## **Certificate course**

The college organized two certificate courses during the session 2018-19.

- 1. Certificate Course in Basic Computer Application
- 2. Certificate Course Instrumentation Training

Details of curriculum and participants are given their in.

# Certificate Course Basic Computer Application

Today's world is the world of computers. We are surrounded by the computers. We use computers and internet in almost every field of our life. Most of the persons are not well acquainted with computers and feel helpless while performing the routine works with computers. The college, after considering this problem, proposes to initiate a certificate course in "Basic computer application". The aim of the course is to literate the common person and students about the basic computer applications.

#### Curriculum

The duration of the course is four weeks, two hours a day. The contents of the course are basic components of PC (Monitor, Keyboard, CPU, Mouse, Printers, Speakers, CD DVD, Pen Drive, Data Cable, Modem, Hard Disk, RAM, Mother Board, Processor etc.)

- Operations like Start, Shut Down, Restart, and Log off etc.
- Interface (Desktop, Drives, Files, Folders etc.)- Basic operations in files/folders like Rename, Cut, Copy, and Paste.
- Start Menu
- Typing Tutor, Notepad, Character Map, Calculator, Paint Brush, Games, Address Book
- Introduction to Microsoft Office (WORD, EXCEL POWER POINT)
- Installation of Basic Software like NERO, Dictionaries etc.

- Secondary devices like CD/DVD (Burn Process for data, audio, video mp3 CD/ DVD and read/write operations)
- Transfer (Cut/Copy/ Paste/Format) from secondary devices like CD/DVD, Pen Drive Mobile Digital Camera, HandiCam etc.
- INTERNET a) Web browsers like Internet Explorer, Mozilla Firefox & Opera B new tab etc c) search Engines and Searching: Google, Khoj, Altavista etc. d) Account creation and mailing text/attachment e) Wikipedia and Encyclopedia f) Online banking etc.

For the session 2018-19, the certificate course was initiated in June 2019. A total of 22 students attended the course.

The fee of the course is decided as Rs. 200. The students were taught an hour of theory and given interface with computers for an hour daily.

After the completion of curriculum, the students have to appear for a practical followed by a viva-voce. All the students successfully completed the programme and they are awarded certificates.

## **List of Participants**

- 1. Ayush Sharma
- 2. Anumita Sharma
- 3. Sachi Chaudhary
- 4. Komal Teotia
- 5. Vivek Gupta
- 6. Ashish
- 7. Gyapti
- 8. Ashish Saxena
- 9. Nishi Chauhan
- 10. Sanjeev Sharma
- 11. Divyansh Sharma
- 12. Ayush Gola
- 13. Babita Gola
- 14. Soniya Tyagi
- 15. Mahipal Singh
- 16. Prince Kumar
- 17. Churchil
- 18. Preeti
- 19. Lakhan
- 20. Sonu Kumar
- 21. Shivani Gupta
- 22. Neerja Sharma

#### **Certificate Course**

## **Instrumentation Training**

The time period of this training was from 06/05/2019 to 30/06/2019. The participants were given certificates after the completion of the training.

#### Curriculum

#### **Infra red Spectroscopy**

Introduction, principal of IR spectroscopy, theory of molecular vibration, vibrational frequency, number of fundamental vibration, selection rules, scanning of infra red spectrum, sampling techniques, spectral features of some classes of organic compound, applications of infra red spectroscopy.

#### **UV-Vis spectroscopy**

Definition, quantization, instrumentation for UV-Vis spectroscopy (a) components and designs, (b) actual commercial instruments, methods and applications of absorption spectroscopy.

Uses of Gaussian software for theoretical calculation of UV, IR and Raman spectra.

#### **Cell, Tissue and Organ culture**

Media preparation, dry and wet heat sterilization, explants sterilization, inoculation, cell viability testing, study of callus culture, study of suspension culture.

#### **Electrophoresis**

Preparation of gel(aqarose), loading of gel over a slide, preparation buffers, preparation of stain, separation of band of DNA through electro phoretic mobility, scanning of bands by scanner.

#### Calorimeter

Preparation of test solution, maintain the standard through Blank solution, study the reading of blank, standard and test solution, measurement of OD through formula using different filters.

# **List of Participants**

S. No.	Name of Participants
1	Devansh Jain
2	Ajeet Gupta
3	Ayushi Tyagi
4	Rishabh Gupta
5	Sakshi Sharma
6	Elia khan
7	Bhavyapratap Sirohi
8	Jaya Bharti
9	Daniya Afzal
10	Kajol Malik
11	Garima Rathi
12	Sakshi Singh
13	Sumit Singh
14	Mohd. Hasan
15	Priya Tomar
16	Manisha Tyagi
17	Ritu Sharma
18	Pulkit Goel
19	Yuvraj
20	Deepti saxena
21	Tanya Singhal
22	Sheetal Chaudhary
23	Shikha Sharan
24	Bhavansh Sharma