

INSTRUMENTATION

Time : Three hours

Maximum : 100 marks

SECTION A — (20 × 1 = 20 marks)

Answer ALL the questions.

Choose the correct answer :

1. Samples to be weighed in electrical balance should be of
(a) High temperature (b) Low temperature
(c) Room temperature (d) Freezed
2. Physical balance is _____ the analytical balance.
(a) Less sensitive than
(b) More sensitive than
(c) Not sensitive than
(d) As sensitive as

3. _____ indicates the ability to reveal closely adjacent details as separate and distinct.
(a) Resolution
(b) Magnification
(c) Numerical aperture
(d) Refractive index.
4. _____ is widely used when microscopic examination is carried out under oil immersion lens.
(a) Cederwood oil (b) palm oil
(c) Mineral oil (d) Glycerol.
5. _____ gradients are used for the separation of cellular organelles.
(a) Sucrose (b) Glucose
(c) Fructose (d) All of the above.
6. In analytical ultracentrifuge, a sample being run can be monitored by
(a) Ultra violet light absorption system
(b) Interference refractive index system
(c) Both a & b
(d) None of the above.

7. Equipment used for sterilization.
- (a) Autoclave (b) Hot air oven
- (c) Incubator (d) Both a & b.
8. Autoclave for routine laboratory sterilization is set for pressure of
- (a) 15 lb (b) 20 lb
- (c) 16 lb (d) 25 lb.
9. A photo cell is a photo elective device, which converts.
- (a) Light energy into electrical energy
- (b) Light energy into chemical energy
- (c) Electrical energy into light energy
- (d) None of the above.
10. Light source with wide range of wavelength is called.
- (a) Monochromatic (b) Polarized
- (c) polychromatic (d) UV light.
11. Flash chromatography is
- (a) Liquid chromatography
- (b) Gas chromatography
- (c) Light chromatography.
- (d) Modified Column chromatography.
12. R_{f} is _____.
- (a) Relative frequency (b) Retention factor
- (c) Refraction factor (d) None of the above
13. In PCR, the DNA polymerase used can with stand heating to _____.
- (a) 95°C or above (b) 55°C or below
- (c) 75°C (d) 65°C.

