

Test Booklet
Series

A

Written Test Paper, 2021

Paper No.

29

LAB TECHNICIAN
(MLT)

Test Booklet No.

Name of Applicant Answer Sheet No.

Application No. : SVSU/2020/Estt/NT/ Signature of Applicant :

Date of Examination: **25 / 12 / 2021**

Signature of the Invigilator(s)

1.

Time of Examination :

2.

Duration : 2 Hours]

[Maximum Marks : 100

IMPORTANT INSTRUCTIONS

- (i) The question paper is in the form of Test-Booklet containing **100 (Hundred)** questions. All questions are compulsory. Each question carries four answers marked (A), (B), (C) and (D), out of which only one is correct.
- (ii) On receipt of the Test-Booklet (Question Paper), the candidate should immediately check it and ensure that it contains all the pages, i.e., **100** questions (70 in Part-A + 30 in Part-B). Discrepancy, if any, should be reported by the candidate to the invigilator immediately after receiving the Test-Booklet.
- (iii) A separate Answer-Sheet is provided with the Test-Booklet/Question Paper. On this sheet there are **100** rows (70 in Part-A + 30 in Part-B) containing four circles each. One row pertains to one question.
- (iv) The candidate should write his/her Application number at the places provided on the cover page of the Test-Booklet/Question Paper and on the Answer-Sheet and **NOWHERE ELSE**.
- (v) No second Test-Booklet/Question Paper and Answer-Sheet will be given to a candidate. The candidates are advised to be careful in handling it and writing the answer on the Answer-Sheet.
- (vi) For every correct answer of the question **One (1) mark will be awarded**. For every unattempted question, Zero (0) mark shall be awarded. **There is no Negative Marking**.
- (vii) Marking shall be done only on the basis of answers responded on the Answer-Sheet.
- (viii) To mark the answer on the Answer-Sheet, candidate should **darken** the appropriate circle in the row of each question with Blue or Black pen.
- (ix) For each question only **one** circle should be **darkened** as a mark of the answer adopted by the candidate. If more than one circle for the question are found darkened or with one black circle any other circle carries any mark, the question will be treated as cancelled.
- (x) The candidates should not remove any paper from the Test-Booklet/Question Paper. Attempting to remove any paper shall be liable to be punished for use of unfair means.
- (xi) Rough work may be done on the blank space provided in the Test-Booklet/Question Paper only.
- (xii) *Mobile phones (even in Switch-off mode) and such other communication/programmable devices are not allowed inside the examination hall.*
- (xiii) No candidate shall be permitted to leave the examination hall before the expiry of the time.

DO NOT OPEN THIS QUESTION BOOKLET UNTIL ASKED TO DO SO.

[P.T.O.

29 / 1

PART-A

1. What is the life span of RBC?
 - (A) 120
 - (B) 100
 - (C) 200
 - (D) 80
2. What is the recommended cleaner for removing all oil from objective lens?
 - (A) 70% alcohol or lens cleaner
 - (B) xylene
 - (C) water
 - (D) benzene
3. Serum differs from blood as it lacks
 - (A) antibodies
 - (B) clotting factors
 - (C) albumins
 - (D) globulins
4. Oxygen is supplied from lungs to tissues and organs by
 - (A) red blood cells
 - (B) white blood cells
 - (C) plasma
 - (D) platelets
5. Blood cells are produced in
 - (A) kidney
 - (B) lungs
 - (C) bone marrow
 - (D) glands
6. By volume, the red blood cells constitute about _____% of whole blood.
 - (A) 15
 - (B) 25
 - (C) 35
 - (D) 45
7. Which constituent of blood fight against infections?
 - (A) red blood cells
 - (B) white blood cells
 - (C) plasma
 - (D) platelets
8. The pH value of blood is normally between _____ and _____.
 - (A) 6.0, 6.5
 - (B) 7.0, 7.35
 - (C) 7.35, 7.45
 - (D) 7.45, 7.98

