

University of the Punjab List of Available Scientific/ Research Equipment's & Teaching Facility in HEIs

| Sr. No | Name of Department | Head of Department | Focal Person Contact Details (email/cell #) | Name of Equipment | Status | Name of Test | Rate (Rs.) per sample |
|--------|---|--|--|------------------------------------|---------|--|-----------------------|
| 1 | Institute of Agricultural Sciences | Dr. Salik Nawaz Khan Mobile: 0333-4918299 salik_nawaz@yahoo.com | Dr. Rashid Mahmood Mobile: 0344-7079236 rashid.iags@pu.edu.pk | Gene gun | working | Gene transformation to callus | |
| 2 | | | | Real time PCR | Working | DNA quantification/ expression analysis | |
| 3 | | | | Fungal Culture Bank | Working | About 1500 fungal cultures are available for sale. Services for identification of unknown fungal species | |
| 4 | | | | Soil and Water Analytical Services | Working | Facility to analyze soil and irrigation water for a number of determinations | |
| 5 | | | | VU/Vis Spectrophotometers | Working | <ol style="list-style-type: none"> 1. Colorimetric analysis and Turbidity measurement in sugar/sucrose 2. Determination of reducing sugars 3. Enzymme assays and protein quantification 4. Anti-oxidant activity test 5. Total phenolics 6. Phytochemicals 7. Sulphate, Nitrate and fluoride content in drinking water. | |
| 6 | | | | Drying Oven | Working | Determination of moisture content | |

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| | | | | | | and total solids | |
| 7 | | | | Flame Photometer | Working | Minerals analysis (Na,k,Li,Ca and Mg) | |
| 8 | | | | pH meter | Working | PH determination of various industrial products | |
| 9 | | | | Titration assembly | Working | <ol style="list-style-type: none"> 1. Acidity, alkalinity, carbonates and bicarbonate in drinking water. 2. Total acidity of fruit juices and other food products. 3. Peroxide value and free fatty acids in fats and oils. 4. Determination of sodium benzoate in preserved foods. 5. Reducing sugars in various foods. | |
| 10 | | | | | | | |
| 11 | | | | Sohxlet apparatus complete assembly with all accessories | Working | Crude fat determination in food and feed samples. | |
| 12 | | | | E.C meter | Working | TDS and conductivity of water. | |
| 13 | | | | HPLC system | Working | <ol style="list-style-type: none"> 1. Phenolic compound 2. Tocopherol & Retinol 3. Organic acids 4. Aflatoxins 5. Pesticides residues | |
| 14 | | | | ELISA complete with accessories | Working | <ol style="list-style-type: none"> 1. Aflatoxins 2. Anti-bodies 3. Efficacy of vaccines 4. Diagnosis of Viruses | |
| 15 | | | | Specific gravity bottles | Working | Specific gravity of liquids | |
| 16 | | | | Nitrogen Digestion and Distillation Unit | Working | Determination of nitrogen from soil and plant samples | |
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| 18 | | | | Auto Clave, Laminar Flow Hood, Fluorescent & Digital Microscopes, Compound & stereo microscopes, Colony counter, Cabinet type incubator, Low temperature Incubator, Temperature controlled shaking incubator, orbital shakers, deep Freezers, Refrigerators, Ultra-low Freezers and freeze dryer (lyophilizer) | Working | <ol style="list-style-type: none"> 1. Aerobic plate counts 2. Yeast & mould counts 3. Presence/Absence of Salmonella 4. Presence/Absence of <i>E. coli</i> 5. Presence/Absence of <i>Staphylococcus aureus</i> 6. Total viable plate counts 7. Total plate count (bacteria, mould, yeast) 8. Total Coliform 9. Availability pure Fungal/Bacterial cultures 10. Facility for identification & characterization of newly isolated fungal/bacterial cultures | |
| 19 | | | | Temperature controlled shaking incubator, Orbital Shakers, Deep Freezer, Refrigerator, Low Temperature Incubator, PCR Machine (Thermo cycle), Refrigerated Centrifuges, Temperature controlled Shaking Incubators, Analytical balances, pH meters, Auto clave, Electrophoresis apparatuses, UV Illuminator, Cabinet type Incubator, pH | Working | <ol style="list-style-type: none"> 1. Gene cloning & expression 2. Recombinant Vaccine for Rabies 3. Diagnosis of plant/animals viruses & their control 4. Development of disease resistant plants 5. Highly efficient industrial enzymes | |

