

28-2/2021

(324)

Shri G. S. Institute of Technology and Science, Indore
Department of Pharmacy

Minutes of BOS Meeting

A meeting of Board of Studies was held on 23/02/2021 in online mode at 3.00 pm in the Department of Pharmacy for considering necessary revisions in B. Pharm and M. Pharm. Syllabus.

Following members were present in the meeting:

1. Dr. T. R. Saini (Chairman)
2. Dr. S. R. Wakode, Professor, (External Expert)
DIPSAR, New Delhi
3. Dr. Rajesh Sharma. (External Expert)
Professor & Head,
School of Pharmacy, DAVV, Indore
4. Dr. (Mrs.) Meera Tiwari (member)
5. Dr. R. K. Maheshwari (member)
6. Mr. Suresh Kumar Paswan (member)
7. Dr. Vineet Singh (member)
8. Mr. Prakash Kumar Soni (member)
9. Mr. Gourav Jain (member)
10. Mr. Shubham Sharma (member)
11. Dr. Puneet Kumar Samaiya (member)
12. Dr. Sharad Prakash Pandey (member)
13. Dr. Rakesh Sagar (member)
14. Dr. Abhishek Kumar Sahi (member)
15. Dr. Omprakash Tanwar (member)

(9,23)

Following resolutions were made:

1. In the B. Pharm course list of new relevant references to be recommended in different subjects was discussed. The subject wise approved list of new references added is as follows:

Syllabus B. Pharm I Semester

1. PY1Y109 Human Anatomy & Physiology I

Reference to be included: <https://z-lib.org>

2. PY1Y006 Remedial Biology

Reference to be included: <https://z-lib.org>

Syllabus of B. Pharm II Semester

1. PY1Y610 Human Anatomy and Physiology II

Reference to be included: <https://z-lib.org>

2. PY1Y613 Subject Nomenclature: Biochemistry

Reference to be included:

Biochemistry, 5th Edition, Elsevier India, Satyanaryana U., Chakrapani U.

3. PY1Y611 Pharmaceutical Organic Chemistry I

Reference to be included:

<http://www.chem.uiuc.edu/weborganic/organic/tutorials.htm>

<https://www.organic-chemistry.org/>

<https://organicchemistrydata.org/links/>

<https://www.masterorganicchemistry.com/resource-guide/>

4. PY1Y612 Pathophysiology

Reference to be included: <https://z-lib.org>

5. PY1Y504 Environmental Sciences

Reference to be included:

Kaushik A., Environmental Science, New Age International Pvt Ltd

Syllabus of B. Pharm III Semester

1. PY2Y015 Pharmaceutical Organic Chemistry II

Reference to be included:

<http://www.chem.uiuc.edu/weborganic/organic/tutorials.htm>

<https://www.organic-chemistry.org/>

<https://organicchemistrydata.org/links/>

<https://www.masterorganicchemistry.com/resource-guide/>

Syllabus of B. Pharm IV Semester

1. PY2Y629 Pharmaceutical Organic Chemistry III

Reference to be included:

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<http://www.chem.uic.edu/weborganic/organictutorials.htm>

<https://www.organic-chemistry.org/>

<https://organicchemistrydata.org/links/>

<https://www.masterorganicchemistry.com/resource-guide/>

2. PY 2Y 627 Medicinal Chemistry I

Reference to be included:

Harkishan Singh and V. K. Kapoor, "Medicinal and Pharmaceutical Chemistry" Vallabh Prakashan Publishers, Delhi, 1996

Graham L. Patrick, "An Introduction to Medicinal Chemistry", 5th edition, 2013, Oxford University Press

Gareth Thomas, "Fundamentals of Medicinal Chemistry", 2nd edition, Wiley-Blackwell, 2007.

<https://pharmafactz.com/online-resources-for-students-of-medicinal-chemistry/>

3. PY 2Y 628 Pharmacology I

Reference to be included:

<https://z-lib.org>

Prakash A. Medhi B, Practical Manual of Experimental and Clinical Pharmacology, 1/e edition, Jaypee Brothers Medical Publishers (P) Ltd. 2010

Syllabus of B. Pharm V Semester

1. PY3Y016 Medicinal Chemistry II

Textbook to be included in reference section

Harkishan Singh and V. K. Kapoor, "Medicinal and Pharmaceutical Chemistry" Vallabh Prakashan Publishers, Delhi, 1996

Graham L. Patrick, "An Introduction to Medicinal Chemistry", 5th edition, 2013, Oxford University Press

Paul M. Dewick, "Essentials of Organic Chemistry: For Students of Pharmacy, Medicinal Chemistry and Biological Chemistry", 5th edition, 2006, John Wiley & Sons

Camille Georges Wermuth, David Aldous, Pierre Raboisson, Didier Rognan, "The Practice of Medicinal Chemistry", 4th edition, 2015, Academic Press.

Gareth Thomas, "Fundamentals of Medicinal Chemistry", 2nd edition, Wiley-Blackwell, 2007.

Website to be included in reference section.

