

### **BOMBAY COLLEGE OF PHARMACY**

(Autonomous-Maharashtra State Government Aided Institute)

Kalina, Santacruz (East), Mumbai - 400 098. India. Tel: +91(022) 2667 0871 / 2667 1027 / 2667 0816 E-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

Vision: To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences

Vision: To educate and train students in the knowledge and practice of pharmaceutical sciences

Mission: To educate and train students in the knowledge and practice of pharmaceutical sciences

To contribute to improvement of health of the society through education programs To contribute to improvement of health of the society through research programs

October 14, 2020

#### NOTICE

All the members of Postgraduate Board of Studies (PG-BoS) are hereby informed that the PG-BoS meeting of Bombay College of Pharmacy-Autonomous (BoS/PG/002/2020) will be held Online on Saturday, 17th October 2020, from 4.00 p.m. to 6.00 p.m. on Zoom platform.

The agenda for the meeting is as follows

- 1. To confirm the minutes of the previous PG-BoS meeting (BoS/PG/001/2019) held on Friday, 26th July 2019.
- 2. To approve the syllabus for Certificate Course (Offline and Online mode) and Post graduate Diploma (offline mode) in 'Data Analytics in Healthcare' offered by Bombay College of Pharmacy and Navigo Analytix group of companies in association with The Indian Pharmaceutical Association-Maharashtra State Branch.
- 3. To identify MOOC Courses organized by Swayam or NPTEL and consider credit addon to the extent of 20% in every semester as per AICTE (Credit Framework for Online learning Courses through Swayam) Regulations 2016 to all the students after successful completion of the course.
- 4. To approve the introduction of Universal Human Values-II course (AICTE Initiative) equivalent to 30 teaching hours and 03 credits, for postgraduate students, at the M.Pharm (Semester II).
- 5. Any other matter with the permission of the chair.

All the members are requested to be present for the same. The link for the meeting will be shared one day prior to the scheduled day of the meeting.

Prof. Krishnapriya Mohanraj I/C Principal



GC BTE, Permanent affiliation to University of Mumbai and Recognized by DSIR as SIRO (Govt. of India) Accreditated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-22 i.e. up to 30.06.2022 National Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019

Best Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019

Member of



■ We are available on:

















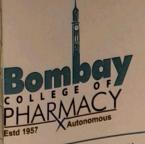












### **BOMBAY COLLEGE OF PHARMACY**

(Autonomous-Maharashtra State Government Aided Institute)

Kalina, Santacruz (East), Mumbai - 400 098. India. Tel: +91(022) 2667 0871 / 2667 1027 / 2667 0816 F-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

Vision: To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences Vision: To be a leader.

Vision: To be a leader that the second of the s

To educate to improvement of health of the society through education programs To contribute to improvement of health of the society through research programs

#### Agenda for the PG-BoS meeting

The agenda for the Post Graduate Board of Studies (PG-BoS) meeting of Bombay College of Pharmacy-Autonomous (BoS/PG/002/2020) scheduled Online on Saturday, 17th October 2020, from 4.00 p.m. to 5.30 p.m. on Zoom Meeting platform is as follows.

- 1. To confirm the minutes of the previous PG-BoS meeting (BoS/PG/001/2019) held on Friday, 26th July 2019.
- 2. To approve the syllabus for Certificate Course (Offline and Online mode) and Post graduate Diploma (offline mode) in 'Data Analytics in Healthcare' offered by Bombay College of Pharmacy and Navigo Analytix group of companies in association with The Indian Pharmaceutical Association-Maharashtra State Branch.
- To identify MOOC Courses organized by Swayam or NPTEL and consider credit addon to the extent of 20% in every semester as per AICTE (Credit Framework for Online learning Courses through Swayam) Regulations 2016 to all the students after successful completion of the course.
- 4. To approve the introduction of Universal Human Values-II course (AICTE Initiative) equivalent to 30 teaching hours and 03 credits, for postgraduate students, at the M.Pharm (Semester II).
- 5. Any other matter with the permission of the chair.