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| | | | | meter, Gel Doc system, water bath, Shaking incubator (Temperature controlled), Ultra-low freeze (-80°C), Ligation Unit, UV Laminator, DNA Hybridizer | | | |
| 20 | | | | Fermenters/Bioreactors | Working | Mass scale production of microbes for the production of antibiotics, enzymes, organic acids & other biotechnological products. | |
| 1 | Centre of Excellence Solid States Physics | Prof. Dr. Shahzad Naseem Mobile: 0301-8466536 director.cssp@pu.edu.pk | Dr. Saira Riaz contact: 042-35839387-9 saira_cssp@yahoo.com | Leica Optical Microscope | working | Surface Study at Micro Level | Rs. 500/- |
| 2 | | | | Hitachi Scanning Electron Microscope | working | Surface Topography | Rs. 3000/- to Rs. 5000/- |
| 3 | | | | Veeco Scanning Probe Microscope | Under repair | Surface Study at Atomic level | Rs. 5000/- to Rs. 10,000/- |
| 4 | | | | Lakeshore Vibrating Sample Magnetometer | working | Magnetic Properties | Rs. 5000/- |
| 5 | | | | JA Woolam Spectroscopic Ellipsometer | working | Optical Properties | Rs. 2000/- |
| 6 | | | | Shimadzu Universal Testing Machine | working | Mechanical Properties | Rs. 1000/- |
| 7 | | | | Shimadzu Vickers Hardness Tester | working | Mechanical Properties | Rs. 500/- |
| 8 | | | | Bruker XRD | working | Materials Identification | Rs. 3000/- to Rs. 5000/- |

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| 9 | | | | Weinkerr Impedence Spectroscopy | working | Impedence & Capacitance Measurement | Rs. 2000/- |
| 10 | | | | Kiethly Semiconductor Characterization System & Microprober | working | Electrical Properties | Rs. 2000/- & Rs. 3000/- |
| 1 | Institute of Chemistry | Dr. Muhammad Makshoof Athar, +92-333-6385995 makshoof.chem@pu.edu.pk | | Inductively Coupled Plasma – optical Emission Spectrometer (ICP-OES) | Working | Analysis of metals at ppb levels | Rs. 1500/- per sample per element |
| 2 | | | | Atomic Absorption Spectrophotometer | Working | Analysis of metals at ppm levels | Rs. 700/- per sample per element |
| 3 | | | | ELIZA | Working | Hormones/ Antibodies | Rs. 2000/- |
| 4 | | | | Gas Chromatograph (GC-MS) | Working | Working | Rs. 3000/- |
| 5 | | | | High Performance Liquid Chromatograph (HPLC) | Working | Pesticides / Pharmaceuticals / Vitamins etc. | Rs. 1500/- |
| 6. | | | | Bomb Calorimeter | Working | Heat of Combustion of Organic compounds | Rs. 3000/- |
| 7. | | | | Fourier Transform Infrared Spectrophotometer (FTIR) | Working | Surface functional groups in organic compounds | Rs. 1000/- |
| 8. | | | | UV/Vis Spectrophotometer | Working | Basic Spectrometry of Inorganic and Organic compounds | Rs. 1000/- |
| 9. | | | | Flame Photometer | Working | Sodium and Potassium in aqueous samples | Rs. 300/- |
| 1 | Department of Microbiology & Molecular Genetics | Prof. Dr. Anjum Nasim Sabri 04235952811, 04235952822 | | Atomic Absorption Spectrophotometer | working | Metal analysis (Cr, As, Se, Hg) | 2000/- |

