds.
- a) Autoclave                                    b) Hot air oven  
c) Filtration                                    d) All of above
- Q. 23.** \_\_\_\_\_ is a component of centrifuge.
- a) Rotor                                         b) Motor  
c) Tachometer                                 d) All of above
- Q. 24.** Resolution depends on \_\_\_\_\_.
- a) Distance between two objects        b) Wavelength of light  
c) Numerical aperture                        d) All of above
- Q. 25.** \_\_\_\_\_ is used as a light source in colorimeter.
- a) Tungsten filament                         b) Hydrogen lamp  
c) Xenon lamp                                 d) All of these
- Q. 26.** \_\_\_\_\_ is an example of moist heat sterilization.
- a) Autoclave                                    b) Hot air oven  
c) Incineration                                 d) All of above
- Q. 27.** In distillation unit, condenser carries \_\_\_\_\_.
- a) Electricity                                    b) Kerosene  
c) Cold water                                    d) Gas

- Q. 28.** \_\_\_\_\_ used as a stain in electron microscopy.
- a) Phosphotungstic acid                      b) Uranyl acetate  
c) Osmium tetroxide                         d) All of above
- Q. 29.** Spectrophotometer is worked with \_\_\_\_\_ light.
- a) UV    b) Visible  
c) IR    d) All of above
- Q. 30.** \_\_\_\_\_ is used to sterilize culture media.
- a) Autoclave                                      b) Hot air oven  
c) Incinerator                                    d) Incubator
- Q. 31.** Solution having pH 3.4 is called \_\_\_\_\_.
- a) Alkali    b) Acidic  
c) Neutral                                         d) Basic
- Q. 32.** In TEM, the amount of electron scattering is proportional to \_\_\_\_\_.
- a) The sectioning of specimen  
b) The source of illumination  
c) The nature of specimen mounting  
d) The electronic density of specimen
- Q. 33.** Chamberland filter was made up of \_\_\_\_\_.
- a) Unglazed porcelain                        b) Asbestos  
c) Polyester                                      d) Cellulose acetate



- Q. 41.** What is pH?
- a) Potential of hydrogen
  - b) Power of halogen
  - c) Potential of halogen
  - d) Power of hydrogen
- Q. 42.** What is the function of substage condenser?
- a) It forms real image and virtual image
  - b) It act as a source of illumination
  - c) It supports microscope
  - d) It focuses a cone of light on the slide
- Q. 43.** Measurement of osmolarity is based on \_\_\_\_\_.
- a) Ionic strength
  - b) Osmotic pressure
  - c) Electrical potential
  - d) Mass
- Q. 44.** Which filter is used for the sterilization of air?
- a) HEPA filter
  - b) Depth filter
  - c) Earthen filter
  - d) Seitz filter
- Q. 45.** In centrifuge, rpm stands for \_\_\_\_\_.
- a) Resolutions per minute
  - b) Resolutions parts per minute
  - c) Revolutions per minute
  - d) Revolutions parts per minute
- Q. 46.** \_\_\_\_\_ is fitted in dark field microscope.
- a) Simple condenser with annular diaphragm
  - b) Substage condenser with phase ring
  - c) Simple condenser with opaque ring
  - d) Abbe condenser with opaque disc

**Q. 47.** In colorimeter, \_\_\_\_\_ is used to hold the solution.

- a) Monochromators
- b) Cuvette
- c) Photocell
- d) Light source

**Q. 48.** Hot air oven is used to sterilize \_\_\_\_\_.

- a) Powder
- b) Mineral oil
- c) Petroleum jelly
- d) All of above

**Q. 49.** Distillation unit contains \_\_\_\_\_.

- a) Condenser
- b) Distilling flask
- c) Burner
- d) All of these

**Q. 50.** *Treponema pallidum* is a causative agent of \_\_\_\_\_.

- a) Tuberculosis
  - b) AIDS
  - c) Influenza
  - d) Syphilis
- \_\_\_\_\_

**SPACE FOR ROUGH WORK**