

## BHARATI VIDYAPEETH

# (Deemed to be University) Pune, India.

- Accredited with 'A+' Grade (2017) by NAAC
- 'A' Grade University Status by MHRD, Govt. of India
- Accredited (2004) & Reaccredited (2011) with 'A' Grade by NAAC
- Category-I (Deemed to be University Grade) by University Grants Commission
- Recognized under Section '12 B' of UGC Act (1956) by University Grants Commission Ranked 63rd among Top 100 Universities by NIRF 2020, MHRD Govt. of India



INFORMATION BROCHURE OF ENTRANCE TEST

B.Tech, B.Pharm/Pharm D. ABON-2021
FOR ADMISSION TO THE UNDER GRADUATE DEGREE COURSES

**B.Sc.** (Nursing)-2021

At

Bharati Vidyapeeth (Deemed to be University) College of Nursing, Pune College of Nursing, Navi Mumbai College of Nursing, Sangli

## Important Dates B.Tech, B.Pharm/Pharm D. ABON - 2021

A)

Entrance Test	Last Date of Online Application	Date of Online Entrance Test	Date of Declaration of Merit list
B.Tech, B.Pharm/Pharm D. ABON			
(Multi-date computer centre / home based online entrance test)	18 <sup>th</sup> July 2021 2 <sup>nd</sup> August 2021	28 <sup>th</sup> July 2021 11 <sup>th</sup> August 2021	Will be Notified at www.bvuniversity.edu.in

#### B) Counselling & on the spot admissions

Admission to Institute at	Counseling location	Date	Time
Pune	College of Nursing, Pune	Will be Notified	Will be Notified
Navi Mumbai	College of Nursing, Mumbai	Will be Notified	Will be Notified
Sangli	College of Nursing, Sangli	Will be Notified	Will be Notified

## **OUR INSTITUTES** (For information)

#### **Pune**

Bharati Vidyapeeth (Deemed to be University)

#### College of Nursing, Pune

Pune-Satara Road, Pune 411043.

Tel. No. 020-24372496

Web: http://conpune.bharatividyapeeth.edu/

#### Sangli

Bharati Vidyapeeth

(Deemed to be University)

#### College of Nursing

Wanlesswadi, Sangli.

Tel. No.: 0233 2601691

Web: http://consangli.bharatividyapeeth.edu/

#### Navi Mumbai

Bharati Vidyapeeth (Deemed to be University)

College of Nursing,

Rain Tree Marg, Sector 7, Belpada Complex,

Opp. Kharghar Railway Station

Navi Mumbai 400 614.

Tel. No.: 022-2756 5956

Web:http://conmumbai.bharatividyapeeth.edu/

C) Commencement of Classes

Will be Notified



Hon'ble Dr. Patangrao Kadam

Founder: Bharati Vidyapeeth (1964)

FOUNDER - CHANCELLOR: Bharati Vidyapeeth (Deemed to be University), Pune (India)

## : Vision of the University : To be a world class University for Social Transformation through Dynamic Education



Hon'ble Dr. Shivajirao Kadam Chancellor, Bharati Vidyapeeth (Deemed to be University), Pune



Hon'ble Dr. Vishwajeet Kadam
Secretary,
Bharati Vidyapeeth
Pro Vice Chancellor,
Bharati Vidyapeeth
(Deemed to be University), Pune



Hon'ble Dr. Manikrao Salunkhe
Vice Chancellor,
Bharati Vidyapeeth
(Deemed to be University), Pune







## राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

## Certificate of Accreditation

The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Jeam is pleased to declare the
Bharati Vidyapeeth University
(Deemed to be University u/s 3 of the USC Act, 1956)
Sadashiv Peth, Pune, Maharashtra as
Accredited
with CSPA of 3.53 on seven point scale

Date: March 28, 2017



at A<sup>+</sup> grade valid up to March 27, 2024







EC(SC)/23/A&A/36.3



# National Institutional Ranking Framework- 2020 Ministry of Human Resource Development Government of India



Maintaining its tradition in academic excellence, in the fifth consecutive year, Bharati Vidyapeeth (Deemed to be University), Pune and its constituent units have the reason to be proud for getting recognized and ranked among leading Universities and Institutes in India. Bharati Vidyapeeth is probably the only educational organization in the country to have 4 institutes having high NIRF ranking.

