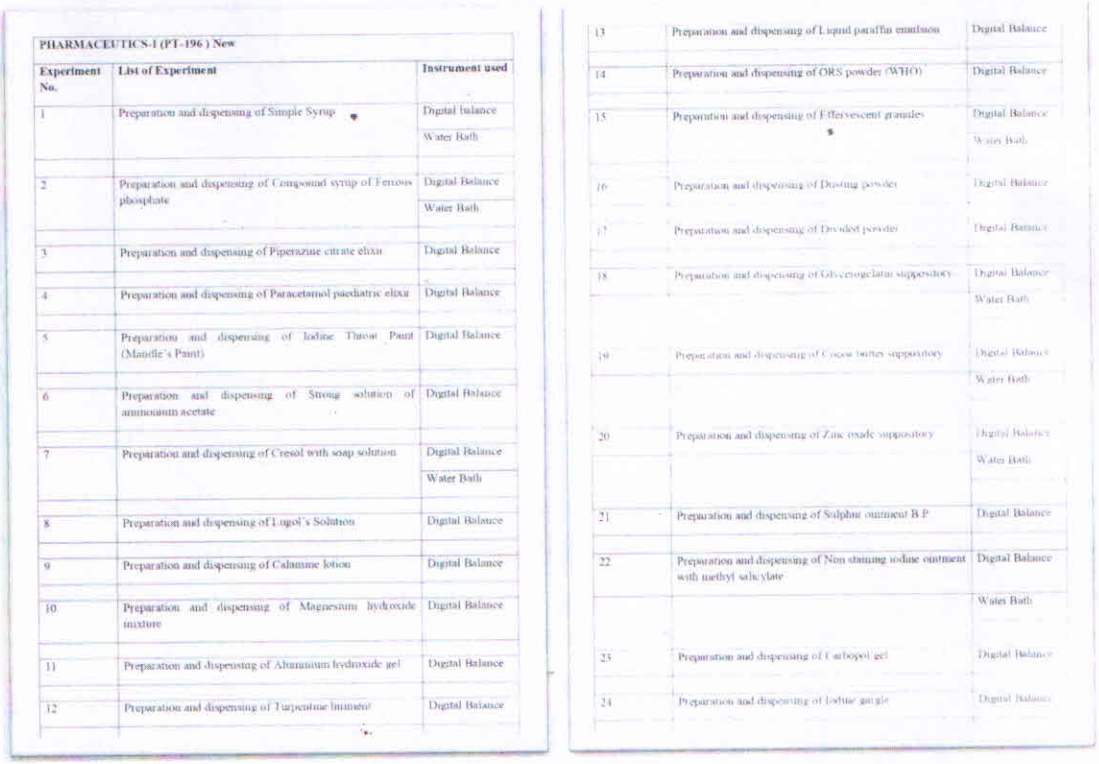
Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.i
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

## HANDS ON LEARNING

As teachers we must focus on the learner's outcome. Hands-on learning allows students to incorporate what is being taught into real world situations, thus allowing the student to retain more information. The students gain knowledge in laboratories located within the Institute. All the faculty members have designed various outcome based experiments as per the syllabus assigned by MAKAUT. The students gain practical knowledge including instrumentation, operation, and calibration of all apparatus or instruments used in laboratories. It helps cement the concepts of the learning into their long-term memory. If the hands-on activity is positive they will use it as training tool themselves.



PHARMACEUTICS-I (PT-196) New

| Experiment No. | List of Experiment | Instrument used |
|---|---|---|
| 1 | Preparation and dispensing of Simple Syrup | Digital balance<br>Water Bath |
| 2 | Preparation and dispensing of Compound syrup of Ferrous phosphate | Digital Balance<br>Water Bath |
| 3 | Preparation and dispensing of Piperazine citrate elixir | Digital Balance |
| 4 | Preparation and dispensing of Paracetamol paediatric elixir | Digital Balance |
| 5 | Preparation and dispensing of Iodine Throat Paint (Mandle's Paint) | Digital Balance |
| 6 | Preparation and dispensing of Strong solution of ammonium acetate | Digital Balance |
| 7 | Preparation and dispensing of Cresol with soap solution | Digital Balance<br>Water Bath |
| 8 | Preparation and dispensing of Lugol's Solution | Digital Balance |
| 9 | Preparation and dispensing of Calamine lotion | Digital Balance |
| 10 | Preparation and dispensing of Magnesium hydroxide mixture | Digital Balance |
| 11 | Preparation and dispensing of Aluminium hydroxide gel | Digital Balance |
| 12 | Preparation and dispensing of Turpentine liniment | Digital Balance |
| 13 | Preparation and dispensing of Liquid paraffin emulsion | Digital Balance |
| 14 | Preparation and dispensing of ORS powder (WHO) | Digital Balance |
| 15 | Preparation and dispensing of Effervescent granules | Digital Balance<br>Water Bath |
| 16 | Preparation and dispensing of Dusting powder | Digital Balance |
| 17 | Preparation and dispensing of Divided powder | Digital Balance |
| 18 | Preparation and dispensing of Glycerogelatin suppository | Digital Balance<br>Water Bath |
| 19 | Preparation and dispensing of Cocoa butter suppository | Digital Balance<br>Water Bath |
| 20 | Preparation and dispensing of Zinc oxide suppository | Digital Balance<br>Water Bath |
| 21 | Preparation and dispensing of Sulphur ointment B.P | Digital Balance |
| 22 | Preparation and dispensing of Non staining iodine ointment with methyl salicylate | Digital Balance<br>Water Bath |
| 23 | Preparation and dispensing of Carbopol gel | Digital Balance |
| 24 | Preparation and dispensing of Iodine gargle | Digital Balance |

B.C. Roy College of Pharmacy & A.H.S. Durgapur

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.i
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

**PHYSICAL PHARMACEUTICS -I ( PT-396) New**

| Experiment No. | List of Experiment | Instrument used |
|---|---|---|
| 1 | Determination the solubility of drug at room temperature | Digital Balance<br>Magnetic Stirrer<br>UV spectrophotometer |
| 2 | Determination of pKa value by Half Neutralization Henderson Hasselbalch equation | Digital Balance<br>pH Meter |
| 3 | Determination of Partition co- efficient of benzoic acid in benzene and water | Digital Balance |
| 4 | Determination of Partition co- efficient of Iodine in $CCl_4$ and water | Digital Balance |
| 5 | Determination of % composition of NaCl in a solution using phenol-water system by CST method | Digital balance<br>Water bath |
| 6 | Determination of surface tension of given liquids by drop count and drop weight method | Digital Balance |
| 7 | Determination of HLB number of a surfactant by saponification method | Digital Balance<br>Heating mantle |
| 8 | Determination of Freundlich and Langmuir constants using activated charcoal | Digital Balance<br>Water bath |
| 9 | Determination of Critical Micellar Concentration of surfactants | Digital Balance |
| 10 | Determination of stability constant and donor acceptor ratio of PABA-Caffeine complex by solubility method | Digital Balance<br>Water bath |
| 11 | Determination of stability constant and donor acceptor ratio of Cupric-Glycine complex by pH titration method | Digital Balance<br>pH Meter |

