CENTRE OF EXCELLENCE IN MICROBIOME
An initiative of the Govt. of Kerala under KSCSTE
KINFRA Film and Video Park, Chanthavila, Kazhakoottam, Thiruvananthapuram, Kerala 695585, India.

NOTICE INVITING TENDERS

Centre of Excellence in Microbiome, an institution under Kerala State Council for Science, Technology and Environment (KSCSTE), Govt. of Kerala, Thiruvananthapuram invites item rate tenders on tender basis:

NIT No & date	CoEM/Purchase/Misc/Con/2025/06-TEN dated 16/06/2025
Description of NIT	Supply of microbiology consumables (Listed Below)
Date of tender publication	16/06/2025
Tender Fee	Rs. 819/-
Earnest Money Deposit (EMD)	Rs. 4094/-
Date of pre-bid meeting	NA
Manufacturer's authorization or Authorised reseller certification required or not	Required: A copy of the certificate must be enclosed without fail.
Last date & time of submission of tender	30/06/2025; 10:30 AM
Date & Time of opening of technical and financial bid	30/06/2025; 12:00 PM
Mode of bidding	Two bid system

The detailed requirements, specifications of procurement and Bid document will be published on website **www.kscste.kerala.gov.in** under Tender section. If any future updates/corrigendum regarding Bid will be there, it will be only published in website **www.kscste.kerala.gov.in** during Bid period. Bidder may visit **www.kscste.kerala.gov.in** regularly during Bid period.

Cost of tender document (tender fee), **Rs. 819/-** and EMD, **Rs. 4094/-** as applicable to be submitted along with the tender as demand draft (preferably Canara Bank / any nationalized bank) favouring "***The Director, Centre of Excellence in Microbiome, payable at Thiruvananthapuram***" failing which the tender will be summarily rejected. EMD of unsuccessful bidders will be returned without any interest, upon finalization of contract or on expiry of validity of offer. EMD of the successful tenderer will be accounted and will be released only after the satisfactory completion of the work/service.

Completed Tender in sealed cover shall reach the "***The Director, Centre of Excellence in Microbiome, First floor - RGCB Bio Innovation Center, KINFRA Film & Video Park, Kazhakkoottam, Thiruvananthapuram- 695585***" on or before 30-06-2025; 10:30 AM. Tenders received will be opened on 30-06-2025; 12:00 PM. During tender opening, authorization by bidder is not permitted and one bidder can represent only one firm/bidder. The Bidders who have already submitted the tender fee for **Tender No. CoEM/Purchase/Misc/Con/2025/03-TEN dated 15/05/2025** are not required to pay the tender fee again for this tender. **However, the EMD (Earnest Money Deposit) must still be submitted**. Additionally, as per applicable government guidelines, only the **manufacturers** with MSME (Micro, Small and Medium Enterprises) license and located within the State of Kerala are exempted from the payment of both the tender fee and EMD. Tenders received after the last date & time mentioned will summarily be rejected.

DIRECTOR, CoEM

Signed by Sabu Thomas
Date: 16-06-2025 12:48:33

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TENDER FORM

Tender No. & Date	CoEM/Purchase/Misc/Con/2025/06-TEN dated 16/06/2025
Last date & time of submission of tender	30/06/2025; 10:30 AM
Date & Time of opening of technical and financial bid	30/06/2025; 12:00 PM

BIDDER DETAILS

1	**Name & Address of the Vendor/ Bidder**	
2	**Phone**	
4	**E-mail**	
5	**Contact Person Name**	
6	**Mobile Number**	
7	**Total no. of pages in the document** (to be filled mandatorily)	
8	**PAN** (Copy to be enclosed mandatorily)	Yes / No
9	**GST Number** (Copy to be enclosed mandatorily)	Yes / No
10	**Tender Fee** paid	Yes / No
11	**Earnest Money Deposit (EMD)** paid	Yes / No
12	**Manufacturer from Kerala with MSME certification** (Other MSMEs are **not** exempted from paying the tender fee and EMD)	Yes / No
13	**Manufacturer's authorization / Authorised reseller certificate** (Copy to be enclosed mandatorily)	Yes / No
14	**Detailed Technical Specifications of the list of items**	Yes / No
15	**Annexure I**	Yes / No
16	**Technical bid** (Annexure II; in separate, sealed envelope)	Yes / No
17	**Financial bid** (Annexure III; in separate sealed envelope)	Yes / No
18	**Annexure IV**	Yes / No
19	**Is a license or permit required for the supply of items? If yes, mention the authority to apply to**	
20	**No. of days within which the items can be delivered to CoEM after issue of purchase order (Maximum: 30 days)**	

(Authorized Signature with Date and Seal)

To,

The Director
Centre of Excellence in Microbiome

Detailed product list - Technical specifications

Sl. No	Details of the item(s)	Specification	Quantity
1	Granulated Sabouraud Dextrose Broth	• Granulated • For cultivation of yeasts, moulds and aciduric microorganisms. • Isolation of organisms from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.	500 g x 1
2	Tryptone Soya Broth	• γ-irradiated sterile powder • Recommended for the evaluation of sterility in manufacturing process • Also used for the tube dilution method of antimicrobial sensitivity testing • Appearance: Cream to yellow, possibly with a green tinge, homogeneous free flowing powder • Colour and Clarity of prepared medium: Light amber coloured clear solution • Reaction of 3.0% w/v aqueous solution at 25°C. pH : 7.3±0.2 • pH range 7.10-7.50 • Sterility Testing: No growth is observed after 14 days for Bacteria at 30-35°C and for Fungi at 20-25°C. • PCR-based Test for Mycoplasma: None detected. • Stability test: Light yellow coloured clear solution without any precipitation or sedimentation at room temperature for 7 days • Growth promoting properties: Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at 30-35°C for 18-24 hours of time when inoculating <=100cfu.	500 g x 1
3	Alkaline Peptone Water	• For enrichment of *Vibrio* species from sea foods and infectious materials and other clinical specimens such as faeces • Compliance with BIS specifications IS 5887 (Part-V)	100 g x 1

		1976 ● Appearance: Cream to yellow coloured homogenous free flowing powder ● Colour and clarity of prepared medium: Light yellow coloured clear solution without any precipitate ● Reaction of 1.5% w/v aqueous solution at 25°C. pH: 8.2 +/- 0.2 ● pH range: 8.00-8.40 ● Cultural characteristics observed after an incubation at 35-37°C for 18-24 h	
4	Granulated MacConkey Agar	● Granulated ● For selective isolation and differentiation of E.coli and other enteric bacteria ● Bacterial isolation from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP. ● For use in microbiological examination of foodstuffs and for direct plating / inoculation of water samples for coliform counts ● Product should be accepted or use by the Standard Methods for the Examination of Milk and Dairy Products ● Appearance: Light yellow to pink colored granular medium. ● Gelling: Firm comparable with 1.35% Agar gel. ● Colour and Clarity of prepared medium: Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates. ● pH range: 6.90-7.30 ● Cultural Response: to be observed after an incubation at 30-35°C for 18-72 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar.	500 g x 2
5	MacConkey Agar w/ 0.15% Bile Salts, CV	● For selective isolation and ● differentiation of coliform organisms and other enteric	500 g x 1

	and NaCl	pathogens from clinical and non-clinical samples. ● For the detection and isolation of Gram negative organisms from clinical, dairy, food, water, pharmaceutical and industrial sources ● Endorsed for selection and recovery of the Enterobacteriaceae and related enteric Gram negative bacilli ● Should comply APHA recommendations and can be used for direct plating of water samples for coliform bacilli, for examination of food samples for food poisoning organisms and for isolation of Salmonella and Shigella species in cheese ● Should suit for counting coli-aerogenes bacteria in animal samples, investigations on the genus Aeromonas ● Specific media components inhibit growth of Gram positive organisms ● Appearance: Light yellow to pink homogeneous free flowing powder ● Gelling: Firm comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates. ● Reaction of 5.15% w/v aqueous solution at 25°C. pH : 7.1±0.2 ● pH range: 6.90-7.30 ● Cultural response to be observed after an incubation at 30-35°C for 18-72 hours.	
6	Granulated Potato Dextrose Agar	● Granulated ● For isolation and enumeration of yeasts and moulds from water, dairy and other food products and clinical samples ● Endorsed by APHA and F.D.A. for plate counts of yeasts and moulds	500 g x 1

		in the examination of foods and dairy products. ● To be used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production ● Should be endorsed by USP, BP, EP and JP for growth of fungi ● Appearance: Cream to yellow granulated free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Yellow coloured clear to slightly opalescent gel forms in Petri plates ● Reaction of 3.9% w/v aqueous solution at 25°C. pH : 5.6±0.2 ● pH range: 5.40-5.80 ● Cultural characteristics observed after an incubation at 22 - 25°C for 4 - 5 days	
7	Modified Bifidobacterium Agar	● Modified ● Selective medium for the isolation of the Bifidobacterium species from faeces or stool specimens. ● Appearance: Cream to yellow coloured homogeneous free flowing powder ● Gelling: Firm, comparable with 1.45% agar gel ● Colour and Clarity of prepared medium: Amber coloured clear to slightly opalescent gel forms in Petri plates ● pH range: 5.30-5.70 ● Cultural Response: Cultural characteristics to be observed with added supplements after an incubation at 35-37°C for 24-48 hours in an anaerobic conditions.	500 g x 1

8	Luria Bertani Agar, Miller	• For the cultivation and maintenance of recombinant strains of Escherichia coli for genetic and molecular biology studies. • May be used for routine cultivation and estimation of not particularly fastidious microorganisms • Ideal for maintaining and propagating bacterial cultures. • Used for growing transformed cultures, preparing cells, and gene studies. • Appearance of Powder: Cream to yellow homogeneous free flowing powder • Gelling: Firm, comparable with 1.5% Agar gel • Colour and Clarity of the prepared medium: Yellow to amber coloured, clear to slightly opalescent gel forms in Petri plates • pH range: 7.30-7.70 • Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 24 hours.	500 g x 1
9	Luria Bertani Broth, Miller	• For the cultivation and maintenance of recombinant strains of Escherichia coli for genetic and molecular biology studies • May be used for routine cultivation and estimation of not particularly fastidious microorganisms • Ideal for maintaining and propagating bacterial cultures. • Used for growing transformed cultures, preparing cells, and gene studies. • Appearance of Powder: Cream to yellow homogeneous free flowing powder • Colour and Clarity of the prepared medium: Yellow to amber coloured clear solution in tubes	500 g x 2

		• pH range: 7.30-7.50 • Cultural Response: Cultural characteristics to be observed after an incubation at 35- 37°C for 18 - 24 hours. • With out Agar	
10	Nutrient Agar	• General purpose medium for cultivation of less fastidious microorganisms • Can be enriched with blood or other biological fluids. • Also used for purity checking prior to biochemical or serological testing • To be ideal for demonstration and teaching purposes where a more prolonged survival of cultures at ambient temperature is often required without risk of overgrowth that can occur with more nutritious substrate • Able to use widely in microbiological examination of variety of materials and is also recommended by standard methods. • Appearance: Cream to yellow homogeneous free flowing powder • Gelling: Firm, comparable with 1.5% Agar gel • Colour and Clarity of prepared medium: Light yellow coloured clear to slightly opalescent gel forms in Petri plates • pH range: 7.30-7.50 • Cultural Response: Cultural characteristics to be observed after an incubation at 35- 37°C for 18 - 24 hours.	500 g × 3
11	Nutrient Broth	• A sterility testing medium for aerobes in compliance with Indian Pharmacopoeia, Third Edition • Used for the examination of water and dairy products	500 g x 2

		according to Standard Methods for the Examination of Water and Wastewater and Dairy Products as per IP ● Also used for cultivating several less fastidious microorganisms. ● Appearance: Cream to yellow homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light yellow coloured clear solution. ● pH range: 7.20-7.40 ● With out agar ● Growth promotion is carried out as per Indian Pharmacopoeia ● Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.	
12	Agar Agar, Type I	● Endorsed for preparation of culture media for microbiological analysis ● For use in bacteriological routine laboratory work, plant tissue culture media, pharmaceutical preparations, where clarity, compatibility are not of prime significance ● Readily dissolves in boiling water ● Appearance: Cream coloured, homogeneous free flowing powder. ● Solubility: Freely soluble in hot water at temperatures above 85°C. Insoluble in cold water. ● Clarity: A firm solid, clear to slightly opalescent gel is formed at a concentration of 1.5% at	500 g x 1

		38-41°C. ● Agar dye diffusion: 18-20mm ● Identification test: In accordance with method specified in USP 2022 ● Cultural response required after an incubation at 35-37°C for 18-24 hours by preparing Nutrient Agar using Agar Agar, Type I as an ingredient	
13	Columbia Blood Agar Base	● Appropriate base for preparation of blood agar, chocolate agar and for various selective and identification media. ● Isolation of organisms from clinical and non-clinical samples. ● Promotes rapid and luxuriant growth of fastidious and non-fastidious organisms. ● The medium supports typical colonial morphology; better pigment production and more sharply defined haemolytic reactions. ● Able to use as base for the media containing blood and for selective media formulations in which different combinations of antimicrobial agents are used as additives. ● Appearance: Cream to yellow homogeneous free flowing powder. ● Gelling: Firm, comparable with 1.5% Agar gel. ● Colour and Clarity of prepared medium Basal medium: Light amber coloured clear to slightly opalescent gel. Cherry red coloured opaque gel should form after addition of 5% w/v sterile defibrinated blood in Petri plates. ● pH range: 7.10-7.50 ● Cultural characteristics should be observed with added 5% w/v sterile defibrinated blood, after an	500 g x 1

		incubation at 35-37°C for 24-48 hours.	
14	Levine - Eosin Methylene Blue Agar Medium	● For isolation, enumeration and differentiation of members of Enterobacte- riaceae in compliance with IP/USP ● Endorsed for the detection, enumeration and differentiation of members of the coliform group by American Public Health Association, United States Pharmacopoeia and Indian Pharmacopoeia ● Appearance: Light pink to purple homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Reddish purple with greenish cast coloured opalescent gel with finely dispersed precipitate forms in Petri plates. ● pH 6.90-7.30 ● Growth Promotion as per USP/IP. ● Cultural response to be observed after an incubation at 30-35°C for 24-48 hours. Recovery rate is considered as 100% for bacteria growth on Soyabean Casein Digest Agar and fungal growth on Sabouraud Dextrose Agar	500 g x 1
15	MacConkey Broth	● For the presumptive identification of coliforms from pharmaceutical products ● For the selective enrichment of E.coli from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP. ● Appearance: Cream to yellow with green tinge homogeneous free flowing powder ● Colour and Clarity of prepared	500 g x 2

		medium: Purple coloured clear to slightly opalescent solution in tubes ● pH range 7.10-7.50 ● Cultural response to be observed after an incubation at 30-35°C for 18-48 hours. ● Agar not added	
16	L-Cysteine hydrochloride monohydrate	● Appearance: White to almost white crystals or powder or colorless crystals ● Solubility: 100 mg soluble in 1 mL of water ● FTIR should agree with the standard pattern ● Specific rotation: +5.00 to +7.00° (c = 8% in 1 M HCl at 20°C, dried substance) ● Loss on drying: 8.50 – 12.00% (in vacuum over Phosphorus pentoxide, 20 hours) ● Assay (Iodometry): 98.00 - 102.00%	100 g x 1
17	Starch M-protein for Actinomycete	● For isolation and propagation of *Actinomycete*s from soil & water samples. ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Yellow to light amber coloured opalescent gel forms in Petri plates ● Cultural Response: Cultural characteristics observed after an incubation at 26-30°C for 6-7 days	500 g x 1
18	Granulated MRS Agar	● Granulated ● For isolation and cultivation of Lactobacilli from food, dairy and clinical samples ● Supports abundant growth	500 g x 1

		of all Lactobacilli from oral cavity, dairy products, foods, faeces and other sources. ● Appearance: Cream to light yellow coloured granular medium ● Gelling: Firm, comparable with 1.2% Agar gel. ● Colour and Clarity of prepared medium: Medium to dark amber coloured, clear to slightly opalescent gel forms in Petri plates ● pH range: 6.30-6.70 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18-24 hours or longer (with 5% CO2)	
19	Granulated MRS Broth	● Granulated ● For cultivation of all Lactobacilli from clinical and non-clinical samples. ● Clinical samples - faeces, swab from oral cavity; Food and dairy samples ● Appearance: Cream to yellow colored granular medium ● Colour and Clarity of prepared medium: Light amber coloured, clear to slightly opalescent solution in tubes ● pH range: 6.30-6.70 ● Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours or longer (with 5% CO2) ● Agar not added	500 g x 1

20	Granulated TCBS Agar	• Granulated • For selective isolation and cultivation of *Vibrio cholerae* and other enteropathogenic *Vibrios* causing food poisoning from clinical and food specimens • Also endorsed by APHA for the selective isolation of *V. cholerae* and *V. parahaemolyticus* • Enrichment in Alkaline Peptone Water, followed by isolation on TCBS Agar is routinely used for isolation of *V. cholerae* • Appearance: Light yellow to light tan colored granular medium. • Gelling: Firm, comparable with 1.5% Agar gel • Colour and Clarity of prepared medium: Bluish green coloured clear to slightly opalescent gel forms in Petri plates. • pH range: 8.40-8.80 • Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18-24 hours	500 g x 1
21	Anaerogas Pack – 3.5 L capacity	• Foil bag containing a paper sachet filled with black coloured oxygen absorbing and carbon dioxide generating agent. • Disposable • For use in anaerobic systems and jars • No catalyst or pressure gauge is required • Capacity: 3.5L	5 x 5/pack

22	Mueller Hinton Agar	● For determination of susceptibility of microorganisms to antimicrobial agents isolated from clinical samples. ● Endorsed for the diffusion of antimicrobial agents impregnated on paper disc through an agar gel as detailed in CLSI Approved Standard ● Facilitates the growth of most non-fastidious bacterial pathogens ● Good batch-to-batch reproducibility for susceptible testing as accepted by WHO Committee on Standardization ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.7% agar gel. ● Colour and Clarity of prepared medium: Light amber coloured clear to slightly opalescent gel forms in Petri plates ● pH range: 7.20-7.40 ● Cultural Response: Antibiotic susceptibility tests to be performed as per ISO/TS 16782. Performance of the medium to be checked in line with the CLSI/ EUCAST guidelines.	500 G x 3
23	Mueller Hinton	● For determination of Invitro susceptibility of	500 G x 2

	Broth	bacterial strains against antibacterial agents by broth dilution methods ● A stable serum-free bacteriological media that supports the growth of two otherwise very fastidious bacteria ● Media for routine bacterial antibiotic susceptibility determination, with updated cutoff standards for designating resistant (R) and susceptible (S) strains (as per CLSI) ● Appearance: Cream to yellow coloured, homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light amber coloured clear solution in tubes ● pH : 7.3±0.1 ● pH range: 7.20-7.40 ● Cultural Response: Cultural characteristics should be observed after an incubation at 35-37°C for 18-24 hours.	
24	M9 Minimal Medium Salts	● For growing recombinant *Escherichia coli* strains for Molecular Biology applications ● Can be supplemented with specific amino acids or other required nutrients for the selection of specific auxotrophs ● The inclusion of certain additives (e.g. thiamine or casamino acids) enhances the bacterial growth.	500 G x 1

		• Appearance of Powder: White to cream coloured, homogeneous, free flowing powder. • Colour and Clarity: Colourless, clear solution without any precipitate. • Cultural Response : Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 48 hours. • Required concentration: 5X	
25	Anaerobic Blood Agar Base	• For isolation and cultivation of Group A and Group B Streptococci from throat cultures and other clinical samples. • Appearance: Cream to yellow homogeneous free flowing powder • Gelling: Firm, comparable with 1.4% Agar gel • Colour and Clarity of prepared medium: Basal medium: Yellow coloured clear to slightly opalescent gel. After addition of 5%v/v sterile defibrinated blood, cherry red coloured opaque gel should form in Petri plates • pH range: 7.10-7.50 • Cultural Response: Cultural characteristics should be observed in presence of 5-10% CO2 with added 5%v/v sterile defibrinated sheep blood and antibiotic supplement, after an incubation for 24-48 hours at 35-37°C.	500 G x 1
26	RNase A Solution	• Concentration: 20 mg/ml • Used for isolating RNA- free DN	5ML x 1