Poona College of Pharmacy, Pune ranked 22nd at the national level under Pharmacy category Institute of Management and
Entrepreneurship Development (IMED),
Pune ranked 63rd at the national level
under Management category

Rajiv Gandhi Institute of IT and Biotechnology, Pune, ranked 42nd at the national level under College category College of Engineering, Pune, ranked 99th at the national level under Engineering category

#### **University Achievements:**

Accredited with 'A+' Grade (2017) by NAAC

'A' Grade University Status by MHRD, Govt. of India

Accredited (2004) & Reaccredited (2011) with 'A' Grade by NAAC

Category-I (Deemed to be University Grade) by University Grants Commission

Recognized under Section '12 B' of UGC Act (1956) by University Grants Commission

Ranked 63rd among Top 100 Universities by NIRF 2020, MHRD Govt. of India

#### Other Achievements of the University:









#### NBA

•College of Engineering has been accredited with National Board of Accreditation for its 5 PG courses.

#### NABH

 Bharati Hospital and Research Centre of Medical College has undergone assessments for full NABH accreditation.

#### NABL

Hospital
 Laboratories in
 Pathology,
 Microbiology
 and
 Biochemistry
 havebeen
 accredited with
 NABL.

#### NABH & FDA Approval

• NABH
accreditation and
FDA approval for
Hospital Blood
Bank, Safe-I
accreditation of
the NABH for
Infectious
diseases was also
received.

#### **BHARATI VIDYAPEETH**

Bharati Vidyapeeth, the parent body of Bharati Vidyapeeth (Deemed to be University) was established on 10th May 1964, by distinguished educationist Hon'ble Dr. Patangraoji Kadam, with a mission of promoting "Social Transformation Through Dynamic Education'. Since its establishment, it has maintained the highest standards and has proliferated innovative practices in the education sector.

In the year 2013-14, Bharati Vidyapeeth celebrated the glorious Golden Jubilee year of imparting education and inculcating moral values among the youth. During the last 5 decades, Bharati Vidyapeeth has made astonishing strides in the field of education. Today it is one of the largest educational organizations in the country that imparts education right from the pre primary to the doctoral level. The spectrum of Bharati Vidyapeeth institutions of higher education spans all professional disciplines which include the colleges of Medicine, Dentistry, Nursing, Audiology,



Optometry, Ayurved, Homeopathy, Engineering, Architecture, Management, Law, Pharmacy, Hotel Management and Catering Technology, Environment Education, Physical Education, Health Management, Biotechnology etc.

Research too is given a high priority in the university. To promote research activities and to create a research culture on its campuses, Bharati Vidyapeeth has established three self-financed specialized research institutes in the areas of Health Related Sciences, Pharmaceutical Science, and Social Sciences.

The colleges are affiliated to various universities including Bharati Vidyapeeth (Deemed to be University), University of Pune, University of Mumbai, Shivaji University Kolhapur and Indraprastha University, Delhi.

With an objective of making educational opportunities available to the deprived sections of the country, Bharati Vidyapeeth has established a large number of educational institutions in the rural areas. Bharati Vidyapeeth with a very moderate beginning in a short span of time has grown leaps and bounds having its major campuses in New Delhi, Navi Mumbai, Pune, Solapur, Kolhapur, Sangli, Karad, Satara and Panchgani.

## Bharati Vidyapeeth (Deemed to be University) Pune

Bharati Vidyapeeth (Deemed to be University) came into existence in April, 1996, when the Ministry of Human Resource Development, Government of India, on the recommendations of UGC conferred the status of University on a cluster of 12 institutions of Bharati Vidyapeeth. In appreciation of the academic excellence achieved by the institutions through a committee of experts. Subsequent to that, the Government of India, vide its various notifications brought several other institutions of Bharati Vidyapeeth under the ambit of this University. As on today the University is having 29 constituent units conducting programmes in 12 different disciplines. Bharati Vidyapeeth (Deemed to be University) is one of the largest multi-faculty, multicampus Deemed to be University in the country which has created a very laudable track record of academic achievements since its inception.

