

Department of Zoology

GOVERNMENT COLLEGE (AUTO), ANGUL.
LIST OF EQUIPMENTS FOR 2017-18

Equipment	Specification
<p>1. UV-Visible spectrophotometer (1 No.) Make: SYSTRONICS (2202)</p>	<p>Optics: Modified Czerny-Turner Monochromator geometry for better aberration correction. Holographic diffraction grating with 1200 lines/mm blazed at 250nm & Advanced Split Beam Technology with PC controlled setting</p> <p>Wavelength: Range: 200-1100nm, Accuracy: ± 0.5 nm, Repeatability: ± 0.2 nm, Resolution: 0.1 nm (200-1100 nm), Band width: 2.0 nm</p> <p>Photometric: Range: -2.5 to 2.5 Abs (± 4.0 Abs), Accuracy: ± 0.005 Abs at 1.0 Abs, Repeatability: ± 0.002 Abs at 1.0 Abs. Stray Light: Less than 0.05%T at 220 nm and 370 nm, Sample Holder: Five position automatic positioning 10mm cuvette for sample and one fixed position for reference cuvette. Source: Tungsten-Halogen lamp (320 to 1100 nm), Deuterium lamp (200 to 340 nm). Detector: Two Si-Photodiodes. Order Cut-off filter: Four glass filter, automatically positioned to eliminate grating spectral order interferences.</p> <p>Minimum Volume: Without cell riser 500μl in 1ml cuvette, 2ml in 4ml cuvette; with Cell riser 250μl in 1ml cuvette, 1 ml in 4ml cuvette</p> <p>Operating mode: Single wavelength, Multi wavelength, Scan, Time/Kinetic Scan (with derivative facility). Measuring Modes: Absorbance, %Transmittance, Concentration (K factor, multi standard), Multi-component Analysis (Max. 10 components)</p> <p>Automatic Calibration/optimisations: Base line, Source optimization, Cell optimization, Wavelength calibration, Electronics calibration, Self-diagnosis. Data Processing: Peak Pick/Point Pick/Vally pick, Expansion/ Compression of spectra, 1st, 2nd, 3rd, 4th Derivative, Averaging of scans, Substraction of first two scans, Three levels of smoothing of spectra, Ratio, corrected ratio, 2 point and 3 point net Abs, Comparison of concentration.</p> <p>Data Presentation: Display of graphic and tabular data on hard disk, hard copy of graphic and tabular data on printer</p> <p>Computer system: PENTIUM-IV or higher version with colour Monitor, RS-232 port or USB port with WIN-XP Operating System or above RS 232 PORT: PC control (RS-232 or USB to serial). POWER: 230V, $\pm 10\%$, 50Hz, DIMENSION: 520(W)X500(D)X190(H) mm, Weight: 23kg (Approx); Accessories: 2 matched 10 mm Quartz cuvettes</p>
<p>2. PC/Monitor (1 No.) HP 20WD 19.45-</p>	<p>Screen Size: 19.4 Inches, Maximum Display Resolution: 1600 x 900 pixels, Item Weight: 2.81 Kg, Package Dimensions: 53.8 x 42.4 x 12.4 cm, Item model number: 20wd, Hardware Platform: PC</p>

J. S. S.
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Inch LED Backlit Monitor	
3. Digital pH meter (4No) (Hanna Pocket Model, HI98108)	Type: Digital pH Meter, pH Range (pH): 0.0 - 14.0 pH, pH Resolution: 0.01 pH, pH Accuracy: ± 0.1 pH, Temperature Compensation: 0 - 50°C, Calibration: Manual, 2 points, Power: 4 x 1.5 Volt, Weight: 95 g, Temperature Range(C): 0 - 50 °C, Battery Life: approx 200 hours continuous use, Dimensions: 175x41x23 mm
4. Microwave Oven (LG 20 L Solo) MS2043DB, Black	Type: Solo, Capacity (Litre): 20, Color: Black: Anti Bacterial, Control Type: Membrane, Auto Cook Menu: 44, Microwave Frequency(MHZ): 2450, Watts Microwave (Output): 700, Microwave Power Levels: 5, WxHxD: 455x252x320
5. Pocket Weighing Scale (Digital) Weightrolux	Product Type: Digital Scales, Size: 63x120x21 mm, Material: Plastic, Item Display: LCD Display with Backlight Weighing Capacity: 0.5-50 Kg, Capacity: 200 g

