

CURRICULUM

رَبِّی زِدَّنِی عِلْمًا
For

B.Sc (Hons) Dialysis Technology

4 Years Degree



Prepared By:
Hafeez Institute of Medical Sciences Peshawar

1st Semester (1st Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT01	Anatomy-I	3	1
2	DYT02	Physiology-I	3	1
3	DYT03	Pharmacology-I	3	1
4	DYT04	Islamic Education	3	0
5	DYT05	Biochemistry-I	3	1
6	DYT06	Computer Skills-I	3	1
TOTAL			23	

2nd Semester (1st Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT07	Anatomy-II	3	1
2	DYT08	Physiology-II	3	1
3	DYT09	Pharmacology-II	3	1
4	DYT 10	Pak Study	3	0
5	DYT 11	Biochemistry-II	3	1
6	DYT 12	Computer Skills-II	3	1
TOTAL			23	

3rd Semester (2nd Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT 13	Renal anatomy & physio related to Urology- I	3	1
2	DYT 14	Clinical aspect of urology patients & clinical practice – I	3	1
3	DYT 15	Urology surgical procedure and clinical practice	3	1
4	DYT 16	Pathology I of renal tract (Urology and clinical practice – I	3	1
5	DYT 17	Sociology –I	3	0
6	DYT 18	Bio-Statics-I	3	0
TOTAL			22	

4th Semester (2nd Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT 19	Renal anatomy & physio related to Urology- I	3	1
2	DYT 20	Clinical aspect of urology patients & clinical practice – I	3	1
3	DYT 21	Urology surgical procedure and clinical practice	3	1
4	DYT 22	Pathology I of renal tract (Urology and clinical practice – I	3	1
5	DYT 23	Sociology –II	3	0
6	DYT 24	Bio-Statics-II	3	0
TOTAL			17	

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5th Semester (3rd Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT 25	Anatomy and physiology related to nephrology – I	3	1
2	DYT 26	Renal pathology and clinical practice – I	3	1
3	DYT 27	Renal disease, pharmacology and clinical practice – I	3	1
4	DYT 28	Clinical aspect of pathology and clinical practice – I	3	1
5	DYT 29	Pathology-I	3	0
6	DYT 30	Basic Communication Skills-I	3	0
TOTAL			22	

6th Semester (3rd Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT 31	Anatomy and physiology related to nephrology – II	3	1
2	DYT 32	Renal pathology and clinical practice – II	3	1
3	DYT 33	Renal disease, pharmacology & clinical practice – II	3	1
4	DYT 34	Clinical aspect of pathology and clinical practice – II	3	1
5	DYT 35	Pathology-II	3	0
6	DYT 36	Basic Communication Skills-II	3	0
TOTAL			22	

7th Semester (4th Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT 37	Clinical aspect of renal pathology II and specialized clinical practice – I	3	1
2	DYT 38	Renal disease, management & specialized clinical practice	3	1
3	DYT 39	Treatment of advance renal disease life support procedure and specialized clinical practice – I	3	1
4	DYT 40	Dialysis & clinical aspect & specialized clinical practice – I	3	1
5	DYT 41	Public Health-I	3	1
6	DYT 42	Research Methodology-I	3	0
7	DYT 43	Ethics & Management-I	3	0
TOTAL			26	

8th Semester (4th Year)

Papers	Course Code	Subject	Credit Hours	
			Theory	Practical
1	DYT 44	Clinical aspect of renal pathology II and specialized clinical practice – II	3	1
2	DYT 45	Renal disease, management & clinical practice II	3	1
3	DYT 46	Treatment of advance renal clinical practice – II	3	1
4	DYT 47	Dialysis & specialized clinical practice – II	3	1
5	DYT 48	Public Health-II	3	1
6	DYT 49	Research Methodology-II	3	0

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1st SEMESTER**PAPER-I: ANATOMY-I (1st SEMESTER)****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****OBJECTIVE:**

To introduce the students the significance of the subject of anatomy in medical science regarding its knowledge its applications and day-to-day developments in the subject

COURSE CONTENT:

- I. **General Anatomy**
Anatomical terms and positions
Description of tissue
- II. **Systemic Anatomy**
Systemic Anatomy includes
 - a. Muscular skeletal system
 - b. Gastrointestinal system
 - c. Respiratory system
 - d. Cardiovascular system

RECOMMENDED BOOKS:

Snell's clinical Anatomy (Text Book) by Snell 7thg Edition 2000 published by Churchill Living Stone

Gray's anatomy (Reference Book) by Roger Warwick Petter L. Williams 1973 published by Langman group limited.

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PAPER-2: PHYSIOLOGY -I (1st SEMESTER)

CREDIT HOURS:	3+1	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

OBJECTIVE:

To introduce the students the significance of the subject of Physiology in medical science regarding its knowledge in making the other subjects of medical sciences understandable. Its applications and day to day developments in the subject of Physiology.

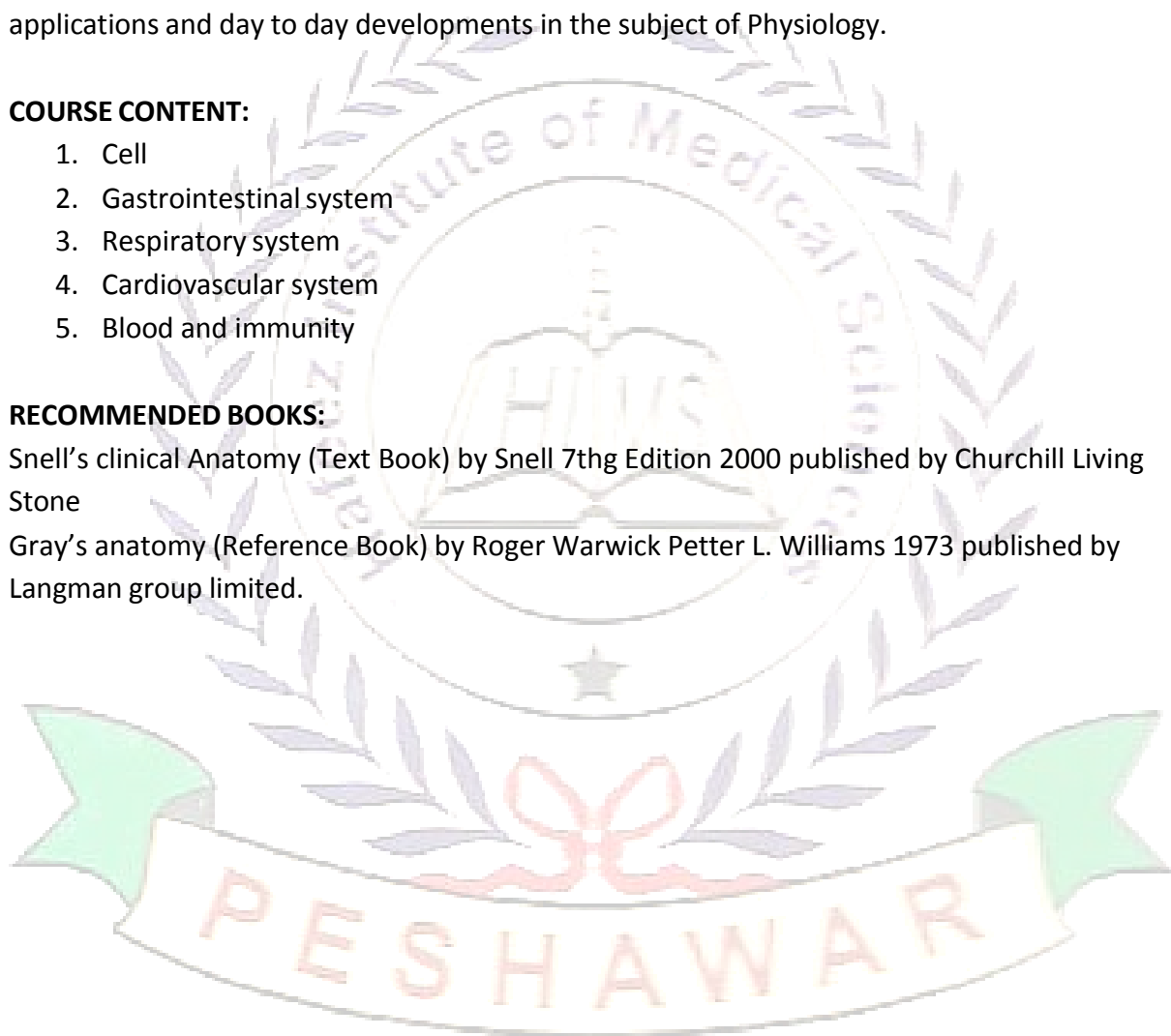
COURSE CONTENT:

1. Cell
2. Gastrointestinal system
3. Respiratory system
4. Cardiovascular system
5. Blood and immunity

RECOMMENDED BOOKS:

Snell's clinical Anatomy (Text Book) by Snell 7th Edition 2000 published by Churchill Living Stone

Gray's anatomy (Reference Book) by Roger Warwick Petter L. Williams 1973 published by Langman group limited.



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PAPER-3: PHARMACOLOGY -I (1st SEMESTER)

CREDIT HOURS:	3+1		MARKS 100
INTERNAL MARKS	40	EXTERNAL MARKS 60	TIME: 3 HRS

OBJECTIVE:

To introduce the students the knowledge of the subject of pharmacology with regards to its importance in understanding the other disciplines of medical sciences regarding the application of the subject and to learn about the new developments in the field of pharmacology.

COURSE CONTENT:

1. Introduction to Pharmacology
2. Pharmacokinetics
3. Pharmacodynamics

RECOMMENDED BOOKS:

Lippincott's pharmacology (Text Book) by Mycek 2nd edition 2000 published by Lippincott Raven

Katzung textbook of pharmacology (Reference Book) by Bertram Katzung 8th Edition published by Appleton.



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PAPER-4: ISLAMIC EDUCATION (1st SEMESTER)**CREDIT HOURS: 3****MARKS 1 0 0****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****OBJECTIVE:**

- To educate students regarding basic concept of Islam
- To educate students regarding Islamic influence in the world
- To educate the students regarding Islamic Medical Ethics & Contribution of the Muslims in Medicine, Science & Technologies.

COURSE CONTENT:**Holy Quran and Sunnah****1.1 Holy Quran**

- Introduction
- Importance and characteristics
- Sura-e-Hujarat with translation
- Sura-e-Al-Furqan: Verses 63-77 with translation and explanation

1.2 Sunnah

- Importance of Sunnah
- Twenty selected Hadith with translation
(Mention in Islamiyat Compulsory for degree classes,
Published by:
(Allama Iqbal Open University)

Fundamental Doctrine of Islam

- a. Islam with reference to Holy Quran & Hadith
- b. Tawheed (Oneness of Allah)
- c. Prophethood
- d. The day of judgment (Akhirat)
- e. Salat & nimaz (Abadaat)
- f. Saum (Fasting)
- g. Zakat
- h. Hajj
- i. Jihad

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Life of Holy Prophet

- 3.1 study of the life of the Holy Prophet & Seerat
- 3.2 life of the Holy Prophet at Maka from birth to Hijra (Migration to Madina)
- 3.3 Method of Preaching & difficulties
- 3.4 Life of Holy Prophet at Madina
- 3.5 Amicable Accords (Mowkhat)
- 3.6 Treaty of Madina (Misaq-e-Mukarama)
- 3.7 Conquest of (Maka Al-Mukarama)
- 3.8 Hajat-ul-wida

The Ethical View of Islam & Characteristics Islamic Cultural

- 4.1 Character Building
- 4.2 The Concept of Ethics
- 4.3 The Moral Values: Truthfulness, Tawakal, Taqwa, Fulfillment of Promises, Simples, the steam of Parents and Guardians, Behaviorism Y & Broadness,
- 4.4 Islamic Society: Kisab-e-Halal, Human Dignity, Social Justice Addle-e- Shoora

Influence of the Islamic Civilization

- 4.4 Panacea of our Problems
Our Future, Unity, Political Stability

Islamic Medical Ethics

Contribution of the Muslims in Medicine, Science and Technology

NOTE: While keeping the Islamic values and basic Characteristics of Islamic Society the Proper guideline may be provided in such a way that should be applicable in business and trade.

