Tender Fee :Rs.1000/-

# **REGIONAL CENTRE FOR BIOTECHNOLOGY**

at NCR Biotech Science Cluster, Village-Bhankri, 3<sup>rd</sup> Milestone Faridabad-Gurgaon Expressway, District - Faridabad (Haryana)- 121001.
Tele Nos 0129-2848800, 0129-2848813 & 0129-2848815

(SCHEDULE-'A')

S.NO. OF	TENDE	R	:						
FILE NO	) <b>.</b>		: R	CB/ATN	N/02/15-16				
Name of the party in whose Favour the Tender form has been issued									
at NCR 3 <sup>rd</sup> Mile	al Centi Biotecl stone F	re for Bion Science Saridabao	otechno e Cluste d-Gurga 2848800,	r, Farion On Exp	dabad, V oressway	'illage /, Dist	-Bhank rict- Fa	ridabad,(Ha	
Dear Sir,								(SEAL OF T	THE OFFICER)
1.	I/We	hereby	submit	our	tender	for	the		
2.	for <u>Rs 1</u> Security	,40,000.00 . (TENDE	_ in favour RS NOT A	r of the ACCOM	"EXECU". PANIED V	TIVE D WITH E	IRECTO EMD/BID	R, RCB" tow	atedvards EMD/Bid ALONGWITH
3.	I/We have same.	ve gone thr	ough all te	rms and	conditions	of the	tender do	cuments before	e submitting the
4.	including	g delivery,		penalty e	tc. Quota	ions for	each gro	oup are being	this connection submitted under
5.									n and initialed.
6. 7.	I/We und issue of	lertake to si the letter of	f acceptance	ract/agre e, failing	ement, if reg	equired, c/my sec	within 15 curity mor	• /	from the date of may be forfeited
-	IONS FAIL	ING WHIC		BE PRES	UMED TH	AT THE	RATES A	RE INCLUSIVE	CATED IN THE OF ALL TAXES
WITNES	S								ture of s) full Address.

## **ADVERTISED TENDER NOTICE**

## REGIONAL CENTRE FOR BIOTECHNOLOGY

at NCR Biotech Science Cluster, Village-Bhankri, 3<sup>rd</sup> Milestone Faridabad-Gurgaon Expressway, District - Faridabad (Haryana)- 121001. Tele Nos 0129-2848800, 0129-2848813 & 0129-2848815

RCB/ATN/01-05/15-16

Dated 30.04. 2015

#### **NOTICE INVITING TENDER**

1. Sealed Tenders are invited, under <u>TWO-BID SYSTEM</u>, from reputed manufacturers / suppliers for the supply and installation of following items at New Campus at Regional Centre for Biotechnology, at NCR Biotech Science Cluster, Gurgaon-Faridabad Express Way, Gurgaon-Faridabad Expressway 3<sup>rd</sup> Milestone towards Gurgaon, Village-Bhankri, District Faridabad (Haryana)

Tender Ref.	Item/Equipment	<u>Qty</u>	<u>Tender</u>	<u>Bid</u>
			<u>Fee</u>	Security/EMD
			(in INR)	<u>(In INR)</u>
RCB/ATN/01/15-16	Microbial Cell Homogenizer	01(One)	1000/-	30,000/-
RCB/ATN/02/15-16	Bioreactor (7 Ltrs	02 (Two)	1000/-	1,40,000/-
	and 14 Ltrs	one each		
RCB/ATN/03/15-16	Analytical Balance	06	1000/-	12,000.00
RCB/ATN/04/1-15	Precision Balance	04	1000/-	8,000.00
RCB/ATN/05/1-15	Centrifuge	01	1000/-	8,000.00

2. Copy of Tender document and other details may be downloaded from <u>www.eprocure.gov.in</u> (CPP Portal), <u>www.rcb.res.in</u> and www.rcb.ac.in. Sealed Bids (Two-Cover System) will be received upto 14:00 hrs on or before 03.06.2015 and opening of Tenders will be on same day (03.06.2015) at 15:00 hrs.

(SR. MANAGER)
For & on behalf of
EXECUTIVE DIRECTOR

## CHECK LIST FOR TERMS AND CONDITIONS

Check li	st for Terms and Conditions (To be filled by the bidder and submitted alongwith the technical bid)					
1.	Certificate for being in business for more than 2 years					
2.	Certificate for sole ownership/partnership					
3.	Statement of financial standing from bankers					
4.	Performance report/List of organization supplied with the same equipment					
5.	Whether rates quoted included all taxes/Rate is a CIF					
6.	Whether rates are quoted as per tenders specifications					
7.	Authority letter from manufacturer/principal enclosed					
8.	Affidavit that the firm has not been black listed in the past by an Organization					
9.	Affidavit that the firm has no vigilance case/CBI/FEMA case pending agains him/supplier(principal)					
10.	Affidavit that the firm is not supplying the same item at the lower rate than the rate quoted in the tender to any Govt. organization or any other Institute (Fall clause)					
11.	Quotation being submitted directly by the manufacturer or authorized distributo					
12.	Statement of turnover/annual report for each of the last three years are attached					
13.	Bid Security amount deposited is enclosed					
14.	Literature of original catalogue of the product is attached for reference					
15.	Details of Name of beneficiary, Account No. of the beneficiary, IFCS code of the bank/brancl enclosed at Page No					
16.	Comprehensive Guarantee/Warranty period for and thereafter Comprehensive AMC (including all spares &labour) YES/NO. (Tick the option YES/NO) for further years.					
17.	Compliance Statement with relation to specification					

( NAME OF THE BIDDER) WITH SIGNATURE & SEAL

## REGIONAL CENTRE FOR BIOTECHNOLOGY

#### F. No. RCB/ATN/02/15-16

#### SPECIFICATIONS FOR BIOREACTOR (7 LTRS AND 14 LTRS

# Specifications for 2 independent in situ fermenters (7 L and 14 L capacity)for Molecular Interaction and Protein Purification Facility (ATPC)

#### I Fermentor with 7L total capacity

#### 1. Fermentor:

- In situ sterilizablefermentor with working volume 2 to 5 litre(Total Volume 7 litre). Fermentor should be capable of accommodating all interchangeable vessels of varying capacity (upto 20 L) compatible to the system quoted
- System should be suitable for microbial fermentation in aerobic & anaerobic condition for batch, fed batch & continuous operation
- Aspect Ratio: 2:1
- The fermentor should have advanced synoptic touch screen interface providing easy to read displays of current values, cascade loops sterilization cycles, customized PI values for all process parameter etc.

#### 2. Process Definition:

- Programmable in situ sterilization, the system should be supplied with Stainless Steel Exhaust Condensor on headplate.
- Fermentor should be capable of reaching sterilization temperature up to at least 121°C and temperature control during fermentation batches should be about minimum 5°C above coolant to maximum 80°C, display in 0.1°C increment with temperature rises of approx 1°C / minute.
- The vessel should get sterilized automatically on the bench without the need of external steam generator.