It offers a variety of programmes in 12 faculties namely:

- 1. Faculty of Medical Sciences
- 2. Faculty of Dentistry
- 3. Faculty of Ayurved
- 4. Faculty of Homoeopathy
- 5. Faculty of Nursing
- 6. Faculty of Engineering and Technology
- 7. Faculty of Pharmaceutical Sciences
- 8. Faculty of Management Studies
- 9. Faculty of Arts, Social Sciences and Commerce
- 10. Faculty of Sciences
- 11. Faculty of Law
- 12. Faculty of Interdisciplinary Studies

The twenty nine constituent institutions of the University are located in eight different campuses; two in Pune, and one each in New Delhi, Navi Mumbai, Kolhapur, Solapur, Sangli and Karad.

The UGC has also recognized this University u/s12(B) of UGC Act 1956. This University is a Member of Association of Indian Universities and has been a Member of Association of Common wealth Universities.

















The University is academically and intellectually very productive. Its faculty members have a very remarkable track record of research publications and patents. It has digitalized the libraries in its constituent units and has been making an extensive use of modern Information and Communication Technology in teaching, learning, research and also administration. The University attracts students from all over India and around 35 countries due to its academic reputation.

## Distinctive Features of Bharati Vidyapeeth (Deemed to be University)

- Accredited with 'A+' Grade by NAAC in 2017 for seven years.
- 'A' Grade University status by MHRD, Govt. of India
- Category-I (Deemed to be University Grade) by University Grants Commission
- Recognised under Section '12 B' of UGC Act (1956) by University Grants Commission
- Ranked 63rd among top 100 Universities by NIRF 2020, MHRD, Govt. of India
- The University offers 250+ programmes under 12 faculties.
- High quality of all-around education has attracted many students from all over India and 35 countries to pursue their studies. Presently there are 23000+ students enrolled into various programmes offered by the University.
- Behind the reputation of the University are the solid credentials of accomplished and experienced 1700 + faculty members, imparting quality education.
- Excellent placements record for its students across faculties and has known industry endorsements.
- Strong alumni network spread across the globe.
- Programmes are designed to enhance employability of students with focus on collaborative and experiential learning pedagogy.

- Entrepreneurship cell has been established to develop entrepreneurial skill and incubate innovative business ideas.
- University constantly encourages and facilitates its faculties to be actively engaged in academic research and publications besides their teaching assignments by establishing collaborative and interdisciplinary research links with industries and institutions around the world.
- All professional programmes are approved by respective Statutory Councils.
- As part of dissemination of knowledge, University organizes International and National Conferences, Seminars, Workshops etc., in recent and upcoming themes.
- Knowledge Resource Centre (Libraries) has an excellent collection of books, print journals, ejournals, and magazines etc. which are regularly being expanded by adding latest publications.
- Augmented infrastructural facilities including smart classrooms, tools for blended learning, laboratories equipped with latest technologies, free accessibility to Wi-Fi, lush green campuses, adequate recreational facilities, on campus residential accommodation etc.
- University is committed to engage for the welfare of the society through various schemes of outreach Programmes and Field work.

## **Digital Initiatives at BVDU:**

University's Information and Communication Technology Centre always acts proactively to meet the dynamic requirements of the University and its constituent units. Its contribution encompasses all spheres of the University – academics, research, administration and governance.

#### Some of these ICT Services are listed as bellow:



## Skill Development Initiatives at BVDU:



## Constituent Units of Bharati Vidyapeeth (Deemed to be University)

#### **Health Sciences:**

#### 1. Faculty of Medical Sciences

• Medical College, Pune

School of Audiology and Speech Language Pathology, Pune

School of Optometry, Pune

 Medical College and Hospital, Sangli School of Optometry, Sangli

#### 2. Faculty of Dentistry

- Dental College and Hospital, Pune
- Dental College and Hospital, Sangli
- Dental College and Hospital, Navi Mumbai

#### 3. Faculty of Ayurved

College of Ayurved, Pune

#### 4. Faculty of Homoeopathy

Homoeopathic Medical College, Pune

#### 5. Faculty of Nursing

- College of Nursing, Pune
- College of Nursing, Sangli
- College of Nursing, Navi Mumbai

#### **Engineering & Technology**

#### 6. Faculty of Engineering and Technology

- College of Engineering, Pune
- College of Architecture, Pune

#### 7. Faculty of Pharmaceutical Sciences

• Poona College of Pharmacy, Pune

#### Management

#### 8. Faculty of Management Studies

- Institute of Management and Entrepreneurship Development, Pune
- Institute of Management and Research (BVIMR), Delhi