RECOMMENDED BOOKS:

Islamiyat Compulsory, Islamabad, Allama Iqbal Open University, Islamabad
M.D Zaffar, Islamic Education (Compulsory) Lahore Aziz Book Dept. Urdu Bazaar.

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PAPER-5: BIOCHEMISTRY -I (1st SEMESTER)

CREDIT HOURS:	3+1	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

OBJECTIVE:

The introduction of knowledge subject of biochemistry to student regarding its importance in understanding the other domains of medical science and regarding the applications of the subject and to know about the recent developments in the field of biochemistry.

COURSE CONTENT:

1. Introduction
2. Carbohydrate
3. Proteins
4. Lipids
5. Enzyme
6. Vitamins

RECOMMENDED BOOKS:

Harper's text book of Biochemistry (Text Book) by Bertram Katzung 1992 published by Appleton Lange.
Biochemistry for Paramedics by Dr. Khalid Mehmood 2005 published by UB agency Peshawar.

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PAPER-6: COMPUTER SKILLS-I (1st SEMESTER)**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****OBJECTIVE:**

To introduce the students the significance of the subject of computer definitions, history, types and component, hardware and software application.

COURSE CONTENT:**Introduction:**

1. Definition of computer
2. History of computer
3. Classification of computer
4. Components of computer

Hardware and Software

1. Physical components of computer
2. Logical component of computer
3. System software
4. Application software

Storage devices

1. Magnetic storage devices
2. Optical storage devices
3. Memories

RECOMMENDED BOOKS:

Fundamental of I.T concept by Nayyar Kanwal by CECOSE University Teacher's notes

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2nd SEMESTER**PAPER-I: ANATOMY-II (2nd SEMESTER)****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE CONTENT:**

- a. Lymphatic system
- b. Head and Neck
- c. Nervous System
- d. Urinary System
- e. Reproductive System
- f. Endocrine System
- g. Special Senses

RECOMMENDED BOOKS:

Snell's clinical Anatomy (Text Book) by Snell 7thg Edition 2000 published by Churchill Living Stone

Gray's anatomy (Reference Book) by Roger Warwick Petter L. Williams 1973 published by Langman group limited.

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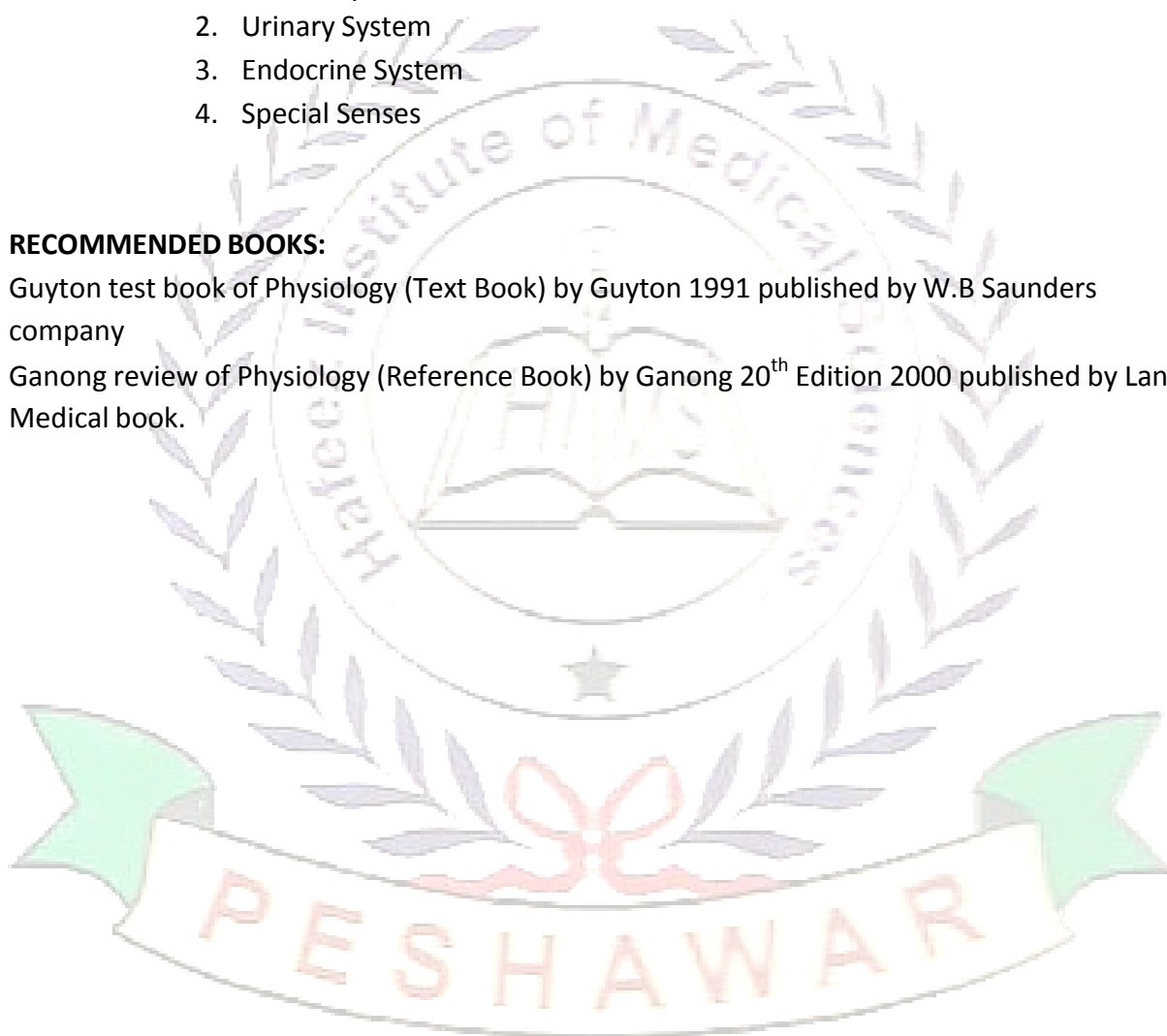
PAPER-2: PHYSIOLOGY-II (2nd SEMESTER)**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE CONTENT:**

1. Nerves System
2. Urinary System
3. Endocrine System
4. Special Senses

RECOMMENDED BOOKS:

Guyton test book of Physiology (Text Book) by Guyton 1991 published by W.B Saunders company

Ganong review of Physiology (Reference Book) by Ganong 20th Edition 2000 published by Land Medical book.



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PAPER-3: PHARMACOLOGY -II (2nd SEMESTER)

CREDIT HOURS: 3+1 MARKS 100
INTERNAL MARKS 40 EXTERNAL MARKS 60 TIME: 3 HRS

OBJECTIVE:

To introduce the students the knowledge of the subject of pharmacology with regards to its importance in understanding the other disciplines of medical sciences regarding the application of the subject and to learn about the new developments in the field of pharmacology.

COURSE CONTENT:

1. Adverse effects of drugs
2. Classification of drugs

RECOMMENDED BOOKS:

Lippincott's pharmacology (Text Book) by Mycek 2nd edition 2000 published by Lippincott Raven

Katzung textbook of pharmacology (Reference Book) by Bertram Katzung 8th Edition published by Appleton.

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PAPER-4: PAKSTUDY (2nd SEMESTER)

CREDIT HOURS: 3 MARKS 100
INTERNAL MARKS 40 EXTERNAL MARKS 60 TIME: 3 HRS

OBJECTIVE:

To introduce to the student the significant of Pak Study B.Sc level course

COURSE CONTENT:

- I. **Chapter One**
Ideology of Pakistan
- II. **Chapter Two**
Background of ideology of Pakistan
 - a. Reformation movement
 - b. Educational movement
 - c. Political movement
- III. **Chapter Three**
Movement of Pakistan (Since Allama Iqbal Address at Ala Bad 1930 till 4th August 1947)
- IV. **Chapter Four**
Establishment of Pakistan (Political, Social Financial Problems)
- V. **Chapter Five**
Constitutional and Political Developments in Pakistan
- VI. **Chapter Five**
Geographical condition of Pakistan
- VII. **Chapter Seven**
Pakistan and Muslim world

RECOMMENDED BOOKS:

Pakistan Studies Compulsory for Degree Courses by Dr. Noshaad Khan

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PAPER-6: COMPUTER SKILLS-II (2nd SEMESTER)

CREDIT HOURS:	3+1	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

OBJECTIVE:

To introduce the students the significance of the subject of computer definitions, history, types and component, hardware and software application.

COURSE CONTENT:

Application software

Microsoft word

Microsoft power point

Microsoft excel

Microsoft Definition of computer

5. History of computer
6. Classification of computer
7. Components of computer

Hardware and Software

5. Physical components of computer
6. Logical component of computer
7. System software
8. Application software

Storage devices

4. Magnetic storage devices
5. Optical storage devices
6. Memories

RECOMMENDED BOOKS:

Fundamental of I.T concept by Nayyar Kanwal by CECOSE University Teacher's notes

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3rd SEMESTER**PAPER – 1 :- ANATOMY AND PHYSIOLOGY RELATED TO UROLOGY****CREDIT HOURS: 3+1 MARKS 100****INTERNAL MARKS 40 EXTERNAL MARKS 60 TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of renal anatomy and physiology related to urology.

COURSE CONTENTS:**Embryology of renal tract:**Bladder
Prostate
Urethra**Developmental anomalies of renal tract**Bladder
Prostate
Urethra**Physiology of renal tract;**Bladder
Prostate
Urethra**RECOMMENDED BOOKS**Clinical anatomy by Richard Snell 7th edition 2000 by Churchill living stone
Essential for medical physiology by Mustafa in 1994 by MEMIT**REFERRAL BOOK:**Guyton physiology by Hucourt Brace in 1994 by WR Sounder Company
Gray anatomy by Roger Warwick, Peter L Williams in 1973 by Langman group Ltd**Prepared By:****Hafeez Institute of Medical Sciences Peshawar**

PAPER – 2:- CLINICAL ASPECTS OF UROLOGY PATIENT AND CLINICAL PRACTICE**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of clinical aspects of Urology patients in OPD, ward and ward management.

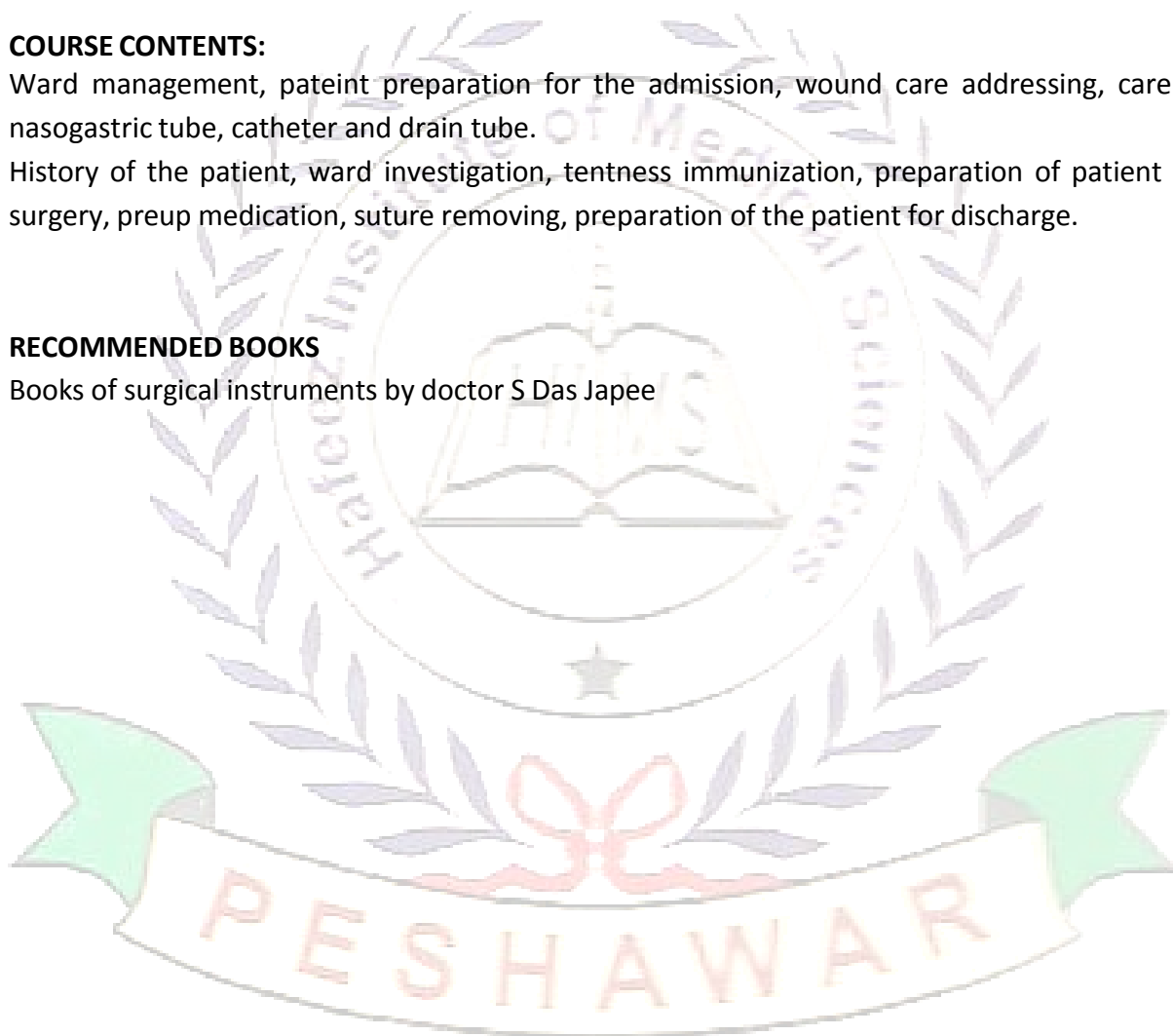
COURSE CONTENTS:

Ward management, patient preparation for the admission, wound care addressing, care of nasogastric tube, catheter and drain tube.

