

Department of BIOTECHNOLOGY

PROPOSAL FOR THE PURCHASE UNDER PLAN FUND FOR THE YEAR 2025-26

Head: LAB-For the purchase of Chemicals

Sl No	Name of Chemical	Use/Specification	Quantity required	Remarks/ Justification
1	ABO blood grouping kit	immunology	1 kit	Blood grouping experiment
2	Isoamyl alcohol	Molecular biology lab	1 L	DNA isolation
3	chloroform	Solvent extraction	1 L	Solvent extraction
4	BSS solution	Analytical grade	1 L	media for all semester practical
5	Leishman Stain	Analytical grade		For microbial culture
6	TAE (Tris Acetate EDTA) Buffer 50 X	Analytical grade	1 pkt	Electrophoresis gel running buffer
7	SYBR green loading Dye	Analytical grade	1 pkt	Electrophoresis gel running dye
8	Tris - HCl	Molecular woks for DNA -Analytical grade	500 g	Buffers for all semester practical

9	ABTS (2,2'-Azino-bis(3-ethylbenzothiazoline-6-sulfonic acid))	Analytical grade	500 g	Enzyme assay
10	Ammonium sulphate	Analytical grade	500 g	Protein precipitation
11	trichloroacetic acid.	Analytical grade	1 L	Protein precipitation
12	ethyl acetate	Analytical grade	1 L	Solvent for plant metabolites
13	hexane	Analytical grade	1 L	Solvent for plant metabolites
14	acetone,	Analytical grade	1 L	Solvent for plant metabolites
15	milk solids	Analytical grade	500 g	For microbial growth medium
16	K ₂ HPO ₄	Analytical grade	500 g	Mineral salt source for microbial growth medium
17	KH ₂ PO ₄	Analytical grade	500 g	Mineral salt source for microbial growth medium
18	MgSO ₄ ·7H ₂ O	Analytical grade	500 g	Mineral salt source for microbial growth medium
19	NH ₄ NO ₃	Analytical grade	500 g	Mineral salt source for microbial growth medium
20	FeCl ₃ ·6H ₂ O	Analytical grade	500 g	Mineral salt source for microbial growth medium
21	Na ₂ HPO ₄	Analytical grade	500 g	Buffer solution component

22	colloidal chitin	Analytical grade	500 g	General purpose
23	tricalcium phosphate	Analytical grade	500 g	General purpose
24	urea	Analytical grade	500 g	General purpose
25	dextrose	Analytical grade	500 g	Carbon source for microbial enzyme assay
26	Maltose	Analytical grade	500 g	Carbon source for microbial enzyme assay
27	Galactose	Analytical grade	500 g	Carbon source for microbial enzyme assay
28	Xylose	Analytical grade	500 g	Carbon source for microbial enzyme assay
29	Chitin	Analytical grade	500 g	Carbon source for microbial enzyme assay
30	phenol red	Analytical grade	500 g	General purpose
31	Sperber's Broth (SB) medium,	Analytical grade	500 g	General purpose
32	soy peptone	Analytical grade	500 g	General purpose
33	Na ₂ CO ₃	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
34	Na ₂ C ₄ H ₄ O ₆	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation

35	Al ₂ (SO ₄) ₃	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
36	trypticase soy agar	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
37	ZnSO ₄	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
38	SeSO ₄	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
39	CoCl ₂ ,	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
40	NiCl ₂	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
41	(NH ₄) ₂ SO ₄	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
42	NH ₄ NO ₃	Analytical grade	500 g	Microbial growth medium for xenobiotic degradation
43	casein	Analytical grade	500 g	Protein source
44	FeCl ₃ 6H ₂ O	Analytical grade	500 g	General purpose
45	0.45 µm PVDF syringe filters	Analytical grade	1 pkt	General purpose
46	10 kDa cut-off Dialysis membrane	Analytical grade	1 pkt	General purpose
47	Nutrient broth (Powder)	good quality	2 X 500 g	for microbiology lab at S2

48	Diluent for DNA extraction	Reagent grade EtOH 99.9%	5X 1L	for crude DNA isolation, S3, sterilization S2, project
49	hand sanitiser with isopropanol	pure grade	500ml X 4	Molecular Biology experimentation
50	Malt extract	pure grade	500gm	Media preparation
51	Agarose for electrophoresis	electrophoresis	500 gm	Sterile media
52	Leishman stain	REAGENT grade	1	Blood staining
53	PCR reagents	10 demos	1	for PCR
54	Hand sanitiser	For LAF use	500 ml	Sterile LAF operations
54	Sepharose beads for column chromatography	Chromatography purpose	500 gm	Biochemistry lab
55	Mineral salt medium (MSM) broth without agar	Isolation and pure culture	100g	Microbiology lab
56	Ninhydrine solution	For paper chromatography	1L	chromatography
57	Orange G	dye	10 ml	For biochemistry lab

58	Forceps of different size	metallic	500g	for general lab
59	Iodine potassium iodide I ₂ KI	For iodine test	500 ml	Biochemistry lab
60	alumina	To pack in chromatography column	1 pkt	For micropipettes
61	lancet	sterile	2 pkt	For blood grouping
62	Biuret reagent	Reagent grade	250 ml	For chemical assays
63	Benedict's solution	For reducing sugars	250 ml	General lab
64	Neutral red	For laboratory stain	250 ml	Cell stain for cytology expts
65	Iodine solution	stain	100 ml	Cytology grade
66	Tissue paper	Good quality	20 roll	Lab use
67	Concentrated liquid soap for washing glassware	Good quality	5 bottles	Lab use
68	Scalpel blade (sterile) with metallic holders	Good quality	1 pkt with 20 holders	For ptc lab
69	toothpick	Microbiology examination	10 packs	Microbiology lab
70	Haemocytometer	Good quality	10	For animal cell counting

71	Janus green B stain	Good quality	100ml	Cytology staining
72	Waste bin, tough plastic, medium size	Good quality	5	To be placed in lab
73	Dische diphenylamine reagent	Molecular biology lab	100 ml	General lab/ for differentiating nucleic acids
74	lancet	For molecular works	15 packet	For blood extraction
75	Sudan IV dye	General purpose	20	Molecular biology experimentation
76	Cobalt chloride	General purpose	200 g	General purpose
77	Cotton roll, absorbent	General purpose	10 pkt	General purpose
78	Filter paper sheets	Molecular works	10 sheets	Molecular biology experimentation
79	Biuret reagent	Protein estimation purpose	100 ml	General purpose
80	Laboratory tray, metallic	General purpose	10 numbers	General purpose
81	Nessler's reagent	General purpose	1 bottle	General purpose

Forwarded

Dept. of Biotechnology

