

Test Booklet
Series

A

Written Test Paper, 2021

Paper No.

26

PHARMACIST

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.

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PART-A

1. The volume of distribution of a drug describes:
 - (A) The apparent distribution of the drug in the body
 - (B) The concentration of the drug in plasma
 - (C) The volume of plasma that is cleared from the body
 - (D) The concentration of the drug in blood
2. The vaccines prepared through recombinant DNA technology are
 - (A) First-generation vaccines
 - (B) Second-generation vaccines
 - (C) Third generation vaccines
 - (D) Fourth generation vaccines
3. An antibody probe is used in
 - (A) Southern blotting
 - (B) Northern blotting
 - (C) Western blotting
 - (D) Eastern blotting
4. The first protein synthesized by recombinant DNA technology was
 - (A) Streptokinase
 - (B) Human growth hormone
 - (C) Tissue plasminogen activator
 - (D) Human insulin
5. T_{aq} polymerase is used in PCR because of its
 - (A) Low thermal stability
 - (B) High thermal stability
 - (C) High fidelity
 - (D) High speed
6. Raynaud's phenomenon:
 - (A) Is characterised by vasodilation
 - (B) Causes hot, red feet
 - (C) Starts as white patches of skin
 - (D) May require vasodilator treatment
7. Diabetic retinopathy:
 - (A) Is reversible changes in the lens shape
 - (B) Indicates long-standing uncontrolled diabetes
 - (C) Presents with impaired drainage of the aqueous humour
 - (D) Is characterised by proteolytic enzymes affecting the lens
8. A significant clinical interaction may occur if St John's wort is administered concomitantly with:
 - (A) Gliclazide
 - (B) Simvastatin
 - (C) Sertraline
 - (D) Amoxicillin

9. Cutaneous squamous cell carcinoma:
- (A) Forms metastases rapidly
 - (B) Arises from a mole
 - (C) May occur in scar tissue
 - (D) Is associated with poor prognosis
10. Each inhalation of Symbicort contains:
- (A) Budesonide 200 µg and formoterol 6 µg
 - (B) Budesonide 160 µg and formoterol 4.5 µg
 - (C) Budesonide 200 mg and formoterol 6 mg
 - (D) Budesonide 160 mg and formoterol 4.5 mg
11. Which of the following preparation is the most appropriate as a cream for the management of chronic symptoms of haemorrhoids?
- (A) Lidocaine
 - (B) Cinchocaine
 - (C) Framycetin
 - (D) Hydrocortisone
12. A mother asks for a preparation for head lice. Which of the following agents could be recommended?
- (A) Permethrin
 - (B) Alcohol
 - (C) Chlorhexidine
 - (D) Cetrimide
13. A patient requests lozenge for sore throat. Which of the following products is the most appropriate?
- (A) Fungilin
 - (B) Contac
 - (C) Bradosol
 - (D) Nystan
14. An investigational medicinal product is:
- (A) A product intended to induce a specific alteration in the immunological response
 - (B) A product prepared in a pharmacy in accordance with a prescription
 - (C) A product prepared from homeopathic stocks
 - (D) A pharmaceutical form of an active substance being tested or used in a clinical trial
15. In pharmaceutical manufacturing, the Qualified Person:
- (A) Ensures that standards of good practice in manufacturing are complied with
 - (B) Establishes the period of validity of the manufacturer's licence
 - (C) May revoke a manufacturer's licence
 - (D) Advises the Licensing Authority on the granting of a manufacturer's licence

16. Tetanus vaccine is indicated when a wound is contaminated with:
- (A) Oil
 - (B) Acid
 - (C) Ethanol
 - (D) Soil
17. The drug which was used as 'LIE DETECTOR' during the Second world war
- (A) Hyoscine
 - (B) Nitrous Oxide
 - (C) Chloroquine
 - (D) Carbamazepine
18. As the temperature increases, the surface tension
- (A) Increases
 - (B) Decreases
 - (C) First increases and then decreases
 - (D) No change and then decreases
19. In plastic system, below yield value, the apparent viscosity is
- (A) Higher
 - (B) Fixed
 - (C) Normal
 - (D) Infinite
20. Micro emulsions contain globules of the size about
- (A) 1 micro meter
 - (B) 0.1 micro meter
 - (C) 0.01 micro meter
 - (D) 10 micro meters
21. Brownian movement of particles
- (A) Prevent sedimentation
 - (B) Enhance sedimentation
 - (C) Assist in sedimentation
 - (D) Have no effect on sedimentation
22. Protein binding of a drug
- (A) Decreases distribution of the drug
 - (B) Decreases its half-life
 - (C) Enhances excretion of the drug
 - (D) Increases bioavailability of the drug
23. The pH of a buffer can be calculated using
- (A) Ilkovic equation
 - (B) Henderson Hasselbalch equation
 - (C) Michaelis-Menten equation
 - (D) Lineweaver-Burk equation
24. Part of solvent required per part of solute to dissolve sparingly soluble salt is
- (A) From 1 to 10
 - (B) From 10 to 30
 - (C) From 30 to 100
 - (D) From 100 to 1000