**PHYSICAL PHARMACEUTICS -II ( PT-496) New**

| Experiment No. | List of Experiment | Instrument used |
|---|---|---|
| 1 | Determination of particle size, particle size distribution using sieving method | Sieve<br>Sieve Shaker |
| 2 | Determination of particle size, particle size distribution using Microscopic method | Microscope |
| 3 | Determination of bulk density, true density and porosity | Digital Balance |
| 4 | Determine the angle of repose and influence of lubricant on angle of repose | Digital Balance |
| 5 | Determination of viscosity of liquid using Ostwald's viscometer | Digital Balance |
| 6 | Determination sedimentation volume with effect of different suspending agent | Digital Balance |
| 7 | Determination sedimentation volume with effect of different concentration of single suspending agent | Digital Balance |
| 8 | Determination of viscosity of semisolid by using Brookfield viscometer | Digital balance<br>Brookfield viscometer |
| 9 | Determination of reaction rate constant first order | Digital Balance |
| 10 | Determination of reaction rate constant second order | Digital Balance |
| 11 | Accelerated stability studies | Digital Balance<br>Stability Chamber |

**DISPENSING PHARMACY (PT-196 ) Old**

| Experiment No. | List of Experiment | Instrument used |
|---|---|---|
| 1 | Preparation and dispensing of a carminative mixture | Digital balance |
| 2 | Preparation and dispensing of camphor water | Digital balance |
| 3 | Preparation and dispensing of a mixture | Digital balance |
| 4 | Preparation and dispensing of Crystal Violet lotion | Digital balance |
| 5 | Preparation and dispensing of sodium bicarbonate solution (Ear drop) B.P | Digital balance |
| 6 | Preparation and dispensing of Chloroform water | Digital balance |
| 7 | Preparation and dispensing of Magnesium Carbonate Mixture B.P.C | Digital balance |
| 8 | Preparation and dispensing of a Gargle | Digital balance |
| 9 | Preparation and dispensing of a Mouth wash | Digital balance |
| 10 | Preparation and dispensing of Calamine Ointment B.P.C | Digital balance |
| 11 | Preparation and dispensing of Compound Zinc Paste B.P.C | Digital balance<br>Water Bath |
| 12 | Preparation and dispensing of Effervescent Powder compound B.P.C | Digital balance |

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.i
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

| | | |
|---|---|---|
| 13 | Preparation and dispensing of Oral Rehydration salt (O.R.S) | Digital balance |
| 14 | Preparation and dispensing of Castor oil emulsion | Digital balance |
| 15 | Dispensing of an Incompatible Prescription | |
| 16 | Preparation and dispensing of Black Draught N.F.I | Digital balance |
| 17 | Preparation and Dispensing of Liquid Paraffin Emulsion | Digital balance |
| 18 | Preparation and dispensing of Magnesium Hydroxide Suspension | Digital balance |
| 19 | Preparation and dispensing of iodine solution I.P | Digital balance |
| 20 | Preparation and dispensing of Non staining iodine ointment | Digital balance<br>Water bath |

| | | |
|---|---|---|
| | ionotropic gelation method | Magnetic stirrer |
| 10 | Evaluation of calcium alginate microspheres | Digital balance |
| 11 | Preparation of sustained release tablets | Digital balance<br>Tablet Compression Machine |
| 12 | Evaluation of prepared sustained release tablets | Digital Balance<br>Roche Friabilator<br>Pfizer Hardness Tester<br>Dissolution apparatus ( Paddle type) |
| 13 | Preparation of ethyl cellulose microsphere by solvent evaporation method | Digital Balance<br>Magnetic stirrer |

**PHARMACEUTICAL ANALYSIS LABORATORYPT-191(NEW)**

| EXPERIMENT NO | EXPERIMENT NAME | INSTRUMENT |
|---|---|---|
| 01 | COMMON APPARATUS USED IN PHARMACEUTICAL ANALYSIS | ---------- |
| 02 | STANDARDIZATION OF SODIUM HYDROXIDE SOLUTION WITH BENZOIC | A DISTILATION UNIT B DIGITAL |

| | | |
|---|---|---|
| | STANDARD OXALIC ACID SOLUTION (N/10) | ELECTRONIC BALANCE |
| 03 | STANDADISATION OF BORIC ACID WITHSECONDARY STANDARD SODIUM HYDROXIDE SOLUTION (N/10) | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 04 | PREPARATION AND STANDARDIZATION OF POTASSIUM PERMANGANATESOLUTION WITH PRIMARY STANDARD OXALIC ACID SOLUTION | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 05 | ASSAY OF FERROUS SULPHATE WITH POTASSIUM PERMANGANATE SOLUTION | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C WATER BATH |
| 06 | STADARDISATION OF SODIUM THIOSULPHATE WITH STANDARD POTASSIUM DICHROMATE SOLUTION | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 07 | ASSAY OF COPPER SULPHATE WITH STANDARDIZED SODIUM THIOSULPHATE SOLUTION | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |

| | | |
|---|---|---|
| 10 | PREPARATION AND STANDARDIZATION OF 0.1 M SODIUM NITRITE SOLUTIONS | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |

**BIOCHEMISTRY PRACTICAL PT-297 (NEW)**

| EXPERIMENT NO | EXPERIMENT NAME | INSTRUMENT |
|---|---|---|
| 01 | QUALITATIVE ANALYSIS OF CARBOHYDRATES | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 02 | IDENTIFICATION TESTS FOR PROTEINS (ALBUMIN AND CASEIN) | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 03 | QUANTITATIVE ANALYSIS OF PROTEINS USING BIURET METHOD | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C VORTEX MIXER D UV-VISIBLE SPECTROPHOTOMETER |
| 04 | QUANTITATIVE ANALYSIS OF REDUCING SUGARS BY DINITROSALICYLIC ACID (DNSA) METHOD | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C VORTEX MIXER D UV-VISIBLE SPECTROPHOTOMETER |
| 05 | PREPARATION OF BUFFER SOLUTION AND MEASUREMENT OF PH | A DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C PHMETER WITH COMBINATION ELECTRODE |