		A from blood cells, animal cells, tis sues, bacterial cells and plant cells. ● Appearance: Colorless solution ● Clarity: Clear and free of particles ● No presence of DNase & RNase ● Suitability Test: This reagent need to be tested for suitability for isolation of RNA- fre e DNA from blood cells, animal cel ls, tissues, bacterial cells and plant c ells.	
27	Diluent for DNA Extraction	● For Molecular Biology ● Appearance: Colourless liquid ● Solubility: 1 mL miscible in 1 mL of water ● DNases & RNases: None detected ● FTIR : should agree with the standard pattern ● Refractive index (n 20/D) : Approx. 1.3550 - 1.3650 ● Density (at 25°C) :Approx. 0.784 - 0.794 g/mL ● Acetone, IPA : ~5.00% ● Methanol : <= 0.10% ● Isobutanol, benzene and others : <= 0.90% ● Assay (GC) : min. 94.00% ● Denatured Ethanol	500 ML x 2
28	Erythromycin-15 mcg	● Level: 15 mcg ● Erythromycin E 15 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures in accordance with Kirby-Bauer Method ● Appearance: Filter paper discs of 6mm diameter with printed code on centre of each side of the disc for identification. ● Cultural response: Average diameter of zone of inhibition should be observed on appropriate agar after 18 hours incubation at 35-37°C for standard cultures.	1 vial (VL) x 1
29	Ampicillin-AMP 25 mcg	● Level: 25 mcg ● Ampicillin AMP 25mcg discs are used for antimicrobial	1 vial (VL) x 1

		susceptibility testing of bacterial cultures in accordance with Bauer-Kirby Method ● Appearance: Filter paper discs of 6mm diameter with printed code on centre of each side of the disc for identification. ● Cultural response: Average diameter of zone of inhibition should be observed on appropriate agar after 18 hours incubation at 35-37°C for standard cultures.	
30	Nigrosin Stain	● Concentration: 10% w/v ● Used as staining solution for negative staining. ● Also permits visualization of the usually transparent and unstainable capsule of many organisms ● Used for negative Staining of bacteria and capsule-containing fungus ● Suitable for specimen: Clinical samples; food & dairy samples; Water samples ● Appearance: Blackish violet coloured solution. ● Clarity: Clear without any particles. ● Microscopic Examination : Negative staining is carried out. Staining characteristics of organism is observed under microscope by using oil immersion lens ● Expected Results: Clear halos surrounding the bacterial cells	500 ML x 1
31	Autoclavable Bag – 12 inch	● Clear, transparent autoclavable disposable bag. ● Size: 12”(height) x 10”(breadth) ● Maximum weight holding capacity: 1.0 kg ● For waste disposal and recommended for disposal of pathological/ clinical or contaminated material. ● Also for sterilization of glass	5 x 500/pack

		ware or plastic wares. ● Used in hospitals, clinical laboratories, microbiological laboratories, Biotechnology laboratories, molecular biology laboratories etc. for disposal of material ● Polypropylene bag ● Superior strength, free from chlorine. ● Can be steam sterilized at 121 ºC- 15 minutes.	
32	Autoclavable Bag – 14 inch	● Clear, transparent autoclavable disposable bag. ● Size: 20”(height) x 14”(breadth) ● Maximum weight holding capacity: 2.5 kg ● For waste disposal and recommended for disposal of pathological/ clinical or contaminated material. ● Also for sterilization of glass ware or plastic wares. ● Used in hospitals, clinical laboratories, microbiological laboratories, Biotechnology laboratories, molecular biology laboratories etc. for disposal of material. ● Polypropylene bag ● Superior strength, free from chlorine. ● Can be steam sterilized at 121 ºC- 15 minutes.	2 x 500 / pack
33	ASN Salt	● For Molecular Biology ● Appearance : White to light yellow hygroscopic crystals or powder or solid ● Solubility : 100 mg soluble in 1 mL of water ● DNases & RNases to in undetectable levels	5 g x 1

		• Values required for specific rotation : +258.0° to +287.0°(c = 0.25% in 0.4% potassium hydrogen phthalate, anhydrous substance at 20°) • Water (K.F.) : <= 2.0% • Assay (HPLC) : 91.00 - 102.00%	
34	Vancomycin-VA 30 mcg	• Symbol: VA • Level: 30 mcg • Vancomycin VA 30 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures as per Bauer-Kirby Method • Appearance: Filter paper discs of 6mm diameter with printed "VA 30" on centre of each side of the disc. • Cultural response: Average diameter of zone of inhibition observed on Mueller Hinton Agar (M173) after 18 hours incubation at 35-37°C for standard cultures.	1 vial (VL)x 1
35	Ethidium bromide solution	• For Molecular Biology • Appearance: Dark red liquid • Solubility: 33.3 mg soluble in 1 mL of water • DNases & RNases: None detected • Suitability test: Suitable for all DNA isolation procedures • Assay (HPLC/AT): min. 95.00% • 10mg/ml concentration	10 ML x 3
36	Sulfuric acid pure	• Pure, AR grade or above • Appearance: Clear colourless liquid • Density (d 25/4) : 1.835 - 1.845 g/mL • Ammonium (NH4) : < = 0.0002% • Arsenic (As) : < = 0.000001% • Cadmium (Cd) : <= 0.00001% • Chloride (Cl): <= 0.00005% • Copper (Cu): <= 0.00001% • Iron (Fe): <= 0.00002% • KMnO4 reducing substances (as SO2): <= 0.0005% • Lead (Pb) : <= 0.00001%	500 ML x 1

		• Nitrate (NO3): <= 0.00002% • Residue on ignition: <= 0.001% • Zinc (Zn): <=0.00001% • Assay (NaOH Titration) :min. 97.00%	
37	Hydrochloric acid abt.35% pure	• Abt.35% pure, AR grade or above • Appearance : Colourless to yellow liquid • Density (d 20/4) : ~1.19 g/mL • Sulfate (SO4) : <=0.0001% • Sulfite(SO3) : <=0.0002% • Free chlorine (Cl2) : <=0.00005% • Lead (Pb) : <=0.000005% • Copper (Cu) : <=0.000005% • Iron (Fe) : <=0.00005% • Zinc (Zn) : <=0.00001% • Cadmium (Cd) : <=0.000001% • Ammonium (NH4) : <=0.00025% • Arsenic (As) : <=0.000005% • Assay (NaOH Titration) : min. 35.00%	500 ML x 1
38	Gram Stains - Kit	• Grams Stain Kit is used for differentiation of bacteria on the basis of their gram nature. • Kit must include Gram's Crystal Violet, Gram's Decolourizer, Gram's Iodine and Safranin (0.5% w/v) • Any isolated colony on primary or subculture plates can be isolated from clinical specimens like Blood, urine, CSF, pus, wounds, lesions, body tissues, sputum etc. or from environment like Air, water, soil, sludge, waste water, food, dairy samples etc.	1 KIT x 2

		• Microscopic examination : Gram staining was carried out and observed under oil immersion lens. • Expected Results : Gram positive organisms: Violet coloured Gram negative organisms: Pinkish red coloured	
39	Oxidase Discs	• For detection of oxidase production by microorganisms like Neisseria, Alcaligenes, Aeromonas, Vibrio's, Campylobacter and Pseudomonas, which give positive reactions and for excluding Enterobacteriaceae, which give negative reactions. • Oxidase discs should be sterile filter paper discs impregnated with N, N-dimethyl-p-phenylenediamine oxalate, ascorbic acid and a-naphthol. • Appearance: Filter paper discs of 10 mm diameter • Cultural response: Typical oxidase reaction given by 18-48 hour culture observed within 5-10 seconds at 25-30°C.	3 x 50 discs/ vial
40	Yeast Extract Powder	• Dried extract from autolysing yeast cells (Saccharomyces) specially cultivated for this purpose. • Rich source of vitamin B complex and endorsed for use in microbial culture media, fermentation and other biological products. • Appearance : Light yellow to brownish yellow homogenous free flowing powder characteristic odour but not putrescent.	500 G x 1

		• Solubility : Freely soluble in distilled/ purified water, insoluble in alcohol. • Clarity : 1% w/v aqueous solution is clear to opalescent, may develop precipitates after autoclaving at 15 lbs pressure (121ºC) for 15 minutes. • Cultural response observed after incubation at 35-37°C for 18-24 hours by preparing appropriate agar plates using Yeast extract powder as an ingredient. • Total Nitrogen : ≥9.00 % • Alpha amino nitrogen : ≥4.50 % • Sodium chloride : ≤5.00 % • Loss on drying : ≤7.00 % • Residue on ignition : ≤15.00 %	
41	Meat extract B Broth	• For routine cultivation of non-fastidious bacteria from clinical (faeces, stool) and non- clinical samples (food, dairy and water) • Used as a general-purpose nutrient medium and is also endorsed for preparation of pure culture of Candida species for carrying out fermentation studies • Appearance :Cream to yellow homogeneous free flowing powder • Colour and Clarity of prepared medium: Yellow coloured, clear solution without any haziness in tubes • Reaction of 1.8% w/v aqueous solution at 25°C. pH : 7.2±0.2 • pH range: 7.00-7.40 • Cultural Response : Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.	500 G x 1

42	Sodium chloride	• AR grade or above • Appearance : Colourless to white crystals or powder or solid • Solubility : 100 mg soluble in 1 mL of water • pH (5% in water at 25°C) : 5.00 - 9.00 • Barium (Ba) : Passes test • Iron (Fe) : <= 0.0002% • Sulphate (SO_4) : <= 0.004% • Phosphate (PO_4) : <= 0.0005% • Magnesium (Mg) : <= 0.001% • Calcium (Ca) : <= 0.002% • Potassium (K) : <= 0.005% • Insoluble matter : <= 0.005% • Bromide (Br) : <= 0.01% • Iodide (I) : <= 0.002% • Assay (AT) : 98.50 - 102.00%	500 G x 1
43	Skim Milk powder	• Appearance : Pale yellow to cream amorphous homogeneous, free flowing powder • Solubility : 33.3 mg soluble in 1 mL of water with slight opacity • pH of 2% w/v aqueous solution at 25°C : 6.00 - 7.00 • Water (K.F.) : <= 10.00% • Sulphated ash : <= 10.00% • Fat content : <= 1.50% • Total Nitrogen (anhydrous basis) : >= 4.70% Total Protein (anhydrous basis) : >= 35.00%	500G x 1
44	Sodium hydroxide pellets	• For molecular biology • Appearance : White hygroscopic pellets • Solubility : 1000 mg soluble in 1 mL of water • DNases & RNases : None detected • Calcium (Ca) : <= 0.005% • Sodium carbonate (Na_2CO_3) : <= 1.0% • Chloride (Cl) : <= 0.005% • Heavy metals (as Pb) : <= 0.002% • Nitrogen compounds (as	100 G x 1

		N) : <= 0.001% ● Phosphate (PO_4) : <= 0.001% ● Iron (Fe) : <= 0.001% ● Mercury (Hg) : <= 0.00001% ● Magnesium (Mg) : <= 0.002% ● Nickel (Ni) : <= 0.001% ● Potassium (K) : <= 0.02% ● Sulfate (SO_4): <= 0.003% ● Assay (HCl Titration) : min. 97.00%	
45	Concavity Slides (Two Cavity)	● Two polished spherical concavities ● 16 mm in diameter x 0.5 mm deep ● Made of non-corrosive glass ● Bevelled and polished edges and corners ● Dimension : 75 x 25 mm ● Thickness : 1.4 mm	1 x 10 slides/pack
46	Glycerol	● For molecular biology ● Appearance : Clear colourless syrupy hygroscopic viscous liquid ● Solubility : 1 mL miscible with 1 mL of water ● pH (5M in water at 25°c) : 5.50 - 8.00 ● DNases & RNases : None detected ● Refractive index (n 20/D) : 1.470 - 1.475 Density (at 25°C) : 1.250 - 1.260 g/mL ● Heavy metals (as Pb) : <= 0.0005% ● Iron (Fe) : <= 0.0005% ● Magnesium (Mg) : <= 0.0005% ● Assay (NaOH Titration/GC) : >= 99.50%	500 ML x 1
47	L-Spreader	● Alternative to bending glass rods or pipettes ● Completely autoclavable ● Reusable ● Recommended sterilization by	1 x 20 Nos. / pack

		autoclaving at 15 lbs pressure at 121°C for 15 minutes.	
48	Sterile Sample Container with spoon	● Material: Polypropylene ● Overflowing capacity: 50 ml ● Spoon securely attached on the lid of the container	2 x 100/pack
49	Sterile Sample Container	● Material: polypropylene ● Overflowing capacity : 50 ml ● Individually packed for sterility ● No spoon attached	4 x 100/pack
50	Anaero Indicator Tablet R.T.	● Accessory for anaerobic system ● For detection of anaerobic environment. ● Under anaerobic conditions the tablet colour will change to pink ● One tablet adequate for a jar of 3.5 litre/ 1.5 litre capacity.	4 x 2 Nos./pack
51	L-Arginine monohydrochlori de	● Appearance : White to almost white crystals or powder ● Solubility : 100 mg soluble in 1 mL of water ● pH (10% in water at 25°C) : 4.70 - 6.20 ● FTIR : Agrees with the standard pattern ● Specific rotation : +21.40 to +23.60° (c = 8% in hydrochloric acid, at 20°C) ● Loss on drying (at 105°C, 3 hr) : <= 0.20% ● Assay (AT/NT, on dry basis) : 98.50 - 101.50%	25 G x 1
52	Phenol:Chloroform:Isoamyl alcohol mixture (25:24:1 v/v)	● Ratio: 25:24:1 volume/volume ● For molecular biology ● Appearance : Colourless to yellow clear solution or 2 layer liquid. ● Solubility : The 2 layer liquid is extracted in water (1:1). ● pH (H2O phase, after	100 ML x 1

		extraction with water, 1:1 at 25°C) : 7.70 - 8.30 ● DNases & RNases : None detected	
53	Sterile Cotton Swab	● Cotton bud w/Polypropylene Stick in polypropylene tube ● Size: 150 mm ● Individually packed in 12 mm diameter tube ● DNA free	1 x 100 Nos./pack
54	D(+)-Trehalose dihydrate	● Dihydrate ● Serves as a carbohydrate reserve in microorganisms and protects them from adverse conditions. ● Appearance : White to off-white hygroscopic crystals or powder ● Solubility : 1000 mg soluble in 1 mL of water ● FTIR (KBr disc) : Agrees with the standard pattern ● Specific rotation [alpha 20/D] : +176.0° to +182.0° (c = 2% in water at 20°C) ● Water (K.F.) : <= 11.0% ● Assay (GC/HPLC) : 99.00 - 102.00%	25 G x 1
55	Glycine	● For Molecular Biology ● Nuclease and Protease free ● Appearance : White to off-white solid or crystals or granules or powder ● Solubility : 100 mg soluble in 1 mL of water ● DNases, RNases & Protease : None detected ● Chloride (Cl) : <= 0.005% ● Heavy metals (as Pb) : <= 0.002% ● Ammonium (NH_4) : <= 0.005% ● Sulphate (SO_4) : <= 0.005% ● Residue after ignition : <= 0.1% ● Substances darkened by H_2SO_4 : Passes test ● Hydrolysable substances : Passes test	100 G x 1

		• Assay (NT) : 99.00 - 102.00%	
56	L-Arginine	• Plays a key role in many physiological processes such as tissue repair and reproduction. • Appearance : White to almost white crystals or powder • Solubility : 100 mg soluble in 1 mL of water • pH (5% in water at 25°C): 10.50 - 12.00 • FTIR : Agrees with the standard pattern • Specific rotation : +25.80° to +28.50° (c = 8% in 6N hydrochloric acid, at 20°C) • Melting range : 217 - 227°C • Chloride (Cl) : <= 0.05% • Ammonium (NH_4) : <= 0.02% • Heavy metals (as Pb) : <= 0.0015% • Iron (Fe) : <= 0.003% • Sulfate (SO_4) : <= 0.03% • Loss on drying (at 105°C, 3 hr) : <= 0.50% • Residue on ignition : <= 0.30% • Assay (NT/HCl Titration, on dry basis): 99.00 - 101.50%	25 G x 1
57	Hydrogen peroxide	• Plant Culture Tested • Assay : min 30%	100 ML x 1
58	Potassium permanganate	• LR grade or above • Used as analytical lab reagent. • An oxidizing agent. • Appearance : Dark purple or green to black crystals or powder • Solubility : 33.3 mg soluble in 1 mL of water • Assay (Iodimetry) : 98.00 - 102.00%	500 G x 1
59	Formaldehyde soln. 37 - 41%	• AR grade or above • 37 - 41% solution • Appearance : Clear colourless liquid with pungent odour. • Solubility : 1 mL miscible in 1 mL	500 ML x 1

		of ethanol ● Density (at 25°C) : 1.080 - 1.090 g/mL ● Acidity (HCOOH) : <= 0.045% ● Chloride (Cl) : <= 0.0002% ● Copper (Cu) : <= 0.002% ● Iron (Fe) : <= 0.0001% ● Lead (Pb) : <= 0.0001% ● Non-volatile Matter : <= 0.005% ● Sulfate (SO_4) : <= 0.002% ● Sulfated ash : <= 0.002% ● Methanol : 10.00 - 14.00% ● Assay (HCL/H2SO4 Titration) : 37.00 - 41.00 %	
60	Buffer Capsule, pH : 9.2	● Colour of solution: Blue ● Appearance : Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water ● pH range : 9.15 - 9.25	1 x 10Nos
61	Buffer Capsule, pH : 4.0	● Colour of solution: Orange ● Appearance: Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water ● pH range: 3.95 – 4.05	1 x 10 Nos
62	Buffer Capsule, pH : 7.0	● Colour of solution : Green ● Appearance : Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water ● pH range : 6.95 - 7.05	1x 10 Nos
63	Triple Sugar Iron Agar	● For identification of members of E*nterobacteriaceae* especially *Salmonella* species ● Complying to the	500 G x 1

		specifications laid down in ISO 1993, Draft ISO DIS 6579-1:2017. ● Must adhere to APHA endorsements for the examination of meat and food products, milk and dairy products and for microbial limit test for confirming the presence of Salmonella and in the identification of gram-negative bacilli. ● Appearance: Light yellow to pink homogeneous free flowing powder ● Gelling: Firm, comparable with 1.2% Agar gel. ● Colour and Clarity of prepared medium: Pinkish red coloured clear to slightly opalescent gel forms in tubes as slants. ● Reaction of 6.45% w/v aqueous solution at 25°C (pH : 7.4±0.2) ● pH range: 7.20-7.60 ● Cultural characteristics must be observed after an incubation at 35-37°C for 18-24 hours	
64	Voges Proskauer Medium	● For performance of the Voges- Proskauer test in differentiation of *Bacillus* cereus complying with FDA BAM 1998. ● Must work on food samples ● Appearance: Cream to yellow homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light	500 G x 1

		yellow coloured clear solution without any precipitate ● Reaction of 1.7% w/v aqueous solution at 25°C. (pH : 6.5±0.2) ● pH range: 6.30-6.70 ● Cultural characteristics must be observed after an incubation at 35°C for 46-50 hours.	
65	Tris base	● [Tris(hydroxymethyl) aminomethane] ● Cell Culture Tested ● Commonly used as a component of buffer solutions in biology, biochemistry and molecular biology applications. ● Tris salts are also used for crystallization of proteins at various pH values. ● Appearance: White to crystalline powder. ● Solubility : Clear colorless to faint yellow solution at 10gm in 100ml of water . ● pKa : 8.1 at 25°C ● Heavy metals: NMT 0.0005% ● Loss on drying: NMT 0.5% ● Assay : NLT 99.00%	500 G x 1
66	EDTA disodium salt dihydrate	● Dihydrate ● Complies with USP-NF, EP, BP and IP testing specifications ● Appearance :White crystalline powder ● Solubility :Soluble in water and insoluble in ethanol (96%) ● pH: 4.00 - 6.00 (5% in water at 25°C) ● Appearance of solution: 5% Solution in water is clear and colourless ● Assay (Pb(NO3)2 Titration) (EP, BP, IP): 98.50 - 101.00%	500G x 1