25. Electro dialysis is a method for the purpose of
- (A) Identification
 - (B) Preparation
 - (C) Purification
 - (D) Stabilization
26. The pH of tears is about
- (A) 6.0
 - (B) 8.0
 - (C) 7.4
 - (D) 9.0
27. Which order of reaction is followed by photo decomposition of the drug
- (A) First order
 - (B) Pseudo First order
 - (C) Second order
 - (D) Zero order
28. The rate of hydrolysis is dependent on
- (A) pH
 - (B) Buffers
 - (C) pH and temperature
 - (D) Temperature
29. In metal ion complex, which of the following is true
- (A) Ligands act as Lewis bases and the central atom acts as a Lewis acid.
 - (B) The central atom acts as Lewis bases and ligands act as a Lewis acids.
 - (C) Ligands bond by forming hydrogen bonds.
 - (D) This is a simple example of the formation of a complex ion with a positive charge.
30. Auxiliary emulsifying agents stabilize the emulsion by
- (A) Adjusting the viscosity of continuous phase
 - (B) Changing the hydrophilic-lipophilic balance
 - (C) Strengthening the polar head of emulsifier
 - (D) Strengthening the non-polar head of emulsifier
31. Errors arising when the individual analyst is responsible for them
- (A) Method error
 - (B) Instrumental error
 - (C) Personal error
 - (D) Random error

32. Which theory states that acid is a substance which dissociates in water to produce hydrogen ions
- (A) Arrhenius theory
 - (B) Lewis theory
 - (C) Bronsted-Lowry theory
 - (D) Lowry theory
33. 20 gm NaOH in 500 ml =
- (A) 0.1 N
 - (B) 1.0 N
 - (C) 0.5 M
 - (D) 0.05 N
34. Potentiometry is which type of method?
- (A) Qualitative
 - (B) Chromatographic
 - (C) Classical
 - (D) Electro-chemical
35. The number of gm-equivalent of the solute per liter of solution is known as
- (A) Normality
 - (B) Molarity
 - (C) Molality
 - (D) Mole fraction
36. The chemical reagent from which solution of required concentration can be prepared is
- (A) Secondary standard
 - (B) Dilute solution
 - (C) Concentrated solution
 - (D) Primary standard
37. The quantity of chemical in each liter of solution is known as
- (A) Normality
 - (B) Strength
 - (C) Molecular Weight
 - (D) Equivalence Weight
38. Which of the following indicators has a transition point closest to the equivalence point for the titration of a weak acid by a strong base?
- (A) Orange IV
 - (B) Thymol blue
 - (C) Methyl orange
 - (D) Bromocresol green
39. Which of the following indicators is yellow at a pH of 10.0?
- (A) Methyl red
 - (B) Phenol red
 - (C) Thymol blue
 - (D) Methyl violet

40. A buffer solution may contain equal moles of
- (A) Weak acid and strong base.
 - (B) Strong acid and strong base.
 - (C) Weak acid and its conjugate base.
 - (D) Strong acid and its conjugate base.
41. The pH at which an indicator changes colour is known as its
- (A) Standard point.
 - (B) Transition point.
 - (C) Equivalence point.
 - (D) Stoichiometric point.
42. On an industrial scale, sodium metal is prepared by electrolysis of fused
- (A) NaCl
 - (B) NaO
 - (C) NH_3
 - (D) NaOH
43. Corrosion can be prevented by
- (A) Alloying
 - (B) Tinning
 - (C) Galvanising
 - (D) All of above
44. The electrolyte used for tin plating is
- (A) Sulphide ore
 - (B) Stannous sulphate
 - (C) Hydrogen sulphate
 - (D) Sodium chloride
45. An electrochemical cell is also called
- (A) Battery cell
 - (B) Galvanic cell
 - (C) Electrolytic cell
 - (D) Chargeable cell
46. Electrochemical cells convert which of these into electrical energy?
- (A) Mechanical energy
 - (B) Potential energy
 - (C) Kinetic energy
 - (D) Chemical energy
47. Voltaic cells generate electricity by
- (A) Spontaneous redox reaction
 - (B) Non-spontaneous redox reaction
 - (C) Sublimation reaction
 - (D) Thermochemical reaction
48. In chromium plating, few drops of sulphuric acid are added to the electrolyte to prevent
- (A) Oxidation
 - (B) Reduction
 - (C) Hydrolysis
 - (D) Sublimation