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| | | chairperson.mmg@pu.edu.pk | | | | | |
| 2 | | | | Spectrophotometer | working | Auxin assay | 1500/- |
| 3 | | | | HPLC | working | HPLC/UV | 1500/- |
| 4 | | | | HPLC | working | HPLC/RI | 1000/- |
| 5 | | | | - | working | Phosphate Solubilization assay for bacteria | 500/- |
| 6 | | | | - | working | Antibiotic susceptible pattern | 1000/- |
| 7 | | | | - | working | Microbiological analysis of drinking water | 1500/- |
| 8 | | | | - | working | Microbiological analysis of food | 1500/- |
| 9 | | | | Fermentor | working | Fermentation facility for bacteria (7.5 liters) | 5000/- |
| 10 | | | | EC Meter | working | Electrical conductivity for water and soil sample | 500/- |
| 11 | | | | Lypholizer | working | Lypholization assay | 500/- |
| 12 | | | | Distillator | working | Distilled water (2.5 liter) | 250/- |
| 13 | | | | Deionizer | working | Deionized water (2 liter) | 500/- |
| 14 | | | | Rotary evaporator | working | Solvent evaporation assay | 500/- |
| 15 | | | | 96 microplate reader 12 microplate reader | working | Biofilm analysis of bacteria on microplate reader | 1000/- |
| | | | | Lumino meter | working | Biofilm formation by luminous production | |
| 16 | | | | - | working | Qualitative test for microbes in industrial samples | 1000/- |
| 17 | | | | - | working | Quantative test for microbes in industrial samples | 1000/- |
| 18 | | | | Fluorescent microscope | working | Fluorescent microscopy | 1000/- |
| 19 | | | | = | working | Light Microscopy | 100/- |
| 20 | | | | = | working | Cyanobacteria culturing and identification | 5000/- |
| 21 | | | | = | working | Microalgae culturing and identification | 5000/- |
| 1 | Department of Metallurgy and | Prof. Dr. Rafiq Ahmad 042-99232256, 042-99232012 Principal.ceet@pu.edu.pk | Dr. Aqil Inam 0321-4230073 Aqeel_inam@hotmail.co | Universal Sand Strength Testing | Working | Texting of Shear & Compression Strength of Moulding Sand | 1000/- |

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| | Materials Engineering | | m | Machine | | | |
| 2 | | | | Moisture Teller | Working | Moisture content of materials | 1000/- |
| 3 | | | | Permeability Tester | Working | Permeability test of materials | 1000/- |
| 4 | | | | Sieve Shaker | Working | Particle Size Analysis | 1000/- |
| 5 | | | | Shatter Index Tester | Working | Shatter index of molding sand | 1000/- |
| 6 | | | | Hardness Tester | Working | Mould Core hardness test | 1000/- |
| 7 | | | | Potentiostat | Working | Electro Chemical Techniques (Corrosion Testing) | Tafel Scan 1000/- Potentiodynamic polarization 1000/- Electro-chemical impedance 1000/- Cyclic Polarization 1000/- Linear Polarization 1000/- |
| 8 | | | | Surface Profilometer | Working | Surface roughness measurement | Surface profilometry 500 |
| 9 | | | | Optical Microscope (Lieca) | Working | Analysis | Phase Analysis 1000/- Grain Analysis 1000/- |
| 10 | | | | Optical Microscope | Working | Digital imaging along with specimen preparation | 1000/- |
| 11 | | | | Micro-Vicker Hardness Tester | Working | Hardness testing of metals and alloys | 1000/- |
| 12 | | | | Rockwell Hardness Tester | Working | Hardness testing of metals and alloys | 1000/- |
| 13 | | | | Muffle Furnace | Working | Heat-treatment | 1000/- |
| 14 | | | | Crucible Furnace | Working | Salt Bath Heat-treatment | 1000/- |

