MCQ1: The commonest rocking microtome is called a ------Answer: Cambridge Rocker MCQ2: A rocking microtome is generally best for cutting sections thicker than Answer: six microns MCQ3: Rotary microtomes enable sections of ----- thickness to be cut Answer: 5 microns MCQ4: -----is a device which usually has a wedge blade and the instrument is unusual as the blade is moved past the fixed chuck Answer: freezing microtome MCQ5: Microtomes of all kinds are cleaned of wax after use possibly by using a little of----- harmful solvent Answer: Xylene MCQ6: Microtome parts liable to rust should be wiped with a little Answer: thin oil MCQ7: There are three basic cross sectional shapes of knives, namely,-----Answer: Wedge, plano- concave and double concave MCQ8: ----- knives are often used for sectioning soft materials such as celloid in embedded Tissues Answer: plano-concave MCQ9: A stereo / dissecting microscope is used for_ Answer: Observing specimen in three-dimensional images MCQ10: Botanical sectioning razors are generally ------Answer: plano-convex MCQ11: The best knives for the cutting of paraffin blocks are the ------Answer: double concave MCQ12: The single ----- ground botanical razor is the ideal instrument for cutting sections Answer: Hollow MCQ13: ----- is the mechanical cutting of plant or animal materials in the laboratory Answer: Microtomy MCQ14: The purpose of ----- in the lab is to get a thin section of the object preferably only one cut thick for microscopic viewing Answer: Sectioning MCQ15: ----- is the science of the measurement of light in terms of its perceived brightness to the human eye Answer: Photometry MCQ16: ----- is the science of measurement of radiant energy (including light) in terms of absolute power Answer: Radiometry

MCQ17: Photometry is typically based on the eye's -----response Answer: Photopic

MCQ18: Parallel examples of analogous systems of quantities of photometric and radiometric quantities include all of these, except

Answer: Absolute and none absolute power MCQ19: Watts are units of radiant flux while ----- are units of luminous flux Answer: Lumens MCQ20: The ----- is the photometric unit of light output Answer: Lumen MCQ21: A dark-field microscope is useful for _____. Answer: Observing bacterial motion MCQ22: The purpose of dehydration in permanent slide preparation is to_____. Answer: allow complete infiltration of tissues with Canada balsam MCQ23: ----- deals mainly with measurement of heat energy Answer: Calorimetry MCQ24: ----- is a form of energy that flows from a part of a system to another through a temperature gradient Answer: Heat MCQ25: The following are good practices in the storage of prepared slides except Answer: No need to store temporary slides MCQ26: If a slide is to be kept for long-term reference Answer: it must be made as a permanent preparation MCQ27: Study of the nervous system is done with: Answer: preserved animals MCQ28: Proper disposal of dissected animals should be done by_____. Answer: By burying them deep in the soil MCQ29: Which of the following is a type of microtome used in the laboratory? Answer: All of the options MCQ30: The following are cross sectional shapes of microtome knives except Answer: Zig-zag MCQ31: All microtomes should be cleaned with_____ MCQ32: are solid rods made of globular proteins and are important component of the cytoskeleton Answer: Microfilaments MCQ33: The main aim of fixation for fresh tissues is to $_$ Answer: kill tissues MCQ34: The making of a permanent stained preparation mounted in Canada balsam involves five process in order Answer: Fixation - Staining - Dehydration -Clearing-Mounting MCQ35: Microtomes can be divided into four basic groups in the following order: Answer: Rocking -Rotary- Sledge -Freezing FBQ1: Clearing removes all traces of alcohol and allows the mountant to infiltrate the -----Answer: Tissue FBQ2: The simplest light microscope is ----- magnifying lens

Answer: simple

FBQ3: If a slide is to be kept for long-term reference it must be made as a

-----preparation

Answer: Permanent

FBQ4: The study of the nervous system is done with ----- animals

Answer: preserved

FBQ5: We can immobilize a frog for dissection by ------

Answer: pithing

FBQ6: Dissection of animals is done in a ----- tray

Answer: dissection

FBQ7: During dissection, vertebrates are better opened up from the ------

side

Answer: ventral

FBQ11: Highly refractive structure bend light at much greater angle than do

structure with low -----

Answer: refractive index

FBQ12: The conductivity of a solution depends on the number of

Answer: Ions

FBQ13: The oil immersion objective with 1000x magnification is also known

as____?

Answer: Wet objective

FBQ14: When a dissecting microscope is used, ----- images of the object

can be seen on the stage. Answer: three-dimensional

FBQ15: ----- microscopy is a cheaper alternative to phase contrast

microscopy

Answer: Dark field

FBQ16: As a rule the shortest ----- has the lowest power and the longest

one has the highest power.

Answer: Lens

FBQ17: The main aim of fixation for fresh tissues is to kill -----

Answer: Tissues

FBQ18: The ------ is the photometric unit of light output

Answer: Lumen

FBQ19: ----- measurement is based on photodetectors, devices that

produce an electric signal when exposed to light

Answer: Photometric

FBQ20: ----- photometers are used to measure the directional

luminous flux produced by Lamps

Answer: Spherical

FBQ21: A----- rotates about the lamp in three axes measuring the output

of the lamp from all sides

Answer: Photocell

FBQ22: when a hot and cold objects are in----- contact, heat flows from

the hot to the cold object until thermal equilibrium is established

Answer: Thermal

that it reaches the same temperature as its content as soon as possible Answer: Copper FBQ24: Why an insulating lid is used to cover the calorimeter to which leads to cooling and loss of part of the liquid weighed into the calorimeter to prevent Answer: evaporation FBQ25: ----- is the rate at which energy is generated or expended Answer: Power FBQ26: The subject of chromatograpy was firstly introduced by the Russian botanist -----Answer: Micharl Iswett FBQ27: Separation of two sample components in chromatography is based on their different distribution between two ----- phases Answer: non-miscible FBQ28: ----- is a method for separating the components of a mixture by differential distribution of the components between a stationary phase and mobile phase. Answer: Chromatography FB029: In liquid chromatography the mobile phase is a ------Answer: Liquid FBQ30: ----- Chromatography is one of the most common types of chromatography in which filter paper serves as a support for immobile liquid phase Answer: Paper FBQ31: ----- chromatography is frequently used by organic chemists to purify liquids and solids Answer: Column FBQ32: Thin layer chromatography is particularly useful in -------work Answer: forensic FBQ33: Gas Chromatography is used to analyse ------ samples for the presence of alcohol Answer: blood FBQ34: ----- lenses are best used at higher powers to focus light unto a specimen Answer: Condenser FBQ35: In microscopy staining is a technique used to _____ and ____ Answer: improve contrast, resolution FBQ36: In microscopy staining is a technique used to _____ and ____ Answer: improve contrast, resolution FBQ37: In microscopy staining is a technique used to _____ and ____ Answer: improve contrast, resolution FBQ38: In microscopy staining is a technique used to _____ and ____ Answer: improve contrast, resolution

FB023: The calorimeter is usually made up of -----, a good conductor so