

**Passed by Academic Council (Resolution No. 355/2006) dtd. 30/05/2006, subject to Uniformity in the Examination pattern.**

# Diploma in Clinical Pathology (DCP)

## **DIPLOMA IN CLINICAL PATHOLOGY (DCP)**

### **GOAL :**

The goal of postgraduate medical education shall be to produce competent specialist.

- (i) Who shall recognize the health needs of the community and carry out professional obligation ethically and in keeping with the objectives of the national health policy;
- (ii) Who shall have mastered most of the competencies, retaining to the speciality, that are required to be practiced at the secondary and tertiary levels of the healthcare delivery system.
- (iii) Who shall be aware of contemporary advances and developments in the discipline concerned.
- (iv) Who shall be able to organize and establish clinical laboratory.

### **OBJECTIVES :**

At the end of the course a candidate must be able to

- (i) Understand and explain about the factors in causation of disease.
- (ii) Understand processes involved in the gross and microscopic changes of organs and tissues and explain these changes.
- (iii) Understand and explain the basis of evolution of clinical signs and symptoms.
- (iv) Should be able to perform procedures designated for laboratory detection of diseases. Should be able to process and accurately interpret the representative materials obtained from the patients in order to arrive at a correct diagnosis.
- (v) Should be able to recognize and report morphological changes in cells, tissues and organs.
- (vi) Should be able to plan, perform and report specific research projects.

## **COURSE CONTENTS:**

Duration of course : 2 years

### **THEORY:**

- General pathology including Immunopathology
- Systemic pathology
- Haematology
- Blood Banking including Transfusion Medicine
- Cytopathology
- Laboratory methods including quality control
- Applied Microbiology & Serology
- Applied Biochemistry

### **PRACTICAL:**

- 1) Collection and dispatching of samples to laboratory and handling of all equipments
- 2) Hands on experience in techniques, its interpretation and reporting
  - (a) Gram's stain
  - (b) Albert stain
  - (c) Z. N. stain
  - (d) Hanging drop preparation
  - (e) KOH / Lactophenol preparation
- 3) Sterilization techniques, Culture- methods, identification and reporting
- 4) Hands on experience and interpretation of serological tests like Widal, VDRL, HIV, HBV, RF, ASO and Pregnancy tests
- 5) Microscopic examination of stools and reporting
- 6) Clinical Biochemistry- Procedures and interpretations of routine biochemical estimations including electrolytes
- 7) Hands on experience in and reporting of routine haematological investigations and special investigations like Platelet count, Sickling tests, Reticulocyte count, PCV, Blood indices, Bone marrow examination etc.
- 8) Histopathology – techniques and reporting
- 9) Cytopathology – techniques and reporting

10) Techniques and interpretation of various procedures in transfusion medicine

**POSTING SCHEDULE :**

<b>Total Duration</b>	<b>24 Months</b>
1. Cytopathology and Clinical pathology	6 months
2. Haematology and Blood Bank	6 months
3..Histopathology	6 months
4..Biochemistry	1 ½ month
5. Microbiology	1 ½ month
6. Revision in all sections	<u>3 months</u>

TOTAL 24 months

**Postgraduate teaching programme should include**

- (A) Grossing seminars
- (B) Slide seminars – Histopathology, Haematology and Cytopathology
- (C) Journal club
- (D) Subject seminars
- (E) Group discussion on clinical cases
- (F) Inter departmental seminars
- (G) Post graduate students should be encouraged to attend CME, Workshops ,Conferences and present papers

## **RECOMMENDED MINIMUM TEXT BOOKS AND JOURNALS**

### **BOOKS:**

1. Cotran, Kumar, Collins. Robin's Pathologic Basis of Disease, published by W.B. Saunders & Company.
2. Ivan Damjanov, James Linder. Anderson's Pathology, published by C.V. Mosby Company.
3. J. B. Walter, M.S. Israel. General Pathology, published by Churchill Livingstone.
4. Emeritus W.ST. Symmers Systemic Pathology, published by Churchill Livingstone.
5. Juan Rosai, Ackerman's Surgical Pathology, published by C.V. Mosby Company.
6. Leopold G Koss, Diagnostic cytology and its histopathologic basis published by J.B. Lippincott Company.
7. Marluce Bibbo, Comprehensive cytopathology, published by W.B Saunders Company
8. Winnifred Grey, Diagnostic cytopathology, published by Churchill Livingstone
9. Orell, Sterrett- Walters and Whittaker, Fine Needle Aspiration Cytology (Manual & Atlas), published by Churchill Livingstone
10. Greer J.P, Foerster J, Jukens J et. al Wintrobe's Clinical Haematology, published by Lippincott Williams and Wilkins
11. Firkin F , Chesterman C, Penington D, de Gruchy's Clinical Haematology in Medical Practice, published by Blackwell Sciences
12. Henry J.B Clinical Diagnostics and Management by Laboratory Methods. published by W.B. Saunders & Company.
13. Lewis S.M, Bain D.J, Bates I, Dacie & Lewis Practical Haematology published by Churchill Livingstone.
14. Hoffbrand A.V, Catovsky D, Tuddenham G.D, Postgraduate Haematology – published by Blackwell publishing
- 15 R.Anantnarayan , C.K.Paniker, Textbook of Microbiology , published by Orient Longman.
16. Harshmohan ,Textbook of pathology , published by Jaypee.
17. Parasitology ( Protozoology & Helminthology.) in relation to clinical medicine – K.D.Chatterjee – published by Chatterjee Medical Publication.