67	50X TAE	• Used for gel electrophoresis after dilution to working concentration • Buffer with faster migration capacity • Ideal for DNA fragments greater than 4Kb • Superior to TBE for preparative gel electrophoresis preceding cloning, and other work requiring enzymatic applications. • Appearance: Colorless solution • Clarity: Clear and free of particles • pH range: 8.2-8.4 • DNase & RNase: None detected • Sterility: Bacterial or Fungal growth were absent after 14 days of incubation as per USP Specifications • Suitability test: This solution has been tested and is suitable for use in Agarose Gel Electrophoresis	500 ML x 1
68	Glacial Acetic acid	• AR grade or above • Appearance: Clear colourless liquid • Solubility: 1 mL miscible with 1 mL of water • Density (at 20°C): 1.00 - 1.10 g/mL • Cadmium (Cd): <= 0.00001% • Chloride (Cl): <= 0.0001% • Copper (Cu): <= 0.00001% • Iron (Fe): <= 0.00002% • Lead (Pb): <= 0.00001% • Sulphate (SO_4): <= 0.0001%	500 ML x 1

		• Water (K.F.): <= 0.2% • Zinc (Zn): <= 0.00001% • Non-volatile substances: <= 0.001% • Substance reducing dichromate (O) : <= 0.003% (Difference between titres < 2.0mL) • Assay (GC/NaOH Titration): min. 99.60%	
69	Sucrose	• For use in Molecular Biology experiments • Appearance : Colourless to off-white hygroscopic crystals or powder or solid • Solubility : 1000 mg soluble in 1 mL of water • DNases & RNases : None detected • Specific rotation: +65.9° to +67.0° (c = 10% in water at 25°C) • Heavy metals (as Pb) : <= 0.0005% • Insoluble matter : <= 0.005% • Iron (Fe) : <= 0.0005% • Chloride (Cl) : <= 0.005% • Titrable acid : <= 0.0008 meq/g • Invert sugar : <= 0.05% • Sulfate and sulfite (as SO4) : <= 0.005% • Residue after ignition : <= 0.01% • Loss on drying (at 105°C, 2 hr) : <= 0.03% • Assay (HPLC) : min. 99.50%	500 G x 1
70	Sodium bicarbonate	• Synonym: Sodium hydrogen carbonate • Cell culture tested • Appearance : White crystals or powder or solid • Identification tests for sodium and bicarbonate must be performed separately • pH (5% in water at 20°C) : 7.50 - 8.50 • Chloride (Cl) : <= 0.015% • Sulfate (SO_4) : <= 0.015% • Assay (HCl Titration) : 99.50 - 102.00%	500 G x 1

71	Chloroform	• Ultra pure grade or above • Colorless, strong-smelling, dense liquid • For use as laboratory solvent • Appearance : Colourless liquid • Solubility : 1 mL miscible with 1 mL of alcohol • FTIR : Must agree with the standard pattern • Refractive index (n 20/D) : 1.4420 - 1.4450 • Density (at 25°C) : 1.474 - 1.480g/mL • Magnesium (Mg) : <= 0.00002% • Calcium (Ca) : <= 0.00005% • Iron (Fe) : <= 0.00005% • Manganese (Mn) : <= 0.000005% • Cadmium (Cd) : <= 0.000005% • Assay (GC) : min. 99.80%	100 ML x 1
72	L-Ascorbic Acid (Vitamin C)	• Cell Culture Tested • Synonym: Vitamin C • Required for normal growth and maintenance of cultured cells. • Used as a component of many classical and serum-free cell culture media. • Appearance : White to yellow powder. • Solubility Clear colorless to light yellow solution at 5gm in 100ml of water . • pH of 5% solution in water 2.10 - 2.70 • Specific rotation [alpha]20/D +20.5° to +21.5° • Iron (Fe) NMT 0.0002% • Residue on ignition NMT 0.1% • Assay NLT 99.00%	25 G x 1
73	Sodium phosphate dibasic anhydrous	• For Molecular Biology experiments • Appearance : White crystals or powder • Solubility : 33.3 mg soluble in 1 mL of water • pH (5% in water at 25°C) : 8.7 - 9.3	250 G x 1

		• DNases & RNases : None detected • Loss on drying (at 130°C, 2 hr) : <= 5.0% • Chloride (Cl) : <= 0.002% • Iron (Fe) : <= 0.002% • Sulfate (SO_4) : <= 0.005% • Assay (HCl Titration, on dry basis) : 99.00 - 100.50%	
74	Potassium phosphate monobasic anhydrous	• For Molecular Biology experiments • Appearance: Colourless to off-white crystals or powder or solid • Solubility: 100 mg soluble in 1 mL of water • pH (5% in water at 25°C): 4.10 - 4.50 • DNases & RNases: None detected • Assay (NaOH Titration): 99.00 - 100.50%	100 G x 1
75	Potassium chloride	• Cell Culture Tested • Assay : ≥98.5%	250 g x 1
76	Potassium ferricyanide	• AR grade and above • Appearance : Pale yellow to ruby-red crystals or powder or chunks • Solubility : 100 mg soluble in 1 mL of water • Chloride (Cl) : <= 0.02% • Sulfate (SO_4) : <= 0.005% • Water insoluble matter : <= 0.005% • Assay (Iodometry) : 99.00 - 102.00%	500 G x 1
77	Ferric chloride anhydrous	• For Molecular Biology experiments • Appearance: Dark red to brown or dark green or black crystals or powder • Solubility: 33.3 mg soluble in 1 mL of water • DNases & RNases: None detected • Assay (Iodometry) : 98.00 - 102.00%	50 MG x 1
78	Ferrous sulphate heptahydrate	• Plant Culture Tested • Appearance : Light blue or blue-green or green solid or crystals or powder	500 G x 1

		• Solubility : 100 mg soluble in 1 mL of water + 0.1 mL of H_2SO_4 • pH (5% in water at 20°C) : 3.00 - 4.00 • Ferric iron (Fe^{+3}) : <= 0.1% • Assay ($KMnO_4$ Titration) : 99.00 - 104.50%	
79	1,10-Phenanthroline monohydrate	• LR grade or above • Appearance : White to off-white crystals or powder or needle-like crystals (May become cream coloured during storage) • Solubility : 33.3 mg soluble in 1 mL of alcohol • Melting range : 97 - 104°C • Suitability as redox indicator : Passes test • Suitability for determining iron : Passes test • Water (K.F.) : 8.00 - 10.00% • Assay (NT, on anhydrous basis) : 99.50 - 102.00%	5 G x 1
80	Pyrogallol	• Works as a plant metabolite • Synonym: 1,2,3-Trihydroxybenzene • Appearance : White to off-white crystals or powder or solid, becomes grayish on exposure to air and light • Solubility : 100 mg soluble in 1 mL of water • FTIR : Agrees with the standard pattern • Melting range : 131 - 135°C • Assay (GC/HPLC) : min. 98.00%	100 G x 1
81	1-Chloro-2,4-dinitrobenzene	• 1. For Molecular Biology experiments • Appearance : Yellow to brown crystals or powder or chunks • Solubility : 33.3 mg soluble in 1 mL of alcohol • DNases & RNases: None detected • FTIR : Agrees with the standard pattern • Melting range : 48 - 54°C	500 G x 1

		• Assay (GC) : min. 99.00%	
82	D.P.X. mountant (Liquid)	• Used as a synthetic resin mounting media for histology purposes • Appearance : Colourless viscous liquid • Solubility : 1 mL miscible in 1 mL of xylene • Refractive index (n 20/D) : 1.515 - 1.525 • Density (at 25°C) : 0.915 - 0.925 g/mL • Acidity : <= 0.05 ml	500 G x 1
83	ONPG discs	• For the detection of b-galactosidase activity in microorganisms • Ideal for the rapid identification of cryptic lactose fermenters (late fermenters) • Sterile filter paper discs impregnated with ONPG (similar to lactose) • Appearance : Filter paper discs of 6 mm diameter bearing letters "On" in continuous printing style. • ONPG reaction observed in 0.85% sodium chloride solution in culture containing ONPG disc, after an incubation of up to 4 hours at 35-37°C.	1 x 50 discs / vial
84	Sodium thioglycolate	• Bacteriological grade or above • Used as a reducing agent • Appearance : White to off-white to faintly pink hygroscopic powder • Solubility : 100 mg soluble in 1 mL of water • pH (10% in water at 25°C) : 5.0 - 9.0 • FTIR : Agrees with the standard pattern • Melting Point : >250°C • Assay (Iodometry/Cation exchange T) : 96.00 - 102.00%	100 G x 1

85	o-Phthalaldehyde	• LR grade or above • Appearance : Yellow to yellow with a green cast crystals or powder or lumps • Solubility : 33.3 mg soluble in 1 mL of ethanol • FTIR : Agrees with the standard pattern • Melting range : 53 - 58°C • Assay (HPLC/GC) : min. 97.00%	5 G x 1
86	Sodium taurodeoxycholate hydrate	• Cell Culture Tested • Assay : ≥99% • Anhydrous basis	500 MG x 1
87	NADPH (TPNH) tetrasodium salt	• Tetrasodium salt • Appearance : White to light yellow crystals or powder • Solubility : Soluble in water • Assay(HPLC) : min.97.00%	100 MG x 1
88	Manganese (II) chloride tetrahydrate	• AR grade or above • Appearance : Pink to reddish deliquescent crystals or powder or solid • Solubility : 1000 mg soluble in 1 mL of water • pH (5% in water at 25°C) : 3.50 - 6.00 • Magnesium (Mg) : <= 0.005% • Calcium (Ca) : <= 0.005% • Heavy metals (as Pb) : <= 0.0005% • Iron (Fe) : <= 0.0005% • Sulfate (SO_4) : <= 0.005% • Potassium (K) : <= 0.01% • Sodium (Na) : <= 0.05% • Zinc (Zn) : <= 0.005% • Insoluble matter : <= 0.005% • Assay (EDTA Titration) : 98.00 - 101.00%	500 G x 1
89	Magnesium sulphate anhydrous	• AR grade or above • Appearance : White to light grey crystals or granules or powder • Solubility : 33.3 mg soluble in 1 mL of hot water • pH (5% in water at 25°C) : 5.00 - 9.20 • Loss on ignition (at 105°C, 2 hr	500 G x 1

		then ignite at 450 ±25°C) : <= 2.00% ● Loss on drying (at 105°C, 2 hr) : <= 2.00% ● Assay (EDTA Titration, on dried basis) : 99.00 - 102.00%	
90	Magnesium chloride hexahydrate	● AR/ACS grade or above ● Highly soluble ionic halides ● Appearance : White deliquescent crystals or powder or solid ● Solubility : 100 mg soluble in 1 mL of water ● Ammonium (NH_4) : <= 0.002% ● Barium (Ba) : <= 0.005% ● Calcium (Ca) : <= 0.01% ● Heavy metals (as Pb) : <= 0.0005% ● Insoluble matter : <= 0.005% ● Iron (Fe) : <= 0.0005% ● Manganese (Mn) : <= 0.0005% ● Nitrate (NO3) : <= 0.001% ● Phosphate (PO_4) : <= 0.0005% ● Potassium (K) : <= 0.005% ● Sodium (Na) : <= 0.005% ● Strontium (Sr) : <= 0.005% ● Sulfate (SO_4) : <= 0.002% ● Assay (EDTA Titration) : 99.00 - 102.00%	500 G x 1
91	Parafilm	● Thermoplastic, colourless & semi-transparent film ● All-purpose laboratory self - sealing film ● Flexible, mouldable and a barrier to moisture loss ● Roll Size : 2” x 250’ ● Diameter core: 1”	1 x 5 Nos.
92	Bradford Reagent	● Used for accurate, quantitative estimation of proteins ● Samples can be estimated visually or values can be determined with a standard Spectrophotometer or plate reader at 595nm ● Ready-to-use ● Working standard preparation not	500 ML x 1

		required ● Easier and faster than other methods ● Detects protein concentration in the range 20 to 1500 µg/mL ● Appearance: Brown colored solution ● Clarity : Clear and free of particles ● Suitability test : This solution has been tested and is suitable for use in quantitative estimation of protein samples by Bradford assay	
93	Bovine serum albumin for molecular biology	● For molecular biology experiments ● Nuclease and Protease free ● Appearance : White to light brown crystals or powder ● Solubility : 33.3 mg soluble in 1 mL of water ● pH (1% in water at 25°C) : 6.5 - 7.5 ● DNases & RNases : None detected ● Alkaline phosphatase and peroxidase : None detected ● Proteases : None detected ● Loss on drying (at 105°C, 2 hr) : <= 5.0% ● Total nitrogen : 14.5 - 16.5% ● Assay (Protein, on dried basis) : min. 98.0%	25 G x 1
94	6X Gel Loading Buffer	● Glycerol based gel loading buffer for DNA gels with two tracking dyes ● Premixed, ready to use DNA gel loading buffer ● For loading on agarose or polyacrylamide gels. ● Does not mask DNA band during gel exposure to UV light ● Appearance: Blue Colored	6 x 1 ML

		solution ● Clarity: Clear and free of particles ● DNase & RNase: None detected ● Suitability test: This solution has been tested and is suitable for use in gel electrophoresis	

CENTRE OF EXCELLENCE IN MICROBIOME
An initiative of the Govt. of Kerala under KSCSTE
KINFRA Film and Video Park, Chanthavila, Kazhakoottam, Thiruvananthapuram, Kerala 695585, India.

TERMS & CONDITIONS

1. Tender Documents shall be available only on KSCSTE Website and not for sales elsewhere.
2. The bids will be opened on the date as mentioned in the NIT. Bidders or their representatives may be present during the opening of bids, if they wish to be present. CoEM will evaluate the bids as per the terms of the tender. Those bids, which fulfil the technical requirements and are responsive to the tender requirements will only be considered. Those bids which are found to be either non-responsive, not satisfying the technical requirements or both will be rejected.
3. All pages of the bid must be **sealed, signed, sequentially numbered and legible**. The **Technical Bid** and **Financial Bid** shall be placed in **separate sealed envelopes**, clearly marked as such, and both these envelopes should be enclosed within a **single main sealed cover**. Each inner envelope must also be properly **sealed, signed, and labeled**.
4. During the bid evaluation, the CoEM may, at its discretion, ask the Bidder for clarifications of their bid in writing/e-mail and the bidder is also required to provide the clarification in writing/e-mail. No change in the price or substance of the bid shall be sought, offered or permitted.
5. CoEM will award the contract to the Bidder whose bid has been determined to be substantially responsive, technically qualified and the Overall Lowest Quoted Evaluated Bid.
6. Delivery at the destination provided by CoEM should strictly be completed within the stipulated period of delivery i.e. within 30 days from issue of the purchase order.
7. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 0.5 percent of the delivered price of the delayed Goods or unperformed Installation for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10 Percent.
8. Manufacturer's authorisation or authorised reseller certificate and detailed technical specifications of the list of items must be sent along with the bid.
9. The items must be of superior quality and must comply with the standards of leading manufacturers such as Sisco Research Laboratories (SRL), Himedia, Central Drug House (CDH) Fine Chemicals or its equivalents.
10. CoEM reserves the right to cancel the order in case the items are not supplied within the stipulated period or non - fulfilment of contractual obligations.
11. Payment will be made only after the satisfactory completion of service for which the supplier shall submit bills in duplicate. In case of any defects to the materials supplied by the bidder, it should be replaced prior to release of the payment.
12. The quoted rates shall be inclusive of all taxes and also the bidder shall include charges like GST, freight, handling, loading, unloading, insurance premiums and placement at the facility supply and deployment. No compensation will be paid in case of any upward revision in the statutory taxes and levies or introduction of new taxes and levies.
13. A firm should submit only one proposal. If a firm submits more than one proposal, all such proposals shall be disqualified. Also, must comply with the Technical Specification, General Conditions and Format/Requirements for Technical and Financial proposal.
14. Price quoted should be valid for 90 days from the due date of the tender.
15. The CoEM may, at its discretion, extend the deadline for submission of bids specified in the NIT, in which case all rights of the CoEM and all obligations of the Bidders will thereafter be subject to the deadline as extended.
16. CoEM reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders. The CoEM reserves the right to negotiate with the Bidder having the Lowest Evaluated Bid.

17. The courts at Thiruvananthapuram shall have jurisdiction over any dispute regarding this tender.
18. Interested bidders are to submit their duly signed and sealed quotation along with all requisite documents as per prequalification in separate sealed envelope superscribing "Tender No. CoEM/Purchase/Misc/Con/2025/06-TEN dated16/06/2025" on or before due date 30.06.2025, 10.30 AM.
19. Late bids will not be considered.

Bid should be addressed to:

The Director
Centre of Excellence in Microbiome
First floor- RGCB Bio Innovation Center
KINFRA Film and Video Park, Chanthavila, Kazhakkoottam
Thiruvananthapuram, Kerala - 695 585.

DOCUMENTS COMPRISING THE BID

All pages must be sequentially numbered, signed, and sealed.

1. Tender Form
2. The bidders must submit an undertaking in the prescribed format as per Annexure I.
3. The bidder must submit a brief description of the list of items, make, catalogue number, quantity and specifications as per Annexure II in a separate sealed envelope and labeled as Technical Bid.
4. Bidders must also submit a financial bid as per Annexure III in a separate sealed envelope and labeled as Financial Bid.
5. Bidders must also submit a declaration sheet as per Annexure IV.
6. Tender Fee and EMD (Exceptional cases as per the NIT)
7. PAN Copy
8. GST Number Copy
9. Manufacturer from Kerala with MSME certification (Other MSMEs are not exempted from paying the tender fee and EMD)
10. Manufacturer's authorization / Authorised reseller certificate Copy
11. Detailed Technical Specifications of the list of items

****

ANNEXURE I

[To be submitted on letter head of the supplier]

To,

The Director
Centre of Excellence in Microbiome

UNDERTAKING BY THE TENDERER

I/WE _____ have carefully gone through the various terms and conditions mentioned in the tender document CoEM/Purchase/Misc/Con/2025/06-TEN dated 16/06/2025.

I/We am making this offer after carefully reading the conditions and understanding the same. I/We have understood the quantity of items/technical specifications and other charges required to supply and install the items, before making this offer.

This tender document has _____ pages including the attachments and all the documents including blank pages are serially numbered.

I/We hereby sign this undertaking as token of our acceptance of various conditions mentioned in tender document.

Further certified that I/WE _____ has never been debarred/blacklisted by any government organisation.