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.in
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

| | | |
|---|---|---|
| | ASCENDING PAPER CHROMATOGRAPHY | BALANCE |
| 04 | IDENTIFICATION OF AMIONO ACID BY THIN LAYER CHROMATOGRAPHY | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE , C TLC SPADER |
| 05 | IDENTIFICATION OF UNKNOW SAMPLE BY THIN LAYER CHROMATOGRAPHY | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C TLC SPADER |
| 06 | ASSAY OF SODIUM ACETATE BY NON-AQUEOUS TITRATION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 07 | PREPARATION AND STANDARDIZATION OF 0.1 (M) EDTA | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 08 | ESTIMATION OF MAGNESIUM SULPHATE BY COMPLEXOMETRIC TITRATION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 09 | DETERMINATION OF POINT OF NEUTRALIZATION BY POTENTIOMETRIC TITRATION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |

| | | |
|---|---|---|
| | COLORIMETRI | BALANCE C COLORIMETRI |
| 05 | ASSAY OF NIMUSULIDE BY U.V. SPECTROPHOTOMETER | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C UV-VISIBLE SPECTROPHOTOMETER |
| 06 | ASSAY OF IBUPROFEN BY U.V SPECTROPHOTOMETER | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C UV-VISIBLE SPECTROPHOTOMETER |

**PHARMACEUTICAL ANALYSIS LABORATORY** **PT-191(NEW)**

| EXPERIMENT NO | EXPERIMENT NAME | INSTRUMENT |
|---|---|---|
| 01 | COMMON APPARATUS USED IN PHARMACEUTICAL ANALYSIS | |
| 02 | STANDARDIZATION OF SODIUM HYDROXIDE SOLUTION WITH PRIMARY STANDARD OXALIC ACID SOLUTION (N/10) | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 03 | STANDADISATION OF BORIC ACID WITHSECONDARY STANDARD SODIUM HYDROXIDE SOLUTION (N/10) | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |

| | | |
|---|---|---|
| 04 | PREPARATION AND STANDARDIZATION OF POTASSIUM PERMANGANATESOLUTION WITH PRIMARY STANDARD OXALIC ACID SOLUTION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 05 | ASSAY OF FERROUS SULPHATE WITH POTASSIUM PERMANGANATE SOLUTION | A. DISTILATION UNIT B. DIGITAL ELECTRONIC BALANCE C WATER BATH |
| 06 | STADARDISATION OF SODIUM THIOSULPHATE WITH STANDARD POTASSIUM DICHROMATE SOLUTION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 07 | ASSAY OF COPPER SULPHATE WITH STANDARDIZED SODIUM THIOSULPHATE SOLUTION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 08 | ESTIMATION OF SILVER (Ag) IN SILVER NITRATE BY GRAVIMETRIC METHOD | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 09 | STANDADIZATION OF IODINE SOLUTION WITH SODUM THIOSULPHATESOLUTION | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |

| | | |
|---|---|---|
| 01 | QUALITATIVE ANALYSIS OF CARBOHYDRATES | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 02 | IDENTIFICATION TESTS FOR PROTEINS (ALBUMIN AND CASEIN) | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE |
| 03 | QUANTITATIVE ANALYSIS OF PROTEINS USING BIURET METHOD | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C VORTEX MIXER D UV-VISIBLE SPECTROPHOTOMETER |
| 04 | QUANTITATIVE ANALYSIS OF REDUCING SUGARS BY DINTROSALICYLIC ACID (DNSA) METHOD | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C VORTEX MIXER D UV-VISIBLE SPECTROPHOTOMETER |
| 05 | PREPARATION OF BUFFER SOLUTION AND MEASUREMENT OF PH | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C PH-METER WITH COMBINATION ELECTRODE |
| 06 | DETERMINATION OF SERUM TOTAL CHOLESTEROL | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C CENTRIFUGATION MC |
| 07 | HYDROLYSIS OF STARCH BY A-AMYLASE | A. DISTILATION UNIT B DIGITAL ELECTRONIC BALANCE C WATER BATH |

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.i
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

| | | |
|---|---|---|
| 3 | DETERMINATION OF ISOELECTRIC POINT OF AMINO ACID | DIGITAL PH METER, ANALYTICAL BALANCE |
| 4 | ISOLATION OF LACTOSE FROM BOVINE MILK | WATER BATH, VACCUM FILTER |
| 5 | IN VITRO ESTIMATION OF SGPT ACTIVITY BY REITMER AND FRANKEL METHOD | ANALYTICAL BALANCE, UV SPECTROSCOPY |
| 6 | EXTRACTION AND IDENTIFICATION OF CHOLESTEROL | CENTRIFUGE |

MICROBIOLOGY LABORATORY

PAPER CODE: PT 399

| SL. NO | NAME OF THE EXPERIMENT | INSTRUMENT USED |
|---|---|---|
| 1 | Sterilization Technique | Autoclave, Hot Air Oven, Incubator |
| 2 | Incubation Method | Incubator |
| 3 | Preparation of Sterile Media | Autoclave, Hot Air Oven, Incubator |
| 4 | Inculcation of Liquid & Solid Media | Air Handling Unit, Hot Air Oven, Incubator |
| 5 | GRAM staining of Bacteria | Compound Microscope |
| 6 | Determination of CFU of Water | Incubator |
| 7 | Microbial Assay of Antibiotics by DISK diffusion Method | Autoclave, Hot Air Oven, Incubator |
| 8 | Test for sterility | Air Handling Unit, Hot Air Oven, Incubator |
| 9 | Rideal Walker test | Air Handling Unit, Hot Air Oven, Incubator |

| SL. NO | NAME OF THE EXPERIMENT | INSTRUMENT USED |
|---|---|---|
| 1 | Sterilization Technique | Autoclave, Hot Air Oven, Incubator |
| 2 | Incubation Method | Incubator |
| 3 | Preparation of Sterile Media | Autoclave, Hot Air Oven, Incubator |
| 4 | Inculcation of Liquid & Solid Media | Air Handling Unit, Hot Air Oven, Incubator |
| 5 | GRAM staining of Bacteria | Compound Microscope |
| 6 | Determination of CFU of Water | Incubator |
| 7 | Microbial Assay of Antibiotics by DISK diffusion Method | Autoclave, Hot Air Oven, Incubator |
| 8 | Test for sterility | Air Handling Unit, Hot Air Oven, Incubator |
| 9 | Rideal Walker test | Air Handling Unit, Hot Air Oven, Incubator |