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LIST OF CHEMICALS
MERCK/HIMEDIA/SRL/SIGMA-ALDRICH

SL. No.	NAME	
01	DNA (calf thymus) 5 unit	SIGMA-ALDRICH
02	Perchloric acid, 250ml	SIGMA/MERCK
03	Sodium citrate (500g)	SIGMA/MERCK
04	Ferric chloride (500g)	SIGMA/MERCK
05	Concentrated Sulphuric acid (500ml)	SIGMA/MERCK
06	Con. Hydrochloric acid (0.1 mol/0.1N) 500 ml	SIGMA/MERCK
07	Copper sulfate (500g)	SIGMA/MERCK
08	Sodium Tartarate dihydrate (500g)	SIGMA/MERCK
09	Folin & Ciocalteu's Phenol Reagent (500ml)	SIGMA/MERCK
10	Ethanol (1Lit)	SIGMA/MERCK
11	Glycerol anhydrous (500ml)	SIGMA/MERCK
12	Hexane (1Lit)	SIGMA/MERCK
13	Acetone (1Lit)	SIGMA/MERCK
14	Trichloroacetic acid (250g)	SIGMA/MERCK
15	Silver Nitrate (25g)	SIGMA/MERCK
16	Starch solution indicator (100ml)	SIGMA/MERCK
17	Phenolphthalein indicator (25g)	SIGMA/MERCK
18	Sodium Hydroxide (100g)	SIGMA/MERCK
19	Luria Bertani HiVeg™ Broth, Miller (500g)	HIMEDIA
20	Luria Bertani HiVeg™ Agar, Miller (500)	HIMEDIA
21	Caustic Soda (500g)	SIGMA/MERCK
22	Oleic acid (500 ml)	SIGMA/MERCK
23	Sudan III, 100g	SIGMA/MERCK
24	Sudan IV, 100g	SIGMA/MERCK
25	pH Paper (wide range)	SIGMA/MERCK
26	Urea 500g	SIGMA/MERCK
27	Urase, 5g	SIGMA/MERCK
28	Uric acid, 100g	SIGMA/MERCK
29	Soyabean powder (250g)	SIGMA/MERCK
30	Sodium potassium tartarate (500g)	SIGMA/MERCK
31	Potassium Iodide (250ml)	SIGMA/MERCK
32	Biuret Reagent (150-1,000 µg/mL protein detection level) (250ml)	SIGMA/MERCK
33	Phenol red (5g)	SIGMA/MERCK
34	Potassium dichromate (500g)	SIGMA/MERCK
35	Orthophosphoric acid (500g)	SIGMA/MERCK
36	Ferrous ammonium sulfate (500g)	SIGMA/MERCK
37	Sodium thiosulphate pentahydrate (250g)	SIGMA/MERCK
38	Manganous Sulphate (250 g)	SIGMA/MERCK
39	Methyl orange (125 ml)	SIGMA/MERCK

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40	Sodium carbonate (250g)	SIGMA/MERCK
41	Sodium Nitrate (250g)	SIGMA/MERCK
42	Boric Acid (500 g)	SIGMA/MERCK
43	Potassium chromate (250g)	SIGMA/MERCK
44	Manganous chloride (250 g)	SIGMA/MERCK
45	Buffer solution (pH.7) 500ml	SIGMA/MERCK
46	Chloroform (500ml)	SIGMA/MERCK
47	MacKonky Agar (500g)	HIMEDIA
48	MacKonky Broth (500g)	HIMEDIA
49	Protein kit Biuret method	SIGMA/MERCK
50	Methylene blue aqueous (125ml)	SIGMA/MERCK
51	Iodine Solution (250ml)	SIGMA/MERCK
52	Sodium Bicarbonate (500g)	SIGMA/MERCK
53	Sodium Carbonate (500g)	SIGMA/MERCK
54	Glacial acetic acid 100%(500ml)	SIGMA/MERCK
55	Molisch's reagent (250ml)	SIGMA/MERCK
56	Sulfo Salicylic acid (100g)	SIGMA/MERCK
57	Ether (500ml)	SIGMA/MERCK
58	Benzene (500ml)	SIGMA/MERCK
59	Ethyl alcohol pure (500ml)	SIGMA/MERCK

Miscellaneous (Slides, Models, Bones, Specimen etc)

Bones

1. Articulated and disarticulated bones(Rabbit, Frog, Varanus, Fow): 2sets each

Model

1. Elbow joint
2. Knee joint
3. Shoulder joint
4. Carapace and plastrons
5. Skull of herbivores and carnivores

Charts

1. Poisonous and Nonpoisonous Snake
2. Comparative chart of different bones
3. Fish scale and fins

Slides

Entamoeba(W.M.), Taenia (W.M.), Ring worm (W.M.)

Taenia (Museum specimen)

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