(Authorised Name & Signatory of Agency/firm with stamp)

Place: _____

Date: _____

Annexure II

Technical Bid

[To be submitted on letter head of the supplier in a separate, sealed envelope]

Sl. No	Details of the item(s)	Specification	Qty	Whether Specification is Satisfied (Yes/No)	Make of the Item	Catalogue Number of the Item
1	Granulated Sabouraud Dextrose Broth	• Granulated • For cultivation of yeasts, moulds and aciduric microorganisms. • Isolation of organisms from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.	500 g x 1			
2	Tryptone Soya Broth	• γ-irradiated sterile powder • Recommended for the evaluation of sterility in manufacturing process • Also used for the tube dilution method of antimicrobial sensitivity testing • Appearance: Cream to yellow, possibly with a green tinge, homogeneous free flowing powder • Colour and Clarity of prepared medium: Light amber coloured clear solution • Reaction of 3.0% w/v aqueous solution at 25°C. pH : 7.3±0.2	500 g x 1			

		• pH range 7.10-7.50 • Sterility Testing: No growth is observed after 14 days for Bacteria at 30-35°C and for Fungi at 20-25°C. • PCR-based Test for Mycoplasma: None detected. • Stability test: Light yellow coloured clear solution without any precipitation or sedimentation at room temperature for 7 days • Growth promoting properties: Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at 30-35°C for 18-24 hours of time when inoculating <=100cfu.				
3	Alkaline Peptone Water	• For enrichment of *Vibrio* species from sea foods and infectious materials and other clinical specimens such as faeces • Compliance with BIS specifications IS 5887 (Part-V) 1976 • Appearance: Cream to yellow coloured homogenous free flowing powder	100 g x 1			

		• Colour and clarity of prepared medium: Light yellow coloured clear solution without any precipitate • Reaction of 1.5% w/v aqueous solution at 25°C. pH: 8.2 +/- 0.2 • pH range: 8.00-8.40 • Cultural characteristics observed after an incubation at 35-37°C for 18-24 h				
4	Granulated MacConkey Agar	• Granulated • For selective isolation and differentiation of E.coli and other enteric bacteria • Bacterial isolation from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP. • For use in microbiological examination of foodstuffs and for direct plating / inoculation of water samples for coliform counts • Product should be accepted or use by the Standard Methods for the Examination of Milk and Dairy Products	500 g x 2			

		• Appearance: Light yellow to pink colored granular medium. • Gelling: Firm comparable with 1.35% Agar gel. • Colour and Clarity of prepared medium: Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates. • pH range: 6.90-7.30 • Cultural Response: to be observed after an incubation at 30-35°C for 18-72 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar.				
5	MacConkey Agar w/ 0.15% Bile Salts, CV and NaCl	• For selective isolation and • differentiation of coliform organisms and other enteric pathogens from clinical and non-clinical samples. • For the detection and isolation of Gram negative organisms from clinical, dairy, food, water, pharmaceutical and industrial sources • Endorsed for selection and recovery of the Enterobacteriaceae	500 g x 1			

		and related enteric Gram negative bacilli ● Should comply APHA recommendations and can be used for direct plating of water samples for coliform bacilli, for examination of food samples for food poisoning organisms and for isolation of Salmonella and Shigella species in cheese ● Should suit for counting coli-aerogenes bacteria in animal samples, investigations on the genus Aeromonas ● Specific media components inhibit growth of Gram positive organisms ● Appearance: Light yellow to pink homogeneous free flowing powder ● Gelling: Firm comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates.				

		• Reaction of 5.15% w/v aqueous solution at 25°C. pH : 7.1±0.2 • pH range: 6.90-7.30 • Cultural response to be observed after an incubation at 30-35°C for 18-72 hours.				
6	Granulated Potato Dextrose Agar	• Granulated • For isolation and enumeration of yeasts and moulds from water, dairy and other food products and clinical samples • Endorsed by APHA and F.D.A. for plate counts of yeasts and moulds in the examination of foods and dairy products. • To be used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production • Should be endorsed by USP, BP, EP and JP for growth of fungi • Appearance: Cream to yellow	500 g x 1			

		granulated free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Yellow coloured clear to slightly opalescent gel forms in Petri plates ● Reaction of 3.9% w/v aqueous solution at 25°C. pH : 5.6±0.2 ● pH range: 5.40-5.80 ● Cultural characteristics observed after an incubation at 22 - 25°C for 4 - 5 days				
7	Modified Bifidobacterium Agar	● Modified ● Selective medium for the isolation of the Bifidobacterium species from faeces or stool specimens. ● Appearance: Cream to yellow coloured homogeneous free flowing powder ● Gelling: Firm, comparable with 1.45% agar gel ● Colour and Clarity of prepared medium: Amber coloured clear to slightly opalescent gel forms in Petri plates ● pH range: 5.30-	500 g x 1			

		5.70 ● Cultural Response: Cultural characteristics to be observed with added supplements after an incubation at 35-37°C for 24-48 hours in an anaerobic conditions.				
8	Luria Bertani Agar, Miller	● For the cultivation and maintenance of recombinant strains of Escherichia coli for genetic and molecular biology studies. ● May be used for routine cultivation and estimation of not particularly fastidious microorganisms ● Ideal for maintaining and propagating bacterial cultures. ● Used for growing transformed cultures, preparing cells, and gene studies. ● Appearance of Powder: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of the prepared	500 g x 1			

		medium: Yellow to amber coloured, clear to slightly opalescent gel forms in Petri plates ● pH range: 7.30-7.70 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 24 hours.				
9	Luria Bertani Broth, Miller	● For the cultivation and maintenance of recombinant strains of Escherichia coli for genetic and molecular biology studies ● May be used for routine cultivation and estimation of not particularly fastidious microorganisms ● Ideal for maintaining and propagating bacterial cultures. ● Used for growing transformed cultures, preparing cells, and gene studies. ● Appearance of Powder: Cream to yellow homogeneous free flowing powder ● Colour and Clarity of the prepared	500 g x 2			

		medium: Yellow to amber coloured clear solution in tubes ● pH range: 7.30-7.50 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35- 37°C for 18 - 24 hours. ● With out Agar				
10	Nutrient Agar	● General purpose medium for cultivation of less fastidious microorganisms ● Can be enriched with blood or other biological fluids. ● Also used for purity checking prior to biochemical or serological testing ● To be ideal for demonstration and teaching purposes where a more prolonged survival of cultures at ambient temperature is often required without risk of overgrowth that can occur with more nutritious substrate ● Able to use widely in microbiological examination of	500 g × 3			

		variety of materials and is also recommended by standard methods. ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Light yellow coloured clear to slightly opalescent gel forms in Petri plates ● pH range: 7.30-7.50 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35- 37°C for 18 - 24 hours.				
11	Nutrient Broth	● A sterility testing medium for aerobes in compliance with Indian Pharmacopoeia, Third Edition ● Used for the examination of water and dairy products according to Standard	500 g x 2			

		Methods for the Examination of Water and Wastewater and Dairy Products as per IP ● Also used for cultivating several less fastidious microorganisms. ● Appearance: Cream to yellow homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light yellow coloured clear solution. ● pH range: 7.20-7.40 ● With out agar ● Growth promotion is carried out as per Indian Pharmacopoeia ● Cultural Response: Cultural characteristics observed after				

		an incubation at 35-37°C for 18-24 hours.				
12	Agar Agar, Type I	• Endorsed for preparation of culture media for microbiological analysis • For use in bacteriological routine laboratory work, plant tissue culture media, pharmaceutical preparations, where clarity, compatibility are not of prime significance • Readily dissolves in boiling water • Appearance: Cream coloured, homogeneous free flowing powder. • Solubility: Freely soluble in hot water at temperatures above 85°C. Insoluble in cold water. • Clarity: A firm solid, clear to slightly	500 g x 1			

		opalescent gel is formed at a concentration of 1.5% at 38-41°C. ● Agar dye diffusion: 18-20mm ● Identification test: In accordance with method specified in USP 2022 ● Cultural response required after an incubation at 35-37°C for 18-24 hours by preparing Nutrient Agar using Agar Agar, Type I as an ingredient				
13	Columbia Blood Agar Base	● Appropriate base for preparation of blood agar, chocolate agar and for various selective and identification media. ● Isolation of organisms from clinical and non-clinical samples. ● Promotes rapid and luxuriant growth of fastidious and non-fastidious organisms. ● The medium	500 g x 1			

		supports typical colonial morphology; better pigment production and more sharply defined haemolytic reactions. ● Able to use as base for the media containing blood and for selective media formulations in which different combinations of antimicrobial agents are used as additives. ● Appearance: Cream to yellow homogeneous free flowing powder. ● Gelling: Firm, comparable with 1.5% Agar gel. ● Colour and Clarity of prepared medium Basal medium: Light amber coloured clear to slightly opalescent gel. Cherry red coloured opaque gel should form after addition of 5% w/v sterile defibrinated blood in Petri plates. ● pH range: 7.10-7.50 ● Cultural characteristics should be observed with added 5% w/v				

		sterile defibrinated blood, after an incubation at 35-37°C for 24-48 hours.				
14	Levine - Eosin Methylene Blue Agar Medium	• For isolation, enumeration and differentiation of members of Enterobacte-riaceae in compliance with IP/USP • Endorsed for the detection, enumeration and differentiation of members of the coliform group by American Public Health Association, United States Pharmacopoeia and Indian Pharmacopoeia • Appearance: Light pink to purple homogeneous free flowing powder • Gelling: Firm, comparable with 1.5% Agar gel • Colour and Clarity of prepared medium: Reddish purple with greenish cast coloured opalescent gel with finely dispersed precipitate forms in Petri plates. • pH 6.90-7.30 • Growth Promotion as per	500 g x 1			

		USP/IP. ● Cultural response to be observed after an incubation at 30-35°C for 24-48 hours. Recovery rate is considered as 100% for bacteria growth on Soyabean Casein Digest Agar and fungal growth on Sabouraud Dextrose Agar				
15	MacConkey Broth	● For the presumptive identification of coliforms from pharmaceutical products ● For the selective enrichment of E.coli from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP. ● Appearance: Cream to yellow with green tinge homogeneous free flowing powder ● Colour and Clarity of prepared medium: Purple coloured clear to slightly opalescent solution in tubes ● pH range 7.10-7.50 ● Cultural response	500 g x 2			

		to be observed after an incubation at 30-35°C for 18-48 hours. ● Agar not added				
16	L-Cysteine hydrochloride monohydrate	● Appearance: White to almost white crystals or powder or colorless crystals ● Solubility: 100 mg soluble in 1 mL of water ● FTIR should agree with the standard pattern ● Specific rotation: +5.00 to +7.00° (c = 8% in 1 M HCl at 20°C, dried substance) ● Loss on drying: 8.50 – 12.00% (in vacuum over Phosphorus pentoxide, 20 hours) ● Assay (Iodometry): 98.00 - 102.00%	100 g x 1			
17	Starch M-protein for Actinomycete	● For isolation and propagation of *Actinomycetes* from soil & water samples. ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm,	500 g x 1			

		comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Yellow to light amber coloured opalescent gel forms in Petri plates ● Cultural Response: Cultural characteristics observed after an incubation at 26-30°C for 6-7 days				
18	Granulated MRS Agar	● Granulated ● For isolation and cultivation of Lactobacilli from food, dairy and clinical samples ● Supports abundant growth of all Lactobacilli from oral cavity, dairy products, foods, faeces and other sources. ● Appearance: Cream to	500 g x 1			

		light yellow coloured granular medium ● Gelling: Firm, comparable with 1.2% Agar gel. ● Colour and Clarity of prepared medium: Medium to dark amber coloured, clear to slightly opalescent gel forms in Petri plates ● pH range: 6.30-6.70 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18-24 hours or longer (with 5% CO2)				
19	Granulated MRS Broth	● Granulated ● For cultivation of all Lactobacilli from clinical	500 g x 1			

		and non-clinical samples. ● Clinical samples - faeces, swab from oral cavity; Food and dairy samples ● Appearance: Cream to yellow colored granular medium ● Colour and Clarity of prepared medium: Light amber coloured, clear to slightly opalescent solution in tubes ● pH range: 6.30-6.70 ● Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for				

		18-24 hours or longer (with 5% CO2) ● Agar not added				
20	Granulated TCBS Agar	● Granulated ● For selective isolation and cultivation of *Vibrio cholerae* and other enteropathogenic *Vibrios* causing food poisoning from clinical and food specimens ● Also endorsed by APHA for the selective isolation of *V. cholerae* and *V. parahaemolyticus* ● Enrichment in Alkaline Peptone Water, followed by isolation on TCBS Agar is routinely used for isolation of *V. cholerae* ● Appearance : Light yellow to light tan	500 g x 1			

		colored granular medium. ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Bluish green coloured clear to slightly opalescent gel forms in Petri plates. ● pH range: 8.40-8.80 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18-24 hours				
21	Anaerogas Pack – 3.5 L capacity	● Foil bag containing a paper sachet filled with black coloured oxygen absorbing and carbon	5 x 5/pack			

		dioxide generating agent. ● Disposable ● For use in anaerobic systems and jars ● No catalyst or pressure gauge is required ● Capacity: 3.5L				
22	Mueller Hinton Agar	● For determination of susceptibility of microorganisms to antimicrobial agents isolated from clinical samples. ● Endorsed for the diffusion of antimicrobial agents impregnated on paper disc through an agar gel as detailed in CLSI Approved Standard ● Facilitates	500 G x 3			

		the growth of most non-fastidious bacterial pathogens ● Good batch-to-batch reproducibility for susceptible testing as accepted by WHO Committee on Standardization ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.7% agar gel. ● Colour and Clarity of prepared medium: Light amber coloured clear to slightly				

		opalescent gel forms in Petri plates ● pH range: 7.20-7.40 ● Cultural Response: Antibiotic susceptibility tests to be performed as per ISO/TS 16782. Performance of the medium to be checked in line with the CLSI/ EUCAST guidelines.				
23	Mueller Hinton Broth	● For determination of Invitro susceptibility of bacterial strains against antibacterial agents by broth dilution methods ● A stable	500 G x 2			

		serum-free bacteriological media that supports the growth of two otherwise very fastidious bacteria ● Media for routine bacterial antibiotic susceptibility determination, with updated cutoff standards for designating resistant (R) and susceptible (S) strains (as per CLSI) ● Appearance : Cream to yellow coloured, homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light				

		amber coloured clear solution in tubes ● pH : 7.3±0.1 ● pH range: 7.20-7.40 ● Cultural Response: Cultural characteristics should be observed after an incubation at 35-37°C for 18-24 hours.				
24	M9 Minimal Medium Salts	● For growing recombinant *Escherichia coli* strains for Molecular Biology applications ● Can be supplemented with specific amino acids or other required nutrients for the selection of specific auxotrophs ● The inclusion of certain additives (e.g. thiamine or casamino	500 G x 1			

		acids) enhances the bacterial growth. ● Appearance of Powder: White to cream coloured, homogeneous , free flowing powder. ● Colour and Clarity: Colourless, clear solution without any precipitate. ● Cultural Response : Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 48 hours. ● Required concentration : 5X				
25	Anaerobic Blood Agar Base	● For isolation and cultivation of Group A and Group B Streptococci from throat cultures and other clinical samples. ● Appearance: Cream to yellow	500 G x 1			

		homogeneous free flowing powder ● Gelling: Firm, comparable with 1.4% Agar gel ● Colour and Clarity of prepared medium: Basal medium: Yellow coloured clear to slightly opalescent gel. After addition of 5%v/v sterile defibrinated blood, cherry red coloured opaque gel should form in Petri plates ● pH range: 7.10-7.50 ● Cultural Response: Cultural characteristics should be observed in presence of 5-10% CO2 with added 5%v/v sterile defibrinated sheep blood and antibiotic supplement, after an incubation for				

		24-48 hours at 35-37°C.				
26	RNase A Solution	• Concentration: 20 mg/ml • Used for isolating RNA- free DNA from blood cells, animal cells, tissues, bacterial cells and plant cells. • Appearance: Colorless solution • Clarity: Clear and free of particles • No presence of DNase & RNase • Suitability Test: This reagent need to be tested for suitability for isolation of RNA- free DNA from blood cells, animal cells, tissues, bacterial cells and plant cells.	5ML x 1			
27	Diluent for DNA Extraction	• For Molecular Biology • Appearance: Colourless liquid • Solubility: 1 mL miscible in 1 mL of water • DNases & RNases: None detected • FTIR : should agree with the standard pattern • Refractive index (n 20/D) : Approx. 1.3550 - 1.3650 • Density (at 25°C) :Approx. 0.784 - 0.794	500 ML x 2			

		g/mL ● Acetone, IPA : ~5.00% ● Methanol : <= 0.10% ● Isobutanol, benzene and others : <= 0.90% ● Assay (GC) : min. 94.00% ● Denatured Ethanol				
28	Erythromy-cin-15 mcg	● Level: 15 mcg ● Erythromycin E 15 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures in accordance with Kirby-Bauer Method ● Appearance: Filter paper discs of 6mm diameter with printed code on centre of each side of the disc for identification. ● Cultural response: Average diameter of zone of inhibition should be observed on appropriate agar after 18 hours incubation at 35-37°C for standard cultures.	1 vial (VL) x 1			
29	Ampicillin AMP 25 mcg	● Level: 25 mcg ● Ampicillin AMP 25mcg discs are used for antimicrobial susceptibility	1 vial (VL) x 1			

		testing of bacterial cultures in accordance with Bauer-Kirby Method ● Appearance: Filter paper discs of 6mm diameter with printed code on centre of each side of the disc for identification. ● Cultural response: Average diameter of zone of inhibition should be observed on appropriate agar after 18 hours incubation at 35-37°C for standard cultures.				
30	Nigrosin Stain	● Concentration: 10% w/v ● Used as staining solution for negative staining. ● Also permits visualization of the usually transparent and unstainable capsule of many organisms ● Used for negative Staining of bacteria and capsule-containing fungus ● Suitable for specimen: Clinical samples; food & dairy samples; Water samples ● Appearance: Blackish violet coloured solution.	500 ML x 1			

		• Clarity: Clear without any particles. • Microscopic Examination : Negative staining is carried out. Staining characteristics of organism is observed under microscope by using oil immersion lens • Expected Results: Clear halos surrounding the bacterial cells				
31	Autoclava-ble Bag – 12 inch	• Clear, transparent autoclavable disposable bag. • Size: 12”(height) x 10”(breadth) • Maximum weight holding capacity: 1.0 kg • For waste disposal and recommend ed for disposal of pathological / clinical or contaminate d material. • Also for sterilization of glass ware or plastic wares.	5 x 5 0 0 / p a c k			

		• Used in hospitals, clinical laboratories, microbiological laboratories, Biotechnology laboratories, molecular biology laboratories etc. for disposal of material • Polypropylene bag • Superior strength, free from chlorine. • Can be steam sterilized at 121 ºC- 15 minutes.				
32	Autoclavable Bag – 14 inch	• Clear, transparent autoclavable disposable bag. • Size: 20”(height) x 14”(breadth) • Maximum weight holding capacity: 2.5 kg • For waste disposal and recommended for	2 x 500 / pack			

		disposal of pathological/ clinical or contaminated material. ● Also for sterilization of glass ware or plastic wares. ● Used in hospitals, clinical laboratories, microbiological laboratories, Biotechnology laboratories, molecular biology laboratories etc. for disposal of material. ● Polypropylene bag ● Superior strength, free from chlorine. ● Can be steam sterilized at 121 ºC- 15 minutes.				
33	ASN Salt	● For Molecular Biology ● Appearance : White to light yellow hygroscopic crystals or powder or solid ● Solubility : 100 mg soluble in 1 mL of water ● DNases & RNases to in undetectable levels ● Values required	5 G x 1			

		for specific rotation : +258.0° to +287.0°(c = 0.25% in 0.4% potassium hydrogen phthalate, anhydrous substance at 20°) ● Water (K.F.) : <= 2.0% ● Assay (HPLC) : 91.00 - 102.00%				
34	Vancomycin-VA 30 mcg	● Symbol: VA ● Level: 30 mcg ● Vancomycin VA 30 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures as per Bauer-Kirby Method ● Appearance: Filter paper discs of 6mm diameter with printed "VA 30" on centre of each side of the disc. ● Cultural response: Average diameter of zone of inhibition observed on Mueller Hinton Agar (M173) after 18 hours incubation at 35-37°C for standard cultures.	1 vial (VL) x 1			
35	Ethidium bromide solution	● For Molecular Biology ● Appearance: Dark red liquid	10 ML x 3			

