School of Medicine

The Maldives National University

 Note: The Items supplied for this project must be of a very high quality and must be from companies with high reputation and must comply with IEC 61010-1:2010 and comply with EC standards and manufactured under ISO 9001:200

The bids must be accompanied with the following:

- 1- Detail catalogue of the item or a pamphlet which provide all related information
- 2- Profile/s of the product manufacturer indicating the website and other related information.
- 3- Country of manufacturing of the products
- 4- Warranty status and after sales service (if calibration or repair is needed)

NO	ITEM	SPECIFICATION	QUANTITY	Your Brand and Specification
1.	Autoclave (Table top) (Front-loading, bench-top autoclave) Boeco, Systec or Zirbus or any other reliable brand	LCD display and fully automatic microprocessor control Internal memory for storing up to 500 sterilization cycles Autofill: automatic demineralized water feed for steam generation F Flexible temperature sensor and additional temperature sensor in condense exhaust Programmable automatic door-opening on completion of program Water-cooled steam exhaust, thermostatically controlled Overheat protection Process evaluation system Pressure auto door lock Emergency stop button Pressure overload protection Customization program Chamber size: 45 - 50 L	01	THE WILLIAM WATER PARTY OF THE



2.	Micropipette Plunger Tip Ejector Volume Adjustment Volume indicator Ejector Arm Where disposable tips attach	Volume locking system Adjustable tip ejector Reliable results Autoclavable		
2.1	Micropipette (0.5-10u)		6	
2.2	Micropipette (2-20ul)		6	Ε.
2.3	Micropipette(100-1000ul)		6	



3	Water Bath Boeco (PWB 8) , Systec or Zirbus or any other reliable brand	 Tank Volume, liters: 10 L Useful Volume, liters: 8 L Temperature Range: Ambient Temp + 5°C / 99,9°C Displays: LED Displays for Temperature and Time Temperature Set and Display Sensitivity 0,1°C Temperature variation @37°C ± 1°C* Temperature fluctuation @37°C ± 1°C* Programmable Alarm Limits ± 0,5°C / 5°C Timer 1 minute – 99,9 hours + Hold Position 	1	
	\ae	Delayed Start Timer 1 minute – 99,9 hours		



4	Class II Biosafety Cabinet	 Airflow Pattern (downflow / exhaust) 70% / 30% Filter with 99.999% efficiency against 0.3µm particles, 99.995% filter efficiency for MPPS at 0.1µm Digital display UV light and regular light for illumination Noise(dB) ≤60 Downflow ULPA Filter Exhaust ULPA Filter Type Class II, Type A2 	1		
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5	Vortex mixture	 Motor: brushless DC motor Kind of motion: orbital, 4 mm Speed range: 300 - 4200 rpm. / speed accuracy: ± 10 rpm Max. loading capacity: 500 g Display: digital speed / time setting Switch: ON / OFF / Touch Pulse mode (default): vibration for 5 secs. than pause for 5 secs. Pulse mode (programm) vibration time & pause time can be defined by user between 1 to 99 secs. Timer 1 to 999 mins. & continuous mode 	2	
6	Gel Electrophoresis Machine with Gel	 Gel Mini electrophoresis system Output Voltage: 35V, 50V or 100V Timer: 0-99 minutes or continuous Safety: magnetic and mechanical lid interlock Max. Bugger Volume: 230ml Gel Capacity: one 10.5 x 6 cm or two 5 x 6 cm Include 2 casting sets 	1	AND WE NATIONAL UNITED

7	Thermal Cycler	 96 × 0,2 ml tubes and 96well plates 96 × 0,2 ml tubes and 96well plates Heating speed of ramping: up to 4,0°C /sec 	1	
		 Cooling speed of ramping: up to 4,0°C /sec Block temp. uniformity: ≤ ± 0,3°C Block temp. accuracy: ≤ ± 0,1°C (55°C) ≤ ± 0,2°C (≥ 90°C) 		
		 Display resolution: 0,1°C Temp. control mode: Block or Tube Ramping rate adjustable: 0,1°C - 4°C Memories: 250 typical programs (unlimited by USB) 		
		Max. cycles: 99 cycles for Nested PCR Time up/down: 0-9 min59s, suit for LongPCR		
		Temperature up/down: 0,1 - 9,9°C suit for Touchdown PCR		



8	Real Time PCR	 Plate-based real-time PCR system with 96-well block Temperature gradient (assay optimization) Standalone system (integrated PC) Touchscreen with separate instrument software (free to load on any PC) Dynamic range of 10 log Sensitivity of one copy 4-plex multicolor Runtime of less than 1 hour Applications: Absolute Quantification, Relative Quantification, Endpoint Genotyping, Melting Curve Analysis Must include PC analysis software 	1	



9

Benchtop Microcentrifuge



Controls and displays

- During centrifugation the actual values of the parameters are indicated
- Entry of the running parameters via foil keypad
- Speed display in RPM or RCF
- RPM input from 200 to 10.000 in steps of 10, starting from 10.000 to
- the maximum speed in steps of 100
- RCF input from 200 to 10.000 in steps of 1, starting from 10.000 to
- the maximum speed in steps of 10
- Time t/min: 1 99 min. in steps of 1min.,
- Time t/sec: 1-59 sec. in steps of 1 sec...
- Continuous operation
- Brake stage, selectable between fast and slow
- Pulse key: For short centrifugation operations
- Open lid key

Safety

- Lid locking and holding device
- · Emergency lid lock release
- · Motor overheating protection
- · Imbalance switch-off
- Deep metal rotor chamber (die-castzinc) to securely accommodate the rotor

1



 The MC-24 conforms to safety regulations such as IEC 61010 or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2008 Technical details Max. RPM (speed) / RCF: 14,000 rpm / 18,845 RCF Noise level: 59 dB(A) Emission / Immunity: EN / IEC 61326-1 class B / FCC class B 	



Mercury Sphygmomanometer	 Desk model mercury sphygmomanometer Precision Glass Tube with easy to read graduated scale Fine Quality of Adult Cuff and Inflation System Measurement Scope: 0-30mm-Hg (Littman brand or equivalent) 	20	
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Dual-lumen tubing: Two sound paths in one tube eliminates the rubbing noise of traditional double tubes. Headset is easily adjusted for individual fit and comfort. Angled ear tubes align with ear canals. Include Special Procedures Adaptor for pediatric or neonatal auscultation. (Littman brand or equivalent)



12	Disarticulated human skeleton model	Good quality plastic models of bones of the human body Packaged as separate bones of the skeletal system	3 Sets	