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| 15 | | | | Carbolite Furnace | Working | Heat Treatment of Large Samples | 2000/- |
| 1 | School of Physical Sciences | Prof. Dr. Aamir Ijaz Phone: 042-99230462 ijazaamir@yahoo.com | Dr. Fawzia Tabassum Phone Office: 042-99238088 fouzia.teaching@gmail.com | High Performance Liquid Chromatography (HPLC) | Working | Purity testing of compounds | 2000/- |
| 2 | | | | Gas Chromatography (GC) | Working | Purity testing of compounds | 2000/- |
| 3 | | | | Polymerase Chain Reaction (PCR) | Working | Diagnosis of Microorganisms/Genes | 1000/- |
| 1. | Institute of Chemical Engineering & Technology | Prof. Dr. Aamir Ijaz Phone: 042-99230462 ijazaamir@yahoo.com | Prof. Dr. Aamir Ijaz | UV/Vis Spectrophotometer (Perkin Elmer LAMBDA-25) | Working OK | Analysis by determination of radiation absorbed/ emitted by a coloured liquid sample in UV/Visible region | Rs. 3000/- |
| 2. | | | | High Pressure Liquid Chromatography (HPLC) (Perkin Elmer) | Not completely working some tests cannot be performed – some parts are needed to replace. | Analysis by component separation using packed columns | Rs. 5000/- |
| 3. | | | | Gas Chromatograph (Varian CP-3800) | Out of order – some parts are needed to replace. | Analysis by Separation of Components using capillary columns. | Rs. 5000/- |
| 4. | | | | Rheometer (Rheotec RC-20) | Working but interface between equipment and computer | Analysis of Viscosity, Shear Rate, Shear Stress using rotational tests with controlled shear rate and controlled shear stress (CSR and CSS) | Rs. 3000/- |

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| | | | | | has some issues but the equipment can be controlled manually. | | |
| 5. | | | | Volumetric Karl Fischer Titration Workstation (Timitra 580 titration manager) | Working OK | Titrimetric and Water content analysis | Rs. 5000/- |
| 6. | | | | Bomb Calorimeter | Working OK | Calorific Value | Rs.2000/- |
| 7. | | | | Redwood I, II Viscometers | Working OK | Viscosity | Rs.1000/- |
| 8. | | | | Pens ley Martin Flash | Working OK | Flash Point | Rs.1000/- |
| 9. | | | | Density Meter | Working OK | Density | Rs.2000/- |
| 10. | | | | Atomic Absorption | Working OK | Heavy Metals | Rs.10000/- |
| 11. | | | | Gas Chromatograph | Under Process | Gas/Liquid Analysis | Rs.5000/- |
| 01 | Institute of Quality & Technology Management | Prof. Dr. Abdus Salam Phone Office: 042-99230085 director.iqtm@pu.edu.pk | Munir Ahmad 0333-7655663 munirbinfaqir@yahoo.com | VBRH-Tester | Working | 1-Vicker Hardness Test 2-Brinell Hardness Test 3-Rockwell Hardness Test | As per market |
| 02 | | | | Coordinate Measuring Machine(CMM) | Working | The CMM's dimensional capabilities to analyze includes position, roundness, perpendicularity, parallelism, flatness, angularity, profile of surface, profile of a line, symmetry, concentricity, straightness and datum quantification. | -do- |