Prof. Krishnapriya Mohanraj I/C Principal

PRINCIPAL

Bombay College of Pharmacy Approved the rest of Mumbai and Recognized by DSIR as SIRO (Govt. of India)

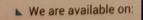
Accreditated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-22 i.e. up to 30.06.2022

National Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019

Best Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019























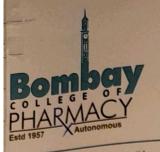












# BOMBAY COLLEGE OF PHARMACY

(Autonomous-Maharashtra State Government Aided Institute) Kalina, Santacruz (East), Mumbai - 400 098. India. Tel: +91(022) 2667 0871 / 2667 1027 / 2667 0816 E-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

Vision: To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences Vision: To educate and train students in the knowledge and practice of pharmaceutical sciences

To contribute to improvement of health of the society through education programs

To contribute to improvement of health of the society through research programs

(BoS/PG/002/2020)

#### Minutes of the PG-BoS Meeting

17/10/2020

The Minutes of the Postgraduate Board of Studies (PG-BoS) meeting of Bombay College of Pharmacy-Autonomous (BoS/PG/002/2020) held Online on Saturday, 17th October 2020, on Zoom Meeting platform are as follows

#### The following PG-BoS members were present for the meeting

- 1. Prof. Krishnapriya Mohanraj (I/C Principal, Bombay College of Pharmacy)
- 2. Prof. Krishna Iyer (Chairperson, PG-BoS, Bombay College of Pharmacy)
- 3. Dr. Vaishali Shirsat (Member Secretary, PG-BoS and HoD-Pharmaceutical Analysis, Bombay College of Pharmacy)
- 4. Dr. Ujwala Shinde (HoD-Pharmaceutics, Bombay College of Pharmacy)
- 5. Dr. Premlata Ambre (HoD-Pharmaceutical Chemistry, Bombay College of Pharmacy)
- 6. Dr. Alka Mukne (HoD-Pharmacognosy, Bombay College of Pharmacy)
- 7. Dr. Vaishali Dixit (HoD-Pharmacology, Bombay College of Pharmacy)
- 8. Prof. S. Y. Gabhe (Professor of Pharmaceutical Chemistry, Bharati Vidyapeeth's Poona College of Pharmacy)
- 9. Dr. Ravindra Purohit (Professor & Head, Department of Regulatory Affairs, Bharati Vidyapeeth's Poona College of Pharmacy, Pune and Director of R N Pharma Consulting, Pune)
- 10. Prof. Vandana Patravale (Professor of Pharmaceutics, Institute of Chemical Technology, Mumbai)
- 11. Dr R. B. Smarta (Chief Managing Director, Interlink Marketing Consultancy Pvt. Ltd., Mumbai)
- 12. Dr Parizad Elchidana (Principal Technical Consultant, ACG, Mumbai)

#### The following members were present for the meeting as Special Invitees

- 1. Dr. Mohnish Puvathingal (AI-ML Data Science Consultant)
- 2. Mr. Ashish Babtiwale (Managing Director, Navigo Analytix India)
- 3. Dr. N. Sivaprasad (President-The Indian Pharmaceutical Association, Maharashtra State Branch)
- 4. Dr. Nitin Maniar (Hon. Secretary-The Indian Pharmaceutical Association, Maharashtra State Branch)
- 5. Dr. Evans Coutinho (Professor of Pharmaceutical Chemistry, Bombay College of Pharmacy)

Dr. Shalaka Dhat (Executive Assistant to Principal, Bombay College of Pharmacy) was present at the meeting to note down the minutes of the meeting and coordinate overall conduct of the meeting.

pproved by AICTE, PCI, UGC, DTE, Permanent affiliation to University of Mumbai and Recognized by DSIR as SIRO (Govt. of India) ccreditated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-22 i.e. up to 30.06.2022 ational Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019

est Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019

ember of



We are available on:











Page 1 of 5





















## The Indian Pharmaceutical Association - Maharashtra State Branch's BOMBAY COLLEGE OF PHARMACY

(Autonomous-Maharashtra State Government Aided Institute)