History of the patient, ward investigation, tetanus immunization, preparation of patient for surgery, preop medication, suture removing, preparation of the patient for discharge.

RECOMMENDED BOOKS

Books of surgical instruments by doctor S Das Japee

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PAPER – 3 :-

UROLOGY SURGICAL TECHNIQUE AND CLINICAL PRACTICE

CREDIT HOURS: 3+1

MARKS 100

INTERNAL MARKS 40

EXTERNAL MARKS 60

TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of Urology surgical technique and clinical practice in Urology OT, OPD and ward.

COURSE CONTENTS:

Surgical scrubbing

Important of scrubbing, principal of scrubbing

Positioning for surgery

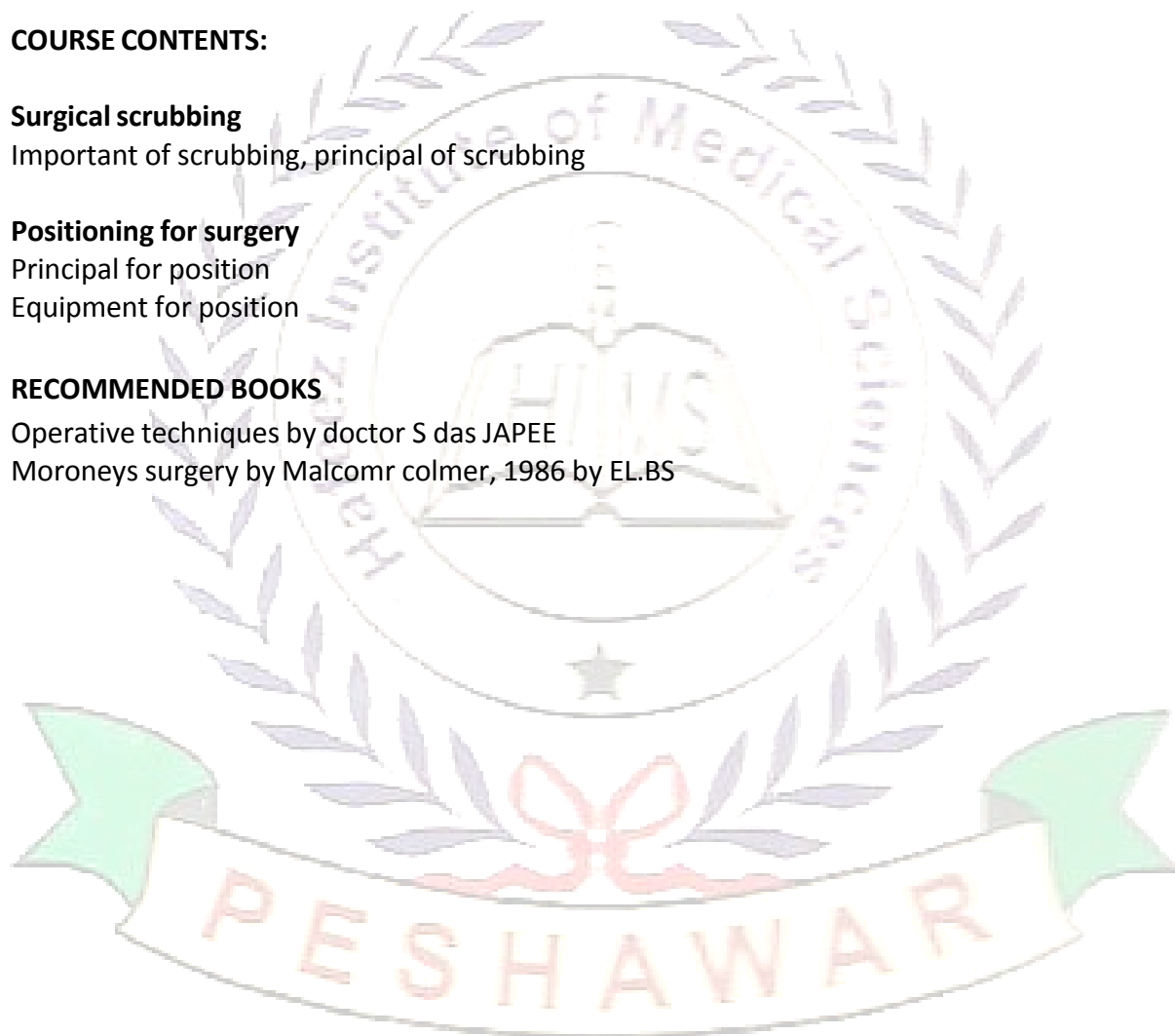
Principal for position

Equipment for position

RECOMMENDED BOOKS

Operative techniques by doctor S das JAPEE

Moroneys surgery by Malcomr colmer, 1986 by EL.BS



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PAPER – 4:-

PATHOLOGY-I RELATED TO UROLOGY, SURGICAL PROCEDURE AND CLINICAL PRACTICE

CREDIT HOURS: 3+1

MARKS 100

INTERNAL MARKS: 40

EXTERNAL MARKS: 60

TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of renal pathology related to urology and his surgical procedure/ clinical jpractice in Urology OPD and ward.

COURSE CONTENTS:

Tumors/neoplastic disease

Renal tomor, Testicular tumor, Ca;prostate, Ca;penis

Fistulas

U.v.f., V. intestine f, V.uterine f

A.v fistula, dialysis, renal transplantation

Urological investigation

Urine, Blood

Radiological x-ray. Usg, ct, mineral scane

Ward management, pateint preparation for the admission, wound care addressing, care of nasogastric tube, catheter and drain tube.

History of the patient, ward investigation, tentness immunization, preparation of patient for surgery, preup medication, suture removing, preparation of the patient for discharge.

Patient attendant in OPD, Receiving of the patient, History taking, Assessment, Investigastion

Advice treatment/ admission

RECOMMENDED BOOKS

Moroneys surgery by Malcomr colmer, 1986 by EL.BS

Robbins pathology 6th edition in 1998 by I.E Sounder

Spiral of Uroogy

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PAPER – 5 :- BASIC EPIDEMIOLOGY -I (3rd SEMESTER)

CREDIT HOURS:	3+1	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

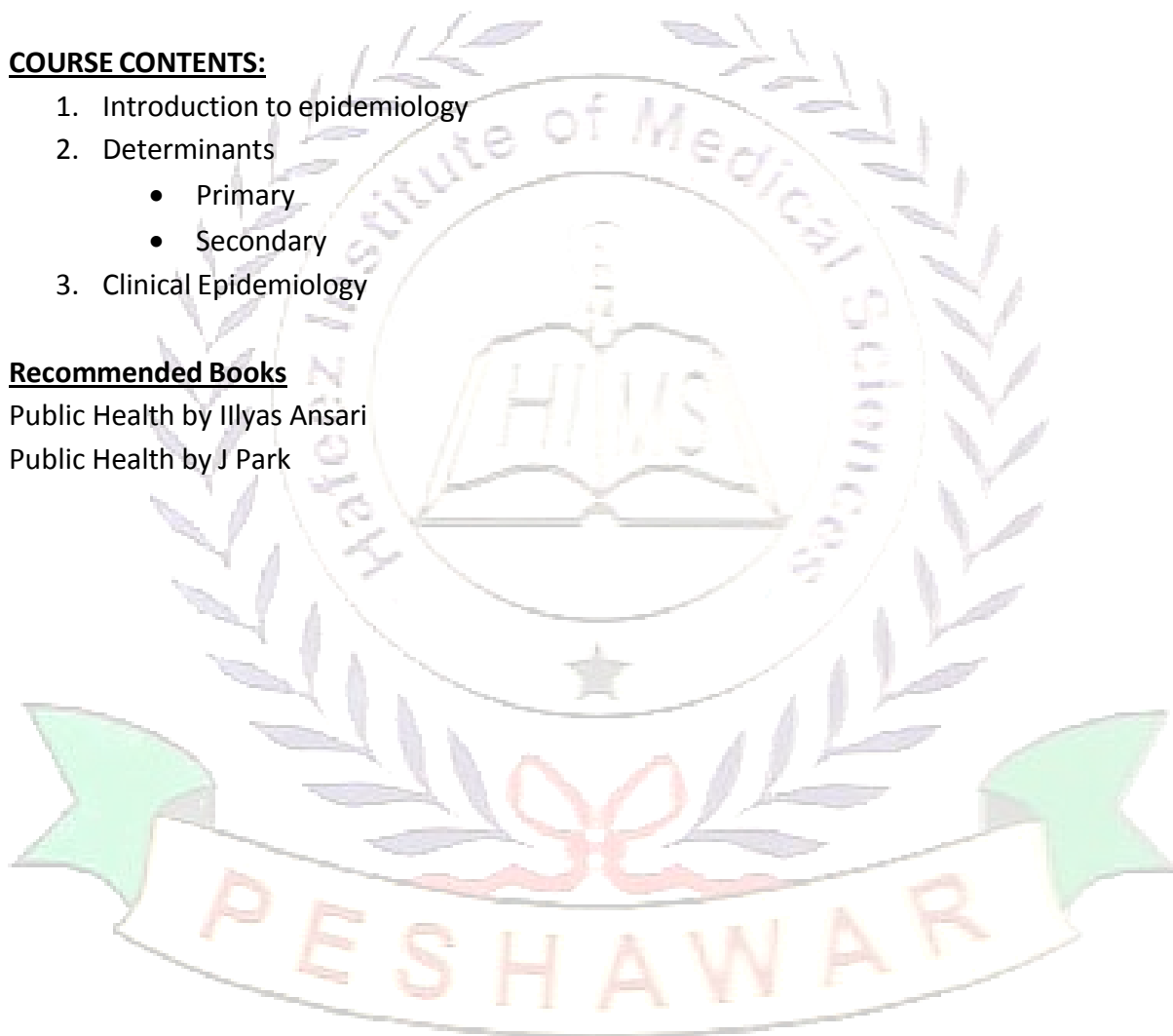
To introduce to the students the know-how of the subject of epidemiology in order to apply the knowledge of the subject regarding the community and community related disease.

COURSE CONTENTS:

1. Introduction to epidemiology
2. Determinants
 - Primary
 - Secondary
3. Clinical Epidemiology

Recommended Books

Public Health by Ilyas Ansari
Public Health by J Park



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PAPER-5: SOCIOLOGY -I (3rd SEMESTER)**CREDIT HOURS: 3****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To produce to the students the significance of definition and scope of sociology as a science, their relation with other sciences.