PHARMACOLOGY LABORATORY

PAPER CODE: PT 498

| SL. NO | NAME OF THE EXPERIMENT | INSTRUMENT USED |
|---|---|---|
| 1 | INTRODUCTION TO PHARMACOLOGY | |
| 2 | ANIMAL HANDLING & ADMINISTRATION OF INJECTION BY DIFFERENT ROUTES | |
| 3 | STUDY OF ANALGESIC EFFECT OF DICLOFENAC SODIUM AGAINST ACETIC ACID INDUCED WRITHING | |
| 4 | TO STUDY THE ANALGESIC EFFECT OF | EDDYS HOT PLATE |

| | | |
|---|---|---|
| | BLOOD | SPECTROPHOTOMETER<br>CENTRIFUGE |
| 3 | ESTIMATION OF SERUM GLUTAMATE OXALOACETATE TRANSAMINASE(SGOT) IN BLOOD | UV SPECTROPHOTOMETER<br>CENTRIFUGE |
| 4 | ISOLATION OF GENOMIC DNA FOR E-coli | COLD CENTRIFUGE |
| 5 | ESTIMATION OF TOTAL CELLULAR DNA BY DIPHENYLAMINE METHOD | |
| 6 | ESTIMATION OF TOTAL CELLULAR PROTEIN BY NINHYDRINE METHOD | COLD CENTRIFUGE<br>UV SPECTROPHOTOMETER |
| 7 | ASSAY OF TOTAL CELLULAR CATALASE BY HYDROGEN PEROXIDE | COLD CENTRIFUGE<br>UV SPECTROPHOTOMETER |
| 8 | ANALYSIS OF SAMPLE PROTEIN BY SDS PAGE | GEL ELECTROPHORESIS ASSEMBLE(GENEI) |
| 9 | ESTIMATION OF AMINO ACID BY PAPER ELECTROPHORESIS | PAPER ELECTROPHORESIS |

PHARMACOLOGY LABORATORY

PAPER CODE: PT 698

| SL. NO | NAME OF THE EXPERIMENT | INSTRUMENT USED |
|---|---|---|
| 1 | INTRODUCTION TO PHARMACOLOGY | |
| 2 | ANIMAL HANDLING & ADMINISTRATION OF INJECTION BY DIFFERENT ROUTES | |
| 3 | STUDY OF ANALGESIC EFFECT OF DICLOFENAC SODIUM AGAINST ACETIC ACID INDUCED WRITHING | |

| | | |
|---|---|---|
| 4 | TO STUDY THE ANALGESIC EFFECT OF PENTAZOCINE USING EDDYS HOT PLATE | EDDYS HOT PLATE |
| 5 | TO STUDY THE EFFECT OF DIAZEPAM ON LOCOMOTOR ACTIVITY OF MICE USING ACTOPHOTOMETER | ACTOPHOTOMETER |
| 6 | TO STUDY THE MUSCLE RELAXANT PROPERTY OF DIAZEPAM ON ROTAROD APPARATUS | ROTAROD APPARATUS |
| 7 | TO STUDY THE EFFECT OF DIAZEPAM ON LOCOMOTOR ACTIVITY OF RAT USING ACTOPHOTOMETER IN A DOSE DEPENDENT MANNER | ACTOPHOTOMETER |
| 8 | STUDY ANALGESIC ACTIVITY USING TAIL FLICK APPARATUS | TAIL FLICK APPARATUS |
| 9 | TO STUDY ANTI-INFLAMMATORY EFFECT USING PLETHYSMOGRAPH | DIGITAL PLETHYSMOMETER |
| 10 | TO STUDY THE ANTICONVULSANT ACTIVITY OF DRUGS | CONVULSIOMETER |

MEDICINAL CHEMISTRY LABORATORY

PAPER CODE: PT 693

| SL. NO | NAME OF THE EXPERIMENT | INSTRUMENT USED |
|---|---|---|
| 1 | PREPARATION OF BENZIL | WATER BATH, ANALYTICAL BALANCE, VACCUM FILTRATION |
| 2 | RECRYSTALLIZATION OF BENZIL | WATER BATH, ANALYTICAL BALANCE, VACCUM FILTRATION, MELTING POINT APPARATUS |
| 3 | PREPARATION OF PHENYTOIN | WATER BATH, ANALYTICAL BALANCE, VACCUM FILTRATION |
| 4 | RECRYSTALLIZATION OF | WATER BATH, ANALYTICAL BALANCE, |

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.i
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

| | | |
|---|---|---|
| | PHENYTOIN | APPARATUS |
| 5 | ASSAY OF PROPANALOL HCl TAB. IP | ANALYTICAL BALANCE, UV SPECTROPHOTOMETER |
| 6 | ASSAY OF VERAPAMIL HCl TAB. IP | ANALYTICAL BALANCE, UV SPECTROPHOTOMETER |
| 7 | SYNTHESIS OF BUTAMBEN | WATER BATH, ANALYTICAL BALANCE, VACCUM FILTRATION, MELTING POINT APPARATUS |
| 8 | ASSAY OF SPIRONOLACTON TAB. IP | ANALYTICAL BALANCE, UV SPECTROPHOTOMETER |
| 9 | ASSAY OF DIAZEPAM TAB. IP | ANALYTICAL BALANCE, UV SPECTROPHOTOMETER |
| 10 | ASSAY OF ASPIRIN TAB. IP | TITREMETRIC METHOD |

Dr. B. C. Roy College of Pharmacy & A.H.S. Durgapur

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

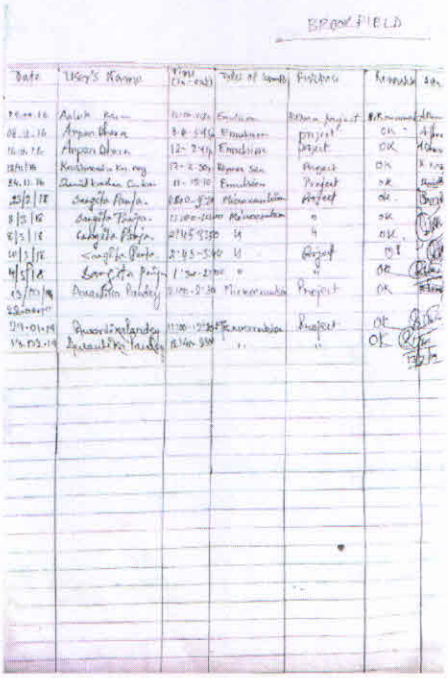
| Date | Bottle Details | Start time | End time | Sign |
|---|---|---|---|---|
| 08.12.18 | Drug + Exp. | 3:20 pm | 4:35 pm | |
| 8-12-18 | Solvent + Exp | 4:55 | 5:15 | |
| 9-12-18 | Solvent " | 5:25 | 5:30 | |
| 14-12-18 | Solvent | 11:00 pm | 11:15 pm | |
| 15.12.18 | Drug + Exp. | 2:30 pm | 3:40 pm | |
| | " + " | 3:50 pm | 5:10 pm | |
| 15-12-18 | Solvent | 5:15 | | |
| 17-12-18 | Solvent | 2:30 pm | 3:45 pm | |
| 17-12-18 | " | 5:15 pm | 5:45 | |
| 18-12-18 | " | 5:15 pm | 5:30 | |
| 19-12-18 | Solvent | 2:00 pm | 2:20 pm | |
| 21-12-18 | Solvent | 2:15 pm | 2:45 | |
| 16-01-19 | Solvent | 2:25 pm | 3:55 | |
| 17-01-19 | Solvent | 2:22 pm | 3:41 | |
| 18-01-19 | Solvent | 2:20 pm | 2:30 | |
| 14-01-19 | Solvent | 2:45 pm | | |
| 24.1.19 | Solvent | 3:50 | 4:50 | |
| 28.1.19 | Solvent | 3:50 | 4:30 | |
| 4.2.19 | Solvent | 4:00 | 4:30 | |
| 13.2.19 | Solvent | 5:00 | 5:25 | |
| 15.2.19 | Solvent | 1:30 | 2:45 | |