		• Solubility: 33.3 mg soluble in 1 mL of water • DNases & RNases: None detected • Suitability test: Suitable for all DNA isolation procedures • Assay (HPLC/AT): min. 95.00% • 10mg/ml concentration				
36	Sulfuric acid pure	• Pure, AR grade or above • Appearance: Clear colourless liquid • Density (d 25/4) : 1.835 - 1.845 g/mL • Ammonium (NH4) : < = 0.0002% • Arsenic (As) : < = 0.000001% • Cadmium (Cd) : <= 0.00001% • Chloride (Cl): <= 0.00005% • Copper (Cu): <= 0.00001% • Iron (Fe): <= 0.00002% • KMnO4 reducing substances (as SO2): <= 0.0005% • Lead (Pb) : <= 0.00001% • Nitrate (NO3): <= 0.00002% • Residue on ignition: <= 0.001% • Zinc (Zn):	500 ML x 1			

		<=0.00001% ● Assay (NaOH Titration) :min. 97.00%				
37	Hydrochl -oric acid abt.35% pure,	● Abt.35% pure, AR grade or above ● Appearance : Colourless to yellow liquid ● Density (d 20/4) : ~1.19 g/mL ● Sulfate (SO4) : <=0.0001% ● Sulfite(SO3) : <=0.0002% ● Free chlorine (Cl2) : <=0.00005 % ● Lead (Pb) : <=0.00000 5% ● Copper (Cu) : <=0.00000 5% ● Iron (Fe) : <=0.00005 % ● Zinc (Zn) : <=0.00001 % ● Cadmium (Cd) : <=0.00000 1%	500 ML x 1			

		• Ammonium (NH4) : <=0.00025 % • Arsenic (As) : <=0.000005% • Assay (NaOH Titration) : min. 35.00%				
38	Gram Stains - Kit	• Grams Stain Kit is used for differentiation of bacteria on the basis of their gram nature. • Kit must include Gram's Crystal Violet, Gram's Decolourizer, Gram's Iodine and Safranin (0.5% w/v) • Any isolated colony on primary or subculture plates can be isolated from clinical specimens like Blood, urine, CSF, pus, wounds, lesions, body tissues, sputum etc. or	1 KIT x 2			

		from environment like Air, water, soil, sludge, waste water, food, dairy samples etc. ● Microscopic examination : Gram staining was carried out and observed under oil immersion lens. ● Expected Results : Gram positive organisms: Violet coloured Gram negative organisms: Pinkish red coloured				
39	Oxidase Discs	● For detection of oxidase production by microorganisms like Neisseria, Alcaligenes, Aeromonas, Vibrio's, Campylobacter and Pseudomonas, which give positive reactions and	3 x 50 discs/ vial			

		for excluding Enterobacteriaceae, which give negative reactions. ● Oxidase discs should be sterile filter paper discs impregnated with N, N-dimethyl-p-phenylenediamine oxalate, ascorbic acid and a-naphthol. ● Appearance: Filter paper discs of 10 mm diameter ● Cultural response: Typical oxidase reaction given by 18-48 hour culture observed within 5-10 seconds at 25-30°C.				
40	Yeast Extract Powder	● Dried extract from autolysing yeast cells (Saccharomyces) specially cultivated for this purpose. ● Rich source of vitamin B	500 G x 1			

		complex and endorsed for use in microbial culture media, fermentation and other biological products. ● Appearance : Light yellow to brownish yellow homogenous free flowing powder characteristic odour but not putrescent. ● Solubility : Freely soluble in distilled/ purified water, insoluble in alcohol. ● Clarity : 1% w/v aqueous solution is clear to opalescent, may develop precipitates after autoclaving at 15 lbs pressure (121ºC) for 15 minutes. ● Cultural response observed after incubation at 35-37°C for 18-24 hours by preparing appropriate agar plates using Yeast extract powder as an ingredient. ● Total Nitrogen : ≥9.00 % ● Alpha amino				

		nitrogen : ≥4.50 % ● Sodium chloride : ≤5.00 % ● Loss on drying : ≤7.00 % ● Residue on ignition : ≤15.00 %				
41	Meat extract B Broth	● For routine cultivation of non-fastidious bacteria from clinical (faeces, stool) and non- clinical samples (food, dairy and water) ● Used as a general-purpose nutrient medium and is also endorsed for preparation of pure culture of Candida species for carrying out fermentation studies ● Appearance :C ream to yellow homogeneous free flowing powder ● Colour and Clarity of prepared medium: Yellow coloured, clear	500 G x 1			

		solution without any haziness in tubes ● Reaction of 1.8% w/v aqueous solution at 25°C. pH : 7.2±0.2 ● pH range: 7.00-7.40 ● Cultural Response : Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.				
42	Sodium chloride	● AR grade or above ● Appearance : Colourless to white crystals or powder or solid ● Solubility : 100 mg soluble in 1 mL of water ● pH (5% in water at 25°C) : 5.00 - 9.00 ● Barium (Ba) : Passes test ● Iron (Fe) : <= 0.0002% ● Sulphate (SO_4) : <= 0.004% ● Phosphate (PO_4) : <= 0.0005% ● Magnesium (Mg) : <= 0.001% ● Calcium (Ca) : <= 0.002% ● Potassium (K) : <= 0.005%	500 G x 1			

		• Insoluble matter : <= 0.005% • Bromide (Br) : <= 0.01% • Iodide (I) : <= 0.002% • Assay (AT) : 98.50 - 102.00%				
43	Skim Milk powder	• Appearance : Pale yellow to cream amorphous homogeneous, free flowing powder • Solubility : 33.3 mg soluble in 1 mL of water with slight opacity • pH of 2% w/v aqueous solution at 25°C : 6.00 - 7.00 • Water (K.F.) : <= 10.00% • Sulphated ash : <= 10.00% • Fat content : <= 1.50% • Total Nitrogen (anhydrous basis) : >= 4.70% Total Protein (anhydrous basis) : >= 35.00%	500G x 1			
44	Sodium hydroxide pellets	• For molecular biology • Appearance : White hygroscopic pellets • Solubility : 1000 mg soluble in 1 mL of water • DNases &	100 G x 1			

		RNases : None detected ● Calcium (Ca) : <= 0.005% ● Sodium carbonate (Na_2CO_3) : <= 1.0% ● Chloride (Cl) : <= 0.005% ● Heavy metals (as Pb) : <= 0.002% ● Nitrogen compounds (as N) : <= 0.001% ● Phosphate (PO_4) : <= 0.001% ● Iron (Fe) : <= 0.001% ● Mercury (Hg) : <= 0.00001% ● Magnesium (Mg) : <= 0.002% ● Nickel (Ni) : <= 0.001% ● Potassium (K) : <= 0.02% ● Sulfate (SO_4): <= 0.003% ● Assay (HCl Titration) : min. 97.00%				

45	Concavity Slides (Two Cavity)	• Two polished spherical concavities • 16 mm in diameter x 0.5 mm deep • Made of non-corrosive glass • Bevelled and polished edges and corners • Dimension : 75 x 25 mm • Thickness : 1.4 mm	1 x 10 slides /pack			
46	Glycerol	• For molecular biology • Appearance : Clear colourless syrupy hygroscopic viscous liquid • Solubility : 1 mL miscible with 1 mL of water • pH (5M in water at 25°c) : 5.50 - 8.00 • DNases & RNases : None detected • Refractive index (n 20/D) : 1.470 - 1.475 Density (at 25°C) : 1.250 - 1.260 g/mL	500 ML x 1			

		• Heavy metals (as Pb) : <= 0.0005% • Iron (Fe) : <= 0.0005% • Magnesium (Mg) : <= 0.0005% • Assay (NaOH Titration/ GC) : >= 99.50%				
47	L-Spreader	• Alternative to bending glass rods or pipettes • Completely autoclavable • Reusable • Recommended sterilization by autoclaving at 15 lbs pressure at 121°C for 15 minutes.	1 x 20 Nos. / pack			
48	Sterile Sample Container with spoon	• Material: Polypropylene • Overflowing capacity: 50 ml • Spoon securely attached on the lid of the container	2 x 100/ pack			
49	Sterile Sample Container	• Material: polypropylene • Overflowing capacity : 50 ml • Individually packed for sterility • No spoon attached	4 x 100/ pack			

50	Anaero Indicator Tablet R.T.	• Accessory for anaerobic system • For detection of anaerobic environment. • Under anaerobic conditions the tablet colour will change to pink • One tablet adequate for a jar of 3.5 litre/ 1.5 litre capacity.	4 x 2 Nos. /pack			
51	L-Arginine monohydrochloride	• Appearance : White to almost white crystals or powder • Solubility : 100 mg soluble in 1 mL of water • pH (10% in water at 25°C) : 4.70 - 6.20 • FTIR : Agrees with the standard pattern • Specific rotation : +21.40 to +23.60° (c = 8% in hydrochloric acid, at 20°C) • Loss on drying (at 105°C, 3 hr) : <= 0.20% • Assay (AT/NT, on dry basis) : 98.50 - 101.50%	25 G x 1			

52	Phenol:Chloroform:Isoamyl alcohol mixture (25:24:1 v/v)	• Ratio: 25:24:1 volume/volume • For molecular biology • Appearance : Colourless to yellow clear solution or 2 layer liquid. • Solubility : The 2 layer liquid is extracted in water (1:1). • pH (H2O phase, after extraction with water, 1:1 at 25°C) : 7.70 - 8.30 • DNases & RNases : None detected	100 ML x 1			
53	Sterile Cotton Swab	• Cotton bud w/Polypropylene Stick in polypropylene tube • Size: 150 mm • Individually packed in 12 mm diameter tube • DNA free	1 x 100 Nos. /pack			
54	D(+)-Trehalose dihydrate	• Dihydrate • Serves as a carbohydrate reserve in microorganisms	25 G x 1			

		and protects them from adverse conditions. ● Appearance : White to off-white hygroscopic crystals or powder ● Solubility : 1000 mg soluble in 1 mL of water ● FTIR (KBr disc) : Agrees with the standard pattern ● Specific rotation [alpha 20/D] : +176.0° to +182.0° (c = 2% in water at 20°C) ● Water (K.F.) : <= 11.0% ● Assay (GC/HPLC) : 99.00 - 102.00%				
55	Glycine	● For Molecular Biology ● Nuclease and Protease free ● Appearance : White to off-white solid or crystals or granules or powder ● Solubility : 100 mg soluble in 1 mL of water ● DNases, RNases & Protease : None detected ● Chloride (Cl) : <= 0.005% ● Heavy metals (as Pb) : <= 0.002% ● Ammonium (NH_4) : <= 0.005% ● Sulphate (SO_4) :	100 G x 1			

		<= 0.005% ● Residue after ignition : <= 0.1% ● Substances darkened by H_2SO_4 : Passes test ● Hydrolysable substances : Passes test ● Assay (NT) : 99.00 - 102.00%				
56	L-Arginine	● Plays a key role in many physiological processes such as tissue repair and reproduction. ● Appearance : White to almost white crystals or powder ● Solubility : 100 mg soluble in 1 mL of water ● pH (5% in water at 25°C): 10.50 - 12.00 ● FTIR : Agrees with the standard pattern ● Specific rotation : +25.80° to +28.50° (c = 8% in 6N hydrochloric acid, at 20°C) ● Melting range : 217 - 227°C ● Chloride (Cl) : <= 0.05% ● Ammonium (NH_4) : <= 0.02% ● Heavy metals (as Pb) : <= 0.0015% ● Iron (Fe) : <= 0.003%	25 G x 1			

		• Sulfate (SO_4) : <= 0.03% • Loss on drying (at 105°C, 3 hr) : <= 0.50% • Residue on ignition : <= 0.30% • Assay (NT/HCl Titration, on dry basis): 99.00 - 101.50%				
57	Hydrogen peroxide	• Plant Culture Tested • Assay : min 30%	100 ML x 1			
58	Potassium permanganate	• LR grade or above • Used as analytical lab reagent. • An oxidizing agent. • Appearance : Dark purple or green to black crystals or powder • Solubility : 33.3 mg soluble in 1 mL of water • Assay (Iodimetry) : 98.00 - 102.00%	500 G x 1			
59	Formaldehyde sol 37 - 41%	• AR grade or above • 37 - 41% solution • Appearance : Clear colourless liquid with pungent odour. • Solubility : 1 mL miscible in 1 mL of ethanol • Density (at 25°C) : 1.080 - 1.090 g/mL • Acidity (HCOOH) : <= 0.045%	500 ML x 1			

		• Chloride (Cl) : <= 0.0002% • Copper (Cu) : <= 0.002% • Iron (Fe) : <= 0.0001% • Lead (Pb) : <= 0.0001% • Non-volatile Matter : <= 0.005% • Sulfate (SO_4) : <= 0.002% • Sulfated ash : <= 0.002% • Methanol : 10.00 - 14.00% • Assay (HCL/H2SO4 Titration) : 37.00 - 41.00 %				
60	Buffer Capsule, pH : 9.2	• Colour of solution: Blue • Appearance : Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water • pH range : 9.15 - 9.25	1 x 10Nos			
61	Buffer Capsule, pH : 4.0	• Colour of solution : Orange • Appearance: Capsule containing pH indicating dye and	1 x 10 Nos			

		preservative for dissolution in 100 ml distilled water ● pH range: 3.95 – 4.05				
62	Buffer Capsule, pH : 7.0	● Colour of solution : Green ● Appearance : Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water ● pH range : 6.95 - 7.05	1x 10 Nos			
63	Triple Sugar Iron Agar	● For identification of members of E*nterobacteriaceae* especially *Salmonell*	500 G x 1			

		a species ● Complying to the specifications laid down in ISO 1993, Draft ISO DIS 6579-1:2017. ● Must adhere to APHA endorsements for the examination of meat and food products, milk and dairy products and for microbial limit test for confirming the presence of Salmonella and in the identification of gram-negative bacilli. ● Appearance: Light yellow to pink homogeneous free				

		flowing powder ● Gelling: Firm, comparable with 1.2% Agar gel. ● Colour and Clarity of prepared medium: Pinkish red coloured clear to slightly opalescent gel forms in tubes as slants. ● Reaction of 6.45% w/v aqueous solution at 25°C (pH : 7.4±0.2) ● pH range: 7.20-7.60 ● Cultural characteristics must be observed after an incubation at 35-37°C for 18-24 hours				

64	Voges Proskauer Medium	• For performance of the Voges-Proskauer test in differentiation of *Bacillus* cereus complying with FDA BAM 1998. • Must work on food samples • Appearance: Cream to yellow homogeneous free flowing powder • Colour and Clarity of prepared medium: Light yellow coloured clear solution without any precipitate • Reaction of 1.7% w/v aqueous solution at 25°C. (pH : 6.5±0.2) • pH range: 6.30-6.70 • Cultural characteristics must be	500 G x 1			

		observed after an incubation at 35°C for 46-50 hours.				
65	Tris base	● [Tris(hydroxymethyl) aminomethane] ● Cell Culture Tested ● Commonly used as a component of buffer solutions in biology, biochemistry and molecular biology applications. ● Tris salts are also used for crystallization of proteins at various pH values. ● Appearance: White to crystalline powder. ● Solubility : Clear colorless to faint yellow solution at 10gm in 100ml of water . ● pKa : 8.1 at 25°C ● Heavy metals: NMT 0.0005% ● Loss on drying: NMT 0.5% ● Assay : NLT 99.00%	500 G x 1			
66	EDTA disodium salt dihydrate	● Dihydrate ● Complies with USP-NF, EP, BP and IP testing specifications ● Appearance :Whit	500G x 1			

		e crystalline powder ● Solubility :Soluble in water and insoluble in ethanol (96%) ● pH: 4.00 - 6.00 (5% in water at 25°C) ● Appearance of solution: 5% Solution in water is clear and colourless ● Assay (Pb(NO3)2 Titration) (EP, BP, IP): 98.50 - 101.00%				
67	50X TAE	● Used for gel electrophoresis after dilution to working concentration ● Buffer with faster migration capacity ● Ideal for DNA fragments greater than 4Kb ● Superior to TBE for preparat	500 ML x 1			

		ive gel electrophoresis preceding cloning, and other work requiring enzymatic applications. ● Appearance: Colorless solution ● Clarity: Clear and free of particles ● pH range: 8.2-8.4 ● DNase & RNase: None detected ● Sterility: Bacterial or Fungal growth were absent after 14 days of incubati				

		on as per USP Specifications ● Suitability test: This solution has been tested and is suitable for use in Agarose Gel Electrophoresis				
68	Glacial Acetic acid	● AR grade or above ● Appearance: Clear colourless liquid ● Solubility: 1 mL miscible with 1 mL of water ● Density (at 20°C): 1.00 - 1.10 g/mL ● Cadmium (Cd): <= 0.00001% ● Chloride (Cl): <= 0.0001% ● Copper (Cu): <= 0.00001% ● Iron (Fe): <= 0.00002% ● Lead (Pb): <= 0.00001% ● Sulphate (SO_4): <= 0.0001% ● Water (K.F.): <= 0.2% ● Zinc (Zn): <= 0.00001% ● Non-volatile substances: <=	500 ML x 1			

		0.001% ● Substance reducing dichromate (O) : <= 0.003% (Difference between titres < 2.0mL) ● Assay (GC/NaOH Titration): min. 99.60%				
69	Sucrose	● For use in Molecular Biology experiments ● Appearance : Colourless to off-white hygroscopic crystals or powder or solid ● Solubility : 1000 mg soluble in 1 mL of water ● DNases & RNases : None detected ● Specific rotation: +65.9° to +67.0° (c = 10% in water at 25°C) ● Heavy metals (as Pb) : <= 0.0005% ● Insoluble matter : <= 0.005% ● Iron (Fe) : <= 0.0005% ● Chloride (Cl) : <= 0.005% ● Titrable acid : <= 0.0008 meq/g ● Invert sugar : <= 0.05% ● Sulfate and sulfite (as SO4) : <= 0.005% ● Residue after ignition : <=	500 G x 1			

		0.01% ● Loss on drying (at 105°C, 2 hr) : <= 0.03% ● Assay (HPLC) : min. 99.50%				
70	Sodium bicarbonate	● Synonym: Sodium hydrogen carbonate ● Cell culture tested ● Appearance : White crystals or powder or solid ● Identification tests for sodium and bicarbonate must be performed separately ● pH (5% in water at 20°C) : 7.50 - 8.50 ● Chloride (Cl) : <= 0.015% ● Sulfate (SO_4) : <= 0.015% ● Assay (HCl Titration) : 99.50 - 102.00%	500 G x 1			
71	Chloroform	● Ultra pure grade or above ● Colorless, strong-smelling, dense liquid ● For use as laboratory solvent ● Appearance : Colourless liquid ● Solubility : 1 mL miscible with 1 mL of alcohol ● FTIR : Must agree with the standard pattern ● Refractive index (n 20/D) : 1.4420 - 1.4450 ● Density (at	100 ML x 1			