<https://pharmafactz.com/online-resources-for-students-of-medicinal-chemistry/>

2. PY3Y020 Pharmacology II

Reference to be included:

<https://z-lib.org>

Prakash A. Medhi B, Practical Manual of Experimental and Clinical Pharmacology, 1/e edition, Jaypee Brothers Medical Publishers (P) Ltd. 2010

3. PY3Y019 Pharmacognosy & Phytochemistry II

Reference to be included:

Biren Shah and A. K. Seth, Text Book of Pharmacognosy and Phytochemistry, Second edition, 2011, CBS publisher and distributors pvt ltd, New Delhi.

4. PY 3Y018 **Pharmaceutical Jurisprudence**

Reference to be included:

N. K. Jain, Pharmaceutical Jurisprudence, 2015, 4th Ed., Vallabh Prakashan, Delhi
N.K. Jain, A textbook of Forensic Pharmacy, 2014, 3th Ed., Vallabh Prakashan, Delhi

Syllabus of B. Pharm VI Semester

1. PY 3Y517 **Medicinal Chemistry III**

Reference to be included:

Harkishan Singh and V. K. Kapoor, "Medicinal and Pharmaceutical Chemistry Vallabh Prakashan Publishers, Delhi, 1996.

Graham L. Patrick, "An Introduction to Medicinal Chemistry", 5th edition, 2013, Oxford University Press

Gareth Thomas, "Fundamentals of Medicinal Chemistry", 2nd edition, Wiley-Blackwell, 2007.

<https://pharmaceutz.com/online-resources-for-students-of-medicinal-chemistry/>

2. PY3Y518 **Pharmacology III**

Reference to be included:

<https://z-lib.org>

Prakash A, Medhi B, Practical Manual of Experimental and Clinical Pharmacology, 1st edition, Jaypee Brothers Medical Publishers (P) Ltd, 2010

3. PY3Y519 **Herbal Drug Technology**

Reference to be included:

S. S Agrawal and M Paridhavi, Herbal Drug Technology, Second Edition, Universities press, Hyderabad.

4. PY 3Y522 **Quality Assurance:**

Reference to be included:

ICH Guideline Q8 (R2): Pharmaceutical Development, 2009

ICH Guideline Q9: Quality Risk Management, 2005

ICH Guideline Q10: Pharmaceutical Quality System, 2008

Syllabus of B. Pharm VII Semester

1. PY4Y012 **Industrial Pharmacy -II**

Reference to be included:

N.K. Jain, Industrial Pharmacy-II, Vallabh Prakashan, Delhi

2. PY-4Y014 **Novel Drug Delivery System**

Reference to be included:

N.K. Jain, Introduction to Novel Drug Delivery Systems, 2020, 3rd Ed., Vallabh Prakashan, Delhi

Syllabus of B. Pharm VIII Semester

1. PY4Y511 **Biostatistics and Research Methodology**

Reference to be included:

N. K. Singh, Fundamentals of research methodology and statistics, New age international publishers, 2006

2. PY4Y512 **Social and Preventive Pharmacy**

Reference to be included:

<https://z-lib.org>

Nagdev S., Budhrani, A., A textbook of social and preventive pharmacy, Nirali Prakashan.

3. PY4Y703 **Subject Nomenclature: Pharmacovigilance**

Reference to be included:

<https://z-lib.org>

http://www.ipc.gov.in/PvPI/pv_home.html

ICH guidelines for pharmacovigilance: Clinical safety and Efficacy guidelines S and E guidelines by ICH

4. Elective: **Experimental Pharmacology**

Reference to be included:

<https://z-lib.org>

Prakash A, Medhi B, Practical Manual of Experimental and Clinical Pharmacology, 1/e edition, Jaypee Brothers Medical Publishers (P) Ltd. 2010

5. PY4Y704 **Dietary Supplements and Nutraceuticals**

C. Egbuna, G. Dable Tupas, Functional food and nutraceuticals, Springer International publishing house.

6. MB4Y602 **Pharma Marketing Management**

Reference to be included:

Priyan Choudhary, The Rx Factor: Strategic Creativity in Pharmaceutical Marketing, 2009, The Wisdom Village Publications

7. PY4Y706 **Pharmaceutical Product Development**

Reference to be included:

N.K. Jain, Pharmaceutical Product Development, 2018, 3rd Ed., CBS Publishers & Distributors, New Delhi

It In M. Pharm syllabus following minor changes (less than 10%) were approved

Syllabus of M. Pharm(MPC) I Semester

1. PY 90001 **DRA and Intellectual Property Rights**

At.

The course contents of Unit V are elaborated as follows:

Patent and intellectual property rights:

- (a) Introduction to TRIPS, GATT, WTO.
- (b) Definition, Need for patenting, Types of Patents, Conditions to be satisfied by an invention to be patentable, Introduction to patent search, Parts of patents, Filing of patents, The essential elements of patent; Guidelines for preparation of laboratory note book, Non-obviousness in Patent, Patent drafting.
- (c) PCT Application, Patentability criteria in US and Europe.
- (d) Hatch Waxman Act, compulsory licensing.
- (e) Infringement proceedings; types of infringement; Case studies for doctrine of equivalents.
- (f) Plagiarism and fair use doctrine

2. PY 90006 Modern Analytical Techniques

Following topic is included in Unit III

Electrophoresis: Principle, Instrumentation, working conditions, factors affecting separation and applications of paper electrophoresis, Gel electrophoresis, Capillary electrophoresis, Zone electrophoresis, moving boundary electrophoresis and isoelectric focusing.