#### 3. Sensors (Measurement & Control):

- All these parameters should have a separate probe whichshould be controlled by PID (Proportional-integral-derivative controller).
- **Temperature range**:5°C to 70°C (originally it was 80°C), displayed in 0.1°C increments using Platinum 1 RTD probe
- **pH range**: 2 12 pH via PID
- pH Sensor: Option for one or two gel pH probes with digital display in 0.01 increments
- **pH Control**: Cascade to pumps, gases and/or loops from external devices
- **DO range**: 0 200% via PID
- **DO Sensor**: Option of one or two polarographic DO probes with digital display in 0.1% increments
- **DO Control**: Cascade to agitation, gases, pumps and/or loops from external devices
- Foam/Level Sensor: 2
- OptionalSensors: Redox, DO

#### 4. AGITATION:

- **Drive**: Top magnetic drive with single mechanical seal
- Range & Control: 50 1000 RPM, ±1 at 100 RPM; ±2 at 500 RPM; ±5 at 1000 RPM
- Impellers: Two six-bladed Rushton impellers
- **Baffles**: Four 316L removable stainless steel baffles

#### 5. Ports:

For 7 lit

- **Headplate port**: 6.35 mm 2; 12 mm 9; 19 mm 1; 13.5 mm 2
- Upper side wall: 2" Tri-clamp
- **Bottom**: 0.75" NA connect

#### 6. AERATION:

- Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM (Standard litres per min) flow rate and built in four-gas control (Air, O2, N2 & CO2). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control
- Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger or overlay

#### 7. PUMPS:

- **Standard**: Three built-in, assignable, peristalitic pumps and one external variable speed peristaltic pump for inoculums/feed
- Control modes: Off, Prime, Base, Acid, Foam, Level 2 Wet, Level 2 dry.
- **Speed**: Pumps 1 & 2: 10-12 RPM fixed speed, ability to view total pump flow rates. Pump 3: 100 RPM fixed speed, ability to view total pump flow rates.
- Inoculum/FEED (Variable Speed): Watson marlow 0-200 RPM

#### 8. PRESSURE:

• Safety device: A sanitary rupture disk in the vessel and an ASME safety release valve on the drain jacket

#### 9. Sampling and Harvesting:

- Autoclavable sampling system with needle and luer lock system
- Harvest through bottom drain valve

#### 10.Material:

 Vessel and Jacket Material should be ASME/CE certified SS 316L and internal material surface of the vessel is Ra value less than 0.55 micron outer surface to an Ra of less than 0.88 micron. Bioreactor should be SIP (Sterilization in place) design and all probes should be in-situ sterilizable.

#### 11. Measurement and control:

- The system should have a powerful Reactor Process Controller providing integrated control of up to 32 process parameters; with a capability of trending 8 parameters simultaneously and storage of up to 10 recipes.
- The system should have large touchscreen interface that simplifies entering set points and provide easy-to-read displays of current values, cascade loops, sterilization cycles.
- The system should come with 2 USB ports for importing firmware / software upgrades and exporting trained data.

#### 12. Peripherals and accessories:

- The system should have illuminated sight glass window of at least 1.5" and light for clear viewing of vessel contents.
- Sterilization through built-in band heater(no external steam generator required)
- Suitable Chiller should be provided for 7 Lvessel or 1, chiller compatible and capable of running both 7L and 14 L vessel simultaneously should be provided
- Suitable Air Compressor compatible for 7L and 14 L vesselshould be provided
- Online 5KVA UPS must be quoted which is capable of meeting the power demand of the entire system
- The above system should be cGMP compliant and validatable and should be capable of automatic sterilization using labs' water supply (RO Water).

#### II Fermentor with 14L total capacity

#### 1. Fermentor:

- In situ sterilizablefermentor with Working Volume 4 to 10 litre(Total Volume 14 litre respectively). Fermentorshould be capable of accommodating interchangeable vessels of varying capacity compatible to the system quoted
- System should be suitable for microbial fermentation in aerobic & anaerobic condition for batch, fed batch & continuous operation
- Aspect Ratio: 2:1
- The fermentor should have advanced synoptic touch screen interface providing easy to read displays of current values, cascade loops sterilization cycles, customize PI values for all process parameter etc.

#### 2. Process Definition:

- Programmable in situ sterilization, the system should be supplied with Stainless Steel Exhaust Condensor on headplate.
- Fermentor should be capable of reaching sterilization temperature up to at least 121°C and temperature control during fermentation batches should be about minimum 5°C above coolant to maximum 80°C, display in 0.1°C increment with temperature rises of approx 1°C / minute.
- The vessel should get sterilized automatically on the bench without the need of external steam generator.

#### 3. Sensors (Measurement and control):

- All these parameters should have a separate probe which should be controlled by PID (Proportional-integral-derivative controller).
- Temperature range: 5°C to 80°C, displayed in 0.1°C increments using Platinum 1 RTD probe
- **pH range**: 2 12 pH via PID
- **pH Sensor**: Option for one or two gel pH probes with digital display in 0.01 increments
- **pH Control**: Cascade to pumps, gases and/or loops from external devices
- **DO range**: 0 200% via PID
- **DO Sensor**: Option of one or two polarographic DO probes with digital display in 0.1% increments
- **DO Control**: Cascade to agitation, gases, pumps and/or loops from external devices
- Foam/Level Sensor: 2

#### 4. AGITATION:

- **Drive**: Top magnetic drive with single mechanical seal
- Range & Control: 50 1000 RPM, ±1 at 100 RPM; ±2 at 500 RPM; ±5 at 1000 RPM
- **Impellers**: Two six-bladed Rushton impellers
- **Baffles**: Four 316L removable stainless steel baffle

#### 5. Ports:

#### For 14 lit

- **Headplate port**: 6.35 mm 2; 12 mm 10; 19 mm 1; 13.5 mm 2
- Upper side wall: 2" Tri-clamp
- **Bottom**: 0.75" NA connect

#### 6. AERATION:

- **Gas System**: Standard: 1 TMFC with 0.5 to 25 SLPM (Standard litres per min) flow rate and built in four-gas control(Air, O2, N2 & Co2). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control.
- Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger or overlay

#### 7. PUMPS:

- **Standard**: Three built-in, assignable, peristalitic pumps and one external variable speed peristaltic pump for inoculums/feed
- Control modes: Off, Prime, Base, Acid, Foam, Level 2 Wet, Level 2 dry.
- **Speed**: Pumps 1 & 2: 10-12 RPM fixed speed, ability to view total pump flow rates. Pump 3: 100 RPM fixed speed, ability to view total pump flow rates.
- Inoculum/FEED (Variable Speed): Watson marlow 0-200 RPM

#### 8. PRESSURE:

• Safety device: A sanitary rupture disk in the vessel and an ASME safety release valve on the drain jacket

#### 9. Sampling and Harvesting:

- Autoclavable sampling system with needle and luerlocksystem
- Harvest through bottom drain valve

#### 10.Material:

 Vessel and Jacket Material should be ASME/CE certified SS 316L and internal material surface of the vessel is Ra value less than 0.55 micron outer surface to an Ra of less than 0.88 micron. Bioreactor should be SIP (Sterilization in place) design and all probes should be in-situ sterilizable.

