



SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY

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ROLL NUMBER

WRITTEN TEST FOR THE POST OF SCIENTIFIC ASST. (LAB)
PATHOLOGY

DATE: 19.05.2026

Part – A

DURATION: 30 MINUTES

Total Marks: 25

INSTRUCTIONS TO THE CANDIDATES

1. Write your Roll Number on the top of the Question Booklet and in the answer sheet.
2. Each question carries 1 mark.
3. There will not be any Negative Marking.
4. Write legibly the alphabet of the most appropriate answer (A, B, C or D) in the separate answer sheet provided.
5. Over-writing is not permitted.
6. Candidate should sign in the question paper and answer sheet.
7. Candidate should hand over the answer sheet and question paper to the invigilator before leaving the examination hall.

Signature of the Candidate

Kanj


VOP - Scientific Assistant (Lab)- Pathology – Part A

Duration: 30 minutes

Max. Marks: 25

1. The fire extinguisher to be used for fires from flammable liquids such as xylene and alcohol is:
 - a. Dry chemical
 - b. Water and foam
 - c. Wet chemical
 - d. Dry powder

 2. Your laboratory is using mice for research. After sacrificing the mice, their carcasses are discarded using:
 - a. Red plastic bag
 - b. Yellow plastic bag
 - c. Green plastic bag
 - d. Blue plastic bag

 3. The pictogram shown below, on a chemical package, indicates which of the following
 - a. Carcinogen
 - b. Narcotic effects
 - c. Dermal sensitizer
 - d. Pyrophorics
- 
4. If a 11.1 ul of serum is diluted with 100 ul of diluent, what is the dilution ratio?
 - a. 1:10
 - b. 1:8
 - c. 1:11
 - d. 1:9

 5. Which of the following International Organization for Standardization (ISO) standards is applicable for medical laboratories?
 - a. ISO 17043
 - b. ISO 15189
 - c. ISO 17034
 - d. ISO 20387

 6. Correct dehydration step during tissue processing should remove only:
 - a. Bound water
 - b. Free water
 - c. Both bound and free water
 - d. Should not remove cellular water

 7. The size of the glass slides used for routine histopathology work is:
 - a. 75 mm x 25 mm
 - b. 95 mm x 45 mm
 - c. 85 mm x 35 mm
 - d. 105 mm x 55 mm

 8. The colour of elastic fibres using Verhoeff's method is:
 - a. Black
 - b. Red
 - c. Green
 - d. Yellow

 9. All of the following are the components of Ziehl-Neelsen stain for Mycobacterium tuberculosis, except:
 - a. Carbol fuchsin
 - b. Hydrochloric acid
 - c. Toluidine blue
 - d. Methylene blue

Handwritten signature

10. A laboratory receives a blood sample for coagulation testing in which the citrate tube is underfilled. What is the most likely analytical consequence?
- Reduced clotting time
 - Prolonged clotting time
 - No change in coagulation results
 - Increased platelet count
11. Which statistical parameter is most commonly used to evaluate the precision of an analytical method in clinical laboratories?
- Bias
 - Detection limit
 - Coefficient of variation
 - Sensitivity
12. A patient with polycythemia vera has increased RBC count and hematocrit. What effect will this have on ESR?
- ESR decreases due to increased RBC concentration
 - ESR increases
 - ESR remains unchanged
 - ESR cannot be measured
13. Which lipoprotein is considered an independent genetic risk factor for atherosclerosis?
- LDL
 - Lipoprotein(a)
 - HDL
 - VLDL
14. How much 1 M HCl is required to prepare 250 mL of 0.1 M HCl?
- 10 mL
 - 25 mL
 - 50 mL
 - 100 mL
15. In an external quality assessment (EQA) program, a laboratory consistently reports results that are significantly higher than the peer group mean for a specific analyte. Which type of error is most likely present?
- Sampling variation
 - Random error
 - Systematic bias
 - Human transcription error
16. A 10-year-old child presents with fever, sore throat, and enlarged cervical lymph nodes. Laboratory investigation reveals TLC = 11,000 cells/ μ L with 60% lymphocytes and atypical lymphocytes in smear. Which condition is most consistent with these findings?
- Acute bacterial infection
 - Infectious mononucleosis
 - Parasitic infection
 - Acute myeloid leukemia
17. In the glucose oxidase–peroxidase (GOD–POD) method for blood glucose estimation, which of the following reactions directly leads to the formation of the coloured compound measured spectrophotometrically?
- Oxidative coupling of chromogen by hydrogen peroxide in the presence of peroxidase
 - Oxidation of glucose to gluconic acid by glucose oxidase
 - Reduction of hydrogen peroxide to water by catalase
 - Conversion of gluconic acid to glucuronate by peroxidase

Kay

18. Biological indicator used for sterilization using Hot air oven is
- Bacillus subtilis
 - Bacillus atrophaeus
 - Geobacillus stearothermophilus
 - Clostridium tetani
19. Which among the following organism is intrinsically resistant to colistin?
- Aeromonas veronii
 - Plesiomonas shigelloides
 - Serratia marcescens
 - Enterobacter cloacae
20. In Hepatitis B infection, which of the following represents the actual viral particle?
- HBsAg
 - HBcAg
 - HBeAg
 - Anti-HBsAg
21. Which of the following viruses can produce diarrhea?
- Respiratory Syncytial virus
 - Hepatitis C Virus(HCV)
 - Rhinovirus
 - Corona virus
22. Cryptococcus neoformans
- Is a mould fungus
 - Is identified by the hair perforation test
 - Is AFB positive
 - Is capsulated
23. Which one of the following viruses can hemagglutinate erythrocytes?
- Japanese Encephalitis virus
 - Rhabdovirus
 - Polio virus
 - Coxsackie virus
24. The green pigment produced by Pseudomonas aeruginosa is:
- Prodigiosin
 - Flourescin
 - Pyoverdin
 - Pyorubrin
25. NABH standards require following manuals, EXCEPT
- SOP manual for each lab
 - Key performance indicators
 - Quality manual
 - Laboratory Manual



KEY	OP SA Pathology - Part A(combined)	
1	a	
2	b	
3	a	
4	a	
5	b	
6	b	
7	a	
8	a	
9	c	
10	b	
11	c	
12	a	
13	b	
14	b	
15	c	
16	b	
17	a	
18	b	
19	c	
20	a	
21	d	
22	d	
23	a	
24	c	
25	b	

Key