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| 1 | Centre of Excellence in Molecular Biology | Dr. Tayyab Husnain Phone Office: 042-35293137 tayyab@cemb.edu.pk | <i>Ms Samra Kausar</i> 042-35293137 sao@cemb.edu.pk | FISH | Working | Gene Integration | 25,000/- |
| 2 | | | | FISH | Working | Karyotyping | 30,000/- |
| 3 | | | | Northern Blotting | Working | Northern blotting | 50,000/ |
| 4 | | | | ELISA | Working | Plant Elisa | 1,000/ |
| 5 | | | | IRGA | Working | Photosynthetic Rate | 1,000/ |
| 6 | | | | Sonication | Working | Sonication | 1,000/ |
| 7 | | | | Genetic Modification | Working | Transformation reaction | 500,000/ |
| 8 | | | | HPLC | Working | Reverse phase HPLC | 5,000/- |
| 9 | | | | Acta-100 | Working | Protein Purification | 5,000/ or 10,000/- |
| 10 | | | | Bio-Assay | Working | Bioassay for recombinant protein | 10,000/ |
| 11 | | | | Antibody generation in animal model | Working | Antibody generation | 10,000/ |
| 01 | School of Biological Sciences | Prof. Dr. Javed Iqbal Phone Office: 042-99230966 Javediqbal1942@yahoo.com | | FPLC | Operating | Facilities provided to Ph.D students without charges. | |
| 02 | | | | HPLC | -do- | -do- | |
| 03 | | | | DNA Sequencing | -do- | -do- | |
| 04 | | | | Atomic absorption | -do- | -do- | |

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| | | | | spectrometry | | | |
| 05 | | | | Maldi- Toff | -do- | -do- | |
| 01 | Centre for Clinical Psychology | Prof. Dr. Rukhsana Kausar Phone Office: 042-99231145 Rukhsana.saddul@gmail.com | | EEG / EMG/ ECG Machine | EEG & ECG used to record electrical activity of the brain and heart respectively. | a. Apparatus | Not Applicable |
| 02 | | | | Stress Meter | It allows to measure the stress level. | a. Apparatus | Not Applicable |
| 03 | | | | Luria- Nebraska | Neuro-psychological Test Battery | a. Manual b. Cards | Not Applicable |
| 04 | | | | Halstead Retain Battery | Neuro-psychological Test Battery | a. Manual b. Cards | Not Applicable |
| 05 | | | | Memory for Design Test | Memory | a. Manual b. Cards | Not Applicable |

| | | | | | Test | | |
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| 06 | | | | Good enough Harris Drawing Test | Personality for Children IQ | a. Manual b. Answer Sheets c. Cards | Not Applicable |
| 07 | | | | Social Skills Training With children and Adolescents | Social Skills Training | a. Manual | Not Applicable |
| 08 | | | | Examining of Aphasia | Aphasia | a. Manual b. Answer Sheets | Not Applicable |
| 09 | | | | Cognitive Abilities Test | Cognitive Abilities | a. Teacher Book b. Booklet | Not Applicable |
| 10 | | | | Bruininks Oseretsky Test of Motor Proficient | Work Functioning (Children) | a. Apparatus | Not Applicable |
| 11 | | | | Golsten-Scheerer Cube Test | Neuro-psychological | a. Apparatus | Not Applicable |
| 12 | | | | Bender Gestalt Test (B.G.T) | Neuro-psychological | a. Manuals b. Cards | Not Applicable |
| 13 | | | | TAT, CAT AND SAT BOOK | Personality | a. Book b. Manual c. Cards | Not Applicable |
| 14 | | | | Arthur Point Scale of Personality Test | Personality | a. Apparatus | Not Applicable |
| 15 | | | | Bayley scales of | Adap | a. Manual | Not |

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| | | | | Infant Development | tive Funct ionin g | b. Answer Sheet | Applicable |
| 16 | | | | Benton Visual Retention Test 4 th Edition | Neur opsyc holog ical | a. Manual b. Booklets | Not Applicable |
| 17 | | | | Benton Visual Retention Test (BVRT) 5 th Edition. | Neur opsyc holog ical | a. Manual b. Booklet | Not Applicable |
| 18 | | | | Carlson Psychological Survey | For asses sment of convi ct of crimi nal offen ses | a. Manual b. Booklets | Not Applicable |
| 19 | | | | Children Apperception Test (C.A.T) | Perso nality | a. Manual b. Picture Set | Not Applicable |
| 20 | | | | Edwards Personal Preference Schedule | Perso nality | a. Manual b. Booklets | Not Applicable |
| 21 | | | | General Health Questionnaire | Gene ral Healt h | a. Manual b. Answer Sheet | Not Applicable |
| 22 | | | | Kendrick Battery Test | Dem entia | a. Manual b. Record Form | Not Applicable |
| 23 | | | | Personal Questionnaire Rapid Scaling Technique | Perso nal feelin gs | a. Manual | Not Applicable |