#### 11. Measurement and control:

- The system should have a powerful Reactor Process Controller providing integrated control of up to 32 process parameters; with a capability of trending 8 parameters simultaneously and storage of up to 10 recepies.
- The system should have large touchscreen interface that simplifies entering set points and provide easy-to-read displays of current values, cascade loops, sterilization cycles.
- The system should come with 2 USB ports for importing firmware / software upgrades and exporting trained data.

#### 12. Peripherals and accessories:

- The system should have illuminated sight glass window of at least 1.5 inch and light for clear viewing of vessel contents.
- Sterilization through built-in band heater(no external steam generator required)
- Suitable Chiller should be provided for 14Lvessel

- Suitable Air Compressor should be provided for 14 L vessel
- Online 5 KVA UPS systemmust be quoted which is capable of meeting the power demand of the entire system
- The above system should be cGMP compliant and validatable and should be capable of automatic sterilization using labs' water supply (RO Water).

#### 1, Remote Control software controlling both the fermenters (7L and 14L) simultaneously

#### **Remote Control Software:**

- SCADA Software (Windows) for monitoring and control of entire process and parameters with security features capable of controlling both the fermenters (7L and 14L) simultaneously
- Desktop PC having Intel® Core™ i5-4570 with Intel HD Graphics 4600 (3.2 GHz, 6 MB cache, 4 cores, 4GB RAM, 1TB Harddisk, 18.5 inch monitor,3-years warranty, labour and on-site service, for SCADA software
- Other analog devices to be integrated up to 7 number
- Software supplied should feature basic data management & monitoring capabilities. It should have ability to
  trend & control parameter set points, establish alarm setting and produce batch records and should be ideal for
  basic process management. It should also have added enhanced control features including a sophisticated
  programming module, custom synoptic display window and equipment lock-out feature

#### **Essential Spares: (1 set for each fermentor)**

- 8 Nos DO membrane with electrolyte,
- extra pH probe-2Nos
- silicon tubing 3.2mm- 40 Mtrs,6.4mm- 40m Mtrs, 4.8mm-40mtrs,
- Extra Mechanical seal 2Nos complete with housing and stirring rod,
- septum-200Nos, extra Needle assembly-4Nos,
- Extra Air filter 10 Nos.
- Extra Exhaust Filter 10Nos.
- Orings and gasket -2 sets,
- probe storage rack-2Nos,
- Feed bottle with filters 500ml-8Nos, 1 Litre-4Nos

#### **Optional items**

- Optional Sensors: Redox, DO
- Single chiller for both 7 L and 14 L system as well as independent chillers for both system should be quoted. Also, both local and imported chillers should be quoted.

#### A. GENERAL REQUIREMENTS

- 1. Company should have dedicated application specialists with a proven track record to provide onsite training and should also have application-training center in India. Company must have to provide comprehensive training to our technical staffs/students/Scientists. In case of breakdown of the system company must agree to provide their facilities for use.
- 2. Company should have a commitment to provide all required services for relocation and reinstallation of the system from RCB-Faridabad Campus to ATPC Faridabad Campus when the latter facility is ready.
- 3. Quoted model must have at least five installations in India and the bidders should submit a comprehensive list of installations of the same instrument with similar application. Bidder should also provide at least three user certificates from recognized research Institute/University in India where instrument has been extensively used for similar applications.
- 4. The equipment should have 60 months warranty from the date of handing over the fully functional unit to the Institute, against manufacturing defects of material and workmanship.
  - The post- warranty CMC (after 5 years) should also be quoted for spares (including) and labor for the complete system, which includes all the accessories, supplied such as UPS, etc.

# 5. Quoted model must have at least five installations in India and vendor must provide the user list Note:

- The price comparison shall be made taking into account the cost of the equipment and accessories with 5 years warranty and post warranty CMC for Five years. Failure to comply this condition entails rejection of bids.
- The selected vendor should also agree to relocate and re-install the equipment at the ATPC Facility at Faridabad Biotech Cluster without any additional financial implication.
- All columns in Technical specifications sheet should be fully filled otherwise the tenders will be rejected.
- Relevant literature and publications from the original manufacturer that support the quoted model's ability to perform all of the
  above capabilities and specifications mentioned in the tender documents must be attachedotherwise the tenders are liable to be
  rejected.
- <u>UP TIME GUARANTEE</u>: The firm should provide uptime guarantee of 95%.
- <u>Downtime penalty Clause:</u> During the Guarantee/warranty period, desired uptime of 95% of 365 days (24 h) is required. If downtime is more than 5%, the institute shall be entitled to impose penalty in the form of extended warranty period equal to twice the downtime period. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least <u>FIVE YEARS</u> after handing over the unit to the Centre. If accessories/other

attachments of the system are procured from the third party, then the vendor must produce cost of accessory/other attachment and the CAMC from the third party separately along with the main offer and the third party will have to sign the CAMC with the Institute if required.

- **SPARE PARTS:** The separate price list of all spares and accessories and consumables, if any, (Including minor) required for maintenance and repairs in future after guarantee/warrantee period must be attached/enclosed along with the sealed quotation (Financial Bid) failing which quotation will not be considered.
- If any spares & accessories other than the price list attached/enclosed by the firm are required for future repair it will be borne by the firm only.

# Technical Compliance sheet for Bioreactor (7L and 14 L total volume) (Bidder should submit this filled document along with TECHNICAL BID only)

S.N o.	Fermentor Specification	Please mention if present (yes/no)	Technical details of the item	If 'yes' then mention reference page number on brochure
1	In situ sterilizablefermentorswith working volume of2 to5L (7 L total volume)and 4 to10 litre (14 litretotal volume)			
	System should be able to culture Bacteria, Yeast or Fungi.			
	Aspect Ratio: 2:1			
	Each fermentor should have advanced synoptic touch screen interface providing easy to read displays of current values, cascade loops sterilization cycles, customize PI values for all process parameter etc.			
	Fermentor should be capable of accommodating all interchangeable vessels of varying capacity (upto 20 L) compatible to the system quoted		Vessel capacity Capable of accommodating:,, sizes	
2	<b>Process Definition</b>			
	Programmable in situ sterlization, eachsystem should be supplied with stainless steel exhaust condensor on headplate. Fermentor should be capable of reaching sterilization temperature up to at least 121°C and temperature control during fermentation batches should be about minimum 5°C above coolant to maximum 80°C, display in 0.1°C increment with temperature rises of approx 1°C / minute. The vessel should get sterilized automatically on the bench without the need of external steam generator.		Max. sterilization temperature: C Range of temp. control: to C including increment value C	
3	Measurement &Control			
	All these parameters should have a separate probe which should be controlled by PID			
	<b>Temperature range</b> : 5°C to 70°C, displayed in 0.1°C increments using Platinum 1 RTD probe		Temperature control range: C to C with increment value	
	<b>pH range</b> : 2 - 12 pH via PID		pH range: topH	
	<b>pH Sensor</b> : Option for one or two gel pH probes with digital display in 0.01 increments		pH sensor type: PID control: Yes/No No. of sensor	
	<b>pH Control</b> : Cascade to pumps, gases and/or loops from external devices			
	<b>DO range</b> : 0 - 200% via PID		DO range: %	