COURSE CONTENTS:

1. **General**
Definition and scope of sociology, sociology is a science, Islamic Sociology
2. **Medical Sociology**
Introduction contribution of sociology to medicine
3. **Health and Disease**
Social definition of illness, social and emotional component of illness
4. **Patient and paramedic**
Paramedics view of disease and patient, psychology of patient/paramedic relationship
5. **Mental illness sociological perspective**
Definitions, social implication of mental illness
6. **Rehabilitation**
Definition, physical, mental handicap
Method in rehabilitation: Guidance counseling and vocational training

Recommended Books

Medical sociology by William C Cuckerham in 1978 printed by USA Health education by Lurna Robinson Wesley F Alles in 1994 by Times Mirror/Mosby College Publishing ST Liois Turonto

Reference Book:

Social psychology of health by Shirlynn Spacapan Stuart Oskanp Edition by SAGE publication New Delhi, New York, in 1987

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PAPER-6: BIostatISTICS -I (3rd SEMESTER)

CREDIT HOURS:	3	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

To introduce to the students the significance of bio-statistics their topic in univariate statistics means basic concept, describing and exploring data, normal distribution, sampling distribution and hypothesis testing, basic concept of probability and categorical data CH and application of statistics and social research.

COURSE CONTENTS:

Topics in univariate statistics

A. Basic

1. Introduction
2. Important terms
3. Senses
4. Method uses for taking senses, information collection during senses, method of estimating the population of any year
5. Measurement scale

B. Describing and Exploring Data

1. Measures of central tendency and variability
2. Health Statistics (Preparation, ration, rate)
3. Percentiles, quartiles and deciles

RECOMMENDED BOOKS

Statistical methods for psychology by Howell DC in 1992 publisher by Belmont CA Duxby press USA

A guide to research methodology, biostatistics and medical writing by college of physicians and surgeons Pakistan by WHO collaboration center

Reading understanding multivanant statistics giimm LG Yard AD PR, in 1995 publisher American Psychological association

Ilyas Ansari's community medicine (Text Book) by Ilyas and Ansari 2003 published by Medical division Urdu Bazaar Karachi.

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4th SEMESTER**PAPER – 1:-****ANATOMY AND PHYSIOLOGY RELATED TO UROLOGY****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of renal anatomy and physiology related to urology.

COURSE CONTENTS:**Embryology of renal tract:**

Kidney

Uretar

Bladder

Developmental anomalies of renal tract

Anatomy of renal tract

Kidney

Uretar

Physiology of renal tract;

Kidney

Uretar

RECOMMENDED BOOKSClinical anatomy by Rechar Snal 7th edition 2000 by Churchill living stone

Essential for medical physiology by Mustafa in 1994 by MEMIT

REFERRAL BOOK:

Guyton physiology by Hercourt Brace in 1994 by WR Sounder Company

Gray anatomy by roger War wick, Peter L Williams in 1973 by Lang man group Ltd

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER – 2 :- CLINICAL ASPECTS OF UROLOGY PATIENT AND CLINICAL PRACTICE**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of clinical aspects of Urology patients in OPD, ward and ward management.

COURSE CONTENTS:

Patient attendant in OPD

Receiving of the patient

History taking

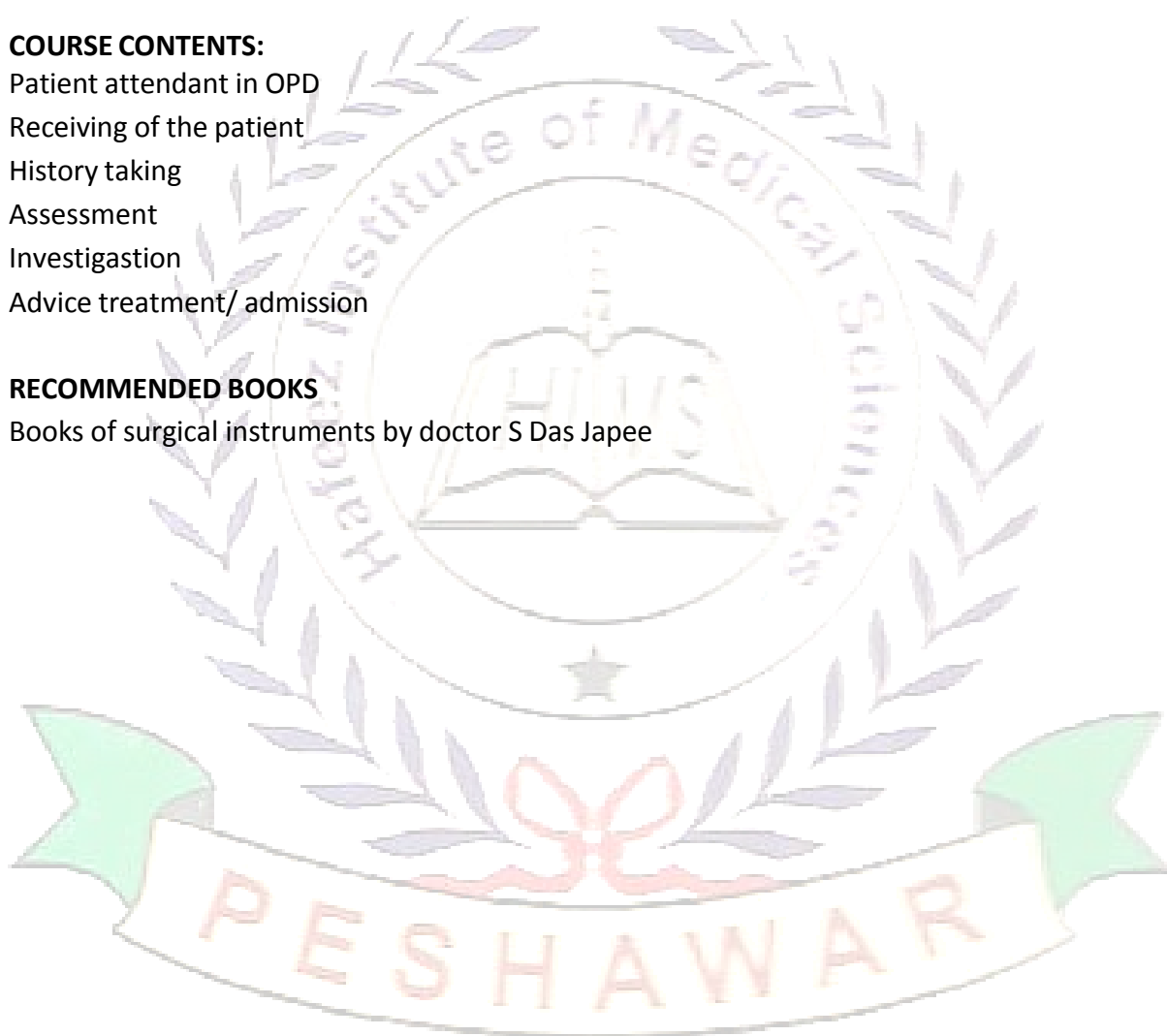
Assessment

Investigation

Advice treatment/ admission

RECOMMENDED BOOKS

Books of surgical instruments by doctor S Das Japee

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PAPER – 4:- UROLOGY SURGICAL TECHNIQUE AND CLINICAL PRACTICE

CREDIT HOURS:	3+1	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of Urology surgical technique and clinical practice in Urology OT, OPD and ward.

COURSE CONTENTS:**Preparation for operation**

Physical preparation

Catheterization, skin preparation, suture material, surgical needle and surgical drain

Introduction to Operation Theater, OT table.

Instrument

Use in operation, his maintenance, operating care and introduction to anaesthesia

Ward management, patient preparation for the admission, wound care addressing, care of nasogastric tube, catheter and drain tube.

History of the patient, ward investigation, tetanus immunization, preparation of patient for surgery, preop medication, suture removing, preparation of the patient for discharge.

Patient attendant in OPD

Receiving of the patient

History taking

Assessment

Investigation

Advice treatment/ admission

RECOMMENDED BOOKS

Operative techniques by doctor S das JAPEE

Moroneys surgery by Malcomr colmer, 1986 by EL.BS

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**PAPER – 5 :- PATHOLOGY-I RELATED TO UROLOGY,
SURGICAL PROCEDURE & CLINICAL PRACTICE**

CREDIT HOURS: 3+1

MARKS 100

INTERNAL MARKS 40

EXTERNAL MARKS 60

TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of renal pathology related to urology and his surgical procedure/ clinical jpractice in Urology OPD and ward.

COURSE CONTENTS:

Tumors/neoplastic disease

Renal tomor, Testicular tumor, Ca;prostate, Ca;penis

Fistulas

U.v.f., V. intestine f, V.uterine f

A.v fistula, dialysis, renal transplantation

Urological investigation

Urine, Blood

Radiological x-ray. Usg, ct, mineral scane

Ward management, pateint preparation for the admission, wound care addressing, care of nasogastric tube, catheter and drain tube.

History of the patient, ward investigation, tentness immunization, preparation of patient for surgery, preup medication, suture removing, preparation of the patient for discharge.

Patient attendant in OPD, Receiving of the patient, History taking, Assessment, Investigastion

Advice treatment/ admission

RECOMMENDED BOOKS

Moroneys surgery by Malcomr colmer, 1986 by EL.BS

Robbins pathology 6th edition in 1998 by I.E Sounder

Spiral of Uroogy

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PAPER-6:**BASIC EPIDEMIOLOGY -II (4th SEMESTER)****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce to the students the know-how of the subject of epidemiology in order to apply the knowledge of the subject regarding the community and community related disease.

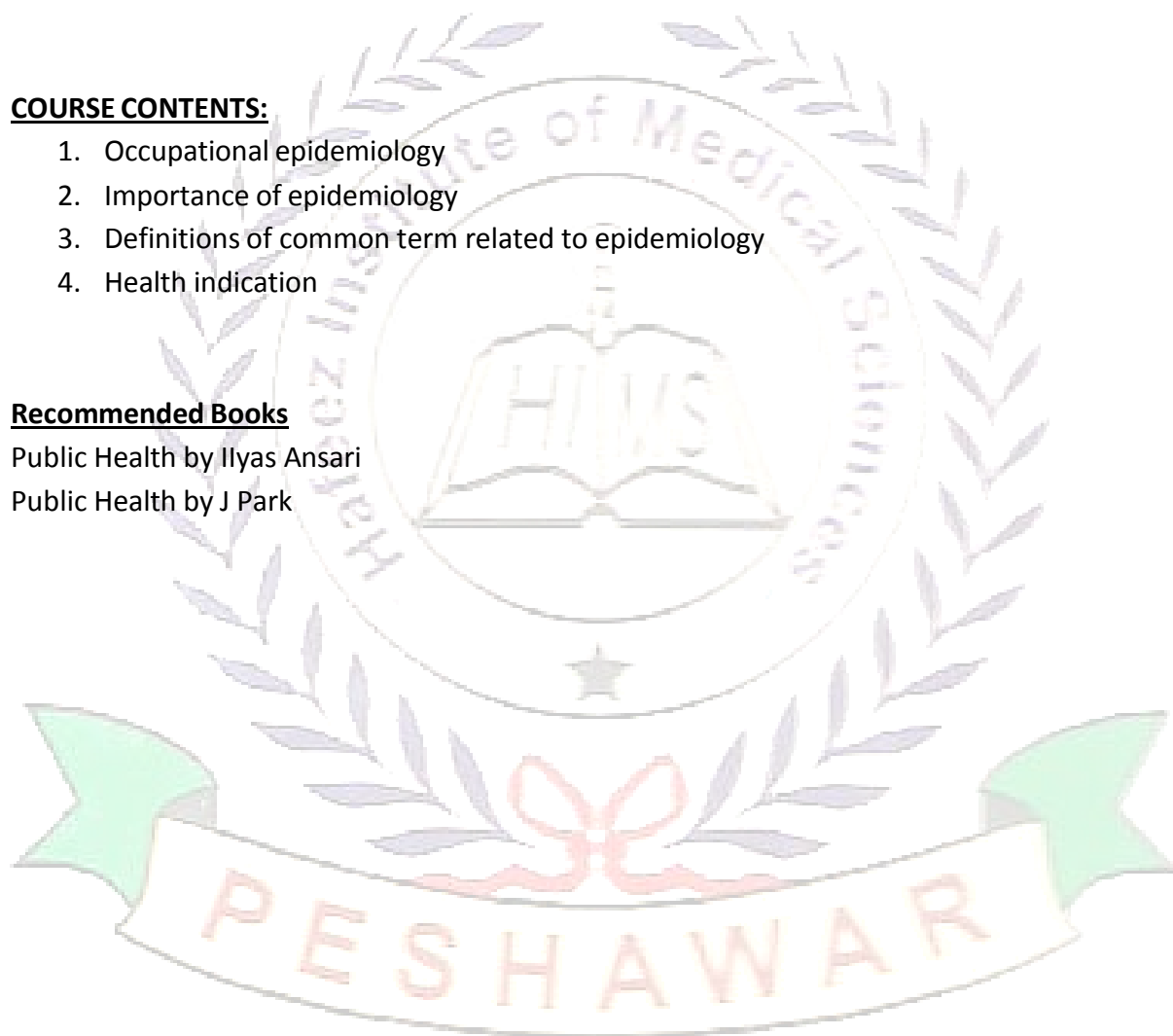
COURSE CONTENTS:

1. Occupational epidemiology
2. Importance of epidemiology
3. Definitions of common terms related to epidemiology
4. Health indicators

Recommended Books

Public Health by Ilyas Ansari

Public Health by J Park

**Prepared By:****Hafeez Institute of Medical Sciences Peshawar**

PAPER-7: SOCIOLOGY -II (4th SEMESTER)

CREDIT HOURS:	3	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

To produce to the students the significance of definition and scope of sociology as a science, their relation with other sciences.