9. An average adult person has about _____ liters of blood by volume.
- (A) 5
 - (B) 5.5
 - (C) 6
 - (D) 6.5
10. What mordant is used in Gram staining?
- (A) crystal violet
 - (B) safranin
 - (C) acid-alcohol
 - (D) iodine
11. RFT Includes:
- (A) electrolytes
 - (B) total protein
 - (C) ast
 - (D) alt
12. Microscopic examination of urine is done to find out:
- (A) rbc
 - (B) pus cells
 - (C) cast
 - (D) All the above
13. Sample used for Platelet counting is :
- (A) serum
 - (B) plasma
 - (C) EDTA blood
 - (D) citrate blood
14. Rh typing is based on the D-antigen present in:
- (A) platelet
 - (B) rbc
 - (C) lymphocyte
 - (D) eosinphils
15. ESR equipment is known as
- (A) sahli's tube
 - (B) centrifuge
 - (C) vacutainer
 - (D) westegren's tube
16. The reagent used in estimation of Glucose is:
- (A) urease
 - (B) hexokinase
 - (C) jaffe
 - (D) None of the above

17. The commonly used fixative for slide preparation is:
- (A) benedict reagent
 - (B) distilled water
 - (C) formalin
 - (D) None of the above
18. Which one of the following does not include routine liver function test?
- (A) bilirubin
 - (B) bile acid
 - (C) sgot
 - (D) alkaline phosphatase
19. CSF samples are collected by:
- (A) lab tech
 - (B) staff nurse
 - (C) physician
 - (D) ward boy
20. All the following are motile bacteria except:
- (A) *e.coli*
 - (B) klebsiella
 - (C) vibrio
 - (D) proteus
21. Confirmatory test for AID's is:
- (A) elisa
 - (B) clia
 - (C) western blot
 - (D) chromatography
22. The basic component of Leishman stain is:
- (A) eosin
 - (B) methylene blue
 - (C) malachite green
 - (D) safrenin
23. Which of the following is Romanowsky stain?
- (A) Leishman
 - (B) giemsa
 - (C) jenners
 - (D) All the above
24. Which of these is not a lipid?
- (A) Fats
 - (B) Oils
 - (C) Proteins
 - (D) Waxes

25. Which of the following is usually not found in the urine?
- (A) Magnesium
 - (B) Urea
 - (C) Uric acid
 - (D) Glucose
26. Testing a refrigerated specimen that has not warmed to room temperature will adversely affect:
- (A) Enzymatic reactions
 - (B) Dye-binding reactions
 - (C) The sodium nitroprusside reaction
 - (D) Diazo reactions
27. All of the following are important to protect the integrity of reagent strips except:
- (A) Removing the desiccant from the bottle
 - (B) Storing in an opaque bottle
 - (C) Storing at room temperature
 - (D) Resealing the bottle after removing a strip
28. A urine specimen with a pH of 9.0:
- (A) Indicates metabolic acidosis
 - (B) Should be recollected
 - (C) May contain calcium oxalate crystals
 - (D) Is seen after drinking cranberry juice
29. The most significant reagent strip test that is associated with a positive ketone result is:
- (A) Glucose
 - (B) Protein
 - (C) pH
 - (D) Specific gravity
30. A specific gravity of 1.005 would produce the reagent strip color:
- (A) Blue
 - (B) Green
 - (C) Yellow
 - (D) Red
31. The coagulase is done to differentiate:
- (A) *Staphylococcus aureus* from *Staphylococcus epidermidis*
 - (B) *Staphylococcus epidermidis* from *Neisseria meningitidis*
 - (C) *Streptococcus pyogenes* from *Enterococcus faecalis*
 - (D) *Streptococcus pyogenes* from *Staphylococcus aureus*
32. Cardiac markers are:
- (A) ck, ckmb, tropi
 - (B) ast, alt, protein
 - (C) carbohydrate
 - (D) glucose