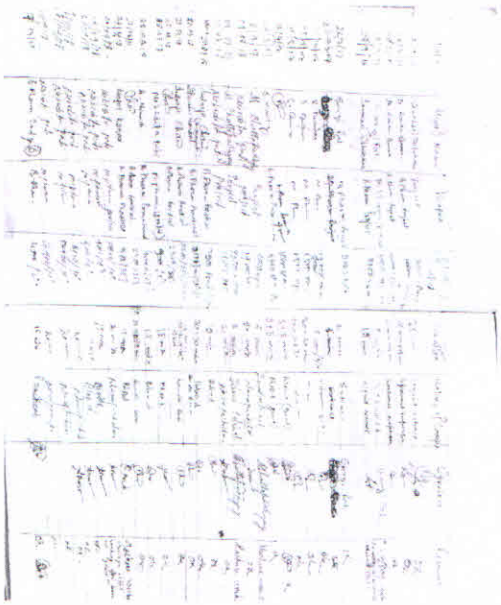

Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

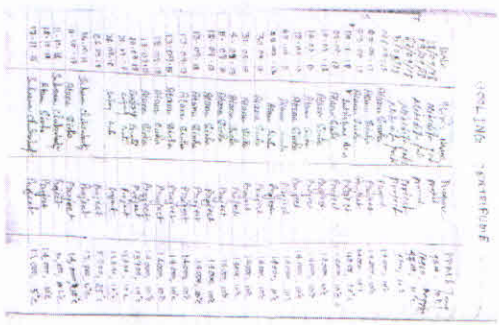
Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.in
contact@bcrcp.org
www.bcrcp.ac.in

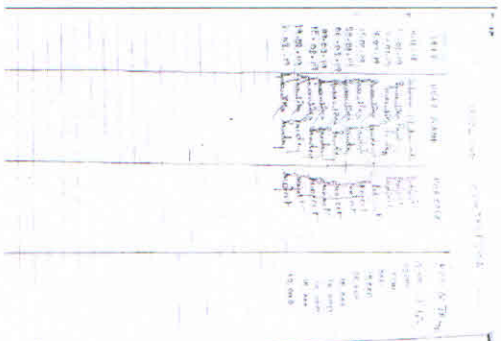
Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

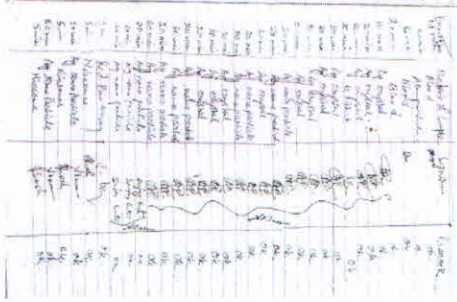


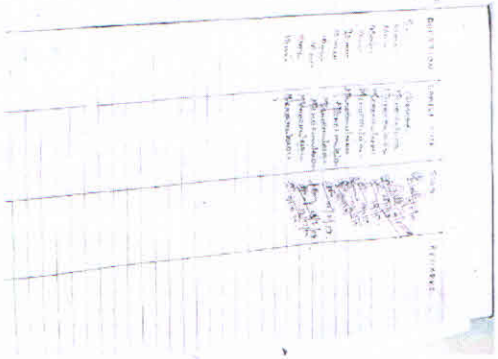












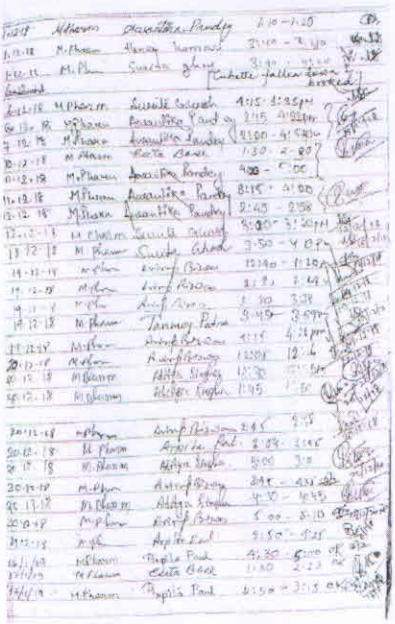
Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

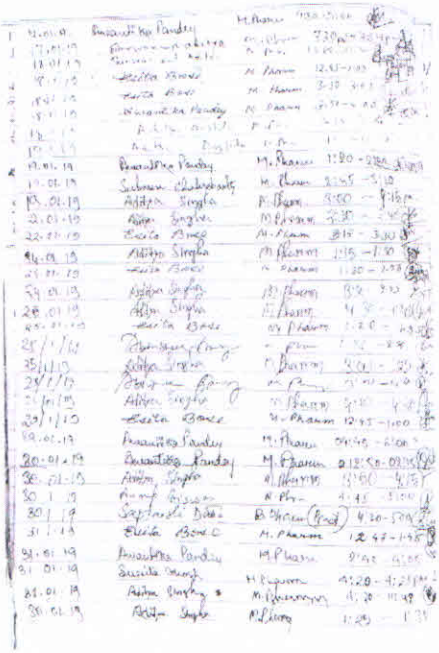
Dr. B. C. Roy College of Pharmacy & AHS Durgapur