COURSE CONTENTS:

1. **Social disorganization**
The concept and factor of social organization, family, group and community disorganization
2. **Problem of community**
Problem of crime, method of treatment and preventative measure
3. **Education Problems**
Deterioration of education standard in school, college and university
4. **Health Problems**
Illness behavior, delivery and utilization of health services
5. **Introduction to applied sociology**
Definition of applied sociology, nature and causative analysis of social problem and the role of sociologist in solving social problems
6. **Application of social research in social problems**
Social servu and social research, nature purpose and function

Recommended Books

Medical sociology by William C Cuckerham in 1978 printed by USA Health education by Lurna Robinson Wesley F Alles in 1994 by Times Mirror/Mosby College Publishing ST Liois Turonto

Reference Book:

Social psychology of health by Shirlynn Spacapan Stuart Oskanp Edition by SAGE publication New Delhi, New York, in 1987

Prepared By:
Hafeez Institute of Medical Sciences Peshawar

PAPER-6: BIOSTATISTICS -II (4th SEMESTER)

CREDIT HOURS:	3	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

To introduce to the students the significance of bio-statistics their topic in univariate statistics means basic concept, describing and exploring data, normal distribution, sampling distribution and hypothesis testing, basic concept of probability and categorical data CH and application of statistics and social research.

COURSE CONTENTS:

Topics in univariate statistics

- A. Sampling distribution and hypothesis testing
- B. Basic concepts of probability
- C. Data collection (purpose and technique)
- D. Categorical data and numerical data
 - Application of statistics in social research
 - Percentages, measure of central tendencies
- A. Means, Median and Mode
- B. Quartile, decile and percentile

RECOMMENDED BOOKS

Statistical methods for psychology by Howell DC in 1992 publisher by Belmont CA Duxby press USA

A guide to research methodology, biostatistics and medical writing by college of physicians and surgeons Pakistan by WHO collaboration center

Reading understanding multivariate statistics giimm LG Yard AD PR, in 1995 publisher American Psychological association

Ilyas Ansari's community medicine (Text Book) by Ilyas and Ansari 2003 published by Medical division Urdu Bazaar Karachi.

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

5th SEMESTER**PAPER – 1:-****ANATOMY AND PHYSIOLOGY RELATED TO NEPHROLOGY****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of renal anatomy and physiology related to nephrology, dialysis and clinical practice in Nephrology ward and OPD.

COURSE CONTENTS:

Morphology of the kidney and its developemnts
 General feature and its relation to different body organ
 Surface anatomy of the kidney
 Brief anatomy uretar, bladder and urethra
 Breif description of renal gland
 Physiology function of nepheron

RECOMMENDED BOOKS

Clinical anatomy by Recharad Snal 7th edition 2000 by Churchill living stone
 Essential for medical physiology by Mustafa in 1994 by MEMIT

REFERRAL BOOK:

Guyton physiology by Hercourt Brace in 1994 by WR Sounder Company
 Gray anatomy by roger War wick, Peter L Williams in 1973 by Lang man group Ltd

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER – 2:- RENAL PATHOLOGY II AND CLINICAL PRACTICE IN NEPHROLOGY OPD, WARD**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of renal pathology related to Nephrology and dialysis.

COURSE CONTENTS:

1. Sign and symptoms of renal disease
2. Clinical assessment of hyponatremia
3. Hypernatremia
4. Metabolic acidosis
5. Respiratory acidosis/ alkalosis
6. Hyperkalemia
7. Hypocalcemia
8. Hyperphosphatemia
9. Oedema and clinical uses of diuretics
10. Introduction to glomerular disease

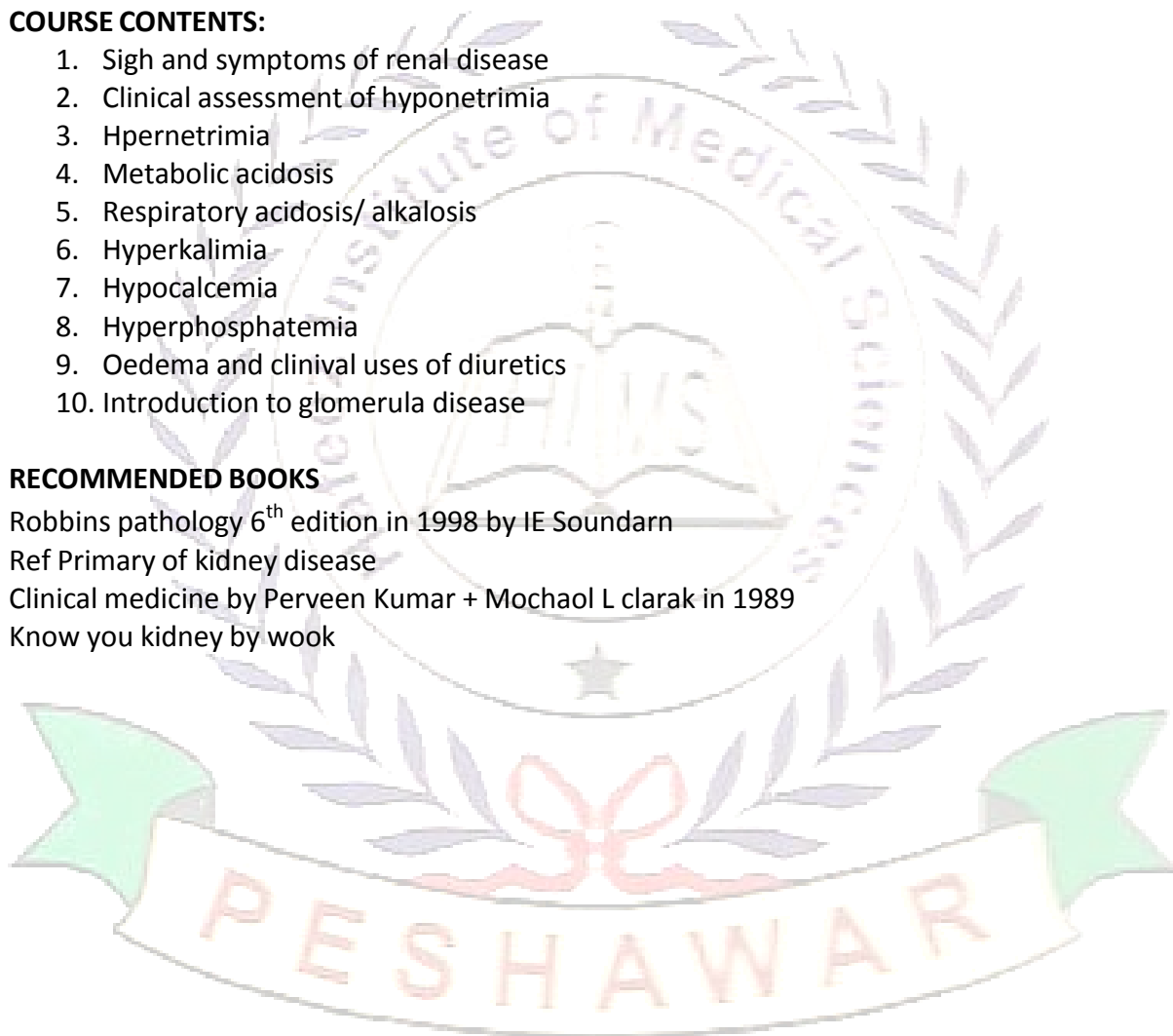
RECOMMENDED BOOKS

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

**Prepared By:****Hafeez Institute of Medical Sciences Peshawar**

PAPER – 3:-

RENAL DISEASE, PHARMACOLOGY AND CLINICAL PRACTICE

CREDIT HOURS: 3+1

MARKS 100

INTERNAL MARKS 40

EXTERNAL MARKS 60

TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of renal disorder

COURSE CONTENTS:

1. Management of acute renal failure
2. Drugs during different nephritides
3. Principal of drugs thereapy in renal failure
4. Sickle cell nephropathy
5. Polycystic and acquired cystic disease
6. Alport's syndrome and related disorder
7. Medullary cystic disease

PHARMACOLOGY RELATED TO NEPHROLOGY

Anti diuretics, Anti hypertensive, Antibiotic, Anti inflammatory
Anti dialysis etc

Ward management, patient preparation for the admission, wound care and dressing, care of nasogastric tube, cateter and drain tube

History of the patient, ward investigation, tetness immunization, preparation of patient for surgery, pre-up medication, sture removing, preparation the patient for discharge

Patient attendant in OPD, Receiving of the patient

History taking, assessment, Investigation and provisional / differential

Advice treatment / admission

RECOMMENDED BOOKS

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Parmacology by Shamin in 2006 by Shamin publication

Synopsis of pharmacology by Dr. Wahid Shah in 1992 KMC

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

PAPER – 4:- CLINICAL ASPECTS OF RENAL PATHOLOGY I AND CLINICAL PRACTICE**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of clinical aspect of renal pathology and clinical practice in ward and dialysis

COURSE CONTENTS:**Renal/ glomerular disease**

Drug therapy

Clinical assessment of:

Hypernatremia/hyponatremia

Hypekalemia/hypokalemia

Hypercalcemia/hypocalcemia

Hyperphosphatemia

Renal involvement in

Cardiovascular disease

Connective tissue disease

Diabetes

Chest disease

Git disease

RECOMMENDED BOOKS:Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER-5 PATHOLOGY -I (5th SEMESTER)**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:-**