(Autonomous Mariana (2009) (Autonomous Mariana (2009) (2007) (200 E-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

ision: To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences Mission: To educate and train students in the knowledge and practice of pharmaceutical sciences

To contribute to improvement of health of the society through education programs To contribute to improvement of health of the society through research programs

(BoS/PG/002/2020)

17/10/2020

At the onset of the meeting, Professor Krishnapriya welcomed and thanked all the esteemed members of the PG-BoS, Bombay College of Pharmacy-Autonomous and the special invitees for their presence at the meeting which was delayed due to the Covid-19 pandemic situation. She briefly introduced the special meeting which was delayed duty of the special special special special special special invitees; Mr. Mohnish Puvathingal, Consultant in Data Science with specialization in Artificial Intelligence and Machine Learning, Dr. N.Sivaprasad, President, The Indian Pharmaceutical Association-Maharashtra State Branch, Mr. Maniar-Chairman, Governing Body-Bombay College of Pharmacy, Dr. Ashish Batiwale, Managing Director- Navigo Analytix and Dr. Evans Coutinho, Professor of Pharmaceutical Chemistry, Bombay College of Pharmacy (BCP), to the members of the PG-BoS.

Prof. Krishnapriya then proceeded with the agenda for the meeting. Every point in the agenda was taken up for discussion and resolved susequently.

Agenda points with discussion and resolution

002.01 To confirm the minutes of the previous PG-BoS meeting (BoS/001/2019) held on Friday, 26th July 2019.

The minutes of the previous PG-BoS meeting (BoS/001/2019) held on Friday, 26th July 2019 were already circulated to all the members prior to the meeting. As there were no changes required to be made to the minutes of the earlier meeting, the members unanimously agreed that the minutes of the previous PG-BoS meeting (BoS/001/2019) held on Friday, 26th July 2019 be confirmed.

002.02 To approve the syllabus for Certificate Course (Offline and Online mode) and Post graduate Diploma (offline mode) in 'Data Analytics in Healthcare' offered by Bombay College of Pharmacy and Navigo Analytix group of companies in association with The Indian Pharmaceutical Association-Maharashtra State Branch.

The rules, regulations and syllabus for the Certificate course in Data Analytics in Healthcare (Offline and Online mode) and the rules, regulations and syllabus framework for the PG Diploma course in Data Analytics in Healthcare were circulated to the committee members prior to the meeting. Prof. Krishnapriya briefly highlighted the similarities and differences in the Certificate course and the PG Diploma course in Data Analytics in Healthcare with respect to the duration of the course, the timings for conduct of the course and the number of credits offered for each course.

peroved by AICTE, PCI, UGC, DTE, Permanent affiliation to University of Mumbai and Recognized by DSIR as SIRO (Govt. of India pereditated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-22 i.e. up to 30.06.2022 ational Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019 est Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019



We are available on:

















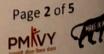


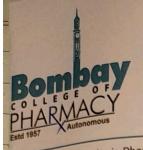












## **BOMBAY COLLEGE OF PHARMACY**

(Autonomous-Maharashtra State Government Aided Institute)
Kalina, Santacruz (East), Mumbai - 400 098. India. Tel: +91(022) 2667 0871 / 2667 1027 / 2667 0816
E-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

Vision: To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences

Mission: To educate and train students in the knowledge and practice of pharmaceutical sciences

To contribute to improvement of health of the society through education programs

To contribute to improvement of health of the society through research programs

(BoS/PG/002/2020) 17/10/2020

Mr. Ashish Babtiwale explained briefly to the committee members about how the problems faced by the industry to get trained personnel having dual knowledge of Data sciences and Pharmacy, triggered him to think of starting these two courses in Data Analytics in Healthcare as a collaborative venture between BCP and Navigo Analytix. He also projected that there would be a requirement of more than 20,000 Data Scientists trained in Healthcare by the end of the year 2023 and assured the members that the students of pharmacy have tremendous potential in this area if they can understand Data Analytics.