		25°C) : 1.474 - 1.480g/mL ● Magnesium (Mg) : <= 0.00002% ● Calcium (Ca) : <= 0.00005% ● Iron (Fe) : <= 0.00005% ● Manganese (Mn) : <= 0.000005% ● Cadmium (Cd) : <= 0.000005% ● Assay (GC) : min. 99.80%				
72	L-Ascorbic Acid (Vitamin C)	● Cell Culture Tested ● Synonym: Vitamin C ● Required for normal growth and maintenance of cultured cells. ● Used as a component of many classical and serum-free cell culture media. ● Appearance : White to yellow powder. ● Solubility Clear colorless to light yellow solution at 5gm in 100ml of water . ● pH of 5% solution in water 2.10 -2.70 ● Specific rotation [alpha]20/D +20.5° to +21.5° ● Iron (Fe) NMT 0.0002% ● Residue on	25 G x 1			

		ignition NMT 0.1% ● Assay NLT 99.00%				
73	Sodium phosphate dibasic anhydrous	● For Molecular Biology experiments ● Appearance : White crystals or powder ● Solubility : 33.3 mg soluble in 1 mL of water ● pH (5% in water at 25°C) : 8.7 - 9.3 ● DNases & RNases : None detected ● Loss on drying (at 130°C, 2 hr) : <= 5.0% ● Chloride (Cl) : <= 0.002% ● Iron (Fe) : <= 0.002% ● Sulfate (SO_4) : <= 0.005% ● Assay (HCl Titration, on dry basis) : 99.00 - 100.50%	250 G x 1			
74	Potassium phosphate monobasic anhydrous	● For Molecular Biology experiments ● Appearance: Colourless to off-white crystals or powder or solid ● Solubility: 100 mg soluble in 1 mL of water ● pH (5% in water at 25°C): 4.10 - 4.50 ● DNases & RNases: None	100 G x 1			

		detected ● Assay (NaOH Titration): 99.00 - 100.50%				
75	Potassium chloride	● Cell Culture Tested ● Assay : ≥98.5%	250 g x 1			
76	Potassium ferricyanide	● AR grade and above ● Appearance : Pale yellow to ruby-red crystals or powder or chunks ● Solubility : 100 mg soluble in 1 mL of water ● Chloride (Cl) : <= 0.02% ● Sulfate (SO_4) : <= 0.005% ● Water insoluble matter : <= 0.005% ● Assay (Iodometry) : 99.00 - 102.00%	500 G x 1			
77	Ferric chloride anhydrous	● For Molecular Biology experiments ● Appearance: Dark red to brown or dark green or black crystals or powder ● Solubility: 33.3 mg soluble in 1 mL of water ● DNases & RNases: None detected ● Assay (Iodometry) : 98.00 - 102.00%	50 MG x 1			
78	Ferrous sulphate heptahyd	● Plant Culture Tested ● Appearance : Light	500 G x 1			

	rate	blue or blue-green or green solid or crystals or powder ● Solubility : 100 mg soluble in 1 mL of water + 0.1 mL of H_2SO_4 ● pH (5% in water at 20°C) : 3.00 - 4.00 ● Ferric iron (Fe^{+3}) : <= 0.1% ● Assay ($KMnO_4$ Titration) : 99.00 - 104.50%				
79	1,10-Phenanthroline monohydrate	● LR grade or above ● Appearance : White to off-white crystals or powder or needle-like crystals (May become cream coloured during storage) ● Solubility : 33.3 mg soluble in 1 mL of alcohol ● Melting range : 97 - 104°C ● Suitability as redox indicator : Passes test ● Suitability for determining iron : Passes test ● Water (K.F.) : 8.00 - 10.00% ● Assay (NT, on anhydrous basis) : 99.50 - 102.00%	5 G x 1			
80	Pyrogallol	● Works as a plant metabolite ● Synonym: 1,2,3-Trihydroxybenzene ● Appearance : White to off-white	100 G x 1			

		crystals or powder or solid, becomes grayish on exposure to air and light ● Solubility : 100 mg soluble in 1 mL of water ● FTIR : Agrees with the standard pattern ● Melting range : 131 - 135°C ● Assay (GC/HPLC) : min. 98.00%				
81	1-Chloro-2,4-dinitrobenzene	● 1. For Molecular Biology experiments ● Appearance : Yellow to brown crystals or powder or chunks ● Solubility : 33.3 mg soluble in 1 mL of alcohol ● DNases & RNases: None detected ● FTIR : Agrees with the standard pattern ● Melting range : 48 - 54°C ● Assay (GC) : min. 99.00%	500 G x 1			
82	D.P.X. mountant (Liquid)	● Used as a synthetic resin mounting media for histology purposes ● Appearance : Colourless viscous liquid ● Solubility : 1 mL miscible in 1 mL	500 G x 1			

		of xylene ● Refractive index (n 20/D) : 1.515 - 1.525 ● Density (at 25°C) : 0.915 - 0.925 g/mL ● Acidity : <= 0.05 ml				
83	ONPG discs	● For the detection of b-galactosidase activity in microorganisms ● Ideal for the rapid identification of cryptic lactose fermenters (late fermenters) ● Sterile filter paper discs impregnated with ONPG (similar to lactose) ● Appearance : Filter paper discs of 6 mm diameter bearing letters "On" in continuous printing style. ● ONPG reaction observed in 0.85% sodium chloride solution in culture containing ONPG disc, after an incubation of up to 4 hours at 35-37°C.	1 x 50 discs / vial			
84	Sodium thioglycolate	● Bacteriological grade or above ● Used as a reducing agent ● Appearance : White to off-white to faintly pink	100 G x 1			

		hygroscopic powder ● Solubility : 100 mg soluble in 1 mL of water ● pH (10% in water at 25°C) : 5.0 - 9.0 ● FTIR : Agrees with the standard pattern ● Melting Point : >250°C ● Assay (Iodometry/Cation exchange T) : 96.00 - 102.00%				
85	o-Phthalaldehyde	● LR grade or above ● Appearance : Yellow to yellow with a green cast crystals or powder or lumps ● Solubility : 33.3 mg soluble in 1 mL of ethanol ● FTIR : Agrees with the standard pattern ● Melting range : 53 - 58°C ● Assay (HPLC/GC) : min. 97.00%	5 G x 1			
86	Sodium taurodeoxycholate hydrate	● Cell Culture Tested ● Assay : ≥99% ● Anhydrous basis	500 MG x 1			
87	NADPH (TPNH) tetrasodium salt	● Tetrasodium salt ● Appearance : White to light yellow crystals or powder ● Solubility : Soluble in water ● Assay(HPLC) :	100 MG x 1			

		min.97.00%				
88	Manganese (II) chloride tetrahydrate	• AR grade or above • Appearance : Pink to reddish deliquescent crystals or powder or solid • Solubility : 1000 mg soluble in 1 mL of water • pH (5% in water at 25°C) : 3.50 - 6.00 • Magnesium (Mg) : <= 0.005% • Calcium (Ca) : <= 0.005% • Heavy metals (as Pb) : <= 0.0005% • Iron (Fe) : <= 0.0005% • Sulfate (SO_4) : <= 0.005% • Potassium (K) : <= 0.01% • Sodium (Na) : <= 0.05% • Zinc (Zn) : <= 0.005% • Insoluble matter : <= 0.005% • Assay (EDTA Titration) : 98.00 - 101.00%	500 G x 1			
89	Magnesium sulphate anhydrous	• AR grade or above • Appearance : White to light grey crystals or granules or powder • Solubility : 33.3 mg soluble in 1 mL of hot water • pH (5% in water at 25°C) : 5.00 - 9.20	500 G x 1			

		• Loss on ignition (at 105°C, 2 hr then ignite at 450 ±25°C) : <= 2.00% • Loss on drying (at 105°C, 2 hr) : <= 2.00% • Assay (EDTA Titration, on dried basis) : 99.00 - 102.00%				
90	Magnesium chloride hexahydrate	• AR/ACS grade or above • Highly soluble ionic halides • Appearance : White deliquescent crystals or powder or solid • Solubility : 100 mg soluble in 1 mL of water • Ammonium (NH_4) : <= 0.002% • Barium (Ba) : <= 0.005% • Calcium (Ca) : <= 0.01% • Heavy metals (as Pb) : <= 0.0005% • Insoluble matter : <= 0.005% • Iron (Fe) : <= 0.0005% • Manganese (Mn) : <= 0.0005% • Nitrate (NO3) : <= 0.001% • Phosphate (PO_4) : <= 0.0005% • Potassium (K) : <= 0.005% • Sodium (Na) : <=	500 G x 1			

		0.005% ● Strontium (Sr) : <= 0.005% ● Sulfate (SO_4) : <= 0.002% ● Assay (EDTA Titration) : 99.00 - 102.00%				
91	Parafilm	● Thermoplastic, colourless & semi-transparent film ● All-purpose laboratory self-sealing film ● Flexible, mouldable and a barrier to moisture loss ● Roll Size : 2" x 250' ● Diameter core: 1"	1 x 5 Nos.			
92	Bradford Reagent	● Used for accurate, quantitative estimation of proteins ● Samples can be estimated visually or values can be determined with a standard Spectrophotometer or plate reader at 595nm ● Ready-to-use ● Working standard	500 ML x 1			

		preparation not required ● Easier and faster than other methods ● Detects protein concentration in the range 20 to 1500 µg/mL ● Appearance: Brown colored solution ● Clarity : Clear and free of particles ● Suitability test : This solution has been tested and is suitable for use in quantitative estimation of protein samples by Bradford assay				
93	Bovine serum albumin for molecular biology	● For molecular biology experiments ● Nuclease and Protease free ● Appearance : White to light brown crystals or powder ● Solubility : 33.3 mg soluble in 1 mL of water ● pH (1% in water at 25°C) : 6.5 - 7.5 ● DNases &	25 G x 1			

		RNases : None detected ● Alkaline phosphatase and peroxidase : None detected ● Proteases : None detected ● Loss on drying (at 105°C, 2 hr) : <= 5.0% ● Total nitrogen : 14.5 - 16.5% ● Assay (Protein, on dried basis) : min. 98.0%				
94	6X Gel Loading Buffer	● Glycerol based gel loading buffer for DNA gels with two tracking dyes ● Premixed, ready to use DNA gel loading buffer ● For loading on agarose or polyacryla	6 x 1 ML			

		mide gels. ● Does not mask DNA band during gel exposure to UV light ● Appearance: Blue Colored solution ● Clarity: Clear and free of particles ● DNase & RNase: None detected ● Suitability test: This solution has been tested and is suitable for use in gel electrophoresis				

We hereby certify that the information and documents submitted in the Technical Bid are true and correct to the best of our knowledge. We understand that any misrepresentation may lead to disqualification. All pages of this bid have been duly signed and sealed as required.

Name of the Bidder:

Signature:

Seal:

Annexure III

Financial Bid

[To be submitted on letter head of the supplier in a separate, sealed envelope]

Sl. No	Details of the item(s)	Specification	Qty	Price	GST	Total price
1	Granulated Sabouraud Dextrose Broth	• Granulated • For cultivation of yeasts, moulds and aciduric microorganisms. • Isolation of organisms from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.	500 g x 1			
2	Tryptone Soya Broth	• γ-irradiated sterile powder • Recommended for the evaluation of sterility in manufacturing process • Also used for the tube dilution method of antimicrobial sensitivity testing • Appearance: Cream to yellow, possibly with a green tinge, homogeneous free flowing powder • Colour and Clarity of prepared medium: Light amber coloured clear solution • Reaction of 3.0% w/v aqueous solution at 25°C. pH : 7.3±0.2 • pH range 7.10-7.50 • Sterility Testing: No growth is observed after 14 days for Bacteria at 30-35°C and for Fungi at 20-25°C. • PCR-based Test for Mycoplasma: None detected.	500 g x 1			

		• Stability test: Light yellow coloured clear solution without any precipitation or sedimentation at room temperature for 7 days • Growth promoting properties: Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at 30-35°C for 18-24 hours of time when inoculating <=100cfu.				
3	Alkaline Peptone Water	• For enrichment of *Vibrio* species from sea foods and infectious materials and other clinical specimens such as faeces • Compliance with BIS specifications IS 5887 (Part-V) 1976 • Appearance: Cream to yellow coloured homogenous free flowing powder • Colour and clarity of prepared medium: Light yellow coloured clear solution without any precipitate • Reaction of 1.5% w/v aqueous solution at 25°C. pH: 8.2 +/- 0.2 • pH range: 8.00-8.40 • Cultural characteristics observed after an incubation at 35-37°C for 18-24 h	100 g x 1			

4	Granulated MacConkey Agar	• Granulated • For selective isolation and differentiation of E.coli and other enteric bacteria • Bacterial isolation from pharmaceutical products in compliance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP. • For use in microbiological examination of foodstuffs and for direct plating / inoculation of water samples for coliform counts • Product should be accepted or use by the Standard Methods for the Examination of Milk and Dairy Products • Appearance: Light yellow to pink colored granular medium. • Gelling: Firm comparable with 1.35% Agar gel. • Colour and Clarity of prepared medium: Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates. • pH range: 6.90-7.30 • Cultural Response: to be observed after an incubation at 30-35°C for 18-72 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar.	500 g x 2			

5	MacConkey Agar w/ 0.15% Bile Salts, CV and NaCl	• For selective isolation and • differentiation of coliform organisms and other enteric pathogens from clinical and non-clinical samples. • For the detection and isolation of Gram negative organisms from clinical, dairy, food, water, pharmaceutical and industrial sources • Endorsed for selection and recovery of the Enterobacteriaceae and related enteric Gram negative bacilli • Should comply APHA recommendations and can be used for direct plating of water samples for coliform bacilli, for examination of food samples for food poisoning organisms and for isolation of Salmonella and Shigella species in cheese • Should suit for counting coli-aerogenes bacteria in animal samples, investigations on the genus Aeromonas • Specific media components inhibit growth of Gram positive organisms • Appearance: Light	500 g x 1			

		yellow to pink homogeneous free flowing powder ● Gelling: Firm comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates. ● Reaction of 5.15% w/v aqueous solution at 25°C. pH : 7.1±0.2 ● pH range: 6.90-7.30 ● Cultural response to be observed after an incubation at 30-35°C for 18-72 hours.				
6	Granulated Potato Dextrose Agar	● Granulated ● For isolation and enumeration of yeasts and moulds from water, dairy and other food products and clinical samples ● Endorsed by APHA and F.D.A. for plate counts of yeasts and moulds in the examination of foods and dairy products. ● To be used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production ● Should be endorsed	500 g x 1			

		by USP, BP, EP and JP for growth of fungi ● Appearance: Cream to yellow granulated free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Yellow coloured clear to slightly opalescent gel forms in Petri plates ● Reaction of 3.9% w/v aqueous solution at 25°C. pH : 5.6±0.2 ● pH range: 5.40-5.80 ● Cultural characteristics observed after an incubation at 22 - 25°C for 4 - 5 days				
7	Modified Bifidobacterium Agar	● Modified ● Selective medium for the isolation of the Bifidobacterium species from faeces or stool specimens. ● Appearance: Cream to yellow coloured homogeneous free flowing powder ● Gelling: Firm, comparable with 1.45% agar gel ● Colour and Clarity of prepared medium: Amber coloured clear to slightly opalescent gel forms in Petri plates ● pH range: 5.30-5.70 ● Cultural Response: Cultural	500 g x 1			

		characteristics to be observed with added supplements after an incubation at 35-37°C for 24-48 hours in an anaerobic conditions.				
8	Luria Bertani Agar, Miller	● For the cultivation and maintenance of recombinant strains of Escherichia coli for genetic and molecular biology studies. ● May be used for routine cultivation and estimation of not particularly fastidious microorganisms ● Ideal for maintaining and propagating bacterial cultures. ● Used for growing transformed cultures, preparing cells, and gene studies. ● Appearance of Powder: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of the prepared medium: Yellow to amber coloured, clear to slightly opalescent gel forms in Petri plates ● pH range: 7.30-7.70 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 24	500 g x 1			

		hours.				
9	Luria Bertani Broth, Miller	● For the cultivation and maintenance of recombinant strains of Escherichia coli for genetic and molecular biology studies ● May be used for routine cultivation and estimation of not particularly fastidious microorganisms ● Ideal for maintaining and propagating bacterial cultures. ● Used for growing transformed cultures, preparing cells, and gene studies. ● Appearance of Powder: Cream to yellow homogeneous free flowing powder ● Colour and Clarity of the prepared medium: Yellow to amber coloured clear solution in tubes ● pH range: 7.30-7.50 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 24 hours. ● With out Agar	500 g x 2			
10	Nutrient Agar	● General purpose medium for cultivation of less fastidious microorganisms ● Can be enriched with	500 g × 3			

		blood or other biological fluids. ● Also used for purity checking prior to biochemical or serological testing ● To be ideal for demonstration and teaching purposes where a more prolonged survival of cultures at ambient temperature is often required without risk of overgrowth that can occur with more nutritious substrate ● Able to use widely in microbiological examination of variety of materials and is also recommended by standard methods. ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Light yellow coloured clear to slightly opalescent gel forms in Petri plates ● pH range: 7.30-7.50 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 24 hours.				

11	Nutrient Broth	• A sterility testing medium for aerobes in compliance with Indian Pharmacopoeia, Third Edition • Used for the examination of water and dairy products according to Standard Methods for the Examination of Water and Wastewater and Dairy Products as per IP • Also used for cultivating several less fastidious microorganisms. • Appearance: Cream to yellow homogeneous free flowing powder • Colour and Clarity of prepared medium: Light yellow coloured clear solution. • pH range: 7.20-7.40 • With out agar • Growth promotion is carried out as per Indian Pharmacopoeia	500 g x 2			

		• Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.				
12	Agar Agar, Type I	• Endorsed for preparation of culture media for microbiological analysis • For use in bacteriological routine laboratory work, plant tissue culture media, pharmaceutical preparations, where clarity, compatibility are not of prime significance • Readily dissolves in boiling water • Appearance: Cream coloured, homogeneous free flowing powder. • Solubility: Freely soluble in hot water at temperatures above 85°C. Insoluble in cold water. • Clarity: A firm solid, clear to slightly opalescent gel is formed at a concentration of	500 g x 1			

		1.5% at 38-41°C. ● Agar dye diffusion: 18-20mm ● Identification test: In accordance with method specified in USP 2022 ● Cultural response required after an incubation at 35-37°C for 18-24 hours by preparing Nutrient Agar using Agar Agar, Type I as an ingredient				
13	Columbia Blood Agar Base	● Appropriate base for preparation of blood agar, chocolate agar and for various selective and identification media. ● Isolation of organisms from clinical and non-clinical samples. ● Promotes rapid and luxuriant growth of fastidious and non-fastidious organisms. ● The medium supports typical colonial morphology; better pigment production and more sharply defined haemolytic reactions. ● Able to use as base for the media containing blood and for selective media formulations in	500 g x 1			

		which different combinations of antimicrobial agents are used as additives. ● Appearance: Cream to yellow homogeneous free flowing powder. ● Gelling: Firm, comparable with 1.5% Agar gel. ● Colour and Clarity of prepared medium Basal medium: Light amber coloured clear to slightly opalescent gel. Cherry red coloured opaque gel should form after addition of 5% w/v sterile defibrinated blood in Petri plates. ● pH range: 7.10-7.50 ● Cultural characteristics should be observed with added 5% w/v sterile defibrinated blood, after an incubation at 35-37°C for 24-48 hours.				
14	Levine - Eosin Methylene Blue Agar Medium	● For isolation, enumeration and differentiation of members of Enterobacte- riaceae in compliance with IP/USP ● Endorsed for the detection, enumeration and differentiation of members of the coliform group by American Public Health Association,	500 g x 1			

