

# **BBK DAV COLLEGE FOR WOMEN**

## **LAWRENCE ROAD, AMRITSAR [PUNJAB]-INDIA**

### **DEPARTMENT OF ZOOLOGY**

The Department of Zoology was started in 1996. Ever since its inception it has been promoting teaching, research and extension activities in the field of Zoology in this part of the state. The Department has two sophisticated labs. The Department is equipped well with laboratory facilities to realize the goals of research activities. The Department has received funds from UGC (under B.S.R. Programme from 2007-2011). Students have access to leading-edge microscopy facilities, latest equipment and a Bio-informatics Lab with 24-hours internet facility. The Department has the following specialization: Animal Biodiversity, Human Genetics, Medical Laboratory Technology, Conservation Biology, Evolution and Animal Behaviour, Animal Physiology and Biochemistry. The animal Museum in the Department is well maintained and is being renovated under UGC-BSR programme. It has a comprehensive collection of animal skeletons. These include mammalian, amphibian, avian, reptilian and fish skeletons. We also offer extension services, which include haematological investigation and environmental conservation.

#### **R&D PROJECT UNDERTAKEN:**

Dr. Monika Bhardwaj, Assistant Professor ,Department of Zoology has been sanctioned a Minor Research Project entitled “ASSESSMENT OF IRON STATUS OF FEMALE STUDENTS (18-23 YEARS) IN AMRITSAR DISTRICT OF PUNJAB, INDIA” by U.G.C. in 2012.



**A View of Zoology Lab.**



**Zoological Museum**

# **BASIC SCIENTIFIC RESEARCH GRANT (B.S.R.)**

## **FACILITIES DEVELOPED**

### **Upgradation of Infrastructure :**

#### **Equipment/materials Purchased during 2008-09**

<b>S.No.</b>	<b>Item/Configuration</b>	<b>Quantity</b>
1	Autoclave pressure Cooker type	2
2	Vaccum pump	1
3	Laminar Air flow	1
4	Humidity cabinet	1
5	Rotary Shaking Machine	2
6	Water bath incubator shaker	1
7	Student microscope	15
8	Human Skeleton	2
9	Rabbit Skeleton	4
10	Frog Skeleton	4
11	Fowl Skeleton	4
12	Varanus Skeleton	4
13	Labeo Skeleton	4
14	Scoliodon Skeleton	4

### Equipment/materials Purchased during 2009-10

S.No.	Item/Configuration	Quantity
1	Erba -5X Semi-Autoanalyser	1
2	TRinocular Microscope ICON –LED MLXi, Freedom Microscope	1
3	Magnus SLR Digital Camera 10 Megepixel	1
4	Binocular microscope Model –CH20i	3
5	Student Monocular Microscope Model; HAS	10
6	Dissecting Microscope with 10x,20x, eye piece ISI mark	10
7	Microscope Condensors with iris diaphragm	2
8	Graph eyepiece	2
9	Eye piece 5x, 10x for HAS series	4
10	Potable projection screen with stand	1
11	B.P. apparatus (Mercury)	10
12	Haemosytometr brightline-with Germanpipettes-with Indian X	10
13	Stethoscope (Microtone)	10
14	Blood cell counter (6 unit)	2
15	Pointer eye piece H5X-P s H 10x –P	4
16	Mechanical stage superior heavy	5
17	Stage micrometer objective	2
18	Occular Graph disc	2
19	Crane Magnefier	2
20	Heamoglobino meter Indian (Topmake)	10
21	Wintrobe Tube (Superior)	5

22	Wintrobe Stand-3Tubes	5
23	Micropipetts	2
24	Slide Cabinet (1000 Slides) Heavy Quality	2
25	Staining Rack	5
26	Aluminium Tray for holding slides	5
27	Parrafin embedding bath with thermostat 6 cups 8 sleeves	1
28	Tools Kit [Local]	1
29	Magnetic stirrer with hot Plate	1
30	Enameled tray W/O wax [10"*12"]	10
31	Animal Cage [Plastic]	1
32	Insect Boxes	
	18"*12 ""*3"	3
	15"*12 ""3	2
33	Insect Display Case 18"*12"*3	1
34	Insect Display Case 15"*12"*3"	2
35	Refrigerator	1
<b>Renovation of Zoology Labs.</b>		
1	Wooden Boards	
2	Marble shelving and flooring	
3	Steel Almirah (with glass doors)	
4	Vitrified tiles and stools	

### Equipment Purchased (2011-12)

S.No.	Item	Quantity
1.	Cell_counter (Differential Hametology Analayzer)	01
2.	Spectrophotometer Spectronic 20D (Thermoscientific)	01
3.	pH_meter (PH-700, Merck, U.K)	01
4.	Electronic Balance (Citizen CY-2220 0.001g)	01
5.	Desktop computer Dell optiplex 390 (MiniTower)	01
6.	Student Monocular microscopes (Olympus)	03
7.	Geyser (Crompton greaves 25 lts)	01

### Expenditure Incurred on Renovation of Zoology Laboratories (2011-12)

S.No	Item	Quantity
1.	Construction of wooden racks	–
2.	Demonstration Table	01
3.	Air conditioner (1 ton) Voltas	01

### APPRAISAL OF INFRASTRUCTURAL DEVELOPMENT MADE OUT OF U.G.C. BSR GRANTS (DEPTT. OF ZOOLOGY)

We are very grateful to university grants commission for providing financial assistance to our institution under Basic Scientific Research (BSR) scheme. May we assure you that every penny of the available grant has been very effectively utilized for the cause of academic advancement of the faculty and the students.

Some of the major equipment purchased out of the BSR grant-2011 includes Differential Hematology Counter (Cell Counter), Spectrophotometer, P<sub>H</sub>- meter, Student Microscopes etc. All these instruments have enhanced the precision in experimentation and have facilitated better transfer of practical skill among the

students. Students are effectively learning the automation and other advancements in medical laboratory technology. The differential haematology counter is being used for training the students of B.Sc-III (Medical) in haematological laboratory methods. Besides, haematological investigation camp is organised every –year in the department for faculty and students. Purchase of spectrophotometer has enabled the students to work in small groups for performing experiments in Biochemistry viz. colorimetric determination of serum glucose, serum cholesterol, serum urea and serum uric acid as included in the syllabi of undergraduate classes in medical stream. Similarly, the electronic balance and ph meter are of multiple uses in experimental biology.

Apart from the purchase of aforementioned equipment, the BSR grant has also been utilized in renovation of Zoology laboratories which have added the provision of adequate space for the installation of equipment and better workspace for students. Additional storage racks have been created beneath the shelves of the labs for procuring class-work materials. Air Conditioner has been installed in one of the zoology labs for facilitating the appropriate functioning of semi- Autoanalyzer (purchased from previous grant) and the differential haematology counter. A demonstration table has been constructed for zoology lab. Additional space has been provided for performing microtomy.

In a nutshell, it may be stated that the BSR grant has been very useful in the upgradation of infrastructure of the department and has very effectively improved the teaching-learning activities for academic upliftment of the students and the faculty.

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