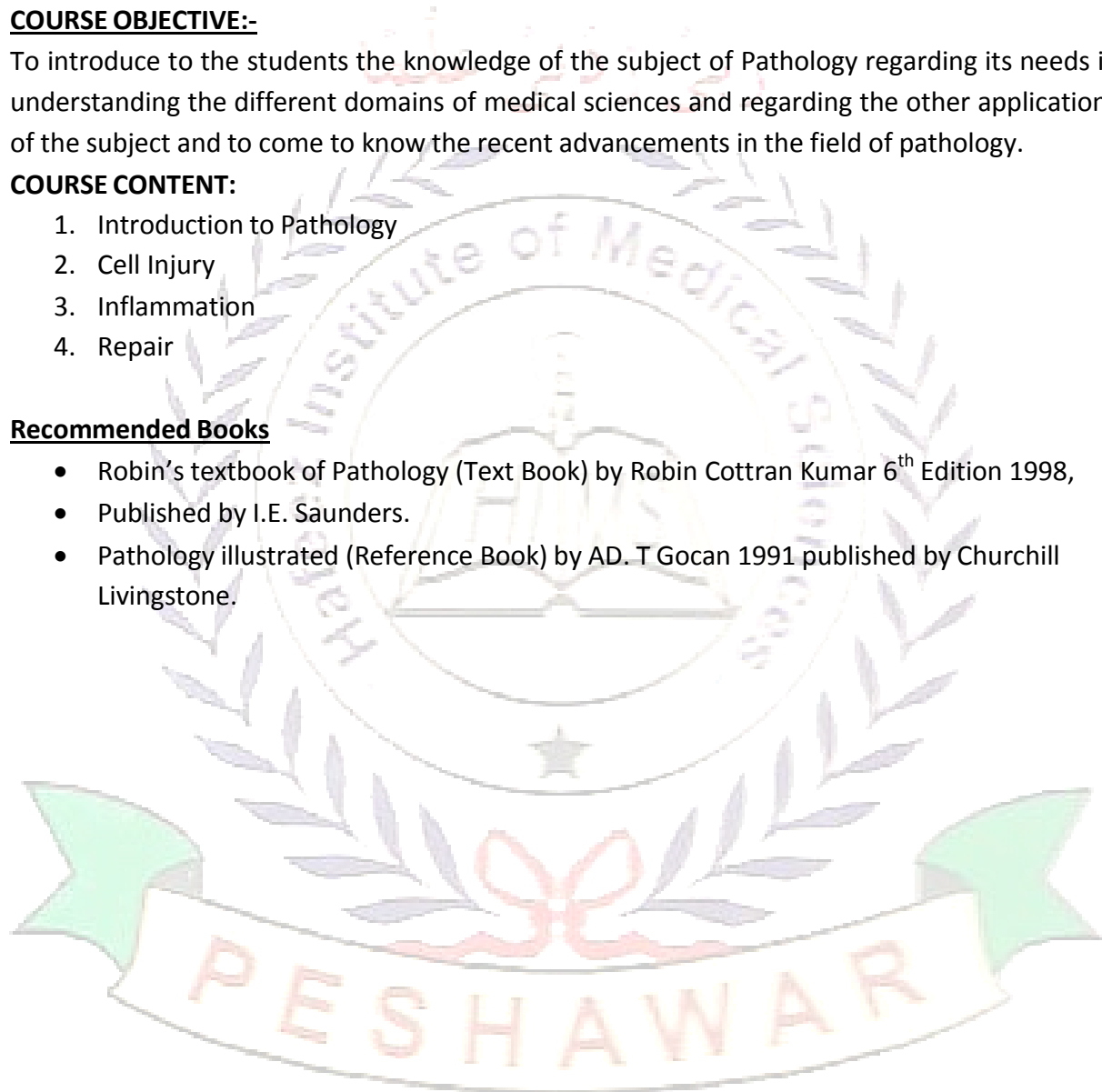
To introduce to the students the knowledge of the subject of Pathology regarding its needs in understanding the different domains of medical sciences and regarding the other applications of the subject and to come to know the recent advancements in the field of pathology.

COURSE CONTENT:

1. Introduction to Pathology
2. Cell Injury
3. Inflammation
4. Repair

Recommended Books

- Robin's textbook of Pathology (Text Book) by Robin Cottran Kumar 6th Edition 1998,
- Published by I.E. Saunders.
- Pathology illustrated (Reference Book) by AD. T Gocan 1991 published by Churchill Livingstone.



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Hafeez Institute of Medical Sciences Peshawar

PAPER-6 :- BASIC COMMUNICATION SKILLS -I (5th SEMESTER)**CREDIT HOURS: 3****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:-**

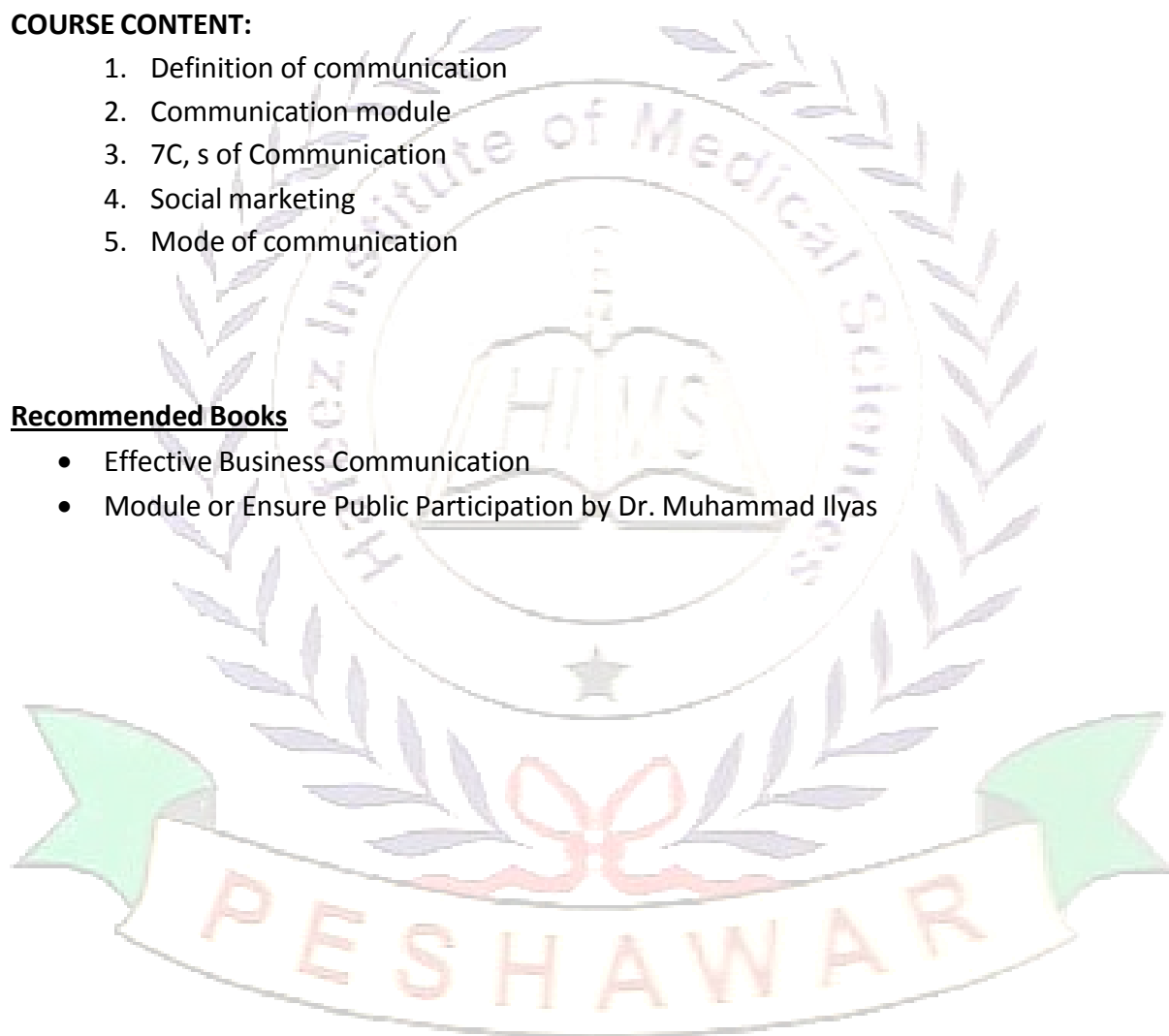
To introduce to the students about the basic communication skill

COURSE CONTENT:

1. Definition of communication
2. Communication module
3. 7C, s of Communication
4. Social marketing
5. Mode of communication

Recommended Books

- Effective Business Communication
- Module or Ensure Public Participation by Dr. Muhammad Ilyas



Prepared By:
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6th SEMESTER

PAPER – 1:-	ANATOMY AND PHYSIOLOGY RELATED TO NEPHROLOGY		
CREDIT HOURS:	3+1		MARKS 100
INTERNAL MARKS	40	EXTERNAL MARKS 60	TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of renal anatomy and physiology related to nephrology, dialysis and clinical practice in Nephrology ward and OPD.

COURSE CONTENTS:

Urine formation

Effect of hormones on the kidney

Ward management, patient preparation for the admission, wound care addressing, care of nasogastric tube, catheter and drain tube.

History of the patient, ward investigation, tetanus immunization, preparation of patient for surgery, preop medication, suture removing, preparation of the patient for discharge.

Patient attendant in OPD, Receiving of the patient, History taking, Assessment, Investigation

Advice treatment/ admission

RECOMMENDED BOOKS

Clinical anatomy by Richard Snell 7th edition 2000 by Churchill living stone

Essential for medical physiology by Mustafa in 1994 by MEMIT

REFERRAL BOOK:

Guyton physiology by Hucourt Brace in 1994 by WR Sounder Company

Gray anatomy by Roger Warwick, Peter L Williams in 1973 by Lang man group Ltd

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

PAPER – 2:- RENAL PATHOLOGY II AND CLINICAL PRACTICE IN NEPHROLOGY OPD, WARD**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS:40****EXTERNAL MARKS:60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of renal pathology related to Nephrology and dialysis.

COURSE CONTENTS:

1. Renal involvement in cardiovascular disease/connective tissue disorder diabetes chest disease cancer git disease.
2. Etiology and pathophysiology of acute renal failure
3. Acute renal failure and metabolic derangement
4. Developmental disorder of the kidney, ureter and bladder
5. Pathology of common renal disease
6. Pathology of acute renal failure
7. Chronic renal failure
8. Renal cell carcinoma
9. Functional pathology of kidney
10. Acid base, fluid, electrolyte disorder.

RECOMMENDED BOOKS

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook



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Hafeez Institute of Medical Sciences Peshawar

PAPER – 3:-	RENAL DISEASE, PHARMACOLOGY AND CLINICAL PRACTICE		
CREDIT HOURS:	3+1		MARKS 100
INTERNAL MARKS	40	EXTERNAL MARKS 60	TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the students the significance of renal disorder

COURSE CONTENTS:

1. Tubular interstitial disease
2. Nephrolithiasis
3. Uti
4. Kidny in infants, children, preganacy Aging Kidney
5. Introduction to chronic renal failure
6. Hypertension

PHARMACOLOGY RELATED TO NEPHROLOGY

Anti diuretics, Anti hypertensive, Antibiotic, Anti inflammatory
Anti dialysis etc

Ward management, patient preparation for the admission, wound care and dressing, care of nasogastric tube, cateter and drain tube

History of the patient, ward investigation, tetness immunization, preparation of patient for surgery, pre-up medication, sture removing, preparation the patient for discharge

Patient attendant in OPD, Receiving of the patient

History taking, assessment, Investigation and provisional / differential

Advice treatment / admission

RECOMMENDED BOOKS

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Parmacology by Shamin in 2006 by Shamin publication

Synopsis of pharmacology by Dr. Wahid Shah in 1992 KMC

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

PAPER – 4 :- CLINICAL ASPECTS OF RENAL PATHOLOGY I AND CLINICAL PRACTICE**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the students the significance of clinical aspect of renal pathology and clinical practice in ward and dialysis

COURSE CONTENTS:**Renal/ glomerular disease**

Introductin

Sign and symptoms

Clinical assessment of:

Metholobic disorder

Metobolic acidosis/ alkalosis

Repiratory acidosis/ alkalosis

Renal involvement in

Cancer

Hypertension

Definition

Types patholensis

Essential hypertension

Renal vascular hypertension

Treatment

RECOMMENDED BOOKS:Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Parmacology by Shamin in 2006 by Shamin publication

Synopsis of pharmacology by Dr. Wahid Shah in 1992 KMC

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER-5**PATHOLOGY -II (6th SEMESTER)****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:-**

To introduce to the students the knowledge of the subject of Pathology regarding its needs in understanding the different domains of medical sciences and regarding the other applications of the subject and to come to know the recent advancements in the field of pathology.

COURSE CONTENT:

1. Homodynamic Disorders
2. Disorders of Immunity
3. Neoplasia
4. Microbiology

Recommended Books

- Robin's textbook of Pathology (Text Book) by Robin Cottran Kumar 6th Edition 1998, Published by I.E. Saunders.
- Pathology illustrated (Reference Book) by AD. T Gocan 1991 published by Churchill Livingstone.

