TECHNICAL SPECIFICATION

1. The scanned copy of this annexure "H" (original downloaded) duly completed and seal signed by the bidder must be uploaded otherwise bid should not be considered. Any supplementary information may be uploaded separately.

2. The samples where-ever mentioned in specifications must be submitted in this Directorate of Technical, Jodhpur(Education wing)

along with physical submission otherwise concerned item will not be considered for technical evaluation.

3. Scanned Copies Items wise Original Literature/Leaflets/Catalogue correct Image as per Tender Specification enclosed, Authorization Certificate of manufacturer prescribed format (Annexure-L) etc. must be enclosed in support of your Make and Specifications otherwise concerned items will not be considered for Technical Evaluation.

4. The delivery period up to 60 days.

5. The Material will be Supplied F.O.R. at Principal Government Polytechnic College, as per order List.

6. Index Page No. 1 & 2 all Document of S. No. 1 to 34(if applicable) and other required document must be enclosed otherwise concerned Tender will not be considered for Technical Evaluation.

7. All the material supplied should be new and no item can be supplied which is refurnished.

S.No.	AND STATE OF	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
1	Plate Type Heat Exchanspecifications:	ger			/
	System Plates Frame Water Flow	 Water to Water Material Stainless Steel Rigid MS Structure Using Rotameters (2Nos.) one 	1	1	

S.No.	ODHPU DE LOS	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
	Measurement	each for cold & hot fluid.			
	Hot Water Tank : Hot Water Circulation :	Made of Stainless steel, Double Wall, Insulated with ceramic wool.			
	Circulation :	Magnetic Pump.			
	Heaters :	Nichrome wire heater.			
	Control panel should be comprising of: Digital Temperature Controller :	0-199.9°C, (For Hot Water Tank)			
	Digital Temperature Indicator :	0-199.9°C, with multi-channel switch			
	Temperature sensors:	RTD PT-100 type.			
		On/Off switch, Mains Indicator etc.			
	A good quality painte parts.	d rigid MS Structure should be provided to support all the			
2	Shell & Tube Heat Exchange	er	1	1	
		2	1	1	

S.No.	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
	specifications			
	HEAT EXCHANGER:			
	SHELL:			
	Moc :ss			
	Dimension: 120(d)*750(L)mm			
	(approximate)			
	Baffles: 4nps. 25% segmental at an Equal distance			
	Insulation: 25mm thick glass wool With ss sheet cover			
	TUBE: MOC :ss			
	Dimension :10/12(D)φ*750(L)mm Pitch: triangular			
	HOT WATER TANK			
	Inner moc: ss			
	Outer moc: ms with power coating			
	Capacity: 50 liter			
	Heater :3Kw rating			
	Cold water tank			
	Hot water pump			
	Cold water pump			
	Rotameter			
	Temp measurement			
	Control panel			

S.No.	Ite	em with	Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
3	Heat Transfer through composi Specifications	te wall				
	Slab Material	:	Slab Size			
	Cast Iron	:	250 mm dia. & 20mm thick.			
	Bakelite	:	250 mm dia. & 15 mm thick.			
	Press Wood	:	250 mm dia. & 12 mm thick.			
	Heater Control panel should be comprises of	:	Nichrome wire.			
	Digital Voltmeter	:	0-300 Volts.	1	1	
	Digital Ammeter	:	0-2 Amp.			
	Range Digital Temperature Indicator	•	0-230 V, 2Amp. 0-200° C, with multi-channel switch			€
	Temperature Sensors	:	RTD PT-100 type.			
	With standard make On Cabinet to accommodate	off swite the sla				
4	Distillation Column specifications: Distillation Materia	.1				
	Distillation Materia Column : Stainles Dia 110	s Steel		1	1	

S.No.	JODHPU STORY	R. Joseph	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
			seven sieve			
			trays.			
	Pressure		Bourdon type,			
	Gauge	:	0-2 kg/cm ² .			
			For cooling water flow rate			
	Rotameter	:	measurement.			
	Steam		Made of Stainless Steel, provided with Pressure			
	Generator	3	Gauge & Level			
			Indicator, Safety valve & insulated with ceramic wool			
			and cladding with			
			Aluminium			
			foil			
			Special arrangement to			
	Reflux		change R/D ratio			
	Divider	:	automatically.			
			Shell & Tube type made of			
	Condenser	:	Stainless Steel.			
	Bottom	:	Ltrs.			