- Institute of Management, Kolhapur
- Institute of Management and Rural Development Administration, Sangli
- Yashwantrao Mohite Institute of Management, Karad
- Abhijit Kadam Institute of Management and Social Sciences, Solapur
- Institute of Hotel Management and Catering Technology, Pune

#### Social Sciences and Humanities

#### 9. Faculty of Arts, Social Sciences and Commerce

 Yashwantrao Mohite College of Arts, Science and Commerce, Pune

School of Performing Arts, Pune

- Social Sciences Centre, Pune
- College of Physical Education, Pune

#### 10. Faculty of Sciences

- Rajiv Gandhi Institute of Information Technology and Biotechnology, Pune
- Institute of Environment Education and Research, Pune

#### 11. Faculty of Law

New Law College, Pune
 Bharati Vidyapeeth Department of Law, New Delhi

#### **Faculty of Interdisciplinary Studies**

#### 12. Research Institutes:

- Interactive Research School for Health Affairs, Pune
- Yashwantrao Chavan Institute of Social Sciences Studies & Research, Pune
- Research and Development Centre in Pharmaceutical Sciences and Applied Chemistry

#### Bharati Vidyapeeth (Deemed to be University)

## **College of Nursing, Pune**

Bharati Vidyapeeth which is the parent body of Bharati Vidyapeeth (Deemed to be University) is one of the largest networks of educational institutions in India. It was established by Dr. Patangrao Kadam in 1964, with a focused objective of bringing about intellectual awakening of people.

Bharati Vidyapeeth College of Nursing, Pune, was established in the month of September 1992 under Pune University, headed by Dr. Maj. Mrs. Tapti Bhattacharjee. College of Nursing became a constituent unit of Bharati Vidyapeeth (Deemed to be University) in 1996. It is the first private college to provide various courses in nursing from GNM to Ph.D.

Got "A" Grade accreditation by NAAC, Bangalore in 2004 & 2011 and re-accredited with 'A+' by NAAC in 2017. The College of Nursing aspires to be a model of excellence through dynamic education, innovative practices and research. To prepare graduates to assume responsibilities as professional competent nurses and midwives in providing promotive, preventive, curative and rehabilitatative services.

#### **Courses Offered:**

1.	Revised General Nursing &	No. of Seats - 50
	Midwifery {Under MNC}	
2.	B.Sc. Nursing	No. of Seats - 65
3.	Post Basic B.Sc. Nursing	No. of Seats - 40
4.	M.Sc. Nursing	No. of Seats - 25
	(All 5 Specialties)	
5.	Ph.D. in Nursing	As per norms

#### STUDENT SUPPORT & PROGRESSION

The college has State-of-the art infrastructure and excellent learning resources and research facilities. The college has its own building with LCD in each class, Well Equipped Laboratories with Mannequins, Well maintained Library with 10788 books, CINAHL & DELNET, Easy access to the Central Medical College Library, A Museum with various models, charts, posters and specimens, Rich Clinical Experience in Bharati Hospital and various hospitals in Pune and India, Nursing Girl's









Hostel Research Centers: Bharati Hospital & Research Centre and IRSHA (In Campus) Knowledgeable and skilled faculty members are the asset of the college. All the teaching faculties are highly efficient and capable in their respective subjects. There are all together 40 faculty members holding various posts and with higher degree like Ph.D in Nursing.

#### **Clinical Experience:**

Bharati hospital is an 830 bedded, NABH Accredited, as well as Nursing Excellence for Nursing Services, multi – Specialty hospital which provides rich hands on practical experience to the students. In addition to this, the students are also sent to various Specialty and Super – Specialty hospitals e.g.:

Utmost care is taken to groom each student to become knowledgeable and skillful nurses.

#### **Extension Activities:**

To make students aware of their social responsibilities and obligations, they are involved in the following extension activities

- 1. School health program
- 2. Health check-up camps
- 3. Environmental sanitation NSS
- 4. Health awareness and education
- 5. Health days celebrations
- 6. Participation in national health programs like pulse polio etc.
- 7. Diaster Management in
- 8. Blood donation camp through NSS
- 9. Tree plantation

#### **Collaborations**

- 1. Malardalens University Sweden student & faculty exchange programme, till date five faculties and 3 students got the chance for exchange Programme.
- 2. IRSHA, BVDU.