33. To which of the following would the term "white cell" NOT be applied?
- (A) erythrocyte
 - (B) leucocyte
 - (C) lymphocyte
 - (D) monocyte
34. Which individuals can receive any type of blood and are considered universal recipients?
- (A) A+
 - (B) O-
 - (C) AB+
 - (D) B-
35. What is found in blood serum that is also in blood plasma?
- (A) blood cells
 - (B) platelets
 - (C) plasma proteins
 - (D) clotting factors
36. Tumor markers:
- (A) CA125
 - (B) CA19.9
 - (C) CEA
 - (D) All the above
37. What is PPE in laboratory?
- (A) personnel protective equipment
 - (B) pipette per equipment
 - (C) professional pipetter
 - (D) None of them
38. The liquid portion of blood remaining after a clot has formed is called:
- (A) plasma
 - (B) serum
 - (C) tissue
 - (D) lymph
39. Which test cannot be performed on a serum sample?
- (A) Iron
 - (B) Vitamin B₁₂
 - (C) Total lipids
 - (D) Clotting factors
40. A suction device used to draw up liquids is a:
- (A) flask
 - (B) cylinder
 - (C) beaker
 - (D) safety bulb

41. Which one of the following is NOT a blood component?
- (A) Fresh frozen plasma
 - (B) Hemolysate
 - (C) Platelet concentrate
 - (D) Plasma
42. What is the normal hemoglobin concentration in adult male?
- (A) 13-20 g/dl
 - (B) 13 - 17 g/dl
 - (C) 13- 15 g/dl
 - (D) 11- 15 g/dl
43. Which one of the following is NOT the site selected for collection of the blood?
- (A) Spleen
 - (B) Arteries
 - (C) Capillaries
 - (D) Veins
44. Which one of the following tests is NOT used to detect renal function?
- (A) Blood sugar
 - (B) Blood urea
 - (C) Serum creatinine
 - (D) Blood urea nitrogen (BUN)
45. Hay's test detects _____ in urine.
- (A) bile salts
 - (B) blood
 - (C) ketone bodies
 - (D) bile pigment
46. What is the gauge of the needle commonly used for venipuncture?
- (A) 26
 - (B) 20
 - (C) 21
 - (D) 18
47. Which of the following parasite is found in urine specimen?
- (A) Taenia sps
 - (B) Trichomonas vaginalis
 - (C) Trichuris trichiura
 - (D) Round worm
48. What is the eosinophil count present in a normal DLC smear?
- (A) 1-10%
 - (B) 6-10%
 - (C) 1-6%
 - (D) 5-10%

49. Which of the following type of cholesterol is called as good cholesterol?
- (A) HDL
 - (B) Chylomicrons
 - (C) VLDL
 - (D) LDL
50. Which of the following is a gram negative bacilli?
- (A) Staphylococcus aureus
 - (B) Staphylococcus citreus
 - (C) Streptococcus pneumoniae
 - (D) Pseudomonas aeruginosa
51. What is the colour of normal CSF?
- (A) Colourless
 - (B) Yellow
 - (C) Light green
 - (D) Brown
52. Normal reticulocyte count in adults is _____.
- (A) 3-6%
 - (B) 0.5-2.5%
 - (C) 1-5%
 - (D) 2-10%
53. Cholesterol estimation is done by the following method:
- (A) Molisch method
 - (B) Benedict's method
 - (C) Zak's ferric chloride method
 - (D) Jaffes method
54. Coma shaped bacteria are known as
- (A) Staphylococci
 - (B) Streptococci
 - (C) Vibrio
 - (D) Bacillus
55. A positive tuberculin test is indicated by and area of induration of:
- (A) < 5 mm in diameter
 - (B) 6-9 mm in diameter
 - (C) 10 mm in diameter
 - (D) No induration
56. Diagnostic test used for TB is
- (A) Mantoux test
 - (B) Dick Test
 - (C) Shick test
 - (D) Widal test

57. Acid fast staining is used to detect
- (A) Mycobacterium TB
 - (B) Ctetani
 - (C) HIV/AIDS
 - (D) Meningococci
58. Method of sterilization used for culture media is...
- (A) Autoclave
 - (B) Hot air oven
 - (C) Pasteurization
 - (D) None of the above
59. Shape of cocci
- (A) Rod
 - (B) Spherical
 - (C) Comma
 - (D) Spiral
60. VDRL is used in the diagnosis of
- (A) Syphilis
 - (B) HIV
 - (C) Typhoid
 - (D) Tuberculosis
61. Name the anticoagulant present in purple coloured vacutainer tube
- (A) Heparin
 - (B) EDTA
 - (C) Sodium citrate
 - (D) None of these
62. Ketone bodies in urine are:
- (A) Acetone
 - (B) Beta hydroxy butyric acid
 - (C) Both (A) and (B)
 - (D) None of these
63. Serum electrolytes are analysed using
- (A) Calorimeter
 - (B) Flamephotometer
 - (C) Spectrophotometer
 - (D) None of these
64. Temperature range used for autoclaving is....
- (A) 100°C for 10 min
 - (B) 100°C for 30 min
 - (C) 121°C for 15 min
 - (D) 121°C for 30 min

