

## CATEGORY B:

**Purchase & Supply of Split Air Conditioners, Computers, Bracket Fans, Water Dispenser, Scanners, Fax Machines, Telephone Sets, Intercom, Extensions, Multimedia Projectors, Refrigerators & Medical Books, for Various Department at Bilawal Medical College at LUMHS, Jamshoro.**

### **Specifications:**

| S#  | Description  | Quantity | @ Rate | Amount |
|-----|--|----------|--------|--------|
| 01. | <b>Air Conditioner 1.5 ton Gree / or Equivalent</b>  | 57 nos.  |        |        |
| 02. | <b>Computers Core i5</b><br>Processor Intel*Core TM i5 processor (6M Cache,3.40 Ghz or higher) Graphic Card 2GB or higher Memory 8GB DDR3or Higher<br>Hard Disk 1 TB or higher Optical drive super multi DVD/CD Burner<br>Display 23” widescreen or Higher<br>USB ports 4USB 2.0/3.0 Ports front/Rear or Higher<br>Outputs VGA port, 2HDMI ports, DVI Port, Multi Display ( Multi Monitors Support 3 or Higher)<br>other wi-fi, LAN Card, Blue tooth, optical Mouse, keyboard.   | 41 Nos.  |        |        |
| 03. | <b>Laser jet Printer latest Model</b>  | 08Nos.   |        |        |
| 04. | <b>Scanners Latest Model</b>   | 04Nos.   |        |        |
| 05. | <b>Color Printer Latest Model</b>  | 01 No.   |        |        |
| 06. | <b>Fax Machine Panasonic / or Equivalent</b>   | 01 No.   |        |        |
| 07. | <b>Multi Media with stand Sony / or Equivalent</b>   | 04 Nos.  |        |        |
| 08. | <b>Water Dispenser</b>   | 17 Nos.  |        |        |
| 09. | <b>Bracket fans Pak/or Equivalent</b>  | 14 Nos.  |        |        |
| 10. | <b>Water Cooler with water filter</b>  | 02 Nos.  |        |        |
| 11. | <b>Slide Projection Microscope Specification:</b><br>EyePieces & Magnification :<br><ul style="list-style-type: none"> <li>• Three Objectives: 5X10X,20X</li> <li>• Spring Loaded 20xobjective to protect slides.</li> </ul> Illumination:<br><ul style="list-style-type: none"> <li>• 24V/150W Halogen Transmitted Base Illumination</li> <li>• Stage specification</li> <li>• Stage Size 110mmX110mm with slides clips</li> </ul> Focusing<br><ul style="list-style-type: none"> <li>• Fine and Coarse Focusing Knobs on Both Slides of Microscope</li> <li>• Adjustable Screw-Stop to Limit Coarse range to protect Slides</li> <li>• Rack and Pinion Steel Gears with knob to Easily move stage Up and Down</li> </ul> Frame -Base Size – Weight :<br><ul style="list-style-type: none"> <li>• Total Overall Height of Microscope : 420mm</li> <li>• Instrument Weight: 16 libs</li> </ul> | 01 No.   |        |        |
| 12. | <b>Embryology Slides Set</b>   | 01 No.   |        |        |
| 13. | <b>Neuro Anatomy slides set</b>  | 01 No.   |        |        |
| 14. | <b>Overhead projector</b>  | 02 Nos.  |        |        |
| 15. | <b>Projection microscope</b>   | 01 No.   |        |        |
| 16. | <b>Refrigerators Haier / or Equivalent</b>   | 02 Nos.  |        |        |