Details regarding infra-structural facilities resources available and other activities conducted at the institute are available on its website.









Bharati Vidyapeeth (Deemed to be University)

College of Nursing, Navi Mumbai

Bharati Vidyapeeth (Deemed to be University) is one of the largest networks of educational institutions in India. It was established by Dr. Patangrao Kadam in 1964, with a focused objective of bringing about intellectual awakening of people.

Bharati Vidyapeeth College of Nursing, Navi Mumbai was established in the month of September 2009. College offers Nursing courses approved by Indian nursing council, Maharashtra Nursing Council and Maharashtra Government and Bharati Vidyapeeth Deemed to be university. Got "A" Grade accreditation by NAAC, Bangalore in 2004 & 2011 and re-accredited with 'A+' by NAAC in 2017.

We believe in intellectual awakening and social transformation in different sphere including education, economic, social and cultural fields. The changing patient needs and expectations in 21st century continue to influence the emerging advanced nursing role in coming decades, which requires the quality nursing care through dynamic education and research.



- 1. Basic B.Sc. Nursing (50 seats)
- 2. Post Basic B.Sc. Nursing (30 seats)
- 3. M.Sc. Nursing (All 5 Specialties):

Medical Surgical Nursing (5 Seats)

Obstetrics and Gynecological Nursing (5 Seats)

Child Health Nursing (5 Seats)

Community Health Nursing (5 Seats)

Mental health nursing (5 Seats)

Aim: To prepare graduates to assume responsibilities as professionals, competent nurses and midwives to providing Promotive, Preventive, Curative and Rehabilitative services. To prepare nurses who will work as case manager, decision maker, teacher, supervisor and manager. Also conduct and implement research in nursing practices.

#### STUDENT SUPPORT & PROGRESSION

The college and its campus has excellent infrastructure











such as well structured spacious class rooms, continuously updated laboratories, national and international books, journals and e- books, cafeteria and vehicle parking facilities.

Students may participate in sports and cultural activities at intercollegiate, inter university and national level. Leadership training, participation in various conferences/workshops and seminars, personality development, placement activities, alumni association carried out for all round development of the college. Knowledgeable and skilled faculty members are the asset of the college. All the teaching faculties are highly efficient and capable in their respective subjects.

Hostel facilities: The fully furnished hostels with modern amenities are available for boys and girls separately with single and double room. Separate mess with dining hall facilities safe drinking water, television, daily newspaper, sports and games facilities especially indoor outdoor games and playground available.

Computer facilities: The college has 61 computers for the nursing students with internet and wi fi access. Students have access to the computers and prepare presentations and seminars.

#### **Clinical Experience:**

The clinical teaching and training of the students are conducted in the government hospital at Navi Mumbai Municipal Hospital Corporation, Vashi.

#### List of affiliated hospitals:

- Navi Mumbai Municipal Corporation Hospital, Vashi (456 bedded Hospital)
- 2. Regional Mental hospital, Thane(1600 bedded hospital)
- 3. Tata Memorial Hospital (700 bedded Hospital)
- 4. Fortis Hiranandani Multispeciality Hospital (150 bedded Hospital)
- 5. Urban Health Center at CBD Belapur
- 6. Rural Health Center at Wavanje Village.

#### **Extension Activities:**

To make the students aware of their social responsibility. They are involved in the following extension activities

- School health program
- Health check up camps
- Environmental Sanitation NSS activity
- Health awareness education
- Health days celebrations
- Participation in national health programs like pulse etc.
- Disaster Management training
- Organ donation camp through NSS
- Tree plantation

#### Collaborations

1. Malardalen University Sweden student & faculty exchange programme.

Bharati Vidyapeeth College of Nursing Navi Mumbai as always promised to provide quality education to the students and add value in the personalities.