65. The only cell in normal CSF is
- (A) Neutrophil
 - (B) Lymphocyte
 - (C) Manocyte
 - (D) None of these
66. The solution used to fix a pap smear is:
- (A) wright stain
 - (B) hematoxylin
 - (C) physiological saline
 - (D) cytospray
67. Presence of red blood cells in the urine is referred to as:
- (A) Hematuria
 - (B) Hemoglobinuria
 - (C) Anuria
 - (D) Chyluria
68. Specific gravity of urine normally varies between _____.
- (A) 1.010–1.040
 - (B) 1.010–1.015
 - (C) 1.010–1.030
 - (D) 1.030–1.040
69. Name the test used to detect the presence of glucose in urine :
- (A) Fouchet's test
 - (B) Benedict's test
 - (C) Hay's test
 - (D) Rothera's test
70. A compound microscope has how many lenses
- (A) 1
 - (B) 2
 - (C) 3
 - (D) 4

PART-B

71. 25 : 37 :: 49 : ?

- (A) 41
- (B) 65
- (C) 56
- (D) 60

72. Find the missing character?

4C	2B	3A
28A	?	45B
7C	5A	15B

- (A) 10C
- (B) 12C
- (C) 13C
- (D) 7C

73. Pointing at a photo, Dinesh said, "His father is only son of my mother." The photo belongs to :

- (A) Dinesh
- (B) Dinesh's brother
- (C) Dinesh's father
- (D) Dinesh's son

74. Rakesh ranks 13th in the class of 33 students. There are 5 students below Mahesh rankwise. How many students are there between Rakesh and Mahesh ?

- (A) 12
- (B) 14
- (C) 15
- (D) 16

75. QAR, RAS, SAT, TAU, _____

- (A) UAV
- (B) UAT
- (C) TAS
- (D) TAT

76. Choose the word which is different from the rest.

- (A) Pear
- (B) Apple
- (C) Litchi
- (D) Orange

77. Before you gave answers, sir them to us.

- (A) sent
- (B) will send
- (C) had sent
- (D) was sending

78. Look, a new missile

- (A) is launched
- (B) is launch
- (C) is being launch
- (D) is being launched

79. The paths of glory lead to the grave.

- (A) straight
- (B) but
- (C) in
- (D) directly

80. You haven't had your lunch yet, you?

- (A) are
- (B) aren't
- (C) have
- (D) haven't

81. Which sequence makes a correct sentence?

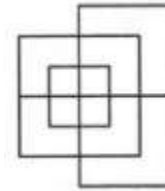
- 1. tea
- 2. have
- 3. that
- 4. some
- 5. before

- (A) 43251
- (B) 24315
- (C) 24153
- (D) 52431

82. He reminds us Paul Walker.

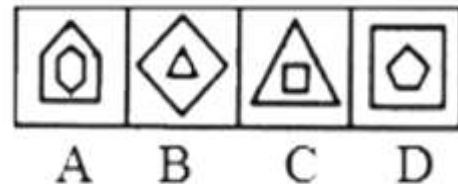
- (A) about
- (B) of
- (C) for
- (D) with

83. Find the minimum number of straight lines required to make the given figure.



- (A) 13
- (B) 15
- (C) 17
- (D) 19

84. Select the figure that does NOT belong in the following group.



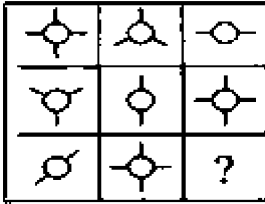
- (A) B
- (B) A
- (C) D
- (D) C

85. P, Q, R and S are four friends. P is shorter than Q but taller than R who is shorter than S. Who is the shortest among all?