**Books For Library Of Dept. of Anatomy at Bilawal Medical  
College LUMHS Jamshoro**

| S#   | Description  | Quantity | @ Rate | Amount |
|--|--|----------|--------|--------|
| <b>Books for Library Of Bilawal Medical College LUMHS Jamshoro</b> |  |          |        |        |
| 01.  | <b>Snell clinical Anatomy by region-9<sup>th</sup> edition</b>             | 02 nos.  |        |        |
| 02.  | <b>Clinically Oriented Anatomy by KLM,7<sup>th</sup> edition</b>           | 02 Nos.  |        |        |
| 03.  | <b>Gray's Anatomy -41 edition</b>  | 02Nos.   |        |        |
| 04.  | <b>Gray's Anatomy for Students 3<sup>rd</sup> edition.</b>                 | 02Nos.   |        |        |
| 05.  | <b>Last's anatomy -12<sup>th</sup> edition</b>                             | 02Nos.   |        |        |
| 06.  | <b>Chaurasia's Human Anatomy -6<sup>th</sup> edition-volumes1,2&amp; 3</b> | 02Nos.   |        |        |
| 07.  | <b>Langman's Medical Embryology -12<sup>th</sup> edition</b>               | 02Nos.   |        |        |
| 08.  | <b>Wheater's Functional Histology-6<sup>th</sup> edition</b>               | 02Nos.   |        |        |
| 09.  | <b>Clinical neuro-anatomy-7<sup>th</sup> edition by R.snell</b>            | 02Nos.   |        |        |
| 10.  | <b>Neuro-anatomy by carpenter (latest edition)</b>                         | 02Nos.   |        |        |
| 11.  | <b>Dorland's Illustrated Medical Dictionary 32<sup>nd</sup> edition</b>    | 02Nos.   |        |        |

**Laboratory Equipments for Dept. of Pathology at Bilawal  
Medical College LUMHS Jamshoro**

| <b>S#</b>  | <b>Description</b>   | <b>Quantity</b> | <b>@ Rate</b> | <b>Amount</b> |
|--|--|-----------------|---------------|---------------|
| <b>Laboratory equipment for Dept. of Pathology at Bilawal Medical College<br/>LUMHS Jamshoro</b> |  |                 |               |               |
| 01.  | <b>Westergren ESR system ( Bottles,<br/>tubes &amp; Stand)x6</b>                       | 02 nos.         |               |               |
| 02.  | <b>Stain Dropping Bottles (250ml)</b>  | 04 Nos.         |               |               |
| 03.  | <b>Hot air oven ( Medium)</b>  | 01No.           |               |               |
| 04.  | <b>Water bath with stirrer,<br/>temperature control &amp; display</b>                  | 02Nos.          |               |               |
| 05.  | <b>Centrifuges microhematocrit with<br/>reader</b>                                     | 01No.           |               |               |
| 06.  | <b>Fixed high speed centrifuges with<br/>timer</b>                                     | 01No.           |               |               |
| 07.  | <b>Centrifuges with timer and speed<br/>control to hold 06 ordinary test<br/>tubes</b> | 01No.           |               |               |
| 08.  | <b>Blood Grouping tiles</b>  | 03Nos.          |               |               |
| 09.  | <b>Pipet glass (Pyrex) graduated 1 ml</b>  | 02Nos.          |               |               |
| 10.  | <b>Pipet glass (Pyrex) graduated 2 ml</b>  | 02Nos.          |               |               |
| 11.  | <b>Pipet glass (Pyrex) graduated 5 ml</b>  | 02Nos.          |               |               |
| 12.  | <b>Pipet glass (Pyrex) graduated 10<br/>ml</b>   | 02 Nos.         |               |               |
| 13.  | <b>Stand test tube plastic/steel for<br/>sugar tubes</b>                               | 06 Nos.         |               |               |
| 14.  | <b>PH meter clinical</b>   | 01 No.          |               |               |
| 15.  | <b>Precision electronic balance</b>  | 01 No.          |               |               |
| 16.  | <b>Bone marrow aspiration needles<br/>adult (Islam)</b>                                | 02 nos.         |               |               |
| 17.  | <b>Bone marrow aspiration needles<br/>pediatric (Islam)</b>                            | 01 No.          |               |               |
| 18.  | <b>Bone Marrow trephine biopsy<br/>needles adult (Islam)</b>                           | 01 No.          |               |               |
| 19.  | <b>Glass beaker (pyrex) 100 ml<br/>graduated</b>                                       | 04 Nos.         |               |               |
| 20.  | <b>Glass beaker (pyrex) 500 ml<br/>graduated</b>                                       | 04 Nos.         |               |               |

|     |  |         |  |  |
|-----|--|---------|--|--|
| 21  | <b>Glass cylinder (pyrex) 500 ml graduated</b>   | 04 Nos. |  |  |
| 22. | <b>Flask conical glass (pyrex) graduate</b>      | 04 Nos. |  |  |
| 23. | <b>Water Still</b>                               | 04 Nos. |  |  |
| 24. | <b>Shaker</b>                                    | 01 No.  |  |  |
| 25. | <b>Incubator 37c large</b>                       | 01 No.  |  |  |
| 26. | <b>Incubator 37c small</b>                       | 01 No.  |  |  |
| 27. | <b>Incubator cold 22-29c</b>                     | 01 No.  |  |  |
| 28. | <b>Safety cabinet</b>                            | 01 No.  |  |  |
| 29  | <b>Anaerobic system with gas generator kit</b>   | 01 No.  |  |  |
| 30  | <b>Semi-automated chemistry analyzer</b>         | 01 No.  |  |  |
| 31  | <b>Oven sterilizer</b>                           | 01 No.  |  |  |
| 32  | <b>Vacuum pump</b>                               | 01 No.  |  |  |
| 33  | <b>Knife Sharpener</b>                           | 01 No.  |  |  |
| 34  | <b>Incubator Large</b>                           | 01 No.  |  |  |
| 35  | <b>Table lamp with flexible/ adjustable head</b> | 01 No.  |  |  |