Following new references are added:

- 1. Willard, H.H.; Merritt, L.L. Jr.; Dean, J.A.; Settle, F.A. Jr., Instrumental methods of analysis, 7th edition, CBS Publisher and distributors.
- 2. Stanley Crouch, Douglas Skoog, F. Holler, Donald West, "Fundamentals of Analytical Chemistry," Cengage learning.
- 3. D. C. Garratt, "THE QUANTITATIVE ANALYSIS OF DRUGS", Science paperback.
- 4. von G. W. Ewing, "Instrumental Methods of Chemical Analysis", McGraw-Hill Book Co., Inc., New York-Toronto-London

3. PY 90008 Biotechnology & Bio-Informatics

Following topic is added in Unit III section b:

"Importance of CRISPR/Cas9 technology in gene editing".

Following new reference is added in the existing list of references:

William S. Klug, Michael R. Cummings, Charlotte A. Spencer, Michael A. Palladino, Darrell Killian (2019) Concepts of Genetics, 12th Edition, Pearson

Syllabus of M. Pharm II Semester (MPC)

1. PY 99507 Advanced Pharmaceutical Chemistry

Following topic is added in Unit V:

Introduction, isolation and purification of flavanoids, General methods of structural determination of flavanoids: Structural elucidation of quercetin.

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Syllabus of M. Pharm(IP) I Semester

1. PY 98001 DRA and Intellectual Property Rights

The course contents of Unit V are elaborated as follows:

Patent and intellectual property rights:

- (a) Introduction to TRIPS, GATT, WTO.
- (b) Definition, Need for patenting, Types of Patents, Conditions to be satisfied by an invention to be patentable, Introduction to patent search, Parts of patents, Filing of patents, The essential elements of patent; Guidelines for preparation of laboratory note book, Non-obviousness in Patent, Patent drafting.
- (c) PCT Application, Patentability criteria in US and Europe.
- (d) Hatch Waxman Act, compulsory licensing.
- (e) Infringement proceedings: types of infringement; Case studies for doctrine of equivalents.
- (f) Plagiarism and fair use doctrine

2. 98002 Advanced Pharmaceutics

Following content is added in Unit II under additives :

"Mixed solvency concept (solubilizers)"

3. PY 98004 Quality Assurance Techniques

Following reference are added:

- ICH Guideline Q8 (R2): Pharmaceutical Development, 2009
- ICH Guideline Q9: Quality Risk Management, 2005
- ICH Guideline Q10: Pharmaceutical Quality System, 2008

Syllabus of M. Pharm II Semester (IP)

1. PY 98853 Novel Drug Delivery System Lab.

The course contents of unit I are elaborated as follows:

"Concept & Models for NDDS: Classification of rate controlled drug delivery systems (DDS), rate programmed DDS, activation modulated & feedback regulated DDS, effect of system parameters in controlled drug delivery, computation of desired release rate and dose for controlled release DDS, pharmacokinetic design for DDS – in solution, zero order & first order release, fick's laws, Higuchi, Hixon – Crowell method and other model."

2. PY 93504 Pharmaceutical Packaging

Following references are added:

John R. Wagner Jr., Multilayer Flexible Packaging: Technology and Applications for the Food, Personal Care, and Over-the-Counter Pharmaceutical Industries, 2009, 1st Edition, Elsevier Publications.

Deepak Kumar Sarkar, Packaging Technology and Engineering: Pharmaceutical, Medical and Food Applications, 2009, Wiley Inc.


The meeting ended with the vote of thanks to the chair.


Dr. T. R. Saini
(Chairman)

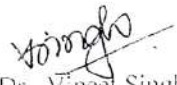
Dr. S. Wakode
(External Expert)


Dr. Rajesh Sharma
(External Expert)

M. Tiwari
Dr. (Mrs.) Meena Tiwari
(Member)


Dr. R. K. Maheshwari
(Member)

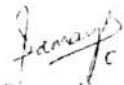

Mr. Suresh Kumar Paswan
(Member)


Dr. Vineet Singh
(Member)

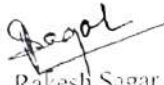

Mr. Prakash Kumar Soni
(Member)

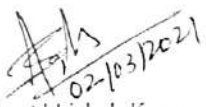

Mr. Gourav Jain
(Member)

Mr. Shubham Sharma
(Member)


Dr. Puneet Kumar Samal
(Member)


Dr. Sharad Prakash Pandey
(Member)


Dr. Rakesh Sagar
(Member)


Dr. Abhishek Kumar Solanki
(Member)


Dr. Omprakash Tarwar (Member)