49. The electrodes used in the production of sodium metal are
- (A) Iron cathode and graphite anode
 - (B) Sodium cathode and carbon anode
 - (C) Aluminum cathode and fluoride anode
 - (D) Aluminum cathode and sodium anode
50. Accumulation of carbon dioxide gas in lungs is called
- (A) Anoxia
 - (B) Asphyxia
 - (C) Anorexia
 - (D) Anosmia
51. Glucose reabsorption takes place mainly in
- (A) Distal convoluted tubules
 - (B) Collecting duct
 - (C) Proximal convoluted tubule
 - (D) Loop of Henley
52. The hormone concerned with the basic metabolic rate is
- (A) Thyroxin
 - (B) Parathormone
 - (C) Adrenaline
 - (D) Calcitonin
53. Which cranial nerve is attached with the eye?
- (A) 2nd
 - (B) 4th
 - (C) 6th
 - (D) 8th
54. The longest skeletal muscle in the body is
- (A) Biceps
 - (B) Quadriceps femoris
 - (C) Supinator
 - (D) Sartorius
55. The lymph fluid is
- (A) Clear to white fluid
 - (B) Reddish fluid
 - (C) Light brown fluid
 - (D) Pinkish fluid
56. Endocytosis, exocytosis and transcytosis are examples of
- (A) Osmosis
 - (B) Diffusion
 - (C) Passivetransport
 - (D) Active transport

57. Which of the following system eliminates excess nitrogen from the body?
- (A) Digestive system
 - (B) Urinary system
 - (C) Respiratory system
 - (D) Lymphatic system
58. Which system protects deeper tissues from injury?
- (A) Immune system
 - (B) Musculo-skeleton system
 - (C) Integumentary system
 - (D) Lymphatic system
59. Which of the following terms describes the body's ability to maintain its normal state?
- (A) Anabolism
 - (B) Catabolism
 - (C) Tolerance
 - (D) Homeostasis
60. Which of the following closes and seals off the lower airway during swallowing?
- (A) Vocal cords
 - (B) Epiglottis
 - (C) Larynx
 - (D) Uvula
61. The association of endotoxin in gram-negative bacteria is due to the presence of
- (A) Steroids
 - (B) Peptidoglycan
 - (C) Lipopolysaccharides
 - (D) Polypeptide
62. Which of the following is not a recognised cause of diarrhoea?
- (A) *Vibrio cholerae*
 - (B) *Escherichia coli*
 - (C) *Clostridium perfringens*
 - (D) *Enterococcus faecalis*
63. All of the following are the rapid and confirmatory staining techniques for Acid fast bacteria, Except?
- (A) Ziehl neelsen method
 - (B) Fluorochrome stain
 - (C) Dorner method
 - (D) Kinyoun method
64. Typhoid fever affects
- (A) Respiratory system
 - (B) Urogenital system
 - (C) Gastrointestinal system
 - (D) Skin

65. Meningitis is an infection of
- (A) The peripheral nervous system
 - (B) The covering of the spinal cord and brain
 - (C) The spinal cord and brain
 - (D) The blood brain barrier
66. A pandemic is
- (A) Worldwide outbreak of a disease
 - (B) Disease outbreak in a country
 - (C) Disease that spreads easily and rapidly
 - (D) Vector of infection is unknown
67. A Plasma membrane is made up of
- (A) Proteins and carbohydrates
 - (B) Proteins and lipids
 - (C) Lipids and carbohydrates
 - (D) Proteins, lipids and carbohydrates
68. Plasma cells and memory cells are responsible for
- (A) Inflammation
 - (B) Cell mediated response
 - (C) Humoral response
 - (D) Complement cascade
69. MMR protects against which three diseases?
- (A) Measles, malaria and rabies
 - (B) Monkey pox, mumps, rabies
 - (C) Measles, mumps, rubella
 - (D) Monkey pox, mumps, rubella
70. Which of the following is not a risk factors of fungal respiratory infections?
- (A) Prolonged steroid therapy
 - (B) Postpartum state
 - (C) Genetic predisposition
 - (D) Post splenectomy state

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?

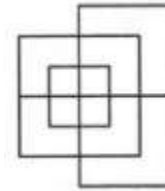
- 1. tea
- 2. have
- 3. that
- 4. some
- 5. before

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

82. He reminds us Paul Walker.

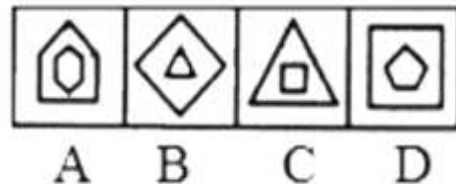
- (A) about
- (B) of
- (C) for
- (D) with

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.



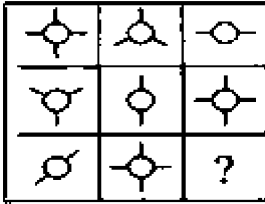
- (A) B
- (B) A
- (C) D
- (D) C

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?

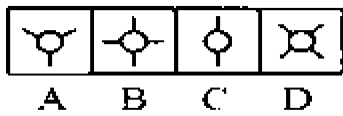
- (A) P
- (B) Q
- (C) R
- (D) S

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

Pharmacist Answer Key

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