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ROLL NUMBER

WRITTEN TEST FOR THE POST OF TECHNICAL ASSISTANT (LAB) – A

DATE : 14/03/2017

TIME : 09.30 AM

DURATION : 90 MINUTES

TOTAL MARKS : 80

INSTRUCTIONS TO THE CANDIDATE

1. Write your Roll Number on the top of the Question Booklet and in the OMR sheet.
2. Each question carries 1 mark.
3. There will not be any Negative Marking.
4. Darken only the bubble corresponding to the most appropriate answer.
5. Marking more than one answer will invalidate the answer.
6. Candidate should sign in the question paper and OMR sheet.
7. Candidate should hand over the question paper and OMR sheet to the invigilator before leaving the examination hall.

Signature of the Candidate

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1. Guthrie's test is positive for
A. Mucopolysaccharidosis B. Phenyl Ketonuria
C. Alkaptonuria D. Galactosemia
2. Normal range of serum sodium level is
A. 136 – 145 mEq/L B. 9 – 11 mEq/L C. 3.5 – 5 mEq/L D. 15 – 30 mEq/L
3. The decolourising agent used in Zeihl Nelson staining technique is
A. Absolute alcohol & HNO₃ B. Acetone
C. Isopropyl alcohol D. 20% H₂SO₄ & 90% Ethanol
4. Alberts stain is used for identification of
A. Corynebacterium diphtherae B. Bacillus tuberculosis
C. Vibrio cholera D. Actinomycetes
5. Common name for Christmas factor of coagulation cascade is
A. Factor IV B. Factor VII C. Factor IX D. Factor XII
6. Highest purity of a chemical is indicated by the term
A. Chemically pure B. Commercial grade
C. Technical grade D. Analytical reagent grade
7. The test for detecting indole compound is
A. Ame's test B. Bial's test C. Obermeyer test D. Schlesinger's test
8. Weil Felix reaction is positive for
A. Typhus fever B. Infectious mononucleosis
C. Leptospirosis D. Chlamydia infection
9. Which one of the following is not a glucogenic molecule
A. Acetyl CoA B. Propionyl CoA C. Pyruvate D. Lactate
10. Programmed cell death is called
A. Proptosis B. Apoptosis C. Necrosis D. Cytolysis
11. Benzidine test is for detecting
A. Bile salt B. Bile pigments C. Blood D. Protein
12. Life span of RBC is
A. 60 days B. 120 days C. 30 days D. 50 days
13. Normal WBC count is
A. 4000 – 11000/cubic mm B. 2000-4000/cubic mm
C. 20000-30000/cubic mm D. 2 lakhs – 3 lakhs/cubic mm
14. The double oxalate mixture used as an anticoagulant contain ammonium oxalate and potassium oxalate in the ratio
A. 3:2 B. 1:1 C. 2:1 D. 3:1
15. Agar is a polymer of
A. Fructose B. Galactose C. Glucosamine D. Sulphated galactose
16. Iron deficiency anemia can be caused due to infestation of
A. Round worm B. Hook worm C. Pin worm D. Tape worm