**Chemicals For Dept. of Biochemistry at Bilawal Medical College**  
**LUMHS Jamshoro**

| <b>S#</b>  | <b>Description</b>                   | <b>Quantity</b> | <b>@ Rate</b> | <b>Amount</b> |
|--|--------------------------------------|-----------------|---------------|---------------|
| <b>Chemicals for Dept. of Biochemistry at Bilawal Medical College LUMHS Jamshoro</b> |                                      |                 |               |               |
| 01.  | <b>Acetone 2.5 liter</b>             | 01 bottle       |               |               |
| 02.  | <b>Acetic Acid Glacial 2.5 liter</b> | 01 bottle.      |               |               |
| 03.  | <b>Acetic Anhydride 250 ml.</b>      | 01bottle.       |               |               |
| 04.  | <b>Albumin</b>                       | 250mg           |               |               |
| 05.  | <b>Alpha-Naphthol</b>                | 250mg           |               |               |
| 06.  | <b>Ammonia strong 2.5 liter</b>      | 01 bottle       |               |               |
| 07.  | <b>Ammonium molybdate</b>            | 250mg           |               |               |
| 08.  | <b>Ammonium sulphate</b>             | 250 mg          |               |               |
| 09.  | <b>Barium chloride</b>               | 250mg           |               |               |
| 10.  | <b>Benzidine HCL (IX100gm)</b>       | 01 bottle       |               |               |
| 11.  | <b>Bile salt (1x250gm)</b>           | 01 bottle       |               |               |
| 12.  | <b>Boric acid 1 kg</b>               | 01 bottle       |               |               |
| 13.  | <b>Bromocresol Brilliant</b>         | 100gram         |               |               |
| 14.  | <b>Casein</b>                        | 100gram         |               |               |
| 15.  | <b>Chloroform 2.5 liter</b>          | 01 bottle       |               |               |
| 16.  | <b>Chlorophenol red (1x25 gm)</b>    | 01 Bottle       |               |               |
| 17.  | <b>Copper sulphate</b>               | 250mg           |               |               |
| 18.  | <b>Creatinine (1x25mg)</b>           | 01 bottle       |               |               |
| 19.  | <b>Dextrin</b>                       | 250mg           |               |               |
| 20.  | <b>Either 1 liter</b>                | 01 bottle       |               |               |

| <b>S#</b>  | <b>Description</b>                    | <b>Quantity</b> | <b>@ Rate</b> | <b>Amount</b> |
|--|---------------------------------------|-----------------|---------------|---------------|
| <b>Chemicals for Dept. of Biochemistry at Bilawal Medical College LUMHS Jamshoro</b> |                                       |                 |               |               |
| 21.  | <b>Ethyl alcohol 2.5 liter</b>        | 01 bottle       |               |               |
| 22.  | <b>Fructose</b>                       | 250mg           |               |               |
| 23.  | <b>Galactose</b>                      | 250mg           |               |               |
| 24.  | <b>Globulin</b>                       | 250mg           |               |               |
| 25.  | <b>Glucose</b>                        | 250mg           |               |               |
| 26.  | <b>Glycogen</b>                       | 10gram          |               |               |
| 27.  | <b>Hydrochloric acid 2.5 Liter</b>    | 01 bottle       |               |               |
| 28.  | <b>Hydrogen peroxide 2.5 liter</b>    | 01 bottle       |               |               |
| 29.  | <b>Iodine (1x500gm)</b>               | 01 bottle       |               |               |
| 30.  | <b>Lactose</b>                        | 250mg           |               |               |
| 31.  | <b>Lead acetate</b>                   | 250mg           |               |               |
| 32.  | <b>Lithium carbonate</b>              | 250mg           |               |               |
| 33.  | <b>Mannose</b>                        | 250mg           |               |               |
| 34.  | <b>Mercuric nitrate (1x100gm)</b>     | 01 bottle       |               |               |
| 35.  | <b>Mercuric sulphate (1x250gm)</b>    | 01 bottle       |               |               |
| 36.  | <b>Mercury Pure (1x250gm)</b>         | 01 bottle       |               |               |
| 37.  | <b>Nitric acid 2.5 liter</b>          | 01 bottle       |               |               |
| 38.  | <b>Orthophosphoricacid 2.5 liter</b>  | 01 bottle       |               |               |
| 39.  | <b>Phenyl hydrazine hydrochloride</b> | 250gm           |               |               |
| 40.  | <b>Picric acid 500 gram</b>           | 01 bottle       |               |               |
| 41.  | <b>Potassium iodide</b>               | 01 kg           |               |               |
| 42.  | <b>Potassium thiocyanate</b>          | 01 kg           |               |               |
| 43.  | <b>Silver nitrate (1x100gm)</b>       | 01 bottle       |               |               |
| 44.  | <b>Sodium acetate</b>                 | 01 kg           |               |               |
| 45.  | <b>Sodium borate</b>                  | 01 kg           |               |               |