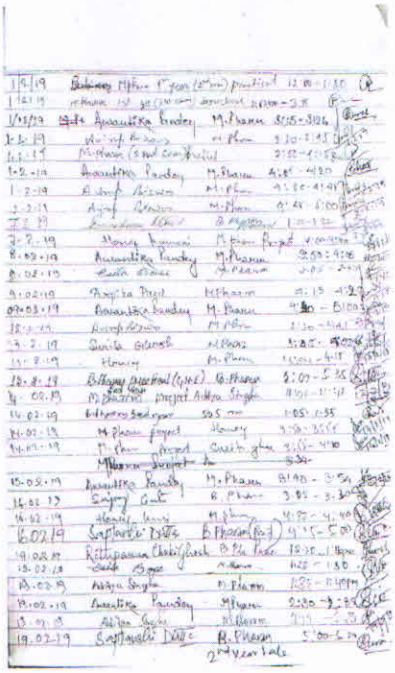
# Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

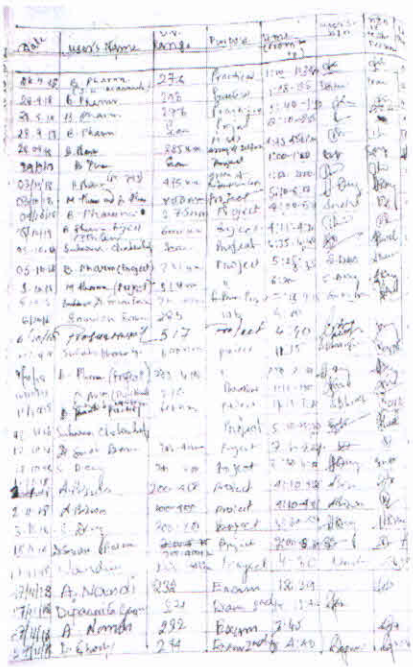
Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.in
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng





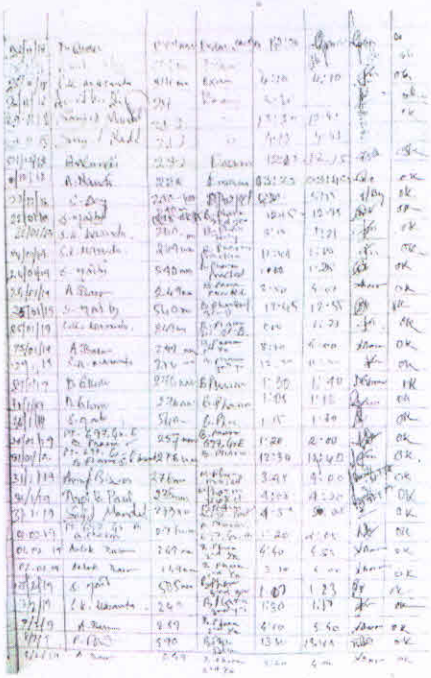


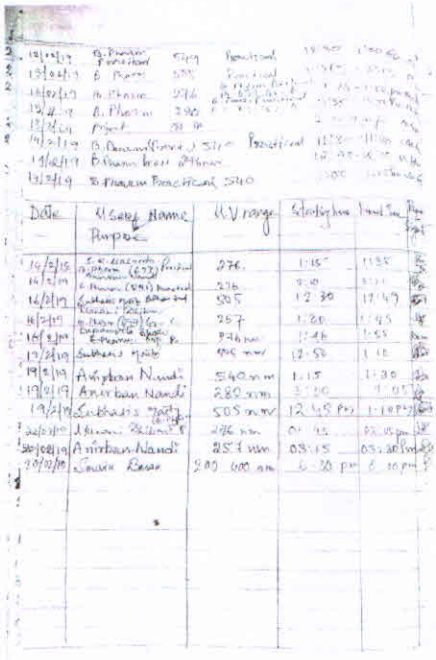
Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

**Dr. B.C. Roy College of Pharmacy and Allied Health Sciences**

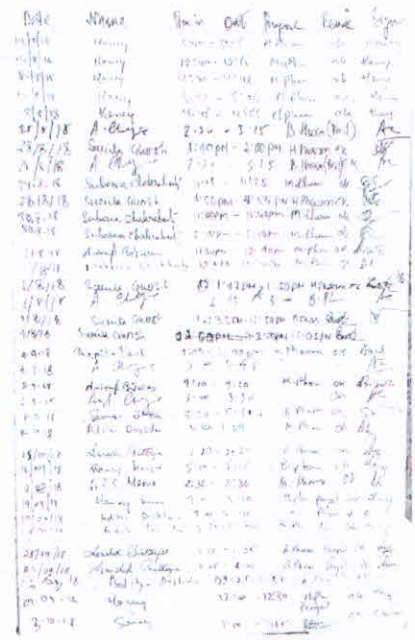
Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.
contact@bcrcp.org
www.bcrcp.ac.in

Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng





| Date | Name | Time out | Purpose | Remarks | Sign |
|---|---|---|---|---|---|
| 12/3/18 | Sanita Ghosh | 12:45 pm | M.Pharm Project | | |
| 3/7/18 | Sanita Ghosh | 1:05 pm - 2:55 pm | M.Pharm Project | OK | |
| 14/3/18 | Sanita Ghosh | 12:15 pm - 12:30 pm | M.Pharm Project | OK | |
| 16/3/18 | Sanita Ghosh | 5:35 pm - 7:45 pm | M.Pharm | OK | |
| 19/2/18 | Sanita Ghosh | 11:15 AM - 11:30 | M.Pharm | OK | |
| 2/3/18 | Sanita Ghosh | 9:20 AM - 5:25 PM | M.Pharm | OK | |
| 01/3/18 | Sanita Ghosh | 1:50 PM - 2:10 PM | M.Pharm | OK | |
| 1/3/18 | Honey Kumari | 12:40 PM - 1:40 PM | M.Pharm | OK | |
| 2/3/18 | Honey Kumari | 2:20 PM - 4:30 PM | M.Pharm | OK | |
| 9/3/18 | Sanita Ghosh | 12:40 PM - 1:40 PM | M. Pharm | OK | |
| 3/3/18 | Sanita Ghosh | 9:00 AM - 4:30 PM | M.Pharm | OK | |
| 1/3/18 | Honey Kumari | 9:15 AM - 12:00 PM | M.Pharm | OK | |
| 19/3/18 | Sanita Ghosh | 9:55 AM - 1:10 PM | M.Pharm | OK | |
| 2/3/18 | Honey | 11:00 - 11:20 | M.Pharm | OK | |
| 2/3/18 | Honey | 8.20 - 8.30 | M.Pharm | OK | Honey |
| 8/3/18 | Honey | 1.00 - 1.15 | M.Pharm | OK | |
| 2/3/18 | Honey | 7.25 - 8.35 | M.Pharm | OK | |
| 2/3/18 | Honey | 3.05 - 3.20 | M.Pharm | OK | |
| 2/3/18 | Honey | 1.05 - 1.20 | M.Pharm | OK | |
| 2/3/18 | Honey | 11.25 - 11.35 | M.Pharm | OK | |
| 5/3/18 | Honey | 12.40 - 12.50 | M.Pharm | OK | |
| 9/3/18 | Honey | 1.05 - 1.13 | M.Pharm | OK | |
| 5/3/18 | Honey | 12.30 - 12.40 | M.Pharm | OK | |
| 1/3/18 | Honey | 3.55 - 4.10 | M.Pharm | OK | |
| 5/3/18 | Honey | 1.10 - 1.39 | M.Pharm | OK | |
| 6-03-18 | Swastika Mukherjee | 2.05 - 2.15 | M.Pharm | OK | |
| 6-03-18 | Honey | 4.20 - 4.35 | M.Pharm | OK | |
| 1/3/18 | Sanita Ghosh | 12:45pm - 12:55pm | M.Pharm | OK | |
| 1/3/18 | Honey | 5.10 - 5.20 | M.Pharm | OK | |
| 1/3/18 | Honey | 12.05 - 12.11 | M.Pharm | OK | |
| 14/3/18 | Sanita | 3:42:25PM - 5:20PM | M.Pharm | OK | |