pumps and/or loops from external devices  4 AGITATION:  Drive: Top magnetic drive with single mechanical seal  Range & Control: 50 - 1000 RPM, ±1 at 100 RPM; ±2 at 500 RPM; ±5 at 1000 RPM  Impellers: Two six-bladed rushton impellers  Baffles: Four 316L removable stainless steel baffles  PORTS:  Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)  Upper side wall: 2" Tri-clamp  Upper side wall: 2" Tri-clamp  Bottom: 0.75" NA connect  AERATION:  Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger or overlay		DO Sensor: Option of one or two Polaragraphic DO probes with digital display in 0.1% increments DO Control: Cascade to agitation, gases,	DO sensor type PID control Yes/No	
Drive: Top magnetic drive with single mechanical seal   Drive type and seal type: No. of seals:		pumps and/or loops from external devices		
Drive: Top magnetic drive with single mechanical seal   Drive type and seal type: No. of seals:	4	AGITATION:		
RPM; ±2 at 500 RPM; ±5 at 1000 RPM  Impellers: Two six-bladed rushton impellers  Baffles: Four 316L removable stainless steel baffles  PORTS:  Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)  Upper side wall: 2" Tri-clamp  Bottom: 0.75" NA connect  Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger		<b>Drive</b> : Top magnetic drive with single	**	
Baffles: Four 316L removable stainless steel baffles:  PORTS:  Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)  Upper side wall: 2" Tri-clamp  Bottom: 0.75" NA connect  Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger				
baffles  5 PORTS:  Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)  Upper side wall: 2" Tri-clamp  Bottom: 0.75" NA connect  6 AERATION:  Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger		Impellers: Two six-bladed rushton impellers	No. and type of impellers:	
Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)  Upper side wall: 2" Tri-clamp  Bottom: 0.75" NA connect  AERATION:  Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger			No. and type of baffles:	
Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)  Upper side wall: 2" Tri-clamp  Bottom: 0.75" NA connect  AERATION:  Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger	5	PORTS:		
Size  Bottom: 0.75" NA connect  Size  6 AERATION:  Gas System: Standard: 1 TMFC with 0.5 to 25  SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2μl absolute disposable filter for use as a sparger		Headplate port: 6.35 mm - 2; 12 mm -9; 19	No	
Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2μl absolute disposable filter for use as a sparger		Upper side wall: 2" Tri-clamp	Size	
Gas System: Standard: 1 TMFC with 0.5 to 25  SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger			Size	
SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control  Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger	6			
absolute disposable filter for use as a sparger		SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for		
Of Overlay		absolute disposable filter for use as a sparger		
7 PUMPS:	7	· ·		
Standard: Three built-in, assignable peristaltic pumps and one external variable speed peristaltic pump for inoculums/Feed  No. of Pumps:		Standard: Three built-in, assignable peristaltic pumps and one external variable speed	No. of Pumps:	
Control modes: Off, Prime, Base, Acid, Foam, Level 2 Wet, Level 2 dry.  No. of control modes: Type of control modes				
Speed: Pumps 1 & 2: 10-12 RPM fixed speed, ability to view total pump flow rates.  Pump capacity: Pump flow rate:		= = =		
Pump 3: 100 RPM fixed speed, ability to view total pump flow rates.  Pump capacity: Pump flow rate:		-		
Inoculum/FEED ( Variable Speed): Watson marlow 0-200 RPM  Pump capacity: Pump flow rate:				
8 PRESSURE:	8	PRESSURE:		
Safety device: A sanitary rupture disk in the vessel and an ASME safety release valve on the drain jacket are standard		vessel and an ASME safety release valve on		
9 Sampling and Harvesting	9	Sampling and Harvesting		

	Autoclavable sampling system with needle and luer lock	Sampling mode:	
	Harvest through bottom drain valve	Harvesting mode:	
10	Material	Vessel and jacket material	
	Vessel and Jacket Material should be ASME/CE certified SS 316L and internal surface of the vessel should be polished to a Ra Value less than 0.55 micron and outer surface to an Ra of less than 0.88 micron.Bioreactor should be SIP design and all probes should be of In-situ sterilization type.  Factory test report and calibration reports part	Internal surface Ra value: Outer surface Ra value: Yes/No	
	of validation document	103/110	
11	Measurement and control		
	The system should have a powerful Reactor Process Controller providing integrated control of up to 32 process parameters; with a capability of trending 8 parameters simultaneously and storage of up to 10 recipes.	Process controller parameters:	
	The system should have large touchscreen interface: simplifies entering setpoints and provide easy-to-read displays of current values, cascade loops, sterilization cycles etc.	Touchscreen interface size:	
	The system should come withatleast 2 USB ports for importing firmware / software upgrades and exporting data.	No. of USB ports:	
13	Peripherals and accessories		
	Suitable online 5KVA UPS (x2)or one combined UPS system must be quoted which is capable of meeting the power demand of the entire system (7 L and 14L fermentor)		
	The system should have illuminated sight glass window of at least 1.5 inches and light for clear viewing of vessel contents.		
	Sterilization through built-in band heater(no external steam generator required)		
	Suitable Chiller should be provided for both 7 L and 14L vessel	Temperature control mode and display type: Pump type and pressure: Pump flow rate:	

		Working temp. range: to C Temp.stability range: +/ C Setting resolution:
	Suitable Air Compressor should be provided for both 7L and 14 L vessel	Refrigerant used
	The above system should be CGMP compliant and validatable and should be capable of automatic sterilization using labs' water supply (RO Water).	
12	1, Remote Control Software controlling both 7L and 14L fermentor	
	SCADA Software (Windows) for monitoring and control of entire process and parameters with security features	Capable of simultaneously running number systems fully
	Desktop PC having Intel® Core <sup>TM</sup> i5-4570 with Intel HD Graphics 4600 (3.2 GHz, 6 MB cache, 4 cores, 4GB RAM, 1TB Harddisk, 18.5 inch monitor,3-years warranty, labour and on-site service, for SCADA software	Bit computing Processor StorageTB RAM Multi SATA R/RWDVD combo drive USBFire wire port LCD monitor with resolution Graphic card
	Other analog devices to be integrated upto 7 number	Number of analog devices integrated Details
	Software supplied should feature basic data management & monitoring capabilities. It should have ability to trend & control parameter set points, establish alarm setting and produce batch records and should be ideal for basic process management. It should also have added enhanced control features including a sophisticated programming module, custom synoptic display window and equipment lock-out feature.	
13	Peripherals and accessories	
	Online 5KVA UPS system must be quoted which is capable of meeting the power demand of the entire system	
	The system should have illuminated sight glass window of at least 1.5 inches and light for clear viewing of vessel contents.	

