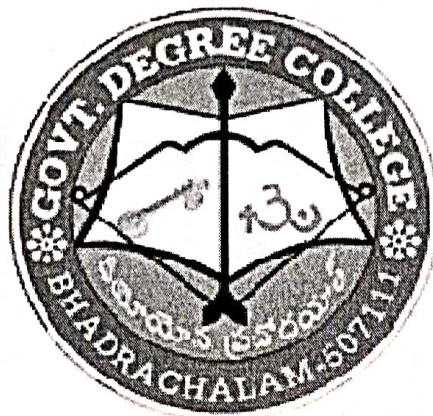


**GOVERNMENT DEGREE COLLEGE**

**BHADRACHALAM**

**BHADRADRI KOTHAGUDEM DISTRICT, TELANGANA STATE**



**DEPARTMENT OF ZOOLOGY**

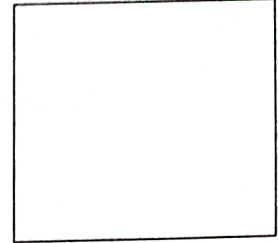
**CERTIFICATE COURSE**

**2021-2022**

**ON**

**CLINICAL PATHOLOGY**

**GOVERNMENT DEGREE COLLEGE  
BHADRACHALAM  
Clinical Pathology  
(Certificate Course)**



Name of the student :

Father's name :

Date of birth/Age :

Sex :

Nationality :

Religion :

Community :

Course in which studying :

Medium of instruction :

Marks obtained in qualifying exam :

Subjects studied in qualifying course :

Address for communication :

Signature of the applicant

Signature of the Co-Ordinator



**CLINICAL PATHOLOGY**  
**Certificate Course**

**Max.Marks:60**

**Time:2 Hours**

**Section-I (Marks:2\*15=30)**  
**(Long answer questions)**

**Answer two questions ,choosing one from each sub-section.**  
**Draw diagrams wherever necessary.**

**Sub-section A**

- 1)Describe the life history of *Entamoeba histolytica*.write about its pathogenesis.
- 2)Describe the life history of *Ascaris lumbricoides*.write about its pathogenesis.

**Sub-section B**

- 3)Write about different types of anaemia
- 4)How will you identify different types blood groups.Add a note on blood group importance

**Section-I I (Marks: 4\*5=20)**

**(Short answer questions)**

**Answer any four questions.**

- 5)Cancer.
- 6)Extra intestinal migration.
- 7)Elephantiasis.
- 8)BTCT
- 9)Filariform larva.
- 10)Blood Functions.
- 11)Erythroblastosis foetalis.

**Section-III (Marks:2\*5=10)**

**(Very short answer questions)**

**Answer any five questions.**

- |                       |                     |
|-----------------------|---------------------|
| 11)Leukemia.          | 15)Sterilization.   |
| 12)Rh Factor.         | 16)Schistosomiasis. |
| 13)Signet Ring Stage. | 17)Phlebotomy.      |
| 14)Autopsy.           | 18)Enterobiasis     |

**Principal**

**Govt. Degree College**  
**Bhadrachalam-507 101,**  
**Bhadrachalam Kothagudem Dist**

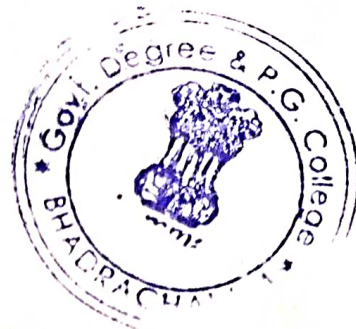
The main motto behind this course in this college is to provide additional qualification to students, as most of the students are from rural and tribal back ground. This course is useful for the students to provide self-employment. Theory and practical syllabus has been planned to benefit the student to acquire more theoretical and practical knowledge.

The student will demonstrate a working understanding of the pathogenesis of a variety of common and uncommon diseases.

The student will be able to properly interpret appropriate microbiology laboratory tests, including gram stain, different serologic tests, for the proper diagnosis and effective treatment of patients with infectious diseases.

After completion of course, students are able to diagnose the diseases using different tools in the laboratory. Moreover, they can also test it through blood samples or any fluid samples from the body.

The curriculum has been chalked out according to the syllabus including theory classes, practicals, trip to a laboratory, extension lectures etc.



Lecturers ,department of zoology observing students identifying blood groups.



  
Principal

Govt. Degree College  
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Bhadradi Kothagudem Dist.



## THEORY SYLLABUS

### clinical pathology

(Total instruction hours -60)

#### MODULE-I(Proposed hours of instruction-10 hrs)

- I. Introduction, history and scope of clinical pathology.
- II. Introduction to Bio-chemistry.
- III. Code of ethics for medical lab technicians.
- IV. Introduction to microbiology, microscope.
- V. Sterilization methods.

#### MODULE-II(Proposed hours of instruction-10 hrs)

- I. Structure and pathogenesis of Protozoan parasites-

1) *Entamoeba histolytica*

2) *Trypanosoma gambiense*

3) *Plasmodium*

4) *Giardia intestinalis*

#### MODULE-III (Proposed hours of instruction-10 hrs)

- I. Structure and pathogenesis of Helminth parasites-

1) *Ascaris lumbricoides*

2) *Enterobius vermicularis*

3) *Taenia solium*

4) *Ancylostoma duodenale*

5) *Schistosoma haematobium*

6) *Wucheraria bancrofti*

MODULE-IV(Proposed hours of instruction-10 hrs)

## HAEMATOLOGY

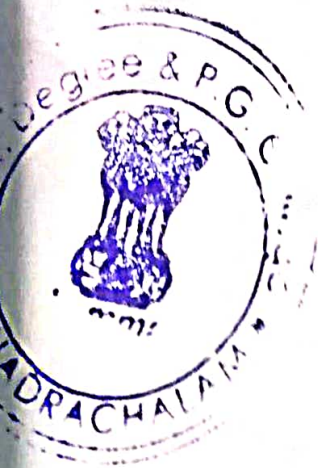
- 1) Sample collection
- 2) Structure and composition of blood, haemopoiesis
- 3) Collection and storage of blood
- 4) Blood cell counting
- 5) Estimation of haemoglobin
- 6) Blood clotting, Erythrocyte sedimentation rate
- 7) Types of anaemia, Lukemia

## PRACTICAL SYLLABUS

(Total instructional hours-20)

1. Estimation of haemoglobin (Sahlis haematin method)
2. Total count of RBC, WBC using Neubauer chamber)
3. Differential count of WBC-Smear method
4. Urine analysis –sugar (Benedicts reagent method)
5. Urine analysis –(10 parameters using automatic urine analyser –  
Strip method and manual method)
6. Erythrocyte Sedimentation Rate (ESR)
7. Blood pressure measurement
8. Microscopic examination of parasites

1) *Entamoeba histolytica*



- 2) *Trypanasoma gambiense*
- 3) *Plasmodium*
- 4) *Giardia intestinalis*
- 5) *Ascaris male*
- 6) *Ascaris female*
- 7) *Entamoeba histolytica*
- 8) *Taenia solium*
- 9) *Ancylostoma duodenale*
- 10) *Schistosoma haematobium*
- 11) *Wucheraria bancrofti*

  
Principal 3/2

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