Mr. Babtiwale mentioned that the Certificate course is comprehensive but more of introductory nature whereas the PG Diploma Course has more Hands-On and anyone completing the course can be directly absorbed by the industry. He also explained about the assessment/examination pattern adopted for certificate and PG Diploma course.

The committee members discussed the fee structure for the course and the modalities for promotion of the course. Dr. Smarta confirmed that the syllabus teaches the students some aspects of 'Decision making' which is closely connected to 'Data Analytics'. The committee members also discussed whether the number of credits for the course were in line with the marking system for the examination. The members suggested that the course can be considered as one of the additional electives, provided there are no issues at the conducting end and the duration of the course matches with the semester duration for the post graduate students. The age limit for enrolling for the course, the number of working professionals had enrolled for the course and their area of work was discussed. Based on his experiences, Dr. Purohit recommended that inclusion of 'In Vitro Bioanalytical Studies' may be a value addition to the syllabus. As a subject expert Mr. Mohnish confirmed that the syllabus for the certificate course was adequate. He suggested that since BCP and Navigo Analytix are going to lead this course in the field of Data Analytics, they should go for Internet Protocols (IP), the Cloud, Data security etc., and the framework for the same should be planned along with the course.

Based on the discussions and suggestions, it was unanimously decided by members of PG-BoS that the syllabus for the Certificate course in Data Analytics in Healthcare (Offline and Online mode) and the syllabus framework for the PG Diploma course in Data Analytics in Healthcare (Offline mode) be approved. It was also recommended by PG-BoS committee that the marks mentioned in the scheme of examinations for the Certificate Course in Data Analytics in Health Care may be doubled from 100 to 200 marks. It was unanimously agreed that the placement details should be included in the prospectus and not in the Rulan Regulations and Syllabus for Certificate and PG Diploma Course in Data Analytics in Healthcare.

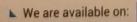
reproved by AICTE, PCI, UGC, DTE, Permanent affiliation to University of Mumbai and Recognized by DSIR as SIRO (Govt. of India) accreditated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-22 i.e. up to 30.06.2022

lational Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019

Best Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019



























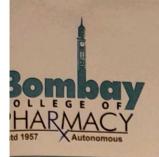












## BOMBAY COLLEGE OF PHARMAC

(Autonomous-Maharashtra State Government Aided Institute)

Kalina, Santacruz (East), Mumbai - 400 098. India. Tel: +91(022) 2667 0871 / 2667 1027 / 2667 0816 E-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

ision : To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences

lission: To educate and train students in the knowledge and practice of pharmaceutical sciences

To contribute to improvement of health of the society through education programs

To contribute to improvement of health of the society through research programs

(BoS/PG/002/2020)

17/10/2020

The committee members recommended that the PG Diploma course in Data Analytics in Healthcare can be considered as one of the electives for all branches of M.Pharm program offered at BCP. It was also unanimously agreed that the PG Diploma in Data Analytics in Healthcare may begin in July 2021 as proposed.

002.04 To identify MOOC Courses organized by Swayam or NPTEL and consider credit addons to the extent of 20% in every semester as per AICTE (Credit Framework for Online learning Courses through Swayam) Regulations 2016 to all the students after successful completion of the course.

Prof. Krishnapriya mentioned that it is now a mandatory requirement from AICTE and MHRD, Ministry for Education, to introduce MOOC courses organized by Swayam or NPTEL at undergraduate and post graduate level. She explained to the committee members, the modalities of adding on credits of the course to the Grade card and Transcripts of the students. Citing the example of other Universities and institutions which have opted for MOOC courses on Swayam and NPTEL, Prof. Krishnapriya mentioned that there are general courses such as Speaking skills and Personality Development available on the Swayam portal along with technical courses related to pharmacy and there was a need to identify courses that will be suitable for pharmacy students. The committee confirmed that there is a need for students to take up non-technical courses provided by Swayam and NPTEL platforms and the same may be useful for shaping the overall personality development of students.