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| | | | | | and thoughts | | |
| 24 | | | | Quick Neurological Screening Test (Q.N.S.T). | Neuro-psychological | a. Manual | Not Applicable |
| 25 | | | | Rotter Incomplete Sentences Blank (R.I.S.B). | Personality / Adjustment | a. Manual b. Answer sheets | Not Applicable |
| 26 | | | | Rorschach Technique Tests | Personality | a. Cards | Not Applicable |
| 27 | | | | WISC Complete | IQ Test | a. Apparatus | Not Applicable |
| 28 | | | | WAIS Complete | IQ Test | a. Apparatus | Not Applicable |
| 29 | | | | Mooney Problem Checklist | Personal Problems | a. Manual b. Answer sheets | Not Applicable |
| 30 | | | | Raven's Progressive Matrices | Cognitive Ability | a. Manual | Not Applicable |
| 31 | | | | Standard Progressive Matrices (SPM) | Cognitive Ability | a. Manual b. Booklet | Not Applicable |
| 32 | | | | Coloured Progressive Matrices (C.P.M) | Cognitive Ability | a. Manual b. Booklet | Not Applicable |
| 33 | | | | Advance Progressive Matrices(APM) | Cognitive | a. Manual b. Booklet | Not Applicable |

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| | | | | | Ability | | |
| 34 | | | | Picture Test "A". | Non-verbal ability | a. Manual b. Booklets | Not Applicable |
| 35 | | | | Non Verbal Test BD | Non-verbal ability (Children) | a. Manual b. Booklets c. Answer Sheet | Not Applicable |
| 36 | | | | Non Verbal Test DH | Non-verbal ability (Children) | a. Manual b. Booklets c. Answer Sheet | Not Applicable |
| 37 | | | | Behavior Assessment Battery | Behavior Assessment of individuals & handicaps | a. Manual | Not Applicable |
| 38 | | | | Self Esteem Scale | Self Esteem | a. Manual | Not Applicable |
| 39 | | | | Study Habits and attitudes of Students | Habits and Attitudes | a. Manual b. Answer sheets | Not Applicable |

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| 40 | | | | WISC-R | IQ | a. Apparatus | Not Applicable |
| 41 | | | | WAIS-R | IQ | a. Apparatus | Not Applicable |
| 42 | | | | Wood Cock Johnson | Achievement | a. Manual b. Booklets | Not Applicable |
| 43 | | | | Suicidal Ideation Questionnaire | Suicidal Ideation | a. Manual b. Answer sheet | Not Applicable |
| 44 | | | | Draw a person (D.A.P) | Personality | a. Manual b. Answer sheets | Not Applicable |
| 45 | | | | Visual Motor Integration Test(VMI) | Visual Motor Coordinator | a. Manual b. Booklets | Not Applicable |
| 46 | | | | Brown Attention Deficit Disorder Scale | Attention Deficit Disorder | a. Manual b. Answer sheets | Not Applicable |
| 47 | | | | WISC-R-III | IQ | a. Apparatus | Not Applicable |
| 48 | | | | WAIS-R | IQ | a. Apparatus | Not Applicable |
| 49 | | | | Wide Range Assessment of Memory and Learning(WRAML) | Memory and Learning | a. Apparatus | Not Applicable |
| 50 | | | | Dyslexia Screening Instrument | Dyslexia | a. Manual b. Disk | Not Applicable |

