

Sl. No		Answers
1.	Flemming discovered penicillin while working on bacterial culture of A. <i>Bacillus subtilis</i> B. <i>Staphylococcus aureus</i> C. <i>Pseudomonas sp.</i> D. <i>E.coli</i>	
2.	Unstained living cells can be best viewed under A. Dark field microscope B. Phase contrast inverted microscope C. Bright field microscope D. Transmission electron microscope	
3.	New glass wares used in general laboratory procedure should be soaked for several hours in a. 1% HCl b. 1% H <sub>2</sub> SO <sub>4</sub> c. 10% HCl d. 10% H <sub>2</sub> SO <sub>4</sub>	
4.	Graticule slides are used for A. Staining B. Calibration C. Counting D. Gravimetric separation	
5.	In normal individual, CD4:CD8 ratio is A. 1:2 B. 1:1 C. 2:1 D. 2:3	
6.	Warning rule used for quality control in diagnostic laboratory A. One control observation exceeds mean $\pm$ 3 SD B. One control observation exceeds mean $\pm$ 2 SD C. Two consecutive control observations exceed mean $\pm$ 2 SD and lies on the same side of mean D. Difference between two control observations within one run exceeds $\pm$ 4SD.	
7.	Affinity of red cells for oxygen decreases when levels of 2,3 DPG A. decreases B. increases C. no effect D. constant	
8.	An antibody treated with mercaptoethanol (reduces S=S) will fragment into--- A. Separate light and heavy chains B. Separate light chains and a dimer of heavy chains C. Separate fragments from the variable and constant domains of the light and heavy chains D. Fab fragments and F <sub>c</sub> fragments	

9.	The parameter of automated chemistry analyzers that requires calibration are A. Volume B. Temperature C. Spectral accuracy D. All the above	
10.	AIDS virus belongs to A. Lassavirus B. Lentivirus C. Poxvirus D. Myxovirus	
11.	Best method for purifying IgG from serum is A. Preparatory gel electrophoresis B. Immunoprecipitation C. Affinity Chromatography A. None of the above.	
12.	Glucose 6 phosphatase enzyme is absent in A. Muscle B. Brain C. Spleen D. both a & b.	
13.	Storage form of proteins in the body is A. Albumin B. Globulin C. Collagen D. None of the above	
14.	Normal viscosity of adult human blood is A. 0.8-1.2 B. 1.4 -1.8 C. 1.8-2.2 D. 2.3-2.6	
15.	Suitable anticoagulant for osmotic fragility measurement is A. Heparin B. EDTA C. Sodium citrate D. Oxalate	
16.	Essential factor for polymerization of fibrin monomer is A. Factor IV B. Factor VIII C. Factor XI D. Factor XIII	
17.	Vitamin K dependent coagulation factor is A. Factor X B. Factor VIII C. Factor IX D. Factor VI	

18.	<p>Red cell ATP estimation using luciferin –luciferase reagent involves</p> <ul style="list-style-type: none"> <li>A. Phosphorescence</li> <li>B. fluorescence</li> <li>C. luminescence</li> <li>D. incandescence</li> </ul>	
19.	<p>Cytotoxicity screening of biomaterials is carried out using</p> <ul style="list-style-type: none"> <li>A. L929 cells</li> <li>B. Hela Cells</li> <li>C. MG63 cells</li> <li>D. Vero cells</li> </ul>	
20.	<p>The organism used in AMES test for detecting carcinogenic potential of industrial chemicals is:</p> <ul style="list-style-type: none"> <li>A. Diphtheriae</li> <li>B. Salmonella typhimurium</li> <li>C. Streptococcus pyogenes</li> <li>D. Hamophilus influenzae</li> </ul>	
21.	<p>In cyanmethaemoglobin method, almost all haemoglobin is converted to cyanmethenoglobin except</p> <ul style="list-style-type: none"> <li>A. HbF</li> <li>B. Methenoglobin</li> <li>C. Sulphaemoglobin</li> <li>D. None</li> </ul>	
22.	<p>Function of low density lipoprotein is the transport of :</p> <ul style="list-style-type: none"> <li>A. Triglycerides from intestines to adipose tissue</li> <li>B. Cholesterol from liver to peripheral tissues</li> <li>C. Cholesterol from peripheral tissues to liver</li> <li>D. Free fatty acids from adipose tissue to peripheral tissues</li> </ul>	
23.	<p>The reproducibility of test results is referred to as</p> <ul style="list-style-type: none"> <li>A. Accuracy</li> <li>B. Precision</li> <li>C. Quality Control</li> <li>D. Reliability</li> </ul>	
24.	<p>When data fluctuations are due to chance, and results are seen to vary in either direction, the problem is referred to as</p> <ul style="list-style-type: none"> <li>A. The coefficient of variation</li> <li>B. Experimental error</li> <li>C. Random error</li> <li>D. Systemic error</li> </ul>	
25.	<p>Out of the following which is not the property of stem cells</p> <ul style="list-style-type: none"> <li>A. Highly proliferative</li> <li>B. Slow cycling</li> <li>C. Specialized function</li> <li>D. A &amp; B</li> </ul>	
26.	<p>Anaerobic respiration by yeast produces</p> <ul style="list-style-type: none"> <li>A. Alcohol</li> <li>B. Carbon dioxide</li> <li>C. Lactic acid</li> <li>D. All the above</li> <li>E. A&amp; B</li> </ul>	