	Sterilization through built-in band heater(no	
	external steam generator required)	
	Suitable Chiller should be provided for both 7 Land 14L vessel	Temperature control mode and display type: Pump type and pressure: Pump flow rate: Working temp. range: to C Temp.stability range: +/ C Setting resolution: Refrigerant used
	Suitable Air Compressor should be provided for both 7Land 14 L vessel	
	The above system should be CGMP compliant and validatable and should be capable of automatic sterilization using labs' water supply (RO Water).	
14	Optional	
	Additional vessels of varying capacity compatible to the system should be quoted as optional items  Redox sensors	
	Single suitable chiller to run both 7 Land 14 L fermentor simultaneously	Specification details
	Single suitable Air Compressor for operatingboth 7Land 14 L fermentor	Specification details

# **Price Compliance sheet for Bioreactor (7L and 14 L total volume)**

# (Bidder should submit this filled document along with PRICE BID only)

S.No	Fermentor Specification	Please mention if present (yes/no)	Technical details of the item	If 'yes' then mention reference page number on brochure
1	In situ sterilizablefermentors with working volume of 2 to 5L (7 L total volume)and 4 to 10 litre (14 litre total volume)			
	System should be able to culture Bacteria, Yeast or Fungi.			
	Aspect Ratio: 2:1			
	Each fermentor should have advanced synoptic touch screen interface providing easy to read displays of current values, cascade loops sterilization cycles, customize PI values for all process parameter etc.			
	Fermentor should be capable of accommodating interchangeable vessels of varying capacity (upto 20L) compatible to the system quoted		Vessel capacity Capable of accommodating:, sizes	
2	<b>Process Definition</b>			
	Programmable in situ sterlization, each system should be supplied with stainless steel exhaust condensor on headplate. Fermentor should be capable of reaching sterilization temperature up to at least 121°C and temperature control during fermentation batches should be about minimum 5°C above coolant to maximum 80°C, display in 0.1°C increment with temperature rises of approx 1°C / minute. The vessel should get sterilized automatically on the bench without the need of external steam generator.		Max. sterilization temperature: C Range of temp. control: to C including increment value C	
3	Measurement & Control			
	All these parameters should have a separate probe which should be controlled by PID			
	<b>Temperature range</b> : 5°C to 70°C, displayed in 0.1°C increments using Platinum 1 RTD probe		Temperature control range: C to C with increment value	
	<b>pH range</b> : 2 - 12 pH via PID		pH range: topH	
	<b>pH Sensor</b> : Option for one or two gel pH probes with digital display in 0.01 increments		pH sensor type: PID control: Yes/No No. of sensor	
	<b>pH Control</b> : Cascade to pumps, gases and/or loops from external devices			
	DO range: 0 - 200% via PID  DO Sensor: Option of one or two Polaragraphic DO probes with digital display in 0.1% increments		DO range: %  DO sensor type PID control Yes/No	
	<b>DO Control</b> : Cascade to agitation, gases, pumps and/or loops from external devices			
4	AGITATION:			
	110111110111		1	

	<b>Drive</b> : Top magnetic drive with single mechanical seal	Drive type and seal type: No. of seals:	
	<b>Range &amp; Control</b> : 50 - 1000 RPM, ±1 at 100 RPM; ±2 at 500 RPM; ±5 at 1000 RPM	RPM range: Control range:	
	Impellers: Two six-bladed rushton impellers	No. and type of impellers:	
	<b>Baffles</b> : Four 316L removable stainless steel baffles	No. and type of baffles:	
5	PORTS:		
	Headplate port: 6.35 mm - 2; 12 mm -9; 19 mm - 1; 13.5 mm - 2 (Head plate port: 15)	Size No Purpose	
	Upper side wall: 2" Tri-clamp	Size	
	Bottom: 0.75" NA connect	Size	
6	AERATION:		
	Gas System: Standard: 1 TMFC with 0.5 to 25 SLPM flow rate and built in four-gas control(Air, O <sub>2</sub> , N <sub>2</sub> & CO <sub>2</sub> ). Optional: Rotameter or 2nd, 3rd or 4th TMFCs for individual gas control	TMFC withto SLPM flow rate	
	Gas Inlet: Ring sparger is provided with 0.2µl absolute disposable filter for use as a sparger or overlay		
7	PUMPS:		
	Standard: Three built-in, assignable peristaltic pumps and one external variable speed peristaltic pump for inoculums/Feed	No. of Pumps:	
	Control modes: Off, Prime, Base, Acid, Foam, Level 2 Wet, Level 2 dry.	No. of control modes: Type of control modes	
	Speed: Pumps 1 & 2: 10-12 RPM fixed speed, ability to view total pump flow rates.	Pump capacity: Pump flow rate:	
	Pump 3: 100 RPM fixed speed, ability to view total pump flow rates.  Inoculum/FEED ( Variable Speed): Watson marlow 0-200 RPM	Pump capacity: Pump flow rate:  Pump capacity: Pump flow rate:	
8	PRESSURE:		
	Safety device: A sanitary rupture disk in the vessel and an ASME safety release valve on the drain jacket are standard		
9	Sampling and Harvesting		
	Autoclavable sampling system with needle and luer lock	Sampling mode:	
	Harvest through bottom drain valve	Harvesting mode:	
10	Material		

	Vessel and Jacket Material should be ASME/CE certified SS 316L and internal surface of the vessel should be polished to a Ra Value less than 0.55 micron and outer surface to an Ra of less than 0.88 micron.Bioreactor should be SIP design and all probes should be of In-situ sterilization type.  Factory test report and calibration reports part of	Vessel and jacket material certification:  Internal surface Ra value: Outer surface Ra value:  Yes/No	
	validation document	103/140	
11	Measurement and control		
	The system should have a powerful Reactor Process Controller providing integrated control of up to 32 process parameters; with a capability of trending 8 parameters simultaneously and storage of up to 10 recipes.	Process controller parameters:	
	The system should have large touchscreen interface:simplifies entering setpoints and provide easy-to-read displays of current values, cascade loops, sterilization cycles etc.	Touchscreen interface size:	
	The system should come with atleast 2 USB ports for importing firmware / software upgrades and exporting data.	No. of USB ports:	
13	Peripherals and accessories		
	Suitable online 5KVA UPS (x2)or one combined UPS system must be quoted which is capable of meeting the power demand of the entire system (7 L and 14L fermentor)		
	The system should have illuminated sight glass window of at least 1.5 inches and light for clear viewing of vessel contents.		
	Sterilization through built-in band heater(no external steam generator required)		
	Suitable Chiller should be provided for both 7 L and 14L vessel	Temperature control mode and display type: Pump type and pressure: Pump flow rate: Working temp. range: to C Temp.stability range: +/ C Setting resolution: Refrigerant used	