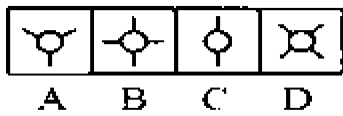
- (A) P
- (B) Q
- (C) R
- (D) S

86. Select the Answer figure that fits in the blank space in the given problem figure.

Problem Figure



Answer Figure



- (A) D
(B) C
(C) B
(D) A

87. From the given alternatives, select the word which CANNOT be formed using the letters of the given word.

Demonstration

- (A) Moon
(B) Most
(C) Train
(D) Damage

88. If white is called black, black is called red, red is called yellow, yellow is called green, green is called blue, blue is called violet and violet is called orange, what would be the colour of human blood?

- (A) green
(B) black
(C) red
(D) yellow

89. A train running at 90 km/hr crosses a pole in 10 seconds. What is the length of train?

- (A) 250 m
(B) 150 m
(C) 900 m
(D) None of these

90. Which is in ascending order?

- (A) $1/3, 2/5, 3/5, 6/7$
(B) $2/5, 1/3, 3/5, 6/7$
(C) $1/3, 2/5, 6/7, 3/5$
(D) $3/5, 6/7, 1/3, 2/5$

91. The average of four consecutive odd numbers is 24. Find the largest number.

- (A) 25
(B) 27
(C) 29
(D) 31

92. Sum of a rational number and its reciprocal is $13/6$. Find the number

- (A) 2
(B) $3/2$
(C) $4/2$
(D) $5/2$

93. Half of 1 percent written as decimal is
(A) 5
(B) 0.5
(C) 0.05
(D) 0.005
94. A person incurs a loss of 5% by selling a watch for Rs. 1140. At what price should the watch be sold to earn 5% profit.
(A) Rs. 1200
(B) Rs. 1230
(C) Rs. 1260
(D) Rs. 1290
95. A fungal disease named 'Mucormycosis' is registered in COVID-19 patients of which state?
(A) Kerala
(B) Gujarat
(C) Bihar
(D) Assam
96. "Energy Conservation Week" is observed every year in which month?
(A) October
(B) November
(C) December
(D) January
97. Who has been appointed as the Chief of Staff Committee, following the demise of General Bipin Rawat?
(A) M.M. Naravane
(B) Karambir Singh
(C) R.K.S. Bhaduria
(D) Vijay Kumar Singh
98. Which state after Haryana has recently announced 75% reservation in private sector jobs for locals?
(A) Uttar Pradesh
(B) Rajasthan
(C) Uttarakhand
(D) Jharkhand
99. The first-ever Haryana Sahitya Sangam has started in which city?
(A) Faridabad
(B) Panchkula
(C) Gurgaon
(D) Karnal
100. The Ministry of Labour recently launched India's first national database on unorganised workers on which portal?
(A) e-Shram portal
(B) Samadhan portal
(C) Atma Nirbhar Bharat portal
(D) None of the above

ROUGH WORK

ANSWER KEY- Lab Technician MLT Answer Key

1. A	26. A	51. A	76. D
2. A	27. A	52. B	77. C
3. B	28. B	53. C	78. D
4. A	29. A	54. C	79. B
5. C	30. A	55. C	80. C
6. D	31. A	56. A	81. C
7. B	32. A	57. A	82. B
8. C	33. A	58. A	83. A
9. A	34. C	59. B	84. A
10. D	35. C	60. A	85. C
11. A	36. D	61. B	86. D
12. D	37. A	62. C	87. D
13. C	38. B	63. B	88. D
14. B	39. D	64. C	89. A
15. D	40. D	65. B	90. A
16. B	41. B	66. D	91. B
17. C	42. B	67. A	92. B
18. B	43. A	68. C	93. D
19. C	44. A	69. B	94. C
20. B	45. A	70. C	95. B
21. C	46. C	71. B	96. C
22. B	47. B	72. A	97. A
23. D	48. C	73. D	98. D
24. C	49. A	74. B	99. B
25. D	50. D	75. A	100. A