S.No.	TO HOUSE	TE, Jook	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
	Product Ta	nk	Made of			
			Stainless Steel,			
			capacity 5			
			Made of			
	Distillate		Stainless Steel,			
	Tank	ŧ	capacity 5 Ltrs.			
			Nichrome wire			
	Heaters	:	heater.			
	Temp.		RTD PT-100			
	Sensors:		type			
	Contro	l panel	should comprises of:			
	Digital	Temp.	Controller: 0-199.9°C, For Steam Reboiler			
	Digital	Temp.	Indicator: 0-199.9oC, with multi-channel Switch			
	The wh structu	ole set- re.	up should be well designed and arranged in a good quality painted			
5	Swenson Walk specifications	ker Cry	tallizer	1	1	
	TROUGH: M	OC : S	8 3 1 6	1	1	~

S.No.	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any otherwise write "No variation" / as per Specification & write Make & Model
	Capacity: approximate 8 litres.			
	Jacket :SS with appropriate insulation & SS cladding.			
	Temp sensor: RTD Pt-100 type, 3 nos.			
	Ribbon type scrapper:			
	MOC:SS			
	Motor for ribbon scrapper:			
	Motor rating :025HP			
	RPM: approximate 8-10 RPM			
	Reduction gear box & pulley arrangement.			
	FEED TANK:MOC :SS -316, Capacity : approx. 30 litrs			
	Temp sensor: RTDPt-100type with appropriate insulation & SS cladding STIRRER FOR FEED TANK: MOC: SS-316			
	Motor rating: 0.25 HP			
	FEED CIRCULATION PUMP:			
	Type: magnetic pump			
	MOC :polypropylene			-
	Motor rating :FHP			>
	CRYSTAL RECEIVER:			
	MOC:SS-316			
	Capacity :approx. 20 liter			
	With removable sieve			
	WATAR TANK:			
	MOC: SS-316			
	Capacity :approx. 50 liters			

S.No.	aHOOM STATE	A TELLOS	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
			type, 3KW			
	WATAR P					
	Type: cent	rifugal	pump, MOC : SS			
	Motor ratin		P			
	Type : rota	meter				
	Qty .: one f Control par	or feed nel shou	& one for cooling water. Ild comprises of:			
	Digital Ten	ip. Con	troller: 0-199.9°C, For Steam Reboiler		E:	
			cator: 0-199.9°C, with multi-channel switch			
6	Multimedi		ctor			
	Specification			1	1	
	Resolution:	1024 x	768 XGA,ANSI Lumen: 3200, Contrast Ratio:10000:1,	1	1	
			LAN/ Wireless Option/ USB x 2/ 10K Hrs lamp life			
7	Roll Crush					
	Specification	ns				
	Rolls	25	Material Chilled Steel			
	Kons	•	Dia. 200mm,			
			Width 100mm.	1	1	
			(approx.)			
			2 HP motor			
		*	coupled with			
	Drive	::	Reduction Gear			

S.No.	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
	Box to give 48-70			
	RPM			
	Feed Hopper: Suitable capacity. Max feed			
	Size : 6-8 mm Product			
	Size : 1-2 mm			
	Control Panel Comprises of:			
	Energy : Electronic energy measurement meter			
	Starter : 2 HP, single phase			
	MCB : For overload protection			
	The set-up should be fitted with required guards and product collection tray.			
8	PLATE & FRAME FILTER PRESS			
	Specifications			
	No. of frame: 6			
	No. of Plates: 7			
	Size: 200 mm x 200 mm.	1	1	
	Material: Acrylic			
	Screw Jack arrangement for tightening and removing of frames easily.			
	Filter Medium: Filter Cloth			· ·