	Suitable Air Compressor should be provided for both 7L and 14 L vessel	
	The above system should be CGMP compliant and validatable and should be capable of automatic sterilization using labs' water supply (RO Water).	
12	1, Remote Control Software controlling both 7L and 14L fermentor	
	SCADA Software (Windows) for monitoring and control of entire process and parameters with security features	Capable of simultaneously running number systems fully
	Desktop PC having Intel® Core <sup>TM</sup> i5-4570 with Intel HD Graphics 4600 (3.2 GHz, 6 MB cache, 4 cores, 4GB RAM, 1TB Harddisk, 18.5 inch monitor,3-years warranty, labour and on-site service, for SCADA software	Bit computing Processor StorageTB RAM Multi SATA R/RWDVD combo drive USBFire wire port LCD monitor with resolution Graphic card
	Other analog devices to be integrated upto 7 number	Number of analog devices integrated Details
	Software supplied should feature basic data management & monitoring capabilities. It should have ability to trend & control parameter set points, establish alarm setting and produce batch records and should be ideal for basic process management. It should also have added enhanced control features including a sophisticated programming module, custom synoptic display window and equipment lock-out feature.	
13	Peripherals and accessories	
	Online 5KVA UPS system must be quoted which is capable of meeting the power demand of the entire system	
	The system should have illuminated sight glass window of at least 1.5 inches and light for clear viewing of vessel contents.	
	Sterilization through built-in band heater(no external steam generator required)	
	Suitable Chiller should be provided for both 7 Land 14L vessel	Temperature control mode and display type: Pump type and pressure: Pump flow rate: Working temp. range: to C Temp.stability range: +/

		- C Setting resolution: Refrigerant used	
	Suitable Air Compressor should be provided for both 7Land 14 L vessel		
	The above system should be CGMP compliant and validatable and should be capable of automatic sterilization using labs' water supply (RO Water).		
14	Optional		
	Additional vessels of varying capacity compatible to the system should be quoted as optional items		
	Redox sensors		
	Single suitable chiller to run both 7 Land 14 L fermentor simultaneously	Specification details	
	Single suitable Air Compressor for operating both 7Land 14 L fermentor	Specification details	

## REGIONAL CENTRE FOR BIOTECHNOLOGY

#### (SCHEDULE-'B')

Tender Ref. No. : RCB/ATN/02/15-16

Subject : Purchase of BIOREACTOR (7 LTRS AND 14 LTRS

Date of Submission : On or before \_03.06.2015\_\_\_\_upto 14.00 hours.

Date of Opening : \_\_03.06.2015\_ at 15.00 hours

- 1. Tender should be addressed to the Executive Director, Regional Centre for Biotechnology, Faridabad and submitted to the Office of the Regional Centre for Biotechnology under sealed cover failing which the tender shall be rejected. Terms and conditions for supply should invariably be indicated otherwise would be taken on its face value. The rates may be quoted on separate sheets failing which the tender(s) will be rejected.
- 2. Mixed quotations will not be considered for acceptance.
- IN CASE OF THE TENDER DOUMENTS DOWNLOADED FROM THE WEBSITE:
  THE BIDDERS MAY DOWNLOAD THE TENDER DOCUMENTS DIRECTLY FROM
  THE WEBSITE AVAILABLE AT <a href="http://www.rcb.res.in">www.rcb.res.in</a>. IN SUCH CASE, THE BIDDERS ARE
  REQUIRED TO SUBMIT THE TENDER COST FEE OF Rs.\_\_\_\_\_\_ (NON-REFUNDABLE)
  BY WAY OF SEPARATE DEMAND DRAFT DRAWN IN FAVOUR OF EXECUTIVE
  DIRECTOR, RCB, AND THE SAME SHOULD ESSENTIALLY BE ENCLOSED
  ALONGWITH THE TECHNO COMMERCIAL BID. THE BIDDERS SHOULD
  SPECIFICALLY SUPERSCRIBE, "DOWNLOADED FROM THE WEBSITE" ON THE
  TOP LEFT CORNER OF THE OUTER ENVELOPE CONTAINING TECHNO
  COMMERCIAL BID & PRICE BID SEPARATELY. IN NO CASE, THE TENDER COST
  FEE SHOULD BE MIXED WITH EMD AMOUNT. THE TENDERS NOT FOLLOWING
  THE ABOVE PROCEDURE WILL BE SUMMARILLY REJECTED.
- 4. TENDER SHOULD BE SUBMITTED IN TWO BID SYSTEM CONTAINING TWO PARTS AS DETAILED BELOW:

PART-I: TECHNO-COMMERCIAL BID IN ONE SEALED COVER WITH E.M.D.

PART-II:- PRICE BID/FINANCIAL BID IN ONE SEALED COVER.

BOTH THE SEALED ENVELOPES SHOULD THEN BE PUT IN ONE OUTERCOVER INDICATING THEREON:

i	Reference No. of the Tender	

ii) Tender regarding

- iii) Due date for submission of the tender:
- iv) Due date for opening of the tender \_\_\_\_\_

v) Name of the firm

PLEASE NOTE THAT PRICES SHOULD NOT BE INDICATED IN THE TECHNO-COMMERCIAL BID. THE PRE-QUALIFICATION DOCUMENTS INCLUDING E.M.D./BID SECURITY AS REQUIRED IN THE TENDER DOCUMENT SHOULD INVARIABLY BE ACCOMPANIED WITH THE TECHNO-COMMERCIAL BID.

#### NOTE:-

- 1) TENDERS ARE TO DEPOSITED IN THE TENDER BOX KEPT AT THE RECEPTION OF RCB OFFICE, AFTER ENTERING THE DETAILS OF TENDER IN THE APPROPRIATE PAGE OF THE TENDER DEPOSIT REGISTER AVAILABLE WITH THE RECEPTIONIST. THOSE TENDERS WHICH ARE DIRECTLY PUT IN THE TENDER BOX WITHOUT DIARIZING IN THE TENDER DEPOSIT REGISTER ARE LIABLE TO BE REJECTED
- 2) TENDERS SUBMITTED WITHOUT FOLLOWING TWO BID SYSTEM PROCEDURE AS MENTIONED ABOVE WILL BE SUMMARILY REJECTED.

- 5. The tenderers should give rates, showing taxes, if any, and levies, packing forwarding and insurance charges separately giving full breakup details. THE INSTITUTE IS NOT AUTHORIZED TO ISSUE 'C/D FORMS'. PLEASE EXCLUDE CUSTOM DUTY/EXCISE DUTY COMPONENT IN RUPEE QUOTE AS THE INSTITUE IS EXEMPTED FROM THE PAYMENT OF BASIC CUSTOMS DUTY/EXCISE DUTY. However, Excise Duty, if any, should be shown separately. Tender not confirming to this requirement shall be rejected and no correspondence will be entertained whatsoever.
- 6. IN CASE OF IMPORT THE TENDERERS ARE REQUIRED TO QUOTE FOB & CIF VALUE SEPARATELY DULY MENTIONING THE BREAK-UP DETAILS FOR FREIGHT & INSURANCE. THIS CONDITION SHOULD BE STRICTLY ADHERED TO, FAILING WHICH THEIR OFFER WILL BE SUMMARILY REJECTED.

The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However, the CIF/CIP prices quoted by any foreign bidder shall be loaded further as under:

- a) Towards customs duty and other statutory levies –as per applicable rates with CDEC.
- b) Towards custom clearance, inland transportation etc. 2% of the CIF/CIP value.
- 7. THE TENDERERS ARE REQUESTED TO SUBMIT THE FOLLOWING INFORMATION INVARIABLY TO MAKE PAYMENT THROUGH RTGS/NEFT. "The payment in pursuance of stores supplied/services rendered/work done will be made through RTGS/NEFT & charges incurred for affecting such electronic transfers will be borne by the vendors. The details of present charges for NEFT/RTGS are as under:

**NEFT:** Up to Rs.1 lakh - Rs.5/- per transaction

Rs. 1 lakh and above -Rs.25/- per transaction

**RTGS:** Upto Rs.5 lakh - Rs.25/- per transaction

Rs.5 lakh and above --Rs.50/- per transaction

To make payment through above said mode, the vendor/supplier/contracts have to submit the following information invariably:

- i. Name of the Beneficiary
- ii. Account No. of the beneficiary
- iii. IFCS Code of the Bank/Branch.

