

RUSA PURCHASE			
Dept	Equipment	Specification	QTY
Botany	Book Scanner	Contactless Book Scanner	1
	Refrigerator	One 400 ltr refrigerator	1
	Refrigerator	-20 Lab Refrigerator with racks and accessories	1
	Microscope	Monocular Compound Microscope with light support	1
Caius	Camera attachment for Olympus CX-41 Microscope	Cooled CCD Camera, Minimum 5 mega pixel compatible with Olympus CX-41 Microscope	1
	Edwards High Vacuum pump	Edwards RV 3, 3 m <sup>3</sup> /hr, vaccum 10 <sup>-4</sup> mbar	1
	Diaphragm vacuum pump	PTFE/ inert diaphragm for organic solvents, medium vacuum	1
	Hotplate magnetic stirrer with temperature control	Digital magnetic stirrer hot plate with temperature control	1
Chemistry	UV-Visible Spectrophotometer	UV-1900 Double Beam With PC and Printer (SHIMADZU)	1
	UV-Visible Spectrophotometer	UV-2600 Double Beam With integrating sphere for solid samples and PC and Printer (SHIMADZU)	1
	Centrifuge	5418 R (Refrigerated with 1.5/2 ml rotor (EPPENDORFF)	1
	Centrifuge	5430 R with 1.5/2 ml and 15/50 ml tube rotors and Centrifuge tube: [ 2 mL and 15 mL, Qty- 150 each] (EPPENDORFF)	1

	Rota Evaporator with vacuum pump	RE-2 (LABINDIA)	2
	UV Cabinet for TLC	Z 169390-1EA Cabinet CM-24,AC/DC input 230 V AC, 50Hz,European 2-pin plug (SPECTROLINE)	1
	Photocatalytic Chamber	61064320 (LELESIL INDIA)	1
	Digital Melting Point Apparatus	EQ-730 (LABLINE) , Apparatus	2
	Magnetic Stirrer with hot plate	LMMS-300 (MLABS)	4
	Refrigerator for Chemicals	212 L 3Star(RR22M272Z58) (SAMSUNG)	1
	Heating mantle	HMDT1000 (EISCO)	1
	Micropipette	1-10 $\mu$ L, 10-100 $\mu$ L and 100-1000 $\mu$ L Quantity- 5 each (EPPENDORFF)	5
<b>English</b>	Camcorder		1
	Tablet		1
	External hard drive		1
	Projector		1
	HD screen		1
<b>Geology</b>	Petrographic Thin Section Making System	Petrographic Thin Section Making System	1
	Sieve Shaker	Automated with Sieve Set, 10 inches diameter.	1
<b>Life Science</b>	Biosafety Cabinet	One number ESCO Class II A2, Biosafety cabinet, Airstream. External dimesions: 1340 x 753 x 1400 mm (52.8" x 29.6" x 54.7") Internal dimensions: 1220 x 580 x 660 mm (48" x 22.8" x 26")	1

		<p>Airflow Velocity (Inflow) 0.53 m/s (105 fpm)  Airflow Velocity (Downflow) 0.30 m/s (60 fpm)  Electrical: 230-250V 50Hz  NSF 49 and UL 61010-certified,  ULPA filters (0.1–0.5 micron), Workspace UV Lamp, Internal Electrical Outlet,  Stainless Steel body with Antimicrobial coating.  LCD display of data and airflow, Filter life display, Stand 35" with Castor Wheels,  with 1 Spare UV tubelight</p>	
	Microscopes	<p>(i) Epi LED module for binocular microscope with dual cassette system (Blue 480nm and Green 535nm)  (ii) trinocular head compatible with Olympus CX21i or Magnus MLX-i Plus  (iii) 3 MP CMOS USB camera.</p>	1 each
	Autoclave	Equitron #7441FA Fully automatic Autoclave 450 X 600 mm (18" x 28") /113L microprocessor based controller with time and temperature programmable by user, with 2 stainless steel carriers of 400 x 330 mm.	1
	Refrigerator	370L capacity double door convertible refrigerator (BOSCH)	1
	Electrical Swiches & Sockets	Renovation of electrical switches and plug points in the Laboratories	
		(i) 36 nos of x 15 Amp sockets with switch,	36
		(ii) 45 nos of 5 Amp sockets with switch,	45
		(iii) Approximately 100 Nos of 6A switches for light and fans.	100
	SS Gas Pipe , Bunsen Burners & stop cock	Replacement of SS Gas Pipe (approximate 20M) and bunsen burners and stop cocks (50 nos) in the laboratory.	1
	Hot Plate wirh Magnetic stirrer	Ceramic Hot plate and magnetic stirrer with digital temperature and speed control	1
<b>Microbiology</b>	Electrophoresis units	4 Well Vertical Gel electrophoresis units With gel casting apparatus	2