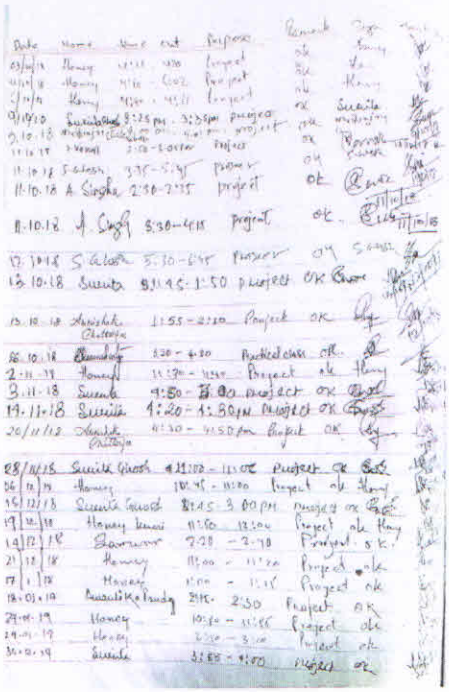



Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan

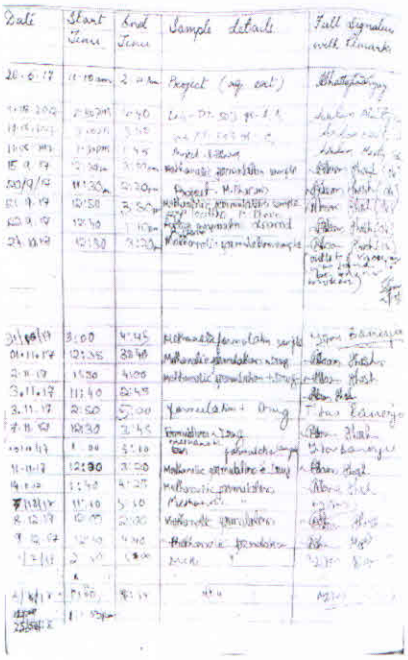
# Dr. B.C. Roy College of Pharmacy and Allied Health Sciences

Ph. : (0343) 253 2678/79
Mob. : +91 7477788556
Telefax : (0343) 253 2679
e-mail : bcrcp_dgp@yahoo.co.i
contact@bcrcp.org
www.bcrcp.ac.in

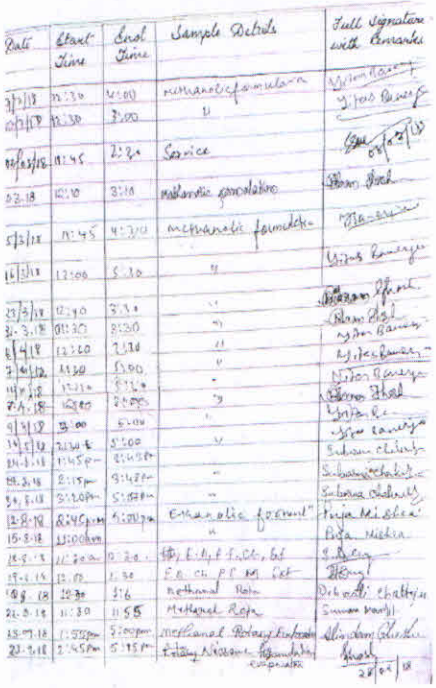
Approved by PCI & AICTE and Affiliated to MAKAUT, W.B., WBSCT&VE&S
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur - 713206, West Beng

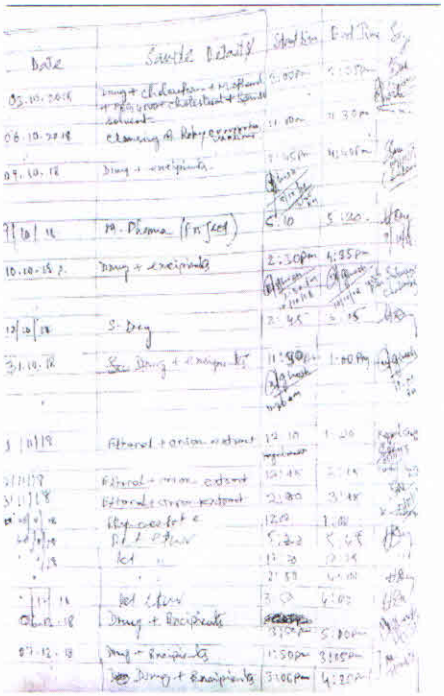
| Date | Name | Time out | Purpose | Remark | Sign |
|---|---|---|---|---|---|
| 03/10/18 | Honey | 4:11 | Project | ok | |
| 4/10/18 | Honey | 4:16 - 6:02 | Project | ok | |
| 5/10/18 | Honey | 4:50 - 4:51 | Project | ok | |
| 9/10/18 | Sucharita | 3:25 pm - 3:35pm | project | ok | |
| 9.10.18 | Sucharita | 2:10 - 2:20 | Project | ok | |
| 11.10.18 | S Ghosh | 3:35 - 5:45 | Project | ok | |
| 11.10.18 | A Singha | 2:30-2:35 | project | ok | |
| 11.10.18 | A Singh | 5:30-6:15 | project | ok | |
| 12.10.18 | S Ghosh | 5:30-6:45 | Project | ok | |
| 13.10.18 | Sucha | 11:45-1:50 | project | OK | |
| 15.10.18 | Srishti Chatterjee | 1:55-2:20 | Project | OK | |
| 16.10.18 | Bandeep | 3:20 - 4:20 | Project | ok | |
| 2.11.18 | Honey | 11:30 - 4:45 | Project | ok | |
| 3.11.18 | Sucha | 9:50 - 11.00 | project | ok | |
| 19.11.18 | Sucha | 1:20 - 1:30pm | Project | OK | |
| 20/11/18 | Srishti Chatterjee | 4:30 - 4:50pm | Project | OK | |
| 28/11/18 | Sucha Ghosh | 11:00 - 11:05 | Project | OK | |
| 26/12/18 | Honey | 10:45 - 11:20 | Project | ok | |
| 13/12/18 | Sucha Ghosh | 11:45 - 3.00 PM | project | ok | |
| 19/12/18 | Honey Kaur | 11:50 - 12:04 | Project | ok | |
| 14/12/18 | Sharmin | 2:28 - 2:38 | Project | S.K. | |
| 21/12/18 | Honey | 11:00 - 11:20 | Project | ok | |
| 17/1/19 | Honey | 11:00 - 11:15 | Project | ok | |
| 18/01/19 | Srishti Chatterjee | 2:15 - 2:50 | Project | OK | |
| 29-01-19 | Honey | 10:50 - 11:55 | Project | ok | |
| 29-01-19 | Honey | 2:50 - 3:00 | Project | ok | |
| 30-01-19 | Sucha | 3:55 - 4:00 | Project | ok | |