Based on the discussions, the PG BoS recommended that Credit addon to the extent of 20% in every semester as per AICTE (Credit Framework for Online learning Courses through Swayam) Regulations 2016 to all the students after successful completion of the course be approved. It was agreed unanimously that the credits earned by the students after completion of the course may be added to his/her Grade Card and the Transcripts for each semester. The committee also recommended that the department and the institution may list down all Swayam and MOOC Courses suitable for each semester. Students may be free to choose courses that are recommended by the department/institution or they can choose courses other than the recommended courses. The committee further added that the faculty coordinators (Departmental/Institute) can be appointed to motivate students to take up appropriate courses.

proved by AICTE, PCI, UGC, DTE, Permanent affiliation to University of Mumbai and Recognized by DSIR as SIRO (Govt. of India coreditated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-22 i.e. up to 30.06.2022 ational Institutional Ranking Framework India Ranking 6<sup>th</sup> in 2016, 15<sup>th</sup> in 2017, 8<sup>th</sup> in 2018, 24<sup>th</sup> in 2019 ast Industry Linked Pharmacy Institution (Established Degree) 1<sup>st</sup> in 2013 & 2014, Mentor in 2015 & 2<sup>nd</sup> in 2019





► We are available on:































## BOMBAY COLLEGE OF PHARMACY

(Autonomous-Maharashtra State Government Aided Institute)

Kalina, Santacruz (East), Mumbai - 400 098. India. Tel: +91(022) 2667 0871 / 2667 1027 / 2667 0816 E-mail: office@bcp.edu.in/office.bcpindia@gmail.com, Web: www.bcp.edu.in

To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences fision To be a least train students in the knowledge and practice of pharmaceutical sciences dission: To educate and train students in the knowledge and practice of pharmaceutical sciences dission: To educate and train students in the knowledge and practice of pharmaceutical sciences

To contribute to improvement of health of the society through education programs

To contribute to improvement of health of the society through research programs

(BoS/PG/002/2020) 17/10/2020

002.05 To approve the introduction of Universal Human Values-II course (AICTE Initiative) equivalent to 30 teaching hours and 03 credits, for postgraduate students, at the M.Pharm (Sem- II).

Prof. Krishnapriya explained to the committee members about the emphasis laid down by AICTE for organizing Universal Human values (UHV)-I as a part of three week Student Induction Program for any fresher joining the institute and introducing UHV-II as a credit course equivalent to 30 teaching hours and 03 credits at any semester of M.Pharm program. Prof. Vandana Patravale mentioned that at ICT, Mumbai, they conduct a comprehensive course which includes human values as a part of syllabus. The committee confirmed the importance of conducting such courses on human values which involves ethics, selfrealization and other aspects mentioned in the model curriculum for UHV-II prescribed by AICTE.

Based on the discussions, the PG-BoS recommended that the introduction of Universal Human Values-II course (AICTE Initiative) equivalent to 30 teaching hours and 03credits at Semester II (F.Y.M.Pharm) for post graduate students be approved.

002.06 Any other matter with the permission of the chair

Since there were no other matters for discussion, Prof. Krishna Iyer concluded the meeting with vote of thanks to the members and the invitees for their valuable inputs in starting the certificate and PG Diploma Courses in Data Analytics in Healthcare, introducing MOOC courses and Universal Human Values course in the post graduate (M.Pharm) program. Prof. Iyer also requested all the members to feel free to communicate any matter which needs to be communicated as member of PG-BoS.

Dr. Krishna Iyer Chairperson

Hhirat

Dr. Vaishali Shirsat Member Secretary

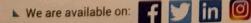


Dr. Krishnapriya Mohanraj I/c Principal

oved by AICTE, PCI, UGC, DTE, Permanent affiliation to University of Mumbai and Recognized by DSIR as SIRO (Sovt. of India) editated by National Board of Accreditation for UG Program for the Academic Years 2017-18 to 2021-227.e. up to 31103. 2022 in all Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019

Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019









Page 5 of 5



















5K0819