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER-6 BASIC COMMUNICATION SKILLS -II (6th SEMESTER)

CREDIT HOURS:	3	MARKS	
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

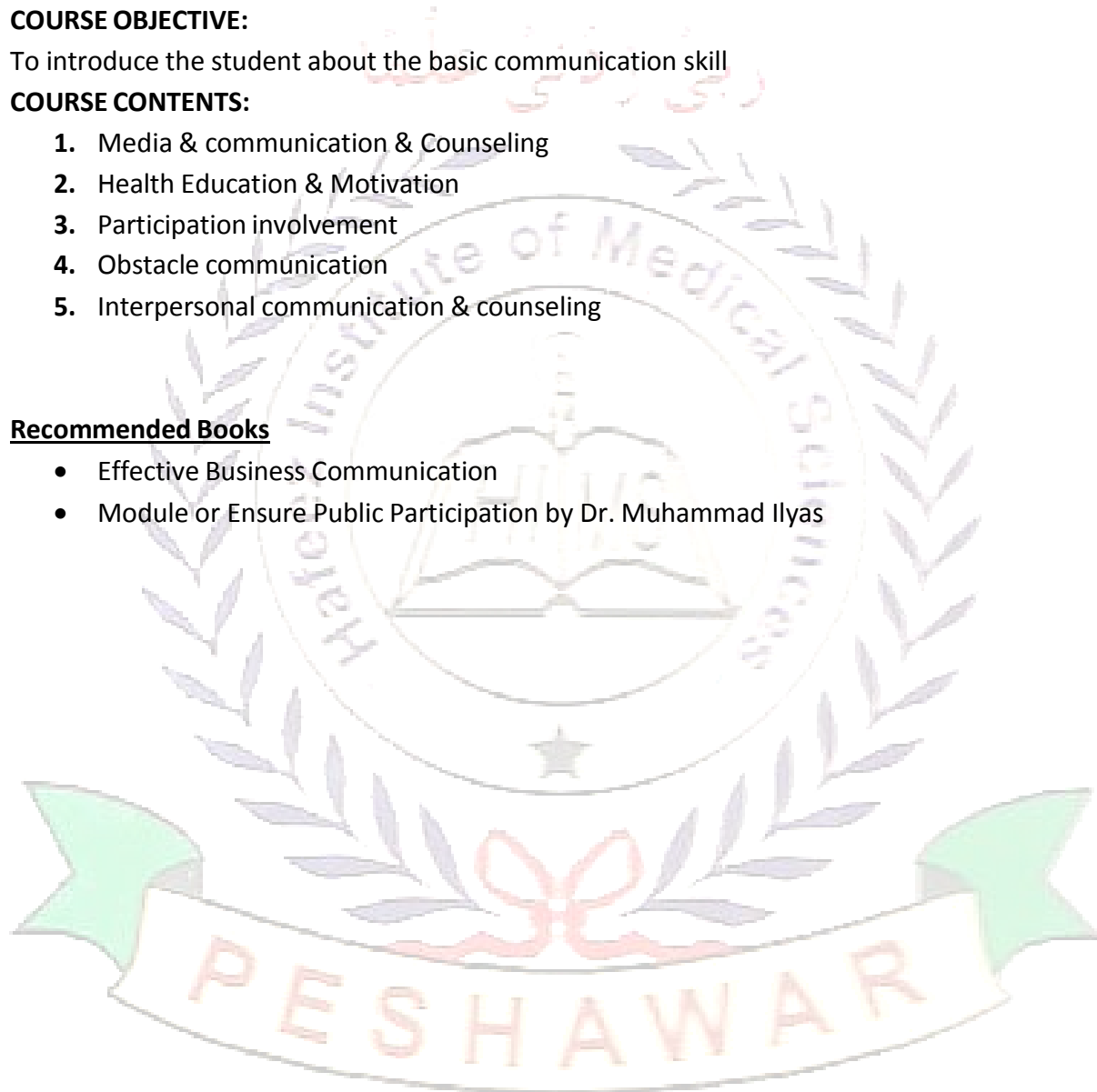
To introduce the student about the basic communication skill

COURSE CONTENTS:

1. Media & communication & Counseling
2. Health Education & Motivation
3. Participation involvement
4. Obstacle communication
5. Interpersonal communication & counseling

Recommended Books

- Effective Business Communication
- Module or Ensure Public Participation by Dr. Muhammad Ilyas



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7th SEMESTER**PAPER – 1:- CLINICAL ASPECTS OF RENAL PATHOLOGY II AND
SPECIALIZED DIALYSIS CLINICAL PRACTICE****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the student the significance of renal pathology and clinical practice in dialysis

COURSE CONTENTS:**Urinary tract infections in**

Infants

Childrens

Pregnancy

Nephrolithiasis

Definition

Types

Causes

Sign and symptoms

Treatment

Sickle cells nephropathy**Cystic disease of kidney****RECOMMENDED BOOKS:**Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Nephrology dialysis by Davidson

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

**PAPER – 2 :- RENAL DISEASE AND MANAGEMENT AND
SPECIALIZED DIALYSIS CLINICAL PRACTICE**

CREDIT HOURS: 3+1

MARKS 100

INTERNAL MARKS 40

EXTERNAL MARKS 60

TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the student the significance of renal disease his management and clinical practice in dialysis

COURSE CONTENTS:

1. Treatment of metabolic derangement
2. Ecg-normal and abnormal in renal disease
3. Treatment of glomerular disease
4. Role of steroid in renal disease
5. Treatment modalities in acute renal failure and chronic renal failure.
6. Treatment of renal emergencies
7. Complication of dialysis
8. Pre and post dialysis care and instruction
9. Shock and renal involvement in shock

RECOMMENDED BOOKS:

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Nephrology dialysis by Davidson

Embryology review board series and management of renal disease

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:

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PAPER – 3:- TREATMENT OF ADVANCED RENAL DISEASE LIFE SUPPORT PROCEDURE AND SPECIALIZED DIALYSIS CLINICAL PRACTICE

CREDIT HOURS: 3+1 MARKS 100
INTERNAL MARKS 40 EXTERNAL MARKS 60 TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the student the significance of advance renal disease and his treatment

COURSE CONTENTS:

Treatment of metabolic derangement

Metabolic acidosis
 Metabolic alkalosis
 Respiratory acidosis
 Respiratory alkalosis

Treatment of electrolytes imbalance

Hypenatremia/hyponatremia
 Hyperkalemia/hypokalemia
 Hypercalcemia
 Hypocalcemia

RECOMMENDED BOOKS:

Robbins pathology 6th edition in 1998 by IE Soundarn
 Ref Primary of kidney disease
 Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989
 Know you kidney by wook
 Nephrology dialysis by Davidson
 Embryology review board series and management of renal disease

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

PAPER – 4:- DIALYSIS, CLINICAL ASPECT AND SPECIALIZED DIALYSIS CLINICAL PRACTICE**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the student the significance of pre and post dialysis care and complications and clinical practice in dialysis

COURSE CONTENTS:**Dialysis Pre-dialysis**

Care and instructions
Post-dialysis care and instructions
Complication of dialysis

Septicemia

Cardiac arrest
Use of contrast in renal disease
The importance of cardiopulmonary resuscitation

RECOMMENDED BOOKS:

Robbins pathology 6th edition in 1998 by IE Soundarn
Ref Primary of kidney disease
Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989
Know you kidney by wook
Nephrology dialysis by Davidson
Embryology review board series and management of renal disease

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER-5: PUBLIC HEALTH -I (7th SEMESTER)

CREDIT HOURS: 3+1 MARKS 100
INTERNAL MARKS 40 EXTERNAL MARKS 60 TIME: 3 HRS

COURSE OBJECTIVE:

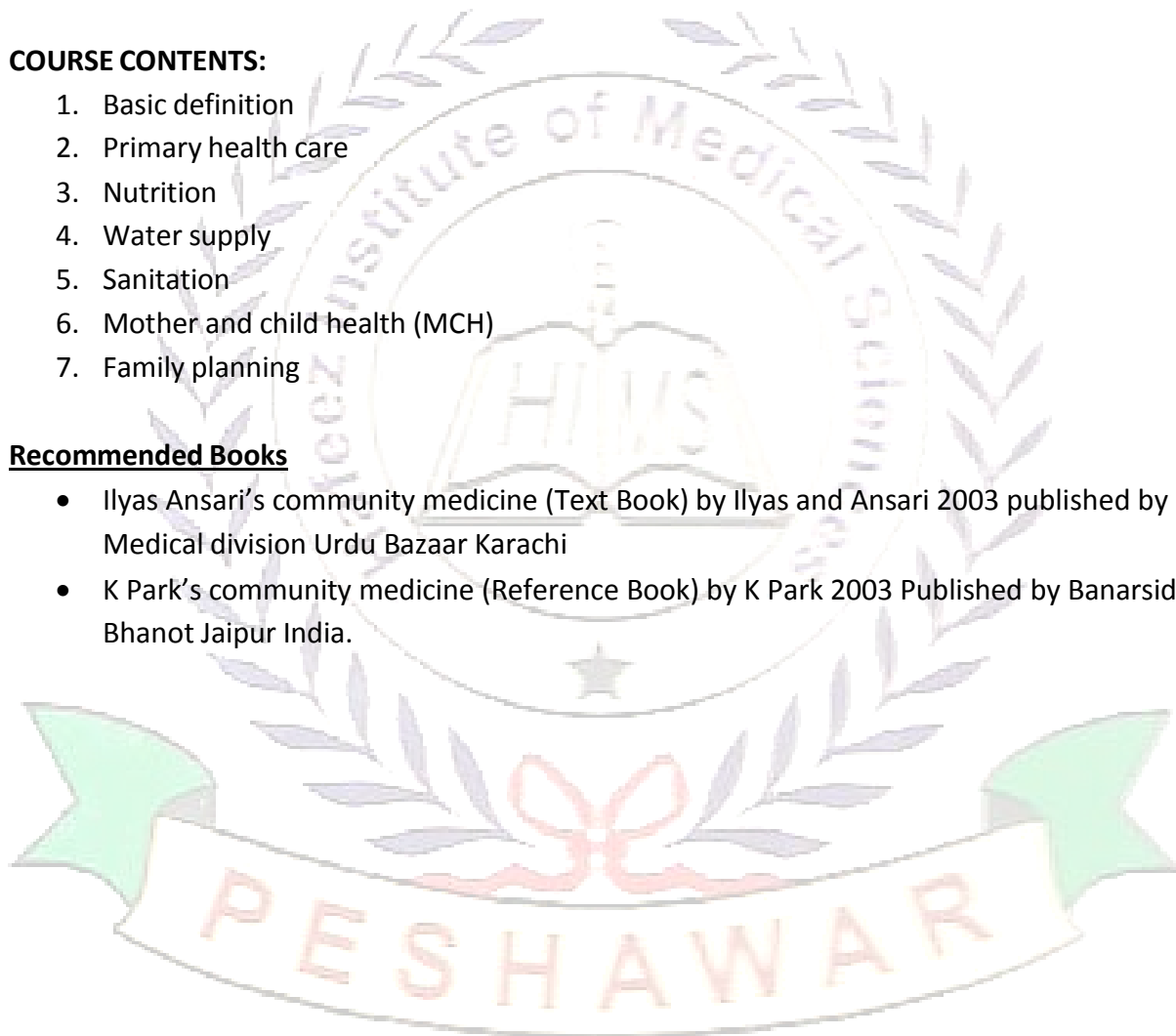
To introduce to the student the significance of the discipline of public health in medical and applied social sciences regarding its history applications and development.

COURSE CONTENTS:

1. Basic definition
2. Primary health care
3. Nutrition
4. Water supply
5. Sanitation
6. Mother and child health (MCH)
7. Family planning

Recommended Books

- Ilyas Ansari's community medicine (Text Book) by Ilyas and Ansari 2003 published by Medical division Urdu Bazaar Karachi
- K Park's community medicine (Reference Book) by K Park 2003 Published by Banarside Bhanot Jaipur India.



Prepared By:
Hafeez Institute of Medical Sciences Peshawar

PAPER-6: RESEARCH METHODOLOGY -I (7th SEMESTER)

CREDIT HOURS:	3+1	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

Introduction the students a significance of research methodology to the students foundation, concept of measurement, design clinical research and health system research.