| Date | Start Time | End Time | Sample details | Full signature with Remarks |
|---|---|---|---|---|
| 26.6.17 | 11:10 am | 2 pm | Project (up cut) | |
| 3.11.17 | 2:50 PM | 5:00 | Formulation + Drug | |
| 8.11.17 | 10:30 | 2:45 | Formulation + Drug | |
| 31/08/18 | 3:00 | 4:45 | Mathematical formulation sample | |
| 01.11.17 | 12:35 | 3:40 | Mathematic formulation + drug | |
| 2.11.17 | 11:30 | 4:00 | Mathematic formulation + drug | |
| 3.11.17 | 11:40 | 12:45 | | |
| 3.11.17 | 2:50 | 5:00 | Formulation + Drug | |
| 8.11.17 | 10:30 | 2:45 | Formulation + Drug | |
| 10.11.17 | 1:30 | 4:30 | Formulation + Drug | |
| 11.11.17 | 12:30 | 3:00 | Mathematic formulation + drug | |
| 14.11.17 | 1:30 | 4:30 | Mathematic formulation | |
| 7/12/17 | 11:40 | 5:10 | Mathematic formulation | |
| 8.12.17 | 10:00 | 2:00 | Mathematic formulation | |
| 9.12.17 | 12:40 | 4:40 | Mathematic formulation | |
| 12/12 | 2 | 4:30 | [illegible] | |
| 4/01/18 | 2:50 | 4:15 | 4.4 | Mitra |
| 25/01/18 | 1:45pm | | | |



| Date | Start Time | End Time | Sample Details | Full Signature with Remarks |
|---|---|---|---|---|
| 3/2/18 | 11:30 | 4:00 | mathematic formulation | |
| 05/2/18 | 11:30 | 3:00 | " | |
| 19/02/18 | 11:45 | 2:30 | Service | |
| 5.2.18 | 12:10 | 3:10 | mathematic formulation | |
| 5/3/18 | 11:45 | 4:30 | mathematic formulation | |
| 16/3/18 | 12:00 | 5:30 | " | |
| 23/3/18 | 12:40 | 3:30 | " | |
| 3.3.18 | 01:30 | 8:30 | " | |
| 6/4/18 | 12:30 | 2:30 | " | |
| 7/6/18 | 11:30 | 5:00 | " | |
| 14/7/18 | 12:30 | 5:30 | " | |
| 7.8.18 | 12:00 | 2:00 | " | |
| 9/8/18 | 3:00 | 6:00 | " | |
| 14/8/18 | 2:30 | 5:00 | " | |
| 24.8.18 | 1:45pm | 2:45pm | " | |
| 28.8.18 | 2:15pm | 5:45pm | " | |
| 29.8.18 | 2:30pm | 5:45pm | " | |
| 12.9.18 | 2:45pm | 4:30pm | Ethanolic formul | |
| 15.9.18 | 11:00am | | " | |
| 18.9.18 | 11:30am | 2:30 | Ethanolic formulation | |
| 19.9.18 | 12:30 | 5:30 | Ethanolic formulation | |
| 21.9.18 | 11:30 | 11:55 | Methanol Rota | |
| 25.9.18 | 1:30pm | 5:00pm | methanol Rotary | |
| 27.9.18 | 2:45pm | 5:15pm | Ethanolic formulation | |



| Date | Sample Details | Start Time | End Time | Sign |
|---|---|---|---|---|
| 05.10.2018 | Drug + Excipients | 5:00pm | 5:30pm | |
| 06.10.2018 | cleaning of Rotary evaporator | 11:00a | 11:30a | |
| 09.10.18 | Drug + excipients | 3:45pm | 4:45pm | |
| 27/10/18 | M. Pharma (Project) | 2:10 | 5:20 | |
| 10.10.18 | Drug + excipients | 2:30pm | 4:45pm | |
| 12/10/18 | S. Drug | 2:45 | 3:15 | |
| 31.10.18 | Soln Drug + Excipients | 11:30 | 1:00pm | |
| 5/11/18 | Ethanol + anion content | 12:10 | 1:20 | |
| 7/11/18 | Ethanol + cation content | 10:45 | 3:15 | |
| 9/11/18 | Ethanolic cation content | 2:30 | 3:45 | |
| 12/11/18 | Drug + Excipients | 12:10 | 1:00 | |
| 14/11/18 | Drug + Excipients | 12:30 | 5:45 | |
| 15/11/18 | Drug + Excipients | 12:30 | 12:45 | |
| 21/11/18 | Drug + Excipients | 2:30 | 4:00 | |
| 22/11/18 | Drug + Excipients | 3:00 | 6:00 | |
| 06.12.18 | Drug + Excipients | 3:00pm | 5:00pm | |
| 07.12.18 | Drug + Excipients | 11:50am | 3:00pm | |
| | Drug + Excipients | 3:00pm | 4:30pm | |


Prof. (Dr.) Subhabrata Ray
Principal, M. Pharm, Ph.D.
Dr. B. C. Roy College of Pharmacy & A.H.S.
Bidhannagar, Durgapur-713206, Burdwan