| <b>S#</b>  | <b>Description</b>                    | <b>Quantity</b> | <b>@ Rate</b> | <b>Amount</b> |
|--|---------------------------------------|-----------------|---------------|---------------|
| <b>Chemicals for Dept. of Biochemistry at Bilawal Medical College LUMHS Jamshoro</b> |                                       |                 |               |               |
| 46.  | <b>Sodium nitrate</b>                 | 01kg            |               |               |
| 47.  | <b>Sodium carbonate</b>               | 01kg            |               |               |
| 48.  | <b>Sodium hydroxide</b>               | 01kg            |               |               |
| 49.  | <b>Sodium nitroperoxide 500g</b>      | 01 bottle       |               |               |
| 50.  | <b>Sodium potassium tartrate</b>      | 01kg            |               |               |
| 51.  | <b>Sodium nitropursside</b>           | 01kg            |               |               |
| 52.  | <b>Sodium sulphate</b>                | 01kg            |               |               |
| 53.  | <b>Sodium Sulphide</b>                | 01kg            |               |               |
| 54.  | <b>Sodium Sulphite</b>                | 01 kg           |               |               |
| 55.  | <b>Sodium tungstate (1x500gm)</b>     | 500gm           |               |               |
| 56.  | <b>Starch Powder</b>                  | 500gm           |               |               |
| 57.  | <b>Sulphosalicylicacid 2.5 L</b>      | 01 kg           |               |               |
| 58.  | <b>Tartaric acid 1kg</b>              | 01kg            |               |               |
| 59.  | <b>Thymol blue Indicater (1x25gm)</b> | 01 bottle       |               |               |
| 60.  | <b>Uric acid 250gm (BDH)</b>          | 01 bottle       |               |               |
| 61.  | <b>Urea 250gm</b>                     | 01 bottle       |               |               |

**Glassware for Dept. of Biochemistry at Bilawal Medical  
College LUMHS Jamshoro**

| <b>S#</b>   | <b>Description</b>             | <b>Quantity</b> | <b>@ Rate</b> | <b>Amount</b> |
|---|--------------------------------|-----------------|---------------|---------------|
| <b>Glassware for Dept. of Bio Chemistry at Bilawal Medical College LUMHS Jamshoro</b> |                                |                 |               |               |
| 01.   | <b>Beakers 500 ml</b>          | 06 Nos.         |               |               |
| 02.   | <b>Beakers 250ml</b>           | 06 Nos.         |               |               |
| 03.   | <b>Beakers 100 ml</b>          | 06 Nos.         |               |               |
| 04.   | <b>Beakers 1000 ml</b>         | 02 Nos.         |               |               |
| 05.   | <b>Burette (pyrex) 25ml</b>    | 10 Nos.         |               |               |
| 06.   | <b>Burette stand iron</b>      | 10 Nos.         |               |               |
| 07.   | <b>Burners</b>                 | 12 Nos.         |               |               |
| 08.   | <b>Bottles (reag) 1000 ml</b>  | 12 Nos.         |               |               |
| 09.   | <b>Bottles (reag) 500 ml</b>   | 12 Nos.         |               |               |
| 10.   | <b>Bottles (reag) 250 ml</b>   | 12 Nos.         |               |               |
| 11.   | <b>Conical flask 250 ml</b>    | 10 Nos.         |               |               |
| 12.   | <b>Conical flask 1000 ml</b>   | 03 Nos.         |               |               |
| 13.   | <b>Conical flask 500 ml</b>    | 06 Nos.         |               |               |
| 14.   | <b>Cylinder 1000 ml</b>        | 01 No.          |               |               |
| 15.   | <b>Cylinder 100 ml</b>         | 06 Nos.         |               |               |
| 16.   | <b>Cylinder 50 ml</b>          | 02 Nos.         |               |               |
| 17.   | <b>Cylinder 25 ml</b>          | 06 Nos.         |               |               |
| 18.   | <b>Drop bottle 50 ml</b>       | 12 Nos.         |               |               |
| 19.   | <b>Medicinal droppers</b>      | 24 Nos.         |               |               |
| 20.   | <b>Funnel</b>                  | 10 Nos.         |               |               |
| 21.   | <b>Glass rods for mixing</b>   | 20 Nos.         |               |               |
| 22.   | <b>Glass slides with cover</b> | 24 Nos.         |               |               |
| 23.   | <b>Pipette stand</b>           | 04 Nos.         |               |               |
| 24.   | <b>Pipette 0.2 ml</b>          | 06 Nos.         |               |               |
| 25.   | <b>Pipette 0.25 ml</b>         | 03 Nos.         |               |               |