18. Sudha R.Kini ,Colour Atlas of differential diagnosis in exfoliative and aspiration cytopathology , published by Lippincott, Williams & Wilkins.
19. Praful B. Godkar ,Clinical Biochemistry – Principles & practice , published by Bhalani Publishing House, Bombay.
20. Theory & practice of Histological Techniques edited by John .D.Bancroft- published by Chruchill Livingstone.
21. Mollison P.L, Blood transfusion in clinical medicine, published by Oxford, ELBS & Blackwell Scientific Publication
22. WHO Classification of tumours, published by IARC Press
23. Recent advances in Histopathology, Haematology etc.

**JOURNALS:**

1. British Journal of Haematology, published by Blackwell Sciences.
2. CANCER, International journal of American Cancer Society, published by John Wile & sons Inc.
3. Journal of Clinical Pathology, published by B.M.J.
4. Haematology/Oncology Clinics of North America, published by W.B. Saunders & Company.
5. American Journal of Surgical Pathology, published by Lippincott & Raven
6. Indian Journal of Pathology & Microbiology, published by IAPM.
7. Indian Journal of Cancer, published by Indian Cancer Society.
8. Indian Journal of Cytology, published by IAC.
9. LANCET, published by Elsevier
- 10.I.C.M.R. Bulletin, published by ICMR

**ADDITIONAL READINGS:**

1. Compendium of recommendations of various committees on health and development ( 1943 to 1975) DGHS, 1985 Central Bureau of Health Intelligence, DGHS, Ministry of Health & Family Welfare, Govt. of India, Nirman Bhavan, New Delhi-335.
2. National Health Policy, Ministry of Health & Family Welfare, Govt. of India, Nirman Bhavan, New Delhi-335. 1983.
3. ICMR, Policy, Statement of ethical considerations involved in research on Human subjects, 1982 ICMR, New Delhi.
4. Code of Medical Ethics framed under Section- 33 of Indian Medical Council Act , 1956 . MCI, Kotla road, New Delhi.

MAHARASHTRA UNIVERSITY OF HEALTH  
SCIENCES, NASHIK

Student's Record Book

DIPLOMA COURSE  
D.C.P. (Pathology)

## DEPARTMENT OF PATHOLOGY

Name of the Student :Dr. \_\_\_\_\_

Name of the Institute & Address:

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### **ABOUT THE LOG BOOK:**

The log book has been prepared to maintain a record of academic and service activities of postgraduates and to provide an account of progress made by him/her. Maintenance of such log books will also allow a review of training programme and incorporation of improvements in the programme.

Postgraduates are required to carry the log book and get the entries made regularly. Faculty is requested to countersign. Log books have to be submitted to the head of the department before submitting the final examination form.



**PERSONAL BIO-DATA**

Paste  
Passport size  
Photograph  
here

Name of the Student : \_\_\_\_\_

Date of joining : \_\_\_\_\_

Probable date of appearing  
for Examination : \_\_\_\_\_

Date of Birth : \_\_\_\_\_

M.B.B.S from : \_\_\_\_\_

Year of passing MBBS : \_\_\_\_\_

Name of the State

Medical Council : \_\_\_\_\_

Registration No.

with date : \_\_\_\_\_

Permanent Address : \_\_\_\_\_

\_\_\_\_\_ PIN- \_\_\_\_\_

Phone No. : ( ) \_\_\_\_\_

Local Guardian's

Address : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ PIN \_\_\_\_\_

Phone No. : ( ) \_\_\_\_\_

\_\_\_\_\_

**POSTING SCHEDULE :**

<b>SECTION</b>	<b>MONTH &amp; YEAR</b>		<b>REMARKS</b>	<b>SIGNATURE OF I/C SECTION</b>
	From...	To.....		
<b>Clinical Pathology</b>				
<b>Cytopathology</b>				
<b>Haematology</b>				
<b>Blood Banking</b>				
<b>Histopathology</b>				
<b>Biochemistry</b>				
<b>Microbiology</b>				
<b>Revision in all sections</b>				



**SCIENTIFIC CONTRIBUTIONS:**

**CME/ Workshops attended :**

<b>SN</b>	<b>Name of CME/ Workshop</b>	<b>Held at</b>	<b>Dates</b>

**Conferences attended :**

<b>SN</b>	<b>Name of Conference</b>	<b>Paper presented Yes/No</b>	<b>If yes, title of paper</b>

**Publications:**

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

**Awards:**

\_\_\_\_\_

## **PARTICIPATION IN P.G. TEACHING ACTIVITY**

**Subject Seminars presented:**

<b>Date</b>	<b>Topic</b>	<b>Remarks</b>	<b>Signature of faculty</b>

**Journal Articles presented:**

<b>Date</b>	<b>Topic</b>	<b>Remarks</b>	<b>Signature of faculty</b>

**Group discussion of clinical cases:**

<b>Date</b>	<b>Topic</b>	<b>Remarks</b>	<b>Signature of faculty</b>

**Slide Seminars presented:**

<b>Date</b>	<b>Topic</b>	<b>Remarks</b>	<b>Signature of faculty</b>



**CERTIFICATE**

**This is to certify that Dr.....**

**has completed the tenure for D.C.P. satisfactorily .**

**P.G.Teacher.**

**P.G.Teaching  
Programme Incharge**

**Professor & Head.  
Department of pathology**

## **EVALUATION SYSTEM**

### **Log book (Work diary) :**

The postgraduate students should include all their activities in the log book. The annual assessment based on the work diary shall be done by the guide, teacher in charge of postgraduate teaching programme and HOD.

### **UNIVERSITY EXAMINATION:**

**Scheme of examination (*As per Direction No. 01/2008 dtd. 26/05/2008*)**