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| 51 | | | | Barrier Games of Better Communication | Learning Skills(Children) | a. Manual b. Picture Card | Not Applicable |
| 52 | | | | Helping Babies Learn | Development Profiles & activities | a. Manual b. Answer Sheet | Not Applicable |
| 53 | | | | Attention Process Training-II(APT-II) | Attentional Deficits due to Brain Dysfunction. | a. Manual b. Cassete c. Booklet | Not Applicable |
| 54 | | | | Reitan-Indiana Aphasia (H.R.B.) Performance Test | Aphasia | a. Manual | Not Applicable |
| 55 | | | | Portable Tactual (H.R.B.) Performance Test. | Neuropsychological | a. Apparatus | Not Applicable |
| 56 | | | | WAIS-III | IQ | a. Apparatus | Not Applicable |
| 57 | | | | Wechsler Abbreviated Scale of intelligence Test WASI | IQ | a. Apparatus | Not Applicable |
| 58 | | | | BDI-II | Depressio | a. Manual b. Answer Sheet | Not Applicable |

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| | | | | | n | | |
| 59 | | | | Comprehensive Behavior Rating Scale for Children | Behavioral Problems | a. Complete Kit | Not Applicable |
| 60 | | | | Children Memory Scale CMS | Memory(Children) | a. Complete Kit | Not Applicable |
| 61 | | | | MMPI-2 | Personality | a. Manual b. Booklet | Not Applicable |
| 62 | | | | Beck Scale for Suicide Ideation (BSSI) | Suicidal Ideation | a. Manual b. Answer sheet | Not Applicable |
| 63 | | | | Asperger Syndrome Diagnostic Scale (ASDS) | Asperger | a. Manual b. Answer sheet | Not Applicable |
| 64 | | | | Beck Youth Inventories of Emotional and Social Impairment Complete Kit | Emotional and Social Impairment | a. Manual b. Answer sheet | Not Applicable |
| 65 | | | | Conner's Rating Scale Complete Parent and Teacher | ADHD | a. Manual b. Answer sheet | Not Applicable |
| 66 | | | | Dyslexia Early Screening Test Complete Kit (DEST-2) 2 edition. | Dyslexia | a. Complete Kit | Not Applicable |
| 67 | | | | Children's Depression Inventory Complete Kit (CDI) | Depression(Children) | a. Manual b. Answer sheet | Not Applicable |
| 68 | | | | Children's Memory | Mem | a. Complete Kit | Not |

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| | | | | Scale Complete Kit (CMS) | ory Scale (Child ren) | | Applicable |
| 69 | | | | Cognitive Linguistic Quick Test Complete Kit (CLQT) | Cogni tive Abilit y | a. Complete Kit | Not Applicable |
| 70 | | | | Comprehensive Behavior Rating Scale for Children (CBRSC) | Beha vioral Probl ems (Child ren) | a. Complete Kit | Not Applicable |
| 71 | | | | Process Assessment of the Learner Test Batter for Reading and Writing Complete Kit (PAL) | Asses smen t of Readi ng & Writi ng Proce ss | a. Manual b. Answer sheet | Not Applicable |
| 72 | | | | Trauma Symptom Checklist for Children complete Kit (TSCC) | Trau ma | a. Complete Kit | Not Applicable |
| 73 | | | | Assessment of Language-Related Functional Activities (ALFA) | Lang uage Abilit y | a. Complete Kit | Not Applicable |
| 74 | | | | Brown Attention Deficit Disorder Scales [®] for Children and Adolescents | ADH D | a. Complete Kit | Not Applicable |
| 75 | | | | Test of Pragmatic Language Complete Kit (TOPL) | Prag matic Lang | a. Complete Kit | Not Applicable |