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17. Which of the following is an indicator of increased turnover of cells
A. Urea B. Bilirubin C. Myoglobin D. Uric acid
18. Cholic acid is formed from
A. Choline B. Cholesterol C. Glycine D. Glutamic acid
19. The test for bile pigment in urine is
A. Fouchet's test B. Bial's test C. Ferric chloride test D. Hay's test
20. The definitive host for *Toxoplasma gondi* is
A. Mouse B. Bat C. Cat D. Dog
21. Vanillyl Mandelic Acid is the metabolic product of
A. Histidine B. Phenyl alanine C. Tryptophan D. Proline
22. Following are the non lipid bio markers of cardiac diseases **except**
A. Homocysteine B. Brain natriuretic peptide
C. Malondialdehyde D. High sensitive C reactive protein
23. The main reaction by which ammonia formed from protein is
A. Non oxidative deamination reactions B. L- aminoacid oxidase reaction
C. Trans deamination reaction D. Trans amination reaction
24. Leishman stain contain
A. Methyl red B. Sudan black C. Methylene blue D. Neutral red
25. The mineral deficient in milk is
A. Zinc B. Iron C. Calcium D. Phosphorus
26. Detoxification process occur in
A. Kidney B. Spleen C. Liver D. Muscle
27. Which one of the following is **not** an ingredient in Drabkin solution
A. Potassium cyanide B. Potassium ferricyanide
C. Sodium carbonate D. Sodium chloride
28. Normal serum creatinine level is
A. 2 - 5 mg/dl B. 0.7 - 1.4mg/dl C. 9 - 11mg/dl D. 0.2 - 0.8mg/dl
29. Hemolysed blood sample shows
A. Increased level of serum sodium B. Increased level of serum potassium
C. Decreased level of serum potassium D. No change in serum potassium or sodium level
30. Which one of the following is **not** used as a fixative in histopathologic technique
A. Formic acid B. Formalin C. Mercuric chloride D. Formol saline
31. The test which can **not** be performed on a serum sample is
A. Homocysteine B. Ferritin C. Clotting factors D. Total lipid
32. Which one of the following condition is **not** included in Garrod's tetrad
A. Alkaptonuria B. Albinism C. Cystinuria D. Cystinosis
33. Sickle cell disease is due to defect in
A. Heme formation B. Alpha chain C. Beta chain D. None of the above

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34. The following are true related to Tuberculin test **except**
- A. Injected subcutaneously B. Injected intra dermally
C. Read after 48 - 72 hours D. Indurations >10mm in diameter is positive
35. Which one of the following is **not** used as an urine preservative
- A. Hydrochloric acid B. Nitric acid C. Thymol D. Toluene
36. How much quantity of 10% Sulphuric acid required to make 500 ml of 5% solution of H₂SO₄
- A. 250 ml B. 100 ml C. 50 ml D. 200 ml
37. Which one of the following is used to embed tissue after processing
- A. Liquid nitrogen B. Agar C. Xylene D. Paraffin
38. Formimino glutamic acid excretion test is for assessing
- A. Thiamine deficiency B. Riboflavin deficiency
C. Folic acid deficiency D. Ascorbic acid deficiency
39. The term microalbuminuria is used when the daily excretion of albumin is
- A. Less than 300 microgram/day B. Less than 300 mg/day
C. Less than 500 mg/day D. Less than 1 gm/day
40. The major antibody of secondary immune response is
- A. IgA B. IgG C. IgM D. IgE
41. Which of the following gas is used as a disinfectant
- A. Nitrous oxide B. Carbon dioxide C. Ethylene dioxide D. Ethylene oxide
42. Lowenstein-Jensen medium is for cultivation of
- A. Shigella B. Salmonella C. Nisseria D. Tubercle bacilli
43. The end product of purine catabolism is
- A. Urea B. Uric acid C. Creatinine D. Ammonia
44. Molality indicates
- A. Moles/kg B. Moles/liter C. Kg/liter D. Microgram/ml
45. Which one of the following is **not** a component of kovac's reagent
- A. Nitric acid B. Amyl alcohol
C. Hydrochloric acid D. Para dimethyl aminobenzaldehyde
46. Sabin viral vaccine is a
- A. Live vaccine B. Killed vaccine C. Viral product D. Sub unit vaccine
47. The autoclave machine operate on the basis of
- A. Dry heating B. Temperature below 100 C
C. Steam under pressure D. Microwave
48. Specific gravity of normal urine is
- A. 0.8 to 1 B. 1.007 to 1.010 C. 1.040 to 1.050 D. 1.015 to 1.025
49. Widal test is positive for
- A. Salmonella typhi B. Shigella C. Typhus fever D. Helicobacter
50. The vaccutainer tube with clot activator is used for collecting blood is
- A. Red cap tube B. Lavender cap tube C. Green cap tube D. Ash color tube