		United States Pharmacopoeia and Indian Pharmacopoeia ● Appearance: Light pink to purple homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Reddish purple with greenish cast coloured opalescent gel with finely dispersed precipitate forms in Petri plates. ● pH 6.90-7.30 ● Growth Promotion as per USP/IP. ● Cultural response to be observed after an incubation at 30-35°C for 24-48 hours. Recovery rate is considered as 100% for bacteria growth on Soyabean Casein Digest Agar and fungal growth on Sabouraud Dextrose Agar				
15	MacConkey Broth	● For the presumptive identification of coliforms from pharmaceutical products ● For the selective enrichment of E.coli from pharmaceutical products in compliance with the microbial limit testing by harmonized	500 g x 2			

		methodology of USP/EP/BP/JP. ● Appearance: Cream to yellow with green tinge homogeneous free flowing powder ● Colour and Clarity of prepared medium: Purple coloured clear to slightly opalescent solution in tubes ● pH range 7.10-7.50 ● Cultural response to be observed after an incubation at 30-35°C for 18-48 hours. ● Agar not added				
16	L-Cysteine hydrochloride monohydrate	● Appearance: White to almost white crystals or powder or colorless crystals ● Solubility: 100 mg soluble in 1 mL of water ● FTIR should agree with the standard pattern ● Specific rotation: +5.00 to +7.00° (c = 8% in 1 M HCl at 20°C, dried substance) ● Loss on drying: 8.50 – 12.00% (in vacuum over Phosphorus pentoxide, 20 hours) ● Assay (Iodometry): 98.00 - 102.00%	100 g x 1			
17	Starch M-protein for Actinomycete	● For isolation and propagation of *Actinomycete*s from soil & water samples. ● Appearance: Cream to yellow	500 g x 1			

		homogeneous free flowing powder ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Yellow to light amber coloured opalescent gel forms in Petri plates ● Cultural Response: Cultural characteristics observed after an incubation at 26-30°C for 6-7 days				
18	Granulated MRS Agar	● Granulated ● For isolation and cultivation of Lactobacilli from food, dairy and clinical samples ● Supports abundant growth of all Lactobacilli from oral cavity, dairy products, foods, faeces and other sources. ● Appearance: Cream to light yellow coloured	500 g x 1			

		granular medium ● Gelling: Firm, comparable with 1.2% Agar gel. ● Colour and Clarity of prepared medium: Medium to dark amber coloured, clear to slightly opalescent gel forms in Petri plates ● pH range: 6.30-6.70 ● Cultural Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18-24 hours or longer (with 5% CO2)				
19	Granulated MRS Broth	● Granulated ● For cultivation of all Lactobacilli from clinical and non-clinical samples. ● Clinical samples - faeces, swab from oral	500 g x 1			

		cavity; Food and dairy samples ● Appearance: Cream to yellow colored granular medium ● Colour and Clarity of prepared medium: Light amber coloured, clear to slightly opalescent solution in tubes ● pH range: 6.30-6.70 ● Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours or longer (with 5% CO2) ● Agar not added				
20	Granulated TCBS Agar	● Granulated ● For selective isolation and cultivation of *Vibrio cholerae* and other enteropathogenic *Vibrios* causing food	500 g x 1			

		poisoning from clinical and food specimens ● Also endorsed by APHA for the selective isolation of *V. cholerae* and *V. parahaemolyticus* ● Enrichment in Alkaline Peptone Water, followed by isolation on TCBS Agar is routinely used for isolation of *V. cholerae* ● Appearance: Light yellow to light tan colored granular medium. ● Gelling: Firm, comparable with 1.5% Agar gel ● Colour and Clarity of prepared medium: Bluish green coloured clear to slightly opalescent gel forms in Petri plates. ● pH range: 8.40-8.80 ● Cultural				

		Response: Cultural characteristics to be observed after an incubation at 35-37°C for 18-24 hours				
21	Anaerogas Pack – 3.5 L capacity	• Foil bag containing a paper sachet filled with black coloured oxygen absorbing and carbon dioxide generating agent. • Disposable • For use in anaerobic systems and jars • No catalyst or pressure gauge is required • Capacity: 3.5L	5 x 5/pack			
22	Mueller Hinton Agar	• For determination of susceptibility of microorganisms to antimicrobial agents isolated from clinical samples. • Endorsed for the diffusion of antimicrobial agents	500 G x 3			

		impregnated on paper disc through an agar gel as detailed in CLSI Approved Standard ● Facilitates the growth of most non-fastidious bacterial pathogens ● Good batch-to-batch reproducibility for susceptible testing as accepted by WHO Committee on Standardization ● Appearance: Cream to yellow homogeneous free flowing powder ● Gelling: Firm, comparable with 1.7% agar gel. ● Colour and Clarity of prepared medium: Light amber coloured				

		clear to slightly opalescent gel forms in Petri plates ● pH range: 7.20-7.40 ● Cultural Response: Antibiotic susceptibility tests to be performed as per ISO/TS 16782. Performance of the medium to be checked in line with the CLSI/ EUCAST guidelines.				
23	Mueller Hinton Broth	● For determination of Invitro susceptibility of bacterial strains against antibacterial agents by broth dilution methods ● A stable serum-free bacteriological media that supports the growth of two otherwise very fastidious	500 G x 2			

		bacteria ● Media for routine bacterial antibiotic susceptibility determination, with updated cutoff standards for designating resistant (R) and susceptible (S) strains (as per CLSI) ● Appearance: Cream to yellow coloured, homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light amber coloured clear solution in tubes ● pH : 7.3±0.1 ● pH range: 7.20-7.40 ● Cultural Response: Cultural characteristics should be observed after an incubation at 35-37°C for 18-24 hours.				

24	M9 Minimal Medium Salts	• For growing recombinant *Escherichia coli* strains for Molecular Biology applications • Can be supplemented with specific amino acids or other required nutrients for the selection of specific auxotrophs • The inclusion of certain additives (e.g. thiamine or casamino acids) enhances the bacterial growth. • Appearance of Powder: White to cream coloured, homogeneous, free flowing powder. • Colour and Clarity: Colourless, clear solution without any precipitate. • Cultural Response : Cultural characteristics to be observed after an incubation at 35-37°C for 18 - 48 hours.	500 G x 1			

		• Required concentration: 5X				
25	Anaerobic Blood Agar Base	• For isolation and cultivation of Group A and Group B Streptococci from throat cultures and other clinical samples. • Appearance: Cream to yellow homogeneous free flowing powder • Gelling: Firm, comparable with 1.4% Agar gel • Colour and Clarity of prepared medium: Basal medium: Yellow coloured clear to slightly opalescent gel. After addition of 5%v/v sterile defibrinated blood, cherry red coloured opaque gel should form in Petri plates • pH range: 7.10-7.50 • Cultural Response: Cultural characteristics should be observed in presence of 5-10% CO2 with added	500 G x 1			

		5%v/v sterile defibrinated sheep blood and antibiotic supplement, after an incubation for 24-48 hours at 35-37°C.				
26	RNase A Solution	● Concentration: 20 mg/ml ● Used for isolating R NA- free DNA from blood cells, animal ce lls, tissues, bacterial c ells and plant cells. ● Appearance: Colorles s solution ● Clarity: Clear and free of particles ● No presence of DNase & RNase ● Suitability Test: This reagent need to be tested for suitability for isolatio n of RNA- free DNA from blood cells, ani mal cells, tissues, bact erial cells and plant cel ls.	5ML x 1			
27	Diluent for DNA Extraction	● For Molecular Biology ● Appearance: Colourless liquid ● Solubility: 1 mL miscible in 1 mL of water ● DNases & RNases: None detected ● FTIR : should agree with the standard pattern ● Refractive index (n 20/D) : Approx.	500 ML x 2			

		1.3550 - 1.3650 ● Density (at 25°C) :Approx. 0.784 - 0.794 g/mL ● Acetone, IPA : ~5.00% ● Methanol : <= 0.10% ● Isobutanol, benzene and others : <= 0.90% ● Assay (GC) : min. 94.00% ● Denatured Ethanol				
28	Erythromycin-15 mcg	● Level: 15 mcg ● Erythromycin E 15 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures in accordance with Kirby-Bauer Method ● Appearance: Filter paper discs of 6mm diameter with printed code on centre of each side of the disc for identification. ● Cultural response: Average diameter of zone of inhibition should be observed on appropriate agar after 18 hours incubation at 35-37°C for standard cultures.	1 vial (VL) x 1			
29	Ampicillin - AMP 25 mcg	● Level: 25 mcg ● Ampicillin AMP 25mcg discs are used for antimicrobial susceptibility testing of bacterial cultures in accordance with Bauer-Kirby Method ● Appearance: Filter paper discs of 6mm diameter with printed	1 vial (VL) x 1			

		code on centre of each side of the disc for identification. ● Cultural response: Average diameter of zone of inhibition should be observed on appropriate agar after 18 hours incubation at 35-37°C for standard cultures.				
30	Nigrosin Stain	● Concentration: 10% w/v ● Used as staining solution for negative staining. ● Also permits visualization of the usually transparent and unstainable capsule of many organisms ● Used for negative Staining of bacteria and capsule-containing fungus ● Suitable for specimen: Clinical samples; food & dairy samples; Water samples ● Appearance: Blackish violet coloured solution. ● Clarity: Clear without any particles. ● Microscopic Examination : Negative staining is carried out. Staining characteristics of organism is observed under microscope by using oil immersion lens ● Expected Results:	500 ML x 1			

		Clear halos surrounding the bacterial cells				
31	Autoclavable Bag – 12 inch	• Clear, transparent autoclavable disposable bag. • Size: 12”(height) x 10”(breadth) • Maximum weight holding capacity: 1.0 kg • For waste disposal and recommended for disposal of pathological/ clinical or contaminated material. • Also for sterilization of glass ware or plastic wares. • Used in hospitals, clinical laboratories, microbiological laboratories, Biotechnology laboratories, molecular biology laboratories etc. for disposal of material • Polypropylene bag • Superior strength, free	5x500/pack			

		from chlorine. ● Can be steam sterilized at 121 ºC- 15 minutes.				
32	Autoclavable Bag – 14 inch	● Clear, transparent autoclavable disposable bag. ● Size: 20”(height) x 14”(breadth) ● Maximum weight holding capacity: 2.5 kg ● For waste disposal and recommended for disposal of pathological/ clinical or contaminated material. ● Also for sterilization of glass ware or plastic wares. ● Used in hospitals, clinical laboratories, microbiological laboratories, Biotechnology laboratories, molecular biology laboratories etc. for disposal of material. ● Polypropylene bag ● Superior strength, free from chlorine. ● Can be steam sterilized at 121 ºC- 15 minutes.	2 x 500 / pack			

33	ASN Salt	• For Molecular Biology • Appearance : White to light yellow hygroscopic crystals or powder or solid • Solubility : 100 mg soluble in 1 mL of water • DNases & RNases to in undetectable levels • Values required for specific rotation : +258.0° to +287.0°(c = 0.25% in 0.4% potassium hydrogen phthalate, anhydrous substance at 20°) • Water (K.F.) : <= 2.0% • Assay (HPLC) : 91.00 - 102.00%	5 G x 1			
34	Vancomycin-VA 30 mcg	• Symbol: VA • Level: 30 mcg • Vancomycin VA 30 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures as per Bauer-Kirby Method • Appearance: Filter paper discs of 6mm diameter with printed "VA 30" on centre of each side of the disc. • Cultural response: Average diameter of zone of inhibition observed on Mueller Hinton Agar (M173) after 18 hours incubation at 35-37°C for standard cultures.	1 vial (VL) x 1			

35	Ethidium bromide solution	• For Molecular Biology • Appearance: Dark red liquid • Solubility: 33.3 mg soluble in 1 mL of water • DNases & RNases: None detected • Suitability test: Suitable for all DNA isolation procedures • Assay (HPLC/AT): min. 95.00% • 10mg/ml concentration	10 ML x 3			
36	Sulfuric acid pure	• Pure, AR grade or above • Appearance: Clear colourless liquid • Density (d 25/4) : 1.835 - 1.845 g/mL • Ammonium (NH4) : < = 0.0002% • Arsenic (As) : < = 0.000001% • Cadmium (Cd) : <= 0.00001% • Chloride (Cl): <= 0.00005% • Copper (Cu): <= 0.00001% • Iron (Fe): <= 0.00002% • KMnO4 reducing substances (as SO2): <= 0.0005% • Lead (Pb) : <= 0.00001% • Nitrate (NO3): <= 0.00002% • Residue on ignition: <= 0.001% • Zinc (Zn): <=0.00001% • Assay (NaOH	500 ML x 1			

		Titration) :min. 97.00%				
37	Hydrochloric acid abt.35% pure	• Abt.35% pure, AR grade or above • Appearance : Colourless to yellow liquid • Density (d 20/4) : ~1.19 g/mL • Sulfate (SO4) : <=0.0001% • Sulfite(SO3) : <=0.0002% • Free chlorine (Cl2) : <=0.00005% • Lead (Pb) : <=0.000005% • Copper (Cu) : <=0.000005% • Iron (Fe) : <=0.00005% • Zinc (Zn) : <=0.00001% • Cadmium (Cd) : <=0.000001% • Ammonium (NH4) : <=0.00025% • Arsenic (As) : <=0.000005% • Assay (NaOH Titration) : min. 35.00%	500 ML x 1			
38	Gram Stains - Kit	• Grams Stain Kit is used for differentiation of bacteria on the basis of their	1 KIT x 2			

		gram nature. ● Kit must include Gram's Crystal Violet, Gram's Decolourizer, Gram's Iodine and Safranin (0.5% w/v) ● Any isolated colony on primary or subculture plates can be isolated from clinical specimens like Blood, urine, CSF, pus, wounds, lesions, body tissues, sputum etc. or from environment like Air, water, soil, sludge, waste water, food, dairy samples etc. ● Microscopic examination : Gram staining was carried out and observed under oil immersion lens. ● Expected Results : Gram positive organisms: Violet coloured Gram negative organisms: Pinkish red coloured				

39	Oxidase Discs	• For detection of oxidase production by microorganisms like Neisseria, Alcaligenes, Aeromonas, Vibrio's, Campylobacter and Pseudomonas, which give positive reactions and for excluding Enterobacteriaceae, which give negative reactions. • Oxidase discs should be sterile filter paper discs impregnated with N, N-dimethyl-p-phenylenediamine oxalate, ascorbic acid and a-naphthol. • Appearance: Filter paper discs of 10 mm diameter • Cultural response: Typical oxidase reaction given by 18-48 hour culture observed within 5-10 seconds at 25-30°C.	3 x 50 discs/vial			

40	Yeast Extract Powder	• Dried extract from autolysing yeast cells (Saccharomyces) specially cultivated for this purpose. • Rich source of vitamin B complex and endorsed for use in microbial culture media, fermentation and other biological products. • Appearance : Light yellow to brownish yellow homogenous free flowing powder characteristic odour but not putrescent. • Solubility : Freely soluble in distilled/ purified water, insoluble in alcohol. • Clarity : 1% w/v aqueous solution is clear to opalescent, may develop precipitates after autoclaving at 15 lbs pressure (121ºC) for 15 minutes. • Cultural response observed after incubation at 35-37°C for 18-24 hours by preparing appropriate agar plates using Yeast extract powder as an ingredient. • Total Nitrogen : ≥9.00 % • Alpha amino	500 G x 1			

		nitrogen : ≥4.50 % ● Sodium chloride : ≤5.00 % ● Loss on drying : ≤7.00 % ● Residue on ignition : ≤15.00 %				
41	Meat extract B Broth	● For routine cultivation of non-fastidious bacteria from clinical (faeces, stool) and non-clinical samples (food, dairy and water) ● Used as a general-purpose nutrient medium and is also endorsed for preparation of pure culture of Candida species for carrying out fermentation studies ● Appearance :Crea m to yellow homogeneous free flowing powder ● Colour and Clarity of prepared medium: Yellow coloured, clear solution without any haziness in tubes ● Reaction of 1.8% w/v aqueous solution at 25°C. pH : 7.2±0.2	500 G x 1			

		• pH range: 7.00-7.40 • Cultural Response : Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.				
42	Sodium chloride	• AR grade or above • Appearance : Colourless to white crystals or powder or solid • Solubility : 100 mg soluble in 1 mL of water • pH (5% in water at 25°C) : 5.00 - 9.00 • Barium (Ba) : Passes test • Iron (Fe) : <= 0.0002% • Sulphate (SO_4) : <= 0.004% • Phosphate (PO_4) : <= 0.0005% • Magnesium (Mg) : <= 0.001% • Calcium (Ca) : <= 0.002% • Potassium (K) : <= 0.005% • Insoluble matter : <= 0.005% • Bromide (Br) : <= 0.01% • Iodide (I) : <= 0.002% • Assay (AT) : 98.50 - 102.00%	500 G x 1			
43	Skim Milk powder	• Appearance : Pale yellow to cream amorphous	500G x 1			

		homogeneous, free flowing powder ● Solubility : 33.3 mg soluble in 1 mL of water with slight opacity ● pH of 2% w/v aqueous solution at 25°C : 6.00 - 7.00 ● Water (K.F.) : <= 10.00% ● Sulphated ash : <= 10.00% ● Fat content : <= 1.50% ● Total Nitrogen (anhydrous basis) : >= 4.70% Total Protein (anhydrous basis) : >= 35.00%				
44	Sodium hydroxide pellets	● For molecular biology ● Appearance : White hygroscopic pellets ● Solubility : 1000 mg soluble in 1 mL of water ● DNases & RNases : None detected ● Calcium (Ca) : <= 0.005% ● Sodium carbonate (Na_2CO_3) : <= 1.0% ● Chloride (Cl) : <= 0.005% ● Heavy metals (as Pb) : <= 0.002% ● Nitrogen	100 G x 1			

		compounds (as N) : <= 0.001% ● Phosphate (PO_4) : <= 0.001% ● Iron (Fe) : <= 0.001% ● Mercury (Hg) : <= 0.00001% ● Magnesium (Mg) : <= 0.002% ● Nickel (Ni) : <= 0.001% ● Potassium (K) : <= 0.02% ● Sulfate (SO_4): <= 0.003% ● Assay (HCl Titration) : min. 97.00%				
45	Concavity Slides (Two Cavity)	● Two polished spherical concavities ● 16 mm in diameter x 0.5 mm deep ● Made of non-corrosive glass ● Bevelled and polished edges and corners ● Dimension : 75 x 25 mm ● Thickness : 1.4 mm	1 x 10 slides /pack			
46	Glycerol	● For molecular biology ● Appearance : Clear colourless syrupy hygroscopic viscous liquid ● Solubility : 1 mL miscible with 1 mL of water ● pH (5M in	500 ML x 1			

		water at 25°c) : 5.50 - 8.00 ● DNases & RNases : None detected ● Refractive index (n 20/D) : 1.470 - 1.475 Density (at 25°C) : 1.250 - 1.260 g/mL ● Heavy metals (as Pb) : <= 0.0005% ● Iron (Fe) : <= 0.0005% ● Magnesium (Mg) : <= 0.0005% ● Assay (NaOH Titration/GC) : >= 99.50%				
47	L-Spreader	● Alternative to bending glass rods or pipettes ● Completely autoclavable ● Reusable ● Recommended sterilization by autoclaving at 15 lbs pressure at 121°C for 15 minutes.	1 x 20 Nos. / pack			
48	Sterile Sample Container with spoon	● Material: Polypropylene ● Overflowing capacity: 50 ml ● Spoon securely attached on the lid of the container	2 x 100/ pack			