#### Bharati Vidyapeeth (Deemed to be University)

## College of Nursing, Sangli

Bharati Vidyapeeth (Deemed to be University), College of Nursing, Sangli started in 2007 at Bharati Vidyapeeth (Deemed to be University) Campus, Wanlesswadi, Sangli. The College is a constituent unit of Bharati Vidyapeeth (Deemed to be University). The College has been started with the permission from Maharashtra Nursing council and Indian Nursing Council. The College has 100-intake capacity for B.Sc., 30 for P.B. B.Sc. and 25 M.Sc. Nursing intake capacity.

Our College is equipped with nursing arts, community health and nutrition laboratories, teaching aids and a departmental library. Since we have our own Medical College in the same campus, our students get exposure to the teaching of senior faculty members having expertise in Anatomy, Physiology, Biochemistry, Pathology, and Microbiology and other subjects. Similarly, our students also have access to the Medical College library, which has a very vast collection of reference books. Our college also subscribes journals and makes audio visual aids available to the students. Hostel facilities with modern amenities are available to the student within the campus. The atmosphere in the college is very congenial for professional growth.

Details regarding infrastructural facilities resources available and other activities conducted at the institute are available on its website.

#### PROGRAMME INFORMATION

## **B.Sc.** Nursing Degree Course

B.Sc. (Nursing) course is designed in the same way as those of other well-known universities and is in accordance with the guidelines of Indian Nursing Council and has an approval of Maharashtra Nursing Council and Indian Nursing Council.

The information and the rules given herein are applicable for admissions to the first year of four years full time B.Sc. (Nursing) degree course of Bharati Vidyapeeth (Deemed to be University), Pune conducted at its following constituent units.









#### Intake:

### Bharati Vidyapeeth (Deemed to be University), College of Nursing, Sangli : 100 seats

There will be a Common Entrance Test for Admission to B.Sc. (Nursing)

The seats will be filled on merit, based on their performance in B.Sc. (Nursing) 2020 conducted by Bharati Vidyapeeth (Deemed to be University) at the designated centers.













#### PROCEDURE AND RULES FOR ADMISSION

#### 1 COMPUTER BASED ONLINE ENTRANCE TEST - GENERAL INSTRUCTIONS, TERMS AND CONDITIONS:

- 1.1 A single combined online computer based entrance tests B.Tech, B.Pharm/Pharm D. ABON-2021, for B.Tech B. Pharm/Pharm D, B.Sc Biotechnology, Bachelor of Audiology & Speech Language Pathology, Bachelor of Optometry and B. Sc. Nursing will be conducted for admission to the above courses.
- 1.2 Applicant may kindly note that mere appearance in the online computer based entrance test and inclusion of name in the merit list does not confer any automatic rights to secure admission to the programme offered by the College. The selection and admission to the programme is subject to fulfilling the admission criteria, eligibility, any such criteria as may be prescribed by the University and availability of seats to the particular programme and College at the time of counseling.
- 1.3 Applications of candidates producing false or fabricated information will not be considered
- 1.4 Before initiating online registration process, candidates should go through the Information brochure carefully for eligibility criteria, and pattern of examination etc. The information brochure shall be available at www.bvuniversity.edu.in
- 1.5 Incomplete online application, if not in accordance with instructions, will not be considered and processed. Applicant should carefully fill up all the fields during online application process and complete the payment process. Application once submitted finally, cannot be withdrawn/modified.
- 1.6 The computer based online entrance test fee, once paid, will not be refunded under any circumstances.

  Candidates who remain absent for the entrance test will forfeit their computer based online entrance test fee.
- 1.7 The Information brochure is subject to modification without notice, please check the website regularly for updations, if any.
- 1.8 The authorities of the College reserves the right to withdraw permission, if any, granted inadvertently to any candidate who is not eligible to appear in the computer based online entrance test even though Admit card/Registration number has been issued.
- 1.9 The Admissions provided to candidates based on the result of the computer based online entrance test will be purely provisional and subject to the fulfillment of eligibility criteria as mentioned in the Information brochure.
- 1.10 Under no circumstance a change in computer based online entrance test centre once selected by the candidate will be allowed.
- 1.11 Candidates MUST bring the following documents to the computer based online entrance test centre (a) Printed copy of Admit Card (b) Any one of the authorized photo IDs (must be original, valid and non-expired): Aadhaar Card /PAN card/Driving license/Voter ID/Passport. The name on the photo identification must match with the name as shown on the Admit card. Candidate reporting to computer based online entrance test center without the above said requisite documents shall not be allowed to appear for the computer based online entrance test.
- 1.12 All the correspondence should preferably be addressed by e-mail. The e-mail query shall be addressed only if it is not anonymous and not vague.
- 1.13 Candidates are deemed to have read, agreed and accepted the terms and conditions in the Information brochure and on completing the online registration/application form for the computer based online entrance test.
- 1.14 In case differences of opinion or any ambiguity in interpretation and implementation of any of the instructions/terms/rules/criteria regarding the determination of eligibility/conduct of examinations/registration of candidates/ information contained herein, the same shall be referred to the Vice Chancellor of the Bharati Vidyapeeth (Deemed to be University) and his decision shall be final and binding on all concerned.
- 1.15 Any legal matters arising out of the total admission process through the All India Common Entrance Test of Bharati Vidyapeeth (Deemed to be University), Pune 30 i.e. **B.Tech, B.Pharm/Pharm D. ABON-2021**, shall be within the exclusive jurisdiction of competent courts at Pune, Maharashtra State only.