#### 8. THIS TENDER DOCUMENT IS NON-TRANSFERABLE.

- 9. The bid document should be paged and a certificate may be provided on the covering letter indicating the number of pages submitted along with the bid.
- 10. The compliance report of specification should invariably be provided indicating the fulfillment of each parameter of the specifications failing which the offer will be rejected.
- 11. The checklist may be furnished properly and page No. may be mentioned against each Serial Number.
- 12. The Tender forms be clearly filled in ink legibly or type written giving full address of the tenderers. The tenderers should quote in figures as well as in words the rates amount tendered by him/them. Any discrepancy between the figures and words, the amount written in words will prevail. Alterations/over-writings, unless legibly attested by the tenderer, shall disqualify the tenders. The tenders should be signed by the tenderer himself/themselves or his/their authorized agent on his/their behalf (Authorization may be enclosed, if applicable).
- 13. THE FORWARDING LETTER/UNDERTAKING (SCHEDULE'A') DULY SIGNED SHOULD INVARIABLY BE ATTACHED ALONGWITH TECHNO-COMMERCIAL BID, FAILING WHICH THE TENDER SHALL BE REJECTED.
- 14. The tenderers should take care that the rates and amounts are written in such a way that interpolation is not possible, no blanks should be left which would otherwise, make the tender redundant.
- 15A. The tender rates should be kept open/valid for a period of one yearfrom the date the tenders are opened.
- 15. The tenderers shall clarify/state whether he/they are manufacturer, accredited agent or sole representative indicating principals name & address. The offers of firms who are not manufacturer or direct authorized agent will be summarily rejected. **Sub-distributors will not be accepted.**

- 16. Delivery prospects with definite date of delivery at destination taking into cognizance transit facilities must be indicated.
- 17. EACH TENDER SHOULD BE ACCOMPANIED WITH AN EMD/BID SECURITY AMOUNTING TO Rs. (as indicated in the tender Notice)/- BY WAY OF DEMAND DRAFT/ BANK GUARANTEE DRAWN IN FAVOUR OF "EXECUTIVE DIRECTOR, RCB", (PREFERABLY BANK GUARANTEE) FAILING WHICH THE TENDER SHALL NOT BE CONSIDERED FOR ACCEPTANCE AND WILL BE OUTRIGHTLY REJECTED. IN CASE OF BANK GUARANTEE, IT SHALL BE VALID FOR ONE YEAR FROM THE DATE OF OPENING AND THE SAME SHOULD BE FROM ANY INDIAN NATIONALIZED BANK. CASH/CHEQUE IS NOT ACCEPTABLE AT ALL. THE EMD/BID SECURITY DEPOSITED AGAINST OTHER TENDERS CANNOT BE ADJUSTED OR CONSIDERED FOR THIS TENDER. NO INTEREST IS PAYABLE ON EMD/BID SECURITY.

### 18. <u>Liquidated Damages Clause :-</u>

- (a) The delivery date as stipulated shall be strictly adhered to failing which the Institute reserves the right to refuse the supplies. The extension of the date of delivery, if required should be obtained before the expected delivery date. The Institute also reserves the right to impose liquidated damages as enumerated below or to effect risk purchase on the firm's cost and risk.
- (i) Supply delay for one week or a part thereof @ 0.5%
- (ii) Supply delay for an additional week or a part thereof @ 0.5% (subject to a ceiling of 10% of the order value.
- (b) In case of non-supply of items within a period of two months in excess of the stipulated delivery period, the order shall be cancelled and the following penalty shall be levied at the discretion of the Executive Director, RCB, GURGAON or his authorized representative:
- (i) Supply order of the value of Rs.100/- or below: No. Liq. Damages.
- (ii) ) Supply orders which remain unexecuted and total value of non-supplied items is above Rs.10000/-: @ 10% and/or administrative action, as deemed fit shall be taken against the defaulter.

#### 19. SOFT WARE AND HARDWARE UPGRADATION

The selected firm for the supply of tendered item will have to provide free up-gradation of software (all update & upgrades) upto5 years from the date of satisfactory installation.

- 20. Rates quoted should be valid for ONE YEARfrom the date of opening of tender.
- 21. THE TENDERERS MAY BE REQUIRED TO DEMONSTRATE THE QUOTED MODEL OF THE EQUIPMENT DURING THE TECHNICAL EVALUATION, IF REQUIRED, FAILING WHICH THEIR BIDS/OFFER SHALL BE REJECTED. The firms are intimated that they should get ready for demonstration and only one-week time will be provided for arrangement of demonstration and no request for extending time for demonstration will be entertained. Failure to demonstrate, their offer will be summarily rejected.
- 22. Any other statutory levy imposed by the Govt. of India from time to time will be authorized on demand with adequate proof thereof will be paid extra.
- 23. Force meajure will be accepted on adequate proof thereof.
- 24. The ExecutiveDirector, RCB,Gurgaon shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.
- 25. No payment shall be made for rejected Stores. Rejected items must be removed by the tenderers within two weeks of the date of rejection at their own cost and replace immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.
- 26. The ExecutiveDirector, RCB, reserves the right to cancel/reject full or any part of the tender which do not fulfill the conditions stipulated in the tender.
- 27. Tenderers submitting tenders would be deemed to have considered and accepted all the terms and conditions. No enquiries, verbal or written, shall be entertained in respect of acceptance or rejection of the tender.
- 28. TENDER MAY BE REJECTED IF THE COPY OF VALUE ADDED TAX (VAT) REGISTRATION IS NOT FURNISHED (IF APPLICABLE).
- 29. The quantity shown in the tender can be <u>increased or decreased</u> to any extent depending upon the actual requirement.
- 30. Any action on the part of the tenderer to influence anybody in the Centre, will be taken as an offence, he will not be allowed to participate in the tender enquiry and their offer will not be considered.

- 31. Material confirming to the specifications should be quoted. Original Catalogue, Leaflets, literatures with full technical details should invariably be attached along with their offer, failing which their offer will be summarily rejected.
- 32. THE TENDERERS MUST QUOTE THEIR MODEL STRICTLY AS PER TENDER SPECIFICATIONS.
- 33. Genuine equipments and instruments etc., should be supplied. Tenderers should indicate the source of supply i.e. name & address of the manufacturers from whom the items are to be imported, country of origin, country of Shipment etc.
- 34. The quoted equipment should preferably be of Indian/International standards.
- 35. The tenderers are required to quote the mode of shipment by Air/Sea/ Airport Parcel and should give separate breakup of freight and Insurance Charges.
- 36. Supply of equipment means-Supply, Installation and Commissioning at site. No separate charges will be paid separately on this account.