27.	Flow cytometer is a device used for analysis of parameters in a flowing cell such as : A. Cell size B. Granularity of Cells C. Surface antigen D. All the above	
28.	Platelet activating factor is released from: A. Mast Cells B. Platelets C. Basophils D. Eosinophils	
29.	The process by which fluorescence of an analyte is reduced due to the excited molecule losing some of its energy by interacting with other substances in solution is A. Ionization B. Quenching C. Phosphorescence D. Luminescence	
30.	Light source in UV spectrophotometer is A. Tungston lamp B. Halogen lamp C. Deuterium Lamp D. All the above	
31.	Which of the following do you expect to be most resistant to high temperatures? A. <i>Streptococcus pyogenes</i> B. <i>Bacillus subtilis</i> C. <i>Neisseria gonorrhoeae</i> D. <i>Staphylococcus aureus</i> E. <i>Eschericia coli</i>	
32.	Which of the following is not a method of culturing viruses? A. In embryonated eggs B. In proliferating cells C. Culture medium supplemented with serum D. In laboratory animals E. None of the above	
33.	Antibiotics have no effect on viruses because: A. They kill all bacteria which act as host for viruses B. Viruses are too small in size for antibiotics to act upon C. Viruses show no metabolism of their own. D. Viruses produce a thick covering and encyst themselves as endospores.	
34.	The following is not true about the Fc regions of an immunoglobulins: A. They can be cleaved from the Fab regions by papain B. They are responsible for antibody binding C. They are involved in mast cell binding D. None of the above	

35.	Which of the following activates platelets during hemostasis: A. Eosinophil degranulation B. Exposed collagen or endothelial basement membrane C. Fibrin D. Thromboplastin	
36.	Fibrinogen concentrate combined with ---- is used as a tissue adhesive A. Prothrombin complex B. Calcium Chloride C. Thrombin D. Both A & B E. Both B & C	
37.	Polymerization of acrylamide is initiated by A. Ammonium persulphate B. N', N' tetramethyl diamine C. Both of the above D. None of the above	
38.	The most ideal marker for haematopoietic stem cell in a leukapheresis sample is: A. CD14 B. CD45 C. CD34 D. CD41 E. CD61	
39.	Proteins may be denatured irreversibly by A. Adding urea B. Bringing to isoelectric pH C. Heat coagulation D. Reduction with mercaptoethanol E. Keeping at -20°C	
40.	Options for sterilization include: A. ethylene oxide B. gamma irradiation C. low temperature steam of 73° C for 20 minutes D. high temperature steam of 134° C for 3 minutes E. All the above	
41.	Bleeding time is increased in: A. Vitamin K deficiency B. von Willebrand's disease C. Disseminated intravascular coagulation (DIC) D. Haemophilia A E. B & C	
42.	For in vitro blood compatibility evaluation of biomaterials the standard tests are described in: A. ISO 10993 part 12 B. ISO10993 part 6 C. ISO 10993 part 4 D. ISO 10993 part 5	

43.	In the study of blood-material interaction important test which predicts poor compatibility is A. Platelet count B. Leukocyte count C. RBC count D. Both A & B E. Both A & C	
44.	Diagnostic hematology tests for medical device evaluation are accredited by A. NABL B. COFRAC C. NAMSA D. ISO E. GLP authority	
45.	Quality system implemented in testing and calibration laboratories is based on A. ISO10993 B. ISO17025 C. ISO14000 D. ISO15189	
46.	Activation of intrinsic coagulation by material surface may be best studied by A. Prothrombin time B. Partial thromboplastin time C. Thrombin time D. Fibrinogen assay	
47.	GLP stands for A. Guided Laboratory Performance B. Guided Laboratory Practice C. Good Laboratory Practice D. Good Laboratory Performance	
48.	Prominent spectral peak of hemoglobin which is useful for estimation of plasma hemoglobin is A. 520 nm B. 405 nm C. 350 nm D. 280 nm E. Both B&C	
49.	When platelet concentrate is stored for transfusion, the quality of storage system may be assessed by testing A. pH of the plasma B. Platelet factor4 in plasma C. Swirling of platelets D. Lactate level in the plasma E. All the above	
50.	Screening tests for defining a material as biomaterial for medical device development is A. Hemolysis B. Cytotoxicity C. Both A & B D. None of the above	