



SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY

THIRUVANANTHAPURAM—695 011, INDIA.

(An Institute of National Importance under Govt. of India)

Phone—(91)0471—2443152 Fax—(91)0471—2446433, 2550728

Email—[sct@sctimst.ac.in](mailto:sct@sctimst.ac.in) Web site—[www.sctimst.ac.in](http://www.sctimst.ac.in)

ROLL NUMBER

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

DATE: 19.05.2026

Part – B

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

*Handwritten signature*

**VOP - Scientific Assistant (Lab)- Pathology – Part B**

Duration: 30 minutes

Max. Marks: 25

1	Mechanism of action of a linker in immunohistochemistry is:
	a Connecting the antigen to the blocking agent
	b Connecting the blocking agent to the primary antibody
	c Connecting the antigen to the primary antibody
	d Connecting the primary antibody to secondary antibody
2	Which of the following is used in immunohistochemistry panel for pituitary adenoma?
	a SF1
	b INI1
	c LIN28A
	d TTF1
3	Anti-MuSK antibody is associated with which of the following disease?
	a Autoimmune encephalitis
	b Collagen vascular disease
	c Myaesthesia gravis
	d Vasculitis
4	Which of the following is present in a panel for detecting antibodies involved in paraneoplastic neurological diseases?
	a Jo-1
	b Titin
	c NMDA
	d Amphiphysin
5	If a skeletal muscle shows dystrophin negativity, what is its interpretation?
	a Normal muscle
	b Muscular dystrophy
	c Neurogenic atrophy
	d Mitochondrial myopathy
6	Which of the following antigen expression is lost in the diseased state?
	a p65
	b LIN28A
	c K27M-mutant H3.3
	d H3 K27me3
7	Which of the following is present in the COX incubating medium for staining muscle sections?
	a Diaminobenzidine tetrahydrochloride
	b Sodium succinate
	c Nitroblue tetrazolium
	d Sodium metabisulphite
8	Which of the following is used to demonstrate ragged red fibres?
	a NADH
	b Oil red O
	c MGT
	d PAS
9	Which of the tissue component does ACTH stain?
	a Basement membrane
	b Nuclei
	c Cell membrane
	d Cytoplasm

*Key*

10	If the muscle tissue sent for frozen section is very fatty, which of the following can be performed to obtain satisfactory sections?	
	a	Increase the cryostat temperature
	b	Cut thicker sections
	c	Avoid using anti-roll plate
	d	Use a larger piece of tissue
11	Commercial cell-based assay in immunology is used for demonstration of antibody against:	
	a	MOG
	b	TPIT
	c	APLA
	d	PIT1
12	Which of the following antibody is useful for diagnosing skeletal muscle diseases?	
	a	Cytokeratin
	b	Vimentin
	c	Neurofilament
	d	Dysferlin
13	Which of the following can be positive in an astrocytoma?	
	a	PAX8
	b	Actin
	c	OLIG2
	d	Desmin
14	Which of the following values is required to optimally perform routine CSF oligoclonal band assay?	
	a	CSF IgG
	b	CSF IgA
	c	CSF IgD
	d	CSF IgM
15	Which of the following antibody is part of a medulloblastoma panel?	
	a	GATA3
	b	Calretinin
	c	ATRX
	d	GAB1
16	The characteristic reaction when a tissue is put in 10% neutral buffered formalin is formation of:	
	a	Hydroxymethyl side chains
	b	Hydroxyethyl side chains
	c	Hydroxypropyl side chains
	d	Hydroxybenzyl side chains
17	The type of fixative with extensive action on lipids in tissue is:	
	a	Zenker's
	b	Formaldehyde
	c	Ethanol
	d	Bouin's
18	All of the following are true with respect to formalin pigment, <i>except</i> :	
	a	Forms at pH less than 5.7
	b	Brown-black in color
	c	Pigment is removed easily with an alcoholic solution of picric acid
	d	More likely to form in tissues with small amounts of hemoglobin breakdown products

*Handwritten signature*

19	The type of microtome used in cryostat is:
	a Base sledge microtome
	b Ultramicrotome
	c Sliding microtome
	d Rotary rocking microtome
20	During microtomy, if the ribbon of consecutive sections are curved, the causes are all, <b>except:</b>
	a Block edges not parallel
	b Tissue varying in consistency
	c Insufficient paraffin wax
	d Dull blade edge
21	The stain-tissue interactions in staining elastic fibres is significantly contributed by:
	a Coulombic attractions
	b van der Waals' forces
	c Hydrogen bonding
	d Covalent bonding
22	Identify the <b>incorrect</b> statement with respect to eosin:
	a Fluorescent
	b Xanthene dye
	c Binds to eosinophilic compounds containing positive charge
	d Binds to eosinophilic compounds containing negative charge
23	All of the following are iron haematoxylin <b>except:</b>
	a Weigert's
	b Carazzi's
	c Heidenhain's
	d Loyez
24	All of the following are the components of the Schiff's reagent, <b>except:</b>
	a Basic fuchsin
	b Sodium metabisulfite
	c Nitric acid
	d Hydrochloric acid
25	The luxol fast blue stain is an example of:
	a Progressive staining
	b Regressive staining
	c Intermediate staining
	d Negative staining

*Kay*

**Name of category: SCIENTIFIC ASSISTANT (LAB)**

**ANSWER KEY - PART B**

1	D	21	B	
2	A	22	D	
3	C	23	B	
4	D	24	C	
5	B	25	B	
6	D			
7	A			
8	C			
9	D			
10	B			
11	A			
12	D			
13	C			
14	A			
15	D			
16	A			
17	C			
18	D			
19	D			
20	C			

16-25