#### 37. UP TIME GUARANTEE:

The firm should provide uptime guarantee of 95%.

#### 38. <u>Downtime penalty Clause</u>

- During the Guarantee/warranty period, desired uptime of 95% of 365 days (24 hrs) if downtime more than 5% the institute shall be entitled to impose penalty in the form of extended warranty period equal to twice the downtime period. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least **FIVE YEARS** after handing over the unit to the Centre. If accessories/other attachment of the system are procured from the third party, then the vendor must produce cost of accessory/other attachment and the CAMC from the third party separately along with the main offer and the third party will have to sign the CAMC with the Institute if required.
- 40.2 The principals or their agents are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.
- 41 GUARANTEE/WARRANTEE PERIOD: THE TENDERERS MUST QUOTE FOR 5 YEARS COMPREHENSIVE WARRANTY (INCLUDING ALL SPARES, ACCESSORIES AND LABOR) FROM THE DATE OF COMPLETION OF THE SATISFACTORY INSTALLATION. THE WARRANTY CHARGES SHALL NOT BE QUOTED SEPARATELY OTHERWISE THE OFFER SHALL BE SUMMARITY REJECTED. ALSO THE BIDDERS ARE REQUESTED TO SUBMIT THEIR QUOTE (RATES) FOR SUBSEQUENT 5 YEARS COMPREHENSIVE AMC (INCLUDING ALL SPARES, ACCESSORIES AND LABOR). FAILURE TO COMPLY THIS CONDITION WILL ENTAIL THE REJECTION OF THE BIDS. THE PRICE COMPARISION SHALL BE MADE TAKING INTO ACCOUNT ON BASIC PRICE AND POST WARRANTY CMC.
- **Delivery:** The successful bidders should strictly adhere to the following delivery schedule supply, installation & Commissioning should be effected within 6 to 8 weeks from the date of supply order and this clause should be strictly adhere to failing which administrative action as deemed fit under rules will be taken against the defaulter.
- 43 **SPARE PARTS:** The separate price list of all spares and accessories and consumables, if any, (Including minor) required for maintenance and repairs in future after guarantee/warrantee period must be attached/enclosed along with the sealed quotation failing which quotation will not be considered.

If any spares & accessories other than the price list attached/enclosed by the firm are required for future repair it will be borne by the firm only.

- 44 The tenderers are required to furnish the list of spares along with their cost in the Financial bid failing which their bids are liable to be rejected.
- 45 The tenderer shall furnish a non-blacklisting certificate that the firm has not been blacklisted in the past by any government/Private institution. The tenderer/supplier has to give an affidavit on non-judicial stamp paper of Rs.10/-that there is no vigilance/CBI case pending against the firm/supplier and the firm has not been blacklisted in the past by any Govt. or Private Organization.
- 46 Payment of Agency Commission, if any, payable in rupees must be indicated. If no Agency Commission is admissible from the foreign suppliers must be indicated specifically.
- 47 Tenderers should clearly indicate the name of the Manufacturers/Beneficiary of the Letter of Credit, country of Origin, place of shipment/Airfreightment, etc.
- 48 Local agents quoting on behalf of their foreign suppliers must attach valid authority letter in their favour. In case of distributor, the firm should be direct distributor from the principal's. Either the Foreign Principals/manufacturers

or their authorized Indian Agent should participate in the tender but not both. Also one agent cannot represent two suppliers or quote on their behalf in the same tender. The sub-distributor authority by distributor will not be accepted at all. In case the firm is neither manufacturer nor direct authorized dealer of the manufacturer, such offers will be summarily rejected.

- 49 SUCCESSFUL TENDERERS WILL HAVE TO FURNISH PERFORMANCE BANK GUARANTEE FOR 10% CONTRACT VALUE FROM ANY INDIAN NATIONALIZED BANK VALID FOR THE WARRANTY PERIOD AND TWO MONTHS EXTRA alongwith the final proforma Invoice.
- 50 The rates quoted for the Stores/Equipments, under the reference, by the supplier shall in no event exceed the lowest price at which the suppliers of the Stores/Equipments of identical description are made to any other person/organization/Institution during the period and should attach an undertaking.

#### **FALL CLAUSE**

- 51 If, at any time, during the said period, the supplier reduce the said prices of such Stores/Equipment or sales such stores to any other person/organization/Institution at a price lower than the chargeable, he shall forthwith notify such reduction or sale to the ExecutiveDirector, Regional Centre for Biotechnology and the price payable for the Stores supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.
- 52 Successful tenderers, should give pre-alert intimation prior to shipment notifying both the nominated clearing agents as well as the Institute.
- 53 The supplier shall furnish the following certificate to the Accounts Officer (Stores Accounts) alongwith each bill for payment for supplies made against in Rate Contract Tender.
  - "I/We certify that the Stores of description identical to the Stores supplied to the government under the contract against Tender herein have not been offered/sold by me/us to any other person/organization/Institution upto date of bill/the date of completion of supplies against all supply orders placed during the currency of the tender/rate contract at the price lower than the institute under contract /against tender".
- 54 The supplier shall furnish a list of organizations where the equipment, in question, has/have been supplied with the period during the last one year and performance certificate from such organization may also be provided.

#### 55 A) PAYMENT TERMS (IN CASE OF IMPORTS)

- 1) Agency Commission, if any, will be paid to Indian agents in Indian Rupees, after satisfactory installation of equipment.
- 2) Letter of Credit will be opened on CIF value, as the case may be, for full amount after deducting the Agency commission/Technical Service Charges, if any.
- 3) 100% payment shall be released against presentation of shipping documents against a performance Bank Guarantee valid for a period of 62 months from the date of satisfactory Installation certificate issued by the user department for 10% value from any Indian Nationalized Bank along with final proforma Invoice. In absence of Performance Bank Guarantee, 90% payment will be released against presentation of shipping documents & balance 10% payment will be released after satisfactory Installation certificate issued by the user department and against submission of Performance Bank Guarantee of 10% order value valid for a period of 62 months from the dated of satisfactory Installation certificate issued by the user department.

#### B) PAYMENT TERMS (IN CASE OF RUPEE OFFER)

100% PAYMENT WILL BE MADE AFTER SUPPLY, installation & satisfactory demonstration of the said equipment subject to submission of Performance Bank Guarantee for 10% order value valid for a period of 62months from the date of satisfactory Installation certificate issued by the user department, from any Indian Nationalized Bank. FAILING WHICH, 90% PAYMENT WILL BE RELEASED AFTER INSTALLATION & BALANCE 10% PAYMENT WILL BE RELEASED AFTER WARRANTY PERIOD.

56) PRE-REQUISITES, IF ANY, FOR INSTALLATION OF THIS EQUIPMENT SHOULD BE CLEARLY INDICIATED IN THE TECHNICAL BID, FAILING WHICH IT WILL BE PRESUMED THAT NO SUCH PRE-REQUISTES ARE REQUIRED AND IT WILL BE THE COMPLETE RESPONSIBILITY OF THE VENDOR TO MAKE THE EQUIPMENT FUNCTIONAL WITHIN THE QUOTE PRICE.