S.No.	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
	Filtrate collection tray: Material Stainless Steel, Suitable size.			
	Slurry Feed tank: Material Stainless Steel, Capacity 40 Ltrs.			
	Slurry Tank Agitator: Stainless Steel Impeller with SS Shaft coupled to FHP Motor and			
	Reduction Gear Box			
	Slurry Feed Pump: Gear Pump with FHP motor.			
	Piping system: GI and PVC.			
	Filtration rate measurement: Using measuring tank. Material Stainless Steel			
	Pressure Measurement: Bourdon type pressure gauge.			
	Overhead water tank: Material Stainless Steel, Capacity 25 Ltrs.			
	Control panel must be Comprises of Standard make On/Off switch, Mains Indicator etc.			
	A good quality painted rigid MS Structure must be provided to support all the parts.			
9	Bucket Conveyor			
	Specifications:			
	Buckets : Material Steel.			
	Belt : Nylon./Synthetic			
	Drive: 1 HP motor coupled to Reduction Gear Box.	1	1	
	Feed Hopper: Suitable capacity with feed control arrangement.			
	Control Panel must			
	be Comprises of: Standard make on/off switch, Mains Indicator etc.			
10	Ball Mill			
	Specifications:		- 2	
	Ball Mill: Material MS	1	1	
	Dia 275mm, Length 350mm. Thickness 5 mm.			

S.No.	Item with Full Specifications	Kota	Total Qty.	Specify variation in Specification if any, otherwise write "No variation" / as per Specification & write Make & Model
	Discharge Chute : Suitable size.			
	Feed Size : 6 mm (approx).			
	Product Size: 200 mesh (approx.)			
	Drive: 1 H.P. motor coupled to Reduction Gearbox & 3 step pulley			
	Revolution Counter: Mechanical type.	-		
	Product Receiver: Material Stainless Steel of suitable size.			
	Control Panel must			
	be Comprises of: Standard make on/off switch,			
	Mains Indicator etc.			
	Energy measurement : Electronic Energy meter.			
	MCB: For overload protection. Standard make			
	on/off switch, Mains indicator etc.		DK .	
	The set-up must be fitted with required guards.			
	The whole set-up must be well designed and arranged in a good quality painted structure			
11	Vibrating Screen	-		
	Specifications:			
	Vibrating Width 380mm,			
	Screen Length 600mm.			
	(3 Nos.) :	1	1	
	Size - 12.7mm,			
	9.5mm			
	Mesh : 6.3mm(Approx)			
	Mesh : 6.3mm(Approx)			

		-		Specification & write Make & Model
Drive : Feed	Eccentric shaft coupled to motor compatible with arrangement to control feed.			
Collecting bins :	4 Nos. of suitable capacity.			
A good and	lity pointed rigid MS Standard rets.			
•	Feed Hopper Collecting bins : Control panel Con Standard n	coupled to motor compatible with arrangement to Drive : control feed. Feed Hopper Collecting 4 Nos. of suitable bins : capacity. Control panel Comprises of: Standard make On/Off switch, Mains Indicator etc. A good quality painted rigid MS Structure is provided to support all the parts.	coupled to motor compatible with arrangement to Drive : control feed. Feed Hopper Collecting 4 Nos. of suitable bins : capacity. Control panel Comprises of: Standard make On/Off switch, Mains Indicator etc. A good quality painted rigid MS Structure is provided to support all the parts.	coupled to motor compatible with arrangement to Drive : control feed. Feed Hopper Collecting 4 Nos. of suitable bins : capacity. Control panel Comprises of: Standard make On/Off switch, Mains Indicator etc. A good quality painted rigid MS Structure is provided to support all the parts.

Terms & Condition:-

F. O. R. Principal Government Polytechnic College, Kota
 Delivery up to 60 days
 GST Extra ------%

Signature of bidder with seal

DIRECTOR, TECHNICAL EDUCATION