|     |   |          |  |  |
|-----|---|----------|--|--|
| 26. | <b>Pipette 0.5 ml</b>                   | 03 Nos.  |  |  |
| 27. | <b>Pipette 01 ml</b>                    | 06 Nos.  |  |  |
| 28. | <b>Pipette 05 ml</b>                    | 06 Nos.  |  |  |
| 29. | <b>Pipette 10 ml</b>                    | 06 Nos.  |  |  |
| 30. | <b>Reagent (Brown Bottle) 500 ml</b>    | 20 Nos.  |  |  |
| 31. | <b>Reagent Bottle 250 ml</b>            | 30 Nos.  |  |  |
| 32. | <b>Reflex condenser</b>                 | 02 Nos.  |  |  |
| 33. | <b>Spatula</b>                          | 12 Nos.  |  |  |
| 34. | <b>Test tube Holders</b>                | 25 Nos.  |  |  |
| 35. | <b>Test Tubes (pyrex)</b>               | 250 Nos. |  |  |
| 36. | <b>Test tubes brush</b>                 | 25 Nos.  |  |  |
| 37. | <b>Test tube stands</b>                 | 25 Nos.  |  |  |
| 38. | <b>Tripod stand</b>                     | 06 Nos.  |  |  |
| 39. | <b>Volumetric flask (every size)</b>    | 06 Nos.  |  |  |
| 40. | <b>Vortex mixer</b>                     | 02 Nos.  |  |  |
| 41. | <b>Wash bottle (Germany) every size</b> | 06 Nos.  |  |  |
| 42. | <b>Wire guaze</b>                       | 12 Nos.  |  |  |

**BOOKS FOR LIBRARY OF DEPT. OF PHYSIOLOGY AT  
BILAWAL MEDICAL COLLEGE LUMHS JAMSHORO**

| <b>S#</b>  | <b>Description</b>          | <b>Quantity</b> | <b>@ Rate</b> | <b>Amount</b> |
|--|-----------------------------|-----------------|---------------|---------------|
| <b>BOOKS FOR LIBRARY OF PHYSIOLOGY AT BILAWAL MEDICAL COLLEGE<br/>LUMHS JAMSHORO</b> |                             |                 |               |               |
| 01.  | Guyton new addition         | 03 Nos.         |               |               |
| 02.  | Sherwood                    | 02 Nos.         |               |               |
| 03.  | Ganong                      | 02Nos.          |               |               |
| 04.  | BRS Series                  | 02Nos.          |               |               |
| 05.  | MONOOS Physiology           | 03Nos.          |               |               |
| 06.  | Davidson Of Physio          | 02Nos.          |               |               |
| 07.  | Dorlands Medical Dictionary | 01Nos.          |               |               |
| 08   | JAYPEES MEDICINE            | 01 Nos.         |               |               |
| 09.  | Physio MCQ/ BCQ Books       | 02Nos.          |               |               |
| 10.  | Bedside Techniques          | 02Nos.          |               |               |
| 11.  | Macleods                    | 02Nos.          |               |               |
| 12.  | JLUMHS Journals             | 03Nos.          |               |               |
| 13.  | Burney Physiology Boo       | 01 Nos.         |               |               |