	Reagents	Consumables : Agarose, DNA ladder, SP sepharose, TMB, Nitrocellulose membrane, Safeview Hi SYBR safe gel stain	–
	Desktop Computers,software	Desktop computers, Intel Core i3 ,8th Generation Processor, 4 GB Ram, 1 TB Hard Disk, DVD, Dell Slim Cabinet with Power Supply, Dell keyboard & mouse, Windows 10 Home, Ms Office Home Student, Creative Speaker, Antivirus Software	2
	Refrigerator	300L double door Refrigerator, door Frost -Free Refrigerator, 3-5 Star	1
<b>Mathematics</b>	Portable projector		1
	Bluetooth speaker		1
	Collar mikes		2
	Cupboards	Approximate height 6 ft (to store books)/ height 4 ft 5 inch with glass door	2 / 1
	Software	Matlab in maths lab computers.	
	Sofaset	3+1+1	
<b>Physics</b>	High power computer desktops with softwares	3.6GHz quad-core Intel Core i7, 16GB of 2400MHz DDR4, 512 GB SSD, Radeon Pro 560 with 4GB of VRAM/Vega Graphics, 21.5 inch, 4096-by-2304 , P3 color.	10
	Acoustic /RF Anechoic Chamber	/ Audiometric room 7ft x 4ft X 4ft, Wide frequency.	1
	Tesla meter	Standard tesla meters	6
	Night sky Photometer	SSP-3 single channel photometer, 2-position filter slider with Johnson B and V (Visual) filters mounted, rechargeable 9-volt battery, 12VDC power supply with wall cord, 10-ft. Null serial cable, and SSPDataq3 data acquisition and reduction software	2

Michelson Interferometer	Standard Michelson Interferometer	2
Spectrophotometer	Student grade,	1
Telescope	Celestron 6"-8" with computerised equatorial/ Alt-Azimuth mount, eyepiece kit, + accessories	2
Calibrated USB measurement Microphone	miniDSP umik-1	3
Frictionless Air tracks	2 meter long with accessories	2
High Speed Camera	2560x2048 @ 250 FPS to SVGA 800x600 @1650FPS	1
Photoelectric effect apparatus	Photodiode, Photodiode Enclosure with tube.Track, required cables, Mercury Light Source etc	5
Digital sound level meter	standard digital sound level meter	5
Solar cell kit	Polycrystalline solar panel with wires, Moving coil meters fitted on box, Lamp house with power supply and accessories, (1W & 2 W).	5
Spectra tubes	Neon, Helium, Water vapor, Krypton, with power supply and mount.	5
Polarizing microscope	Standard polarising microscopes	2
Millikan's oil drop apparatus	Standard apparatus.	2
Dip Needle	Standard dip needle.	4
Wireless weather sensors with GPS		1
Vacuum pump	Standard	2
Thermal expansion kit		4
Recording Microphone	Sennheiser ClipMic digital Mobile Recording Microphone	2