#### 2. GENERAL

#### **Duration:**

The B.Sc. (Nursing) course is of 4 years duration.

**Note:** 15% seats are reserved under Foreign / NRI /P.I.O. / OCI/ Institutional Quota Merit Category. Candidates seeking admissions to the seats under Foreign / NRI /P.I.O. / OCI/ Institutional Quota Merit category will have to apply separately on a prescribed application form. The application form will be available at the office of **The Registrar**, **Bharati Vidyapeeth (Deemed to be University)**, **Bharati Vidyapeeth Bhavan**, **L.B.S. Marg**, **Pune-30**. **The form fee for this category is Rs. 1,000/- (non refundable)**. Seats remaining vacant after allotment to Foreign / NRI / P.I.O./ OCI Students (based on Merit), will be allotted to Indian students under Institutional Quota on the basis of merit based on the marks obtained by them in **B.Sc. Nursing-2021**. The last date for submission of form to this category at the above mentioned address is **2nd August 2021** before 5.00 p.m.

#### 3 ELIGIBILITY

- 3.1 The candidate should have passed H.S.C. I.C.S.E., P.U.C. of any recognized Board/University in India or any other examination equivalent to 10 + 2(Higher/Senior) Secondary Examination after twelve years of study from any institution situated in India, candidates should have passed in the subjects of Physics, Chemistry, biology and English individually and must have obtained 45% marks taken together in Physics, Chemistry, Biology and 40% in case of SC/ST students.
- 3.2 Candidates who are likely to appear, or who have appeared for qualifying examination but whose results have not been declared will also be considered eligible for appearing for the **B.Sc. Nursing-2021** provided they fulfill the eligibility conditions mentioned above. The candidates who fail to fulfill the above mentioned conditions regarding eligibility will not be considered eligible for admission to B.Sc. Nursing course, even if their names appears in the merit list.

#### Nationality And Age:

The candidate must be an Indian national and should have completed 17 years of age on 31st December 2021

Only those candidates who would satisfy all the eligibility requirements as mentioned above will be considered eligible to appear in the online computer based entrance test and for admission to the course.

All the candidates seeking admissions will have to appear for computer based online Entrance Test "B.Tech, B.Pharm/Pharm D., ABON-2021" conducted by Bharati Vidyapeeth (Deemed to be University), Pune. All candidates will have to apply online & fill the prescribed application form.

#### 4. BASIS OF SELECTION FOR ADMISSION

- 4.1 A Candidate desirous of seeking admission to B.Sc. Nursing Programme should fulfill the minimum eligibility condition as stated in point no. 3 above.
- 4.2 He/She must have appeared for the **B.Tech, B.Pharm/Pharm D. ABON-2021** Test, conducted by Bharati Vidyapeeth (Deemed to be University), Pune at designated centres.
- 4.3 The Candidate shall be offered admission on the basis of his/her rank in the final merit list and availability of the seats for a particular programme at a particular College of the candidate's choice at the time of counseling and admission in the concerned College.
- 4.4 In the case of candidates securing equal aggregate marks their relative rank will be determined on the basis of following order of preference:
  - a) First preference to the Candidates obtaining higher marks in Biology in the entrance examination.
  - b) If equal the Candidates obtaining higher total marks in subjects of Biology, Chemistry, Physics and English in the 12th standard qualifying examination.
  - c) If equal, the candidates will be ranked according to their percentage of marks scored at SSC or its equivalent examination
  - d) When all the above scores are the same, the candidates will be ranked on the basis of computerized random numbering.