COURSE CONTENTS:**PART – 1 FOUNDATION**

Introduction to research (in simple term and a scientific term), concept of research, why do need research, advantage of research, identification of research need and its qualities, component of research, ethical and legal aspect of research and objective of research (definition, purpose, structure)

PART 2**(A) SELECTION OF TOPIC****The criteria points of prioritization of topic**

1. Relevance ii. Avoidance of duplication iii. Physibility IV. Political acceptability
 - v. applicability VI. Cost efficiencies vii. Ethical consideration and scales
- for rating research topic mentioned above

WORK PLAN

Its contents, how to developed a work plan, what factor should be kept in mind while preparing research work plan

© BUDGET REQUIRED FOR RESEARCH WORK

Why it is needed, wok should be taken into consideration, literature searching, statistical help, material, type of manuscript, printing of manuscript for submission and postage

Recommended Books

- Foundation of Clinical Research by Portney LG Walkais MP in 1993, Publisher by Appleton and lauge USA
- A guide to Research Methodology, Biostatistics and Medical writing by college of physicians and surgeons Pakistan by WHO collaboration center
- Health system research project by Corlien M Varkerisser, Indra Pathmanathan, Ann Brownlee in 1993 by International Development Research Center in New Delhi, Singapore.

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER-7: ETHICS & MANAGEMENT -I (7th SEMESTER)

CREDIT HOURS:	3	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

To introduce to the student of medical ethics their behavior with patients and medical staff and management of different wards, departments includes the equipments records and their duties.

COURSE CONTENTS:**Ethics:-**

Ethical conduct, relationship with patient, surgeon, physician, nurse, social workers and co-workers, preparation and uses of records, report, physical plant, equipments.

The implementation of and confirmation to the rules of professional context and understanding, the paramedic liability and obligations in the case of medico legal action, a wider knowledge of ethics relating to current social and medical policy in the paramedic society as a professional association, the role of international health agencies such as world health organization.

Recommended Books

Management A modern hospital by AV Srinivasa response book sage publication New Delhi London and 2005

Hand book of hospital personal management by RC Goyal prentice Hall of India New Delhi in 1994

Medical ethic by Dr. Mehmood Alam in 2006 by Health Department KPK

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

8th SEMESTER**PAPER – 1:-****CLINICAL ASPECTS OF RENAL PATHOLOGY II AND SPECIALIZED
DIALYSIS CLINICAL PRACTICE****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the student the significance of renal pathology and clinical practice in dialysis

COURSE CONTENTS:**Tubular interstitial disease****Acute renal failure**

Definition

Causes

Pathogenesis

Metabolic derangement

Principal of drug therapy in renal failure

Management of ARF

Chronic renal failure

Introduction

Causes, Pathogenesis, sign and symptoms and the aging kidney

RECOMMENDED BOOKS:Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Nephrology dialysis by Davidson

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER – 2:-

**RENAL DISEASE AND MANAGEMENT AND SPECIALIZED DIALYSIS
CLINICAL PRACTICE**

CREDIT HOURS: 3+1

MARKS 100

INTERNAL MARKS 40

EXTERNAL MARKS 60

TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the student the significance of renal disease his management and clinical practice in dialysis

COURSE CONTENTS:

1. Septicemia
2. Cardiac arrest
3. Use of contrast in renal medicine
4. Important of cardio pulmonary resuscitation
5. Receiving and attending the patient in dialysis room
6. Preparation of patient for dialysis procedure
7. Pre dialysis medication
8. Dialysis procedure technique, principles
9. Post dialysis care and home management.

RECOMMENDED BOOKS:

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Nephrology dialysis by Davidson

Embryology review board series and management of renal disease

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

PAPER – 3 :- TREATMENT OF ADVANCED RENAL DISEASE LIFE SUPPORT PROCEDURE AND SPECIALIZED DIALYSIS CLINICAL PRACTICE

CREDIT HOURS: 3+1 MARKS 100
INTERNAL MARKS 40 EXTERNAL MARKS 60 TIME: 3 HRS

COURSE OBJECTIVE:

To introduce the student the significance of advance renal disease and his treatment

COURSE CONTENTS:

Treatment of electrolytes imbalance

Hyperphosphatemia

Ecg

Normal reading

Abnormal in renal disease

Treatment of

Glomerular disease

Renal emergencies

Role of steroids in renal disease

Treatment modalities in

Acute renal failure

Chronic renal failure

RECOMMENDED BOOKS:

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Nephrology dialysis by Davidson

Embryology review board series and management of renal disease

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:

Hafeez Institute of Medical Sciences Peshawar

PAPER – 4 DIALYSIS, CLINICAL ASPECT AND SPECIALIZED DIALYSIS CLINICAL PRACTICE**CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

To introduce the student the significance of pre and post dialysis care and complications and clinical practice in dialysis

COURSE CONTENTS:**Practice in dialysis**

Receiving and attending the patient in dialysis room

Preparation of patient for dialysis procedure

Pre dialysis medication

Dialysis procedure technique, principals

Post dialysis care and home management

RECOMMENDED BOOKS:

Robbins pathology 6th edition in 1998 by IE Soundarn

Ref Primary of kidney disease

Clinical medicine by Perveen Kumar + Mochaol L clarak in 1989

Know you kidney by wook

Nephrology dialysis by Davidson

Embryology review board series and management of renal disease

REFERRAL BOOK:

General pathology by water Israel in 1999 by Churchill living stone

Prepared By:**Hafeez Institute of Medical Sciences Peshawar**

PAPER-5:**PUBLIC HEALTH -II (8th SEMESTER)****CREDIT HOURS: 3+1****MARKS 100****INTERNAL MARKS 40****EXTERNAL MARKS 60****TIME: 3 HRS****COURSE OBJECTIVE:**

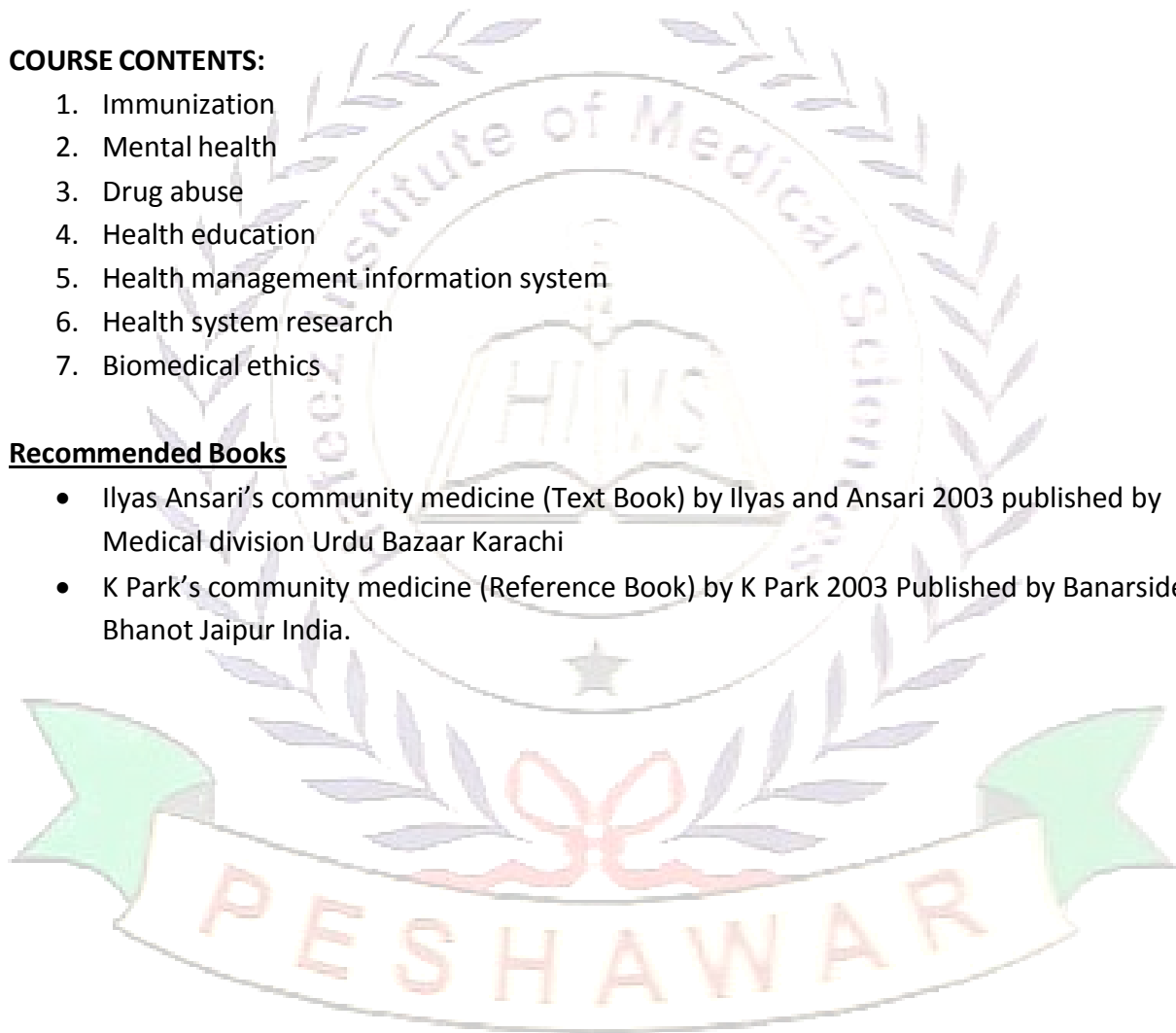
To introduce to the student the significance of the discipline of public health in medical and applied social sciences regarding its history applications and development.

COURSE CONTENTS:

1. Immunization
2. Mental health
3. Drug abuse
4. Health education
5. Health management information system
6. Health system research
7. Biomedical ethics

Recommended Books

- Ilyas Ansari's community medicine (Text Book) by Ilyas and Ansari 2003 published by Medical division Urdu Bazaar Karachi
- K Park's community medicine (Reference Book) by K Park 2003 Published by Banarside Bhanot Jaipur India.

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PAPER-6: RESEARCH METHODOLOGY -II (8th SEMESTER)

CREDIT HOURS:	3	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

Introduction the students a significance of research methodology to the students foundation, concept of measurement, design clinical research and health system research.

COURSE CONTENTS:**PART – 3****CONCEPTS OF MEASUREMENT**

Principals and reliability of measurement, errors and sources of measurement, types of measurement, measure of disease frequency and screening, (introduction, validity and screening test)

DESIGNING CLINICAL RESEARCH

Studies design (introduction, selection of design), research questionnaire, validity and reliability of research finding, confounding factors, strategies to deal with threats to validity.

Recommended Books

Foundation of Clinical Research by Portney LG Walkais MP in 1993, Publisher by Appleton and lauge USA

A quide to Research Methodology, Biostatistics and Medical writing by college of physicians and surgeons Pakistan by WHO collaboration center

Health system research project by Corlien M Varkerisser, Indra Pathmanathan, Ann Brownlee in 1993 by International Development Research Center in New Delhi, Singapore.

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PAPER-7: ETHICS & MANAGEMENT -II (8th SEMESTER)

CREDIT HOURS:	3	MARKS	100
INTERNAL MARKS	40	EXTERNAL MARKS	60
		TIME:	3 HRS

COURSE OBJECTIVE:

To introduce to the student of medical ethics their behavior with patients and medical staff and management of different wards, departments includes the equipments records and their duties.

COURSE CONTENTS:

Management:-

Identify the features of a health care system and desirable role and function of paramedical within the system, the inter relationship of all levels of health care identify function, organization and inter relationship of departments in a health care facility, the rules and functions of paramedic in community, provincial and federal, resources available to the patient, chronically ill and elderly citizens, professional institutional and government measures to safe guard patients and control of quality care, the roles and functions of professional associations.

Principles of Management

Eliminatory features of hospital ward, unit and factors (budgetary, architectural and personnel) quality control total quality control, control, continuous quality control.

Recommended Books

Management A modern hospital by AV Srinivasa response book sage publication New Delhi London and 2005

Hand book of hospital personal management by RC Goyal prentice Hall of India New Delhi in 1994

Medical ethic by Dr. Mehmood Alam in 2006 by Health Department KPK

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