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| | | | | | uage | | |
| 76 | | | | Wide Range Achievement Test (Expanded Edition) (WRAT) | Achievement | a. Complete | Not Applicable |
| 77 | | | | Clark Beck Obsessive Compulsive Inventory (CBOCI) | Obsessive Compulsive Disorder (OCD) | a. Manual b. Answer Sheet | Not Applicable |
| 78 | | | | Detailed Assessment of Posttraumatic Stress (DAPS) | Post Traumatic Stress Disorder | a. Complete Kit | Not Applicable |
| 79 | | | | Picture Exchange Communication System (PECS) | Developmental | a. Complete | Not Applicable |
| 80 | | | | Leiter International Performance Scale | Cognitive Function | a. Complete Kit | Not Applicable |
| 81 | | | | Wechsler Memory Scale-III Abbreviated (WMS-III) | Memory | a. Complete | Not Applicable |
| 82 | | | | Beck Anxiety Inventory (BAI) | Anxiety | a. Manual b. Answer Sheet | Not Applicable |
| 83 | | | | Beck Hopelessness Scale (BHS) | Hopelessness | a. Manual b. Answer Sheet c. Key | Not Applicable |
| 84 | | | | Childhood Trauma Questionnaire (CTQ) | Trauma | a. Manual b. Answer Sheet | Not Applicable |
| 85 | | | | Essentials of WMS-III | Essentials | a. Only Manual | Not |

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| | | | | Assessment | of WMS-III Assessment | | Applicable |
| 86 | | | | Parenting Satisfaction Scale | Parenting Satisfaction | a. Manual b. Answer Sheet | Not Applicable |
| 87 | | | | Parental Stress Index (PSI) | Stress | a. Manual b. Answer Sheet | Not Applicable |
| 88 | | | | Firestone Assessment of Self-Destructive Thoughts (FAST) | Self Destructive Thoughts | a. Manual b. Answer Sheet | Not Applicable |
| 89 | | | | Differential Aptitude Test Battery | Aptitude | a. Manual b. Booklet c. Answer Sheet | Not Applicable |
| 90 | | | | WAIS-III (Complete Kit) | IQ Intelligence | a. Apparatus | Not Applicable |
| 91 | | | | WISC-IV (Complete Kit) | IQ | a. Apparatus | Not Applicable |
| 92 | | | | NEO-P1-3 Adult Comprehensive Kit | Personality | a. Manual b. Answer Sheet | Not Applicable |
| 93 | | | | Wechsler Nonverbal Scale of Ability | Nonverbal Ability Scale | a. Complete Kit | Not Applicable |
| 94 | | | | Wellbeing Evaluation Scale Complete Kit (WES) | Wellbeing Scale | a. Complete Kit | Not Applicable |
| 95 | | | | Behavioral | Neur | a. Complete Kit | Not |

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| | | | | Assessment of the Dysexecutive Syndrome (BADS) | opsychological | | Applicable |
| 96 | | | | The Stress Profile | Stress | a. Complete Ket | Not Applicable |
| 97 | | | | Millon Pre-Adolescent Clinical Inventory | Psychological Issues | a. Manual b. Answer Sheet c. Key | Not Applicable |
| 98 | | | | Hare P.Scan Research Version | Psychopathy Traits | a. Manual b. Answer Sheet | Not Applicable |
| 01 | Department of Zoology | Dr. Muhammad Akhtar Phone Office:042-99231246-47 drakhtarfdrc@hotmail.com | Dr. Nadeem Sheikh Ph: 042-99231246 S_nadeem77@yahoo.com | Atomic absorption spectrophotometer | Working | 1.Total coliform 2.categorization of coliform | 4000/- 6000/- |
| 02 | | | | Microbiological Environmental samples | working | 1.Total coliform 2.categorization of coliform | 4000/- 6000/- |
| 03 | | | | Designing, bioremediation of industrial effects | working | Will depend on nature of material | 0.1 to 0.9 million/sample |
| 04 | | | | Cell and tissue histological morphontary | working | 1.cell morphontary 2.Quantigation of connective tissues 3.Revascularization Reinnervation | 6000/sample |
| 05 | | | | PCR | working | 1.Gene amphfication 2.Gene expression studies | Depends on sample type |
| 06 | | | | GEL | working | Gel electrophoresis for nucleric acids Gel electrophoresis for protein (SDS-PAGE) | 2000/Gel 2000/Gel |