49	Sterile Sample Container	• Material: polypropylene • Overflowing capacity : 50 ml • Individually packed for sterility • No spoon attached	4 x 100/ pack			
50	Anaero Indicator Tablet R.T.	• Accessory for anaerobic system • For detection of anaerobic environment. • Under anaerobic conditions the tablet colour will change to pink • One tablet adequate for a jar of 3.5 litre/ 1.5 litre capacity.	4 x 2 Nos. /pack			
51	L-Arginine monohydrochloride	• Appearance : White to almost white crystals or powder • Solubility : 100 mg soluble in 1 mL of water • pH (10% in water at 25°C) : 4.70 - 6.20 • FTIR : Agrees with the standard pattern • Specific rotation : +21.40 to +23.60° (c = 8% in hydrochloric acid, at 20°C) • Loss on drying (at 105°C, 3 hr) : <= 0.20% • Assay (AT/NT, on dry basis) : 98.50 - 101.50%	25 G x 1			
52	Phenol:Chlorofor m:Isoamyl alcohol	• Ratio: 25:24:1 volume/volume • For molecular biology	100 ML x 1			

	mixture (25:24:1 v/v)	• Appearance : Colourless to yellow clear solution or 2 layer liquid. • Solubility : The 2 layer liquid is extracted in water (1:1). • pH (H2O phase, after extraction with water, 1:1 at 25°C) : 7.70 - 8.30 • DNases & RNases : None detected				
53	Sterile Cotton Swab	• Cotton bud w/Polypropylene Stick in polypropylene tube • Size: 150 mm • Individually packed in 12 mm diameter tube • DNA free	1 x 100 Nos. /pack			
54	D(+)-Trehalose dihydrate	• Dihydrate • Serves as a carbohydrate reserve in microorganisms and protects them from adverse conditions. • Appearance : White to off-white hygroscopic crystals or powder • Solubility : 1000 mg soluble in 1 mL of water • FTIR (KBr disc) : Agrees with the	25 G x 1			

		standard pattern ● Specific rotation [alpha 20/D] : +176.0° to +182.0° (c = 2% in water at 20°C) ● Water (K.F.) : <= 11.0% ● Assay (GC/HPLC) : 99.00 - 102.00%				
55	Glycine	● For Molecular Biology ● Nuclease and Protease free ● Appearance : White to off-white solid or crystals or granules or powder ● Solubility : 100 mg soluble in 1 mL of water ● DNases, RNases & Protease : None detected ● Chloride (Cl) : <= 0.005% ● Heavy metals (as Pb) : <= 0.002% ● Ammonium (NH_4) : <= 0.005% ● Sulphate (SO_4) : <= 0.005% ● Residue after ignition : <= 0.1% ● Substances darkened by H_2SO_4 : Passes test ● Hydrolysable substances : Passes test ● Assay (NT) : 99.00 - 102.00%	100 G x 1			
56	L-Arginine	● Plays a key role in many physiological processes such as tissue repair and	25 G x 1			

		reproduction. ● Appearance : White to almost white crystals or powder ● Solubility : 100 mg soluble in 1 mL of water ● pH (5% in water at 25°C): 10.50 - 12.00 ● FTIR : Agrees with the standard pattern ● Specific rotation : +25.80° to +28.50° (c = 8% in 6N hydrochloric acid, at 20°C) ● Melting range : 217 - 227°C ● Chloride (Cl) : <= 0.05% ● Ammonium (NH_4) : <= 0.02% ● Heavy metals (as Pb) : <= 0.0015% ● Iron (Fe) : <= 0.003% ● Sulfate (SO_4) : <= 0.03% ● Loss on drying (at 105°C, 3 hr) : <= 0.50% ● Residue on ignition : <= 0.30% ● Assay (NT/HCl Titration, on dry basis): 99.00 - 101.50%				
57	Hydrogen peroxide	● Plant Culture Tested ● Assay : min 30%	100 ML x 1			
58	Potassium permanganate	● LR grade or above ● Used as analytical lab reagent. ● An oxidizing agent. ● Appearance : Dark purple or green to black crystals or	500 G x 1			

		powder ● Solubility : 33.3 mg soluble in 1 mL of water ● Assay (Iodimetry) : 98.00 - 102.00%				
59	Formaldehyde sol 37 - 41%	● AR grade or above ● 37 - 41% solution ● Appearance : Clear colourless liquid with pungent odour. ● Solubility : 1 mL miscible in 1 mL of ethanol ● Density (at 25°C) : 1.080 - 1.090 g/mL ● Acidity (HCOOH) : <= 0.045% ● Chloride (Cl) : <= 0.0002% ● Copper (Cu) : <= 0.002% ● Iron (Fe) : <= 0.0001% ● Lead (Pb) : <= 0.0001% ● Non-volatile Matter : <= 0.005% ● Sulfate (SO_4) : <= 0.002% ● Sulfated ash : <= 0.002% ● Methanol : 10.00 - 14.00% ● Assay (HCL/H2SO4 Titration) : 37.00 - 41.00 %	500 ML x 1			
60	Buffer Capsule, pH : 9.2	● Colour of solution: Blue ● Appearance : Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water	1 x 10Nos			

		• pH range : 9.15 - 9.25				
61	Buffer Capsule, pH : 4.0	• Colour of solution: Orange • Appearance: Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water • pH range: 3.95 – 4.05	1 x 10 Nos			
62	Buffer Capsule, pH : 7.0	• Colour of solution : Green • Appearance : Capsule containing pH indicating dye and preservative for dissolution in 100 ml distilled water • pH range : 6.95 - 7.05	1x 10 Nos			
63	Triple Sugar Iron Agar	• For identification of members of E*nterobacteri*	500 G x 1			

		aceae especially *Salmonella* species ● Complying to the specifications laid down in ISO 1993, Draft ISO DIS 6579-1:2017. ● Must adhere to APHA endorsements for the examination of meat and food products, milk and dairy products and for microbial limit test for confirming the presence of Salmonella and in the identification of gram-negative bacilli. ● Appearance: Light yellow to pink homogeneous free flowing powder ● Gelling: Firm, comparable with 1.2% Agar gel.				

		• Colour and Clarity of prepared medium: Pinkish red coloured clear to slightly opalescent gel forms in tubes as slants. • Reaction of 6.45% w/v aqueous solution at 25°C (pH : 7.4±0.2) • pH range: 7.20-7.60 • Cultural characteristics must be observed after an incubation at 35-37°C for 18-24 hours				
64	Voges Proskauer Medium	• For performance of the Voges-Proskauer test in differentiation of *Bacillus* cereus complying with FDA BAM 1998. • Must work on food samples • Appearance: Cream to	500 G x 1			

		yellow homogeneous free flowing powder ● Colour and Clarity of prepared medium: Light yellow coloured clear solution without any precipitate ● Reaction of 1.7% w/v aqueous solution at 25°C. (pH : 6.5±0.2) ● pH range: 6.30-6.70 ● Cultural characteristics must be observed after an incubation at 35°C for 46-50 hours.				
65	Tris base	● [Tris(hydroxy methyl) aminomethane] ● Cell Culture Tested ● Commonly used as a component of buffer solutions in biology, biochemistry and molecular biology applications. ● Tris salts are also used for crystallization of proteins at various pH values. ● Appearance: White to	500 G x 1			

		crystalline powder. ● Solubility : Clear colorless to faint yellow solution at 10gm in 100ml of water . ● pKa : 8.1 at 25°C ● Heavy metals: NMT 0.0005% ● Loss on drying: NMT 0.5% ● Assay : NLT 99.00%				
66	EDTA disodium salt dihydrate	● Dihydrate ● Complies with USP-NF, EP, BP and IP testing specifications ● Appearance :White crystalline powder ● Solubility :Soluble in water and insoluble in ethanol (96%) ● pH: 4.00 - 6.00 (5% in water at 25°C) ● Appearance of solution: 5% Solution in water is clear and colourless ● Assay (Pb(NO3)2 Titration) (EP, BP, IP): 98.50 - 101.00%	500G x 1			
67	50X TAE	● Used for gel electrophoresis after dilution to working concentration ● Buffer with faster migration capacity ● Ideal for DNA fragments	500 ML x 1			

		greater than 4Kb ● Superior to TBE for preparative gel electrophoresis preceding cloning, and other work requiring enzymatic applications. ● Appearance : Colorless solution ● Clarity: Clear and free of particles ● pH range: 8.2-8.4 ● DNase & RNase: None detected ● Sterility: Bacterial or Fungal growth were absent after 14 days of incubation as per USP Specifications ● Suitability test: This solution has				

		been tested and is suitable for use in Agarose Gel Electrophoresis				
68	Glacial Acetic acid	• AR grade or above • Appearance: Clear colourless liquid • Solubility: 1 mL miscible with 1 mL of water • Density (at 20°C): 1.00 - 1.10 g/mL • Cadmium (Cd): <= 0.00001% • Chloride (Cl): <= 0.0001% • Copper (Cu): <= 0.00001% • Iron (Fe): <= 0.00002% • Lead (Pb): <= 0.00001% • Sulphate (SO_4): <= 0.0001% • Water (K.F.): <= 0.2% • Zinc (Zn): <= 0.00001% • Non-volatile substances: <= 0.001% • Substance reducing dichromate (O) : <= 0.003% (Difference between titres < 2.0mL) • Assay (GC/NaOH Titration): min. 99.60%	500 ML x 1			
69	Sucrose	• For use in Molecular Biology experiments • Appearance :	500 G x 1			

		Colourless to off-white hygroscopic crystals or powder or solid ● Solubility : 1000 mg soluble in 1 mL of water ● DNases & RNases : None detected ● Specific rotation: +65.9° to +67.0° (c = 10% in water at 25°C) ● Heavy metals (as Pb) : <= 0.0005% ● Insoluble matter : <= 0.005% ● Iron (Fe) : <= 0.0005% ● Chloride (Cl) : <= 0.005% ● Titrable acid : <= 0.0008 meq/g ● Invert sugar : <= 0.05% ● Sulfate and sulfite (as SO4) : <= 0.005% ● Residue after ignition : <= 0.01% ● Loss on drying (at 105°C, 2 hr) : <= 0.03% ● Assay (HPLC) : min. 99.50%				
70	Sodium bicarbonate	● Synonym: Sodium hydrogen carbonate ● Cell culture tested ● Appearance : White crystals or powder or solid ● Identification tests for sodium and bicarbonate must be performed separately ● pH (5% in water at 20°C) : 7.50 - 8.50 ● Chloride (Cl) : <=	500 G x 1			

		0.015% ● Sulfate (SO_4) : <= 0.015% ● Assay (HCl Titration) : 99.50 - 102.00%				
71	Chloroform	● Ultra pure grade or above ● Colorless, strong-smelling, dense liquid ● For use as laboratory solvent ● Appearance : Colourless liquid ● Solubility : 1 mL miscible with 1 mL of alcohol ● FTIR : Must agree with the standard pattern ● Refractive index (n 20/D) : 1.4420 - 1.4450 ● Density (at 25°C) : 1.474 - 1.480g/mL ● Magnesium (Mg) : <= 0.00002% ● Calcium (Ca) : <= 0.00005% ● Iron (Fe) : <= 0.00005% ● Manganese (Mn) : <= 0.000005% ● Cadmium (Cd) : <= 0.000005% ● Assay (GC) : min. 99.80%	100 ML x 1			
72	L-Ascorbic Acid (Vitamin C)	● Cell Culture Tested ● Synonym: Vitamin C ● Required for normal growth and maintenance of cultured cells. ● Used as a component of many classical and	25 G x 1			

		serum-free cell culture media. ● Appearance : White to yellow powder. ● Solubility Clear colorless to light yellow solution at 5gm in 100ml of water . ● pH of 5% solution in water 2.10 -2.70 ● Specific rotation [alpha]20/D +20.5° to +21.5° ● Iron (Fe) NMT 0.0002% ● Residue on ignition NMT 0.1% ● Assay NLT 99.00%				
73	Sodium phosphate dibasic anhydrous	● For Molecular Biology experiments ● Appearance : White crystals or powder ● Solubility : 33.3 mg soluble in 1 mL of water ● pH (5% in water at 25°C) : 8.7 - 9.3 ● DNases & RNases : None detected ● Loss on drying (at 130°C, 2 hr) : <= 5.0% ● Chloride (Cl) : <= 0.002% ● Iron (Fe) : <= 0.002% ● Sulfate (SO_4) : <= 0.005% ● Assay (HCl Titration, on dry basis) : 99.00 - 100.50%	250 G x 1			
74	Potassium phosphate monobasic anhydrous	● For Molecular Biology experiments ● Appearance: Colourless to off-	100 G x 1			

		white crystals or powder or solid ● Solubility: 100 mg soluble in 1 mL of water ● pH (5% in water at 25°C): 4.10 - 4.50 ● DNases & RNases: None detected ● Assay (NaOH Titration): 99.00 - 100.50%				
75	Potassium chloride	● Cell Culture Tested ● Assay : ≥98.5%	250 g x 1			
76	Potassium ferricyanide	● AR grade and above ● Appearance : Pale yellow to ruby-red crystals or powder or chunks ● Solubility : 100 mg soluble in 1 mL of water ● Chloride (Cl) : <= 0.02% ● Sulfate (SO_4) : <= 0.005% ● Water insoluble matter : <= 0.005% ● Assay (Iodometry) : 99.00 - 102.00%	500 G x 1			
77	Ferric chloride anhydrous	● For Molecular Biology experiments ● Appearance: Dark red to brown or dark green or black crystals or powder ● Solubility: 33.3 mg soluble in 1 mL of water ● DNases & RNases: None detected ● Assay (Iodometry) : 98.00 - 102.00%	50 MG x 1			

78	Ferrous sulphate heptahydrate	• Plant Culture Tested • Appearance : Light blue or blue-green or green solid or crystals or powder • Solubility : 100 mg soluble in 1 mL of water + 0.1 mL of H_2SO_4 • pH (5% in water at 20°C) : 3.00 - 4.00 • Ferric iron (Fe^{+3}) : <= 0.1% • Assay ($KMnO_4$ Titration) : 99.00 - 104.50%	500 G x 1			
79	1,10-Phenanthroline monohydrate	• LR grade or above • Appearance : White to off-white crystals or powder or needle-like crystals (May become cream coloured during storage) • Solubility : 33.3 mg soluble in 1 mL of alcohol • Melting range : 97 - 104°C • Suitability as redox indicator : Passes test • Suitability for determining iron : Passes test • Water (K.F.) : 8.00 - 10.00% • Assay (NT, on anhydrous basis) : 99.50 - 102.00%	5 G x 1			
80	Pyrogallol	• Works as a plant metabolite • Synonym: 1,2,3-Trihydroxybenzene • Appearance : White to off-white crystals	100 G x 1			

		or powder or solid, becomes grayish on exposure to air and light ● Solubility : 100 mg soluble in 1 mL of water ● FTIR : Agrees with the standard pattern ● Melting range : 131 - 135°C ● Assay (GC/HPLC) : min. 98.00%				
81	1-Chloro-2,4-dinitrobenzene	● 1. For Molecular Biology experiments ● Appearance : Yellow to brown crystals or powder or chunks ● Solubility : 33.3 mg soluble in 1 mL of alcohol ● DNases & RNases: None detected ● FTIR : Agrees with the standard pattern ● Melting range : 48 - 54°C ● Assay (GC) : min. 99.00%	500 G x 1			
82	D.P.X. mountant (Liquid)	● Used as a synthetic resin mounting media for histology purposes ● Appearance : Colourless viscous liquid ● Solubility : 1 mL miscible in 1 mL of xylene ● Refractive index (n 20/D) : 1.515 - 1.525 ● Density (at 25°C) : 0.915 - 0.925 g/mL ● Acidity : <= 0.05 ml	500 G x 1			

83	ONPG discs	● For the detection of b-galactosidase activity in microorganisms ● Ideal for the rapid identification of cryptic lactose fermenters (late fermenters) ● Sterile filter paper discs impregnated with ONPG (similar to lactose) ● Appearance : Filter paper discs of 6 mm diameter bearing letters "On" in continuous printing style. ● ONPG reaction observed in 0.85% sodium chloride solution in culture containing ONPG disc, after an incubation of up to 4 hours at 35-37°C.	1 x 50 discs / vial			
84	Sodium thioglycolate	● Bacteriological grade or above ● Used as a reducing agent ● Appearance : White to off-white to faintly pink hygroscopic powder ● Solubility : 100 mg soluble in 1 mL of water ● pH (10% in water at 25°C) : 5.0 - 9.0 ● FTIR : Agrees with the standard pattern ● Melting Point : >250°C ● Assay (Iodometry/Cation	100 G x 1			

		exchange T) : 96.00 - 102.00%				
85	o-Phthalaldehyde	• LR grade or above • Appearance : Yellow to yellow with a green cast crystals or powder or lumps • Solubility : 33.3 mg soluble in 1 mL of ethanol • FTIR : Agrees with the standard pattern • Melting range : 53 - 58°C • Assay (HPLC/GC) : min. 97.00%	5 G x 1			
86	Sodium taurodeoxycholate hydrate	• Cell Culture Tested • Assay : ≥99% • Anhydrous basis	500 MG x 1			
87	NADPH (TPNH) tetrasodium salt	• Tetrasodium salt • Appearance : White to light yellow crystals or powder • Solubility : Soluble in water • Assay(HPLC) : min.97.00%	100 MG x 1			
88	Manganese (II) chloride tetrahydrate	• AR grade or above • Appearance : Pink to reddish deliquescent crystals or powder or solid • Solubility : 1000 mg soluble in 1 mL of water • pH (5% in water at 25°C) : 3.50 - 6.00 • Magnesium (Mg) : <= 0.005% • Calcium (Ca) : <= 0.005% • Heavy metals (as Pb) : <= 0.0005%	500 G x 1			

		• Iron (Fe) : <= 0.0005% • Sulfate (SO_4) : <= 0.005% • Potassium (K) : <= 0.01% • Sodium (Na) : <= 0.05% • Zinc (Zn) : <= 0.005% • Insoluble matter : <= 0.005% • Assay (EDTA Titration) : 98.00 - 101.00%				
89	Magnesium sulphate anhydrous	• AR grade or above • Appearance : White to light grey crystals or granules or powder • Solubility : 33.3 mg soluble in 1 mL of hot water • pH (5% in water at 25°C) : 5.00 - 9.20 • Loss on ignition (at 105°C, 2 hr then ignite at 450 ±25°C) : <= 2.00% • Loss on drying (at 105°C, 2 hr) : <= 2.00% • Assay (EDTA Titration, on dried basis) : 99.00 - 102.00%	500 G x 1			
90	Magnesium chloride hexahydrate	• AR/ACS grade or above • Highly soluble ionic halides • Appearance : White deliquescent crystals or powder or solid • Solubility : 100 mg soluble in 1 mL of water	500 G x 1			

		• Ammonium (NH_4) : <= 0.002% • Barium (Ba) : <= 0.005% • Calcium (Ca) : <= 0.01% • Heavy metals (as Pb) : <= 0.0005% • Insoluble matter : <= 0.005% • Iron (Fe) : <= 0.0005% • Manganese (Mn) : <= 0.0005% • Nitrate (NO3) : <= 0.001% • Phosphate (PO_4) : <= 0.0005% • Potassium (K) : <= 0.005% • Sodium (Na) : <= 0.005% • Strontium (Sr) : <= 0.005% • Sulfate (SO_4) : <= 0.002% • Assay (EDTA Titration) : 99.00 - 102.00%				
91	Parafilm	• Thermo plastic, colourless & semi-transparent film • All-purpose laboratory self-sealing film • Flexible, mouldable and a barrier to moisture loss • Roll Size : 2" x 250' • Diameter core: 1"	1 x 5 Nos.			

92	Bradford Reagent	• Used for accurate, quantitative estimation of proteins • Samples can be estimated visually or values can be determined with a standard Spectrophotometer or plate reader at 595nm • Ready-to-use • Working standard preparation not required • Easier and faster than other methods • Detects protein concentration in the range 20 to 1500 µg/mL • Appearance: Brown colored solution • Clarity : Clear and free of particles • Suitability test : This solution has been tested and is suitable for use in quantitative estimation of protein samples by Bradford assay	500 ML x 1			
93	Bovine serum albumin for molecular biology	• For molecular biology experiments • Nuclease and Protease free • Appearance : White to light brown crystals or powder • Solubility : 33.3 mg soluble in 1	25 G x 1			

		mL of water ● pH (1% in water at 25°C) : 6.5 - 7.5 ● DNases & RNases : None detected ● Alkaline phosphatase and peroxidase : None detected ● Proteases : None detected ● Loss on drying (at 105°C, 2 hr) : <= 5.0% ● Total nitrogen : 14.5 - 16.5% ● Assay (Protein, on dried basis) : min. 98.0%				
94	6X Gel Loading Buffer	● Glycerol based gel loading buffer for DNA gels with two tracking dyes ● Premixed, ready to use DNA gel loading buffer ● For loading on agarose or polyacrylamide gels. ● Does not mask DNA band during	6 x 1 ML			

		gel exposure to UV light ● Appearance: Blue Colored solution ● Clarity: Clear and free of particles ● DNase & RNase: None detected ● Suitability test: This solution has been tested and is suitable for use in gel electrophoresis				

Total			
Total amount in words			

We hereby submit our Financial Bid for the above-mentioned tender. The prices quoted are firm and inclusive of all applicable taxes and charges. We understand that the rates quoted shall remain valid for the duration specified in the tender terms. All pages of the Financial Bid have been duly signed and sealed.

Name of the Bidder:

Signature: **[Seal]**

Annexure IV

[To be submitted on letter head of the supplier]

DECLARATION SHEET

I/WE, _____ hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification. It is certified that our organization has been authorised by the original manufacturer or is an authorised reseller (Copy attached) to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document.

We, further specifically certify that our organization has not been Blacklisted/De Listed or put to any interruption by any Institutional Agency/ Govt. Department/Public Sector Undertaking in the last three years.

(Authorized Signature with Seal)