	Strobe lamp	Up to 50 Khz Frequency	2
	Softwares	For video, audio analysis and editing, Mathematical simulations	1
	Force sensor	0-1N, 0-10N, 0-100N	9
	Helmholtz oscillators	10inch and smaller in length	4
	Polariser	Linear, CPL	10
	Infrared thermometer	Standard	2
	Digital LCR meter	Standard	4
	Radiation sensor	Microwave Range	2
	Coulombs law apparatus	Standard	2
	High-Frequency, High-Power Function Generator	0-300 MHz, upto 10 A	2
	GM counter with RA source (Academic Purpose)		2
<b>Psychology</b>	Psychological Tests	Children's Apperception Test (Indian)	5
		Vineland Social Maturity Scale	1
		Seguin Form Board	1
		Binet Kamat Intelligence Test	5
		Wechsler Intelligence Scale for Children	1
		David's Battery of Differential Ability	1
		Holland's Self Directed Search	1
		NEO-PI 3	1
		16 Personality Factor Inventory	1
		Thematic Apperception Test (Indian)	5

		Sentence Completion Series	1
		Wechsler Adult Intelligence Scale IV	1
		PGI Memory Scale	1
		Wechsler Memory Scale III	1
		Bender Gestalt Test II	1
<b>Statistics</b>	Laptop	Intel Core i3 or i5, 8th Generation, 8GB RAM/1TB HD/Built in Graphics Card/Win 10 Pro(Licensed)/MS Office(Licensed), HDMI,USB drive,Antivirus s/w(Norton/Mc Afee). Make can be HP/Dell/Lenovo with laptop bag with approx cost 50-60K	3
<b>Zoology</b>	Biosafety cabinet	Type II A2,Vertical air flow, ULPA filters (0.1–0.5 micron), UV Lamp, Internal Electrical Outlet, Size: 2 - 3 ft Stainless Steel body with Antimicrobial coating. LCD display of data and airflow, Filter life display, Stand	1
	UV-VIS Spectrophotometer	Xenon Lamp/D2 Lamp for UV Integrated software , 0.1-0.5 increaments in wavelength Should have various modes estimation Output port for data transfer	1

Small Laptops/Tablets	Core i5 8th Gen (1.6 to 2 GHz) (4 cores).Minimum 4 GB DDR4 RAM with expandable slots.Minimum 1 TB HDD.Windows 10 Home OS with Windows Office (licensed versions).Integrated Graphics.LED Screen (1080p)Wireless, Bluetooth Would prefer Laptops	6
Egg Incubator	Temperature and humidity control and LED display, Egg turning automated. Light body.Capacity 48 egg	2
Water Analyzer	Ability to test various parameters of water: pH, OD, Conductivity, Phosphate, nitrates, sulphates in water	2
Flourescence or Phase contrast Inverted Microscope	Flourescence should have blue green and UV excitations DIC enabled Phase contrast Simple polarized light Brightfield and Darkfield Lenses should be Achromatic Device should be inclusive of software and illumination sources for all the microscopy techniques mentioned above	1



	Auto Analyzer	Measure various blood parameters: CBC count, blood glucose, serum creatinine, LFT, ion levels, serum albumin, certain Immunoparameters	1
<b>Sports</b>	Equipments for sports & Gymnasium	New surfaces for badminton, Volleyball, basketball, new tables for table tennis, new equipments in gymnasium	
<b>College Infrastructure</b>	Stairlifts, Solar Power Generator, Civil works in Hostel		
<b>ICT</b>	Server Switch	HP DL360 G9 Server Cisco SRW2048 Switch	1
	Turnitin	Turnitin Originality Check for faculty/ Student	1
	Software	Seqrite EPS 7.4 Business Stellar EaseUS	1
	PA System Digital Signage	YIF BR-500	1
	Microphone	Easun -EM-820E/Ahuja 520VL	100
	Computers	Dell Vostro 3470 LG 55SE3KE	5