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51. The most common anticoagulant solution used in blood for transfusion is
A. Oxalate mixture B. EDTA solution
C. ACD solution D. Fluoride and oxalate mixture
52. Which one of the following is **not** used as a disinfectant in a lab
A. Formaldehyde B. Acetaldehyde C. Gluteraldehyde D. Phenolic solution
53. Which one of the following is not an ingredient in mixed acid reagent used for urea estimation by DAM method
A. Concentrated Sulphuric Acid B. Concentrated Nitric Acid
C. Orthophosphoric Acid D. Cadmium Sulphate
54. The immediate first aid measure reagent required in a lab where there is regular usage of cyanide is
A. Fresh ferrous hydroxide B. Freshly prepared ammonium sulphate
C. Freshly prepared ferrous sulphate D. Freshly prepared sodium nitroprusside
55. Normal serum bilirubin level is
A. 2 – 8 mg/dl B. 1- 2 mg/dl C. 0. 2 – 0. 8 mg/dl D. 0.01 – 0.2 mg/dl
56. For the conversion in to S I unit the glucose in mg/dl is multiplied with the factor
A. 0.0556 B. 17.1 C. 10 D. 0.0249
57. In serum electrophoresis pattern albumin fraction is seen
A. Very near to point of application B. Far away from the point of application
C. In and around the point of application D. Between α_1 and α_2 globulin fractions
58. Metabolic screening test for homocystinuria is
A. Benedict's test B. Cyanide nitroprusside test
C. Ferric chloride test D. Methyl amine test
59. Total body water content is
A. 40% of the total body weight B. 30% of the total body weight
C. 20% of the total body weight D. 60% of the total body weight
60. Kernicterus develops when the serum bilirubin exceeds
A. > 20 mg/dl B. > 10 mg/dl C. > 2 mg/dl D. > 1 mg/dl
61. Which one of the following is a nuclear fixative
A. Formol Saline B. Helly's fluid C. Flemming's fluid D. Acetic acid
62. Hay's test is for detection of
A. Bile salts in urine B. Bile pigments in urine
C. Blood in urine D. Haemoglobin in urine
63. The complementary colour of the solution for green filter is
A. Red color B. Green color C. Bluish green color D. Purple color
64. The most abundant solute in normal urine is
A. Urea B. Uric acid C. Creatinine D. Calcium
65. Scurvy is due to deficiency of
A. Folic acid B. Ascorbic acid C. Lipoic acid D. Pantothenic acid

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66. Normal Albumin Globulin ratio is
A. 0.8: 1 B. 1.3: 1 C. 3.5: 1 D. 2.5: 1
67. Normal average platelet count is
A. 100,000 - 300,000 / μ l B. 4.2 - 5.4 million/ μ l
C. 4000 - 11000/ μ l D. 4.7 - 6.1million/ μ l
68. Calculated LDL level from 210mg% cholesterol, 180 mg% triglyceride, HDL 40 mg%
A. 134 mg% B. 98 mg% C. 70mg/dl D. 166 mg%
69. The following bio molecules are involved in iron absorption **except**
A. Ferroportin B. Ferritin C. Heme carrier protein -1 D. Hepcidin
70. Which one of the following is **not** a function of albumin
A. Maintenance of osmotic pressure B. Transport of amino acids
C. Transport of free fatty acids D. Transport of calcium
71. Which one of the following is **not** laying egg in small intestine
A. Hook worm B. Pin worm C. Tape worm D. Round worm
72. Number of wells in a standard micro plate in ELISA is
A. 100 B. 98 C. 96 D. 90
73. Immunoglobulin elevated in allergic conditions
A. IgG B. IgM C. IgD D. IgE
74. Antigen not found in Rh negative person is
A. D antigen B. A Antigen C. B Antigen D. H Antigen
75. In tuberculous meningitis which one of the following is **not** correct
A. Sugar content in CSF is high B. Sugar content in CSF is low
C. Protein content in CSF is high D. Cobweb type coagulation
76. The most important buffer system in the plasma is
A. Hemoglobin buffer B. Phosphate buffer
C. Bicarbonate buffer D. Protein buffer
77. The significance of pentose phosphate pathway is production of
A. NADH B. FADH C. NADPH D. ATP
78. The test which is **not** used to monitor a patient's coagulation status is
A. PT B. APTT C. D dimer D. AAT
79. Concentrated acid is diluted by adding
A. Acid slowly to water B. Water slowly to acid
C. Water and acid are added together D. None of the above
80. Fetal hemoglobin consists of
A. 2 α & 2 β chain B. 2 γ & 2 β chain C. 2 ϵ & 2 α chain D. 2 α & 2 γ chain