#### 5. NATURE OF COMPUTER BASED ONLINE ENTRANCE TEST "B.Sc. Nursing)-2021"

5.1 The **B.Tech, B.Pharm/Pharm D. ABON-2021** is a computer based online entrance test for admission to B. Sc. Nursing Programme. It will be of 200 marks and shall be of 180 minutes duration.

The Computer based Online entrance test will consists of one question paper, set in English and will contain 200 multiple choice objective-type questions, 60 each on Physics, 60 each on Chemistry, 80 each on Biology (Botany and Zoology). They will be set on the topics in the syllabus of 10+2 (H.S.C.) Course. It consists of 200 multiple choice questions, one mark each with four alternatives, with only one correct or most appropriate answer. One Mark will be awarded for each correct answer. There is no negative marking.

#### MODE OF CONDUCT OF COMPUTER BASED ONLINE ENTRANCE TEST

The entrance test will be conducted based on two modes:

a) Computer centre based online test (CBT) – where in candidate has appear for the test at a designated test centre in the city provided/ preferred or allotted.

OR

b) Remote Proctored Home based online test (RPHBT) - where in the candidate can appear for the online test from their home location provided they have the minimum hardware and software requirement.

The candidate has to choose any one of the above mode of test while filling the application form online.

#### 6. COMPUTER BASED ONLINE ENTRANCE TEST SCHEDULE AND ADMIT CARDS:

The computer based online entrance test "B.Tech, B.Pharm/Pharm D., ABON-2021" will be held twice as per the dates mentioned at Important Dates page(after front page). A single result will be prepared for all the tests and colleges. The Candidates has a choice to appear for the Computer based Online Entrance Test on any one of the date. A single result will be prepared for all the tests.

The admit cards will be available from seven days prior to the date of entrance test. The candidate will have to, login with their credentials provided and download their respective admit card of particular entrance test for which he/she applied for.

#### If appearing for the Computer centre based online entrance test (CBT).

- 6.1 The reporting time before the gate closes shall be mentioned in the admit card. The candidate must report as per the time schedule at the test venue.
- 6.2 The candidates must bring admit card at the Computer centre based online entrance test. No candidate will be allowed entry without this Hall Ticket. The candidate is also required to bring one of the photo identification card in original viz. Voter Identity Card, Driving License, PAN Card, Passport or Adhar Card etc.
- 6.3 No candidate will be allowed to enter the Computer centre based online entrance test after the scheduled time of commencement of examination.
- 6.4 The candidates appearing for the Computer centre based online entrance test should, in their own interest, check their eligibility in all respect so as to avoid disappointment at any later stage. Your application for the Computer based Online Entrance test is "PURELY PROVISIONAL" pending detailed scrutiny of your fulfilling the eligibility conditions as mentioned in the information brochure for the programme applied. In case, it is found that the candidate does not fulfill the eligibility criteria, Online application of such candidate is liable to be rejected at any stage of admission process or even after joining in the College.

Candidates MUST bring the following documents to the computer based online entrance test centre -

- (a) Printed copy of Admit Card
- (b) Any one of the authorized photo IDs (must be original, valid and non-expired): Aadhaar Card / PAN card / Driving license / Voter ID / Passport. The name on the photo identification must match with the name as show on the Admit card.

Candidate reporting to online computer based entrance test center without the above said requisite documents shall not be allowed to appear for the online computer based entrance test. All India online computer based entrance test **B.Tech, B.Pharm/Pharm D., ABON-2021** is conducted by Bharati Vidyapeeth (Deemed to be University), Pune.

#### If appearing for Remote Proctored Home based Online test (RPHBT):

The candidate has to make prior arrangements of the minimum hardware and software required. The candidate has to appear for the test from their home location at the allotted time.

Prior to conduct of the actual test a mock-test will be held to familiarise the candidate regarding home based entrance test.

#### 7. TEST CENTERS FOR COMPUTER CENTRE BASED ONLINE ENTRANCE TEST

The **B.Tech**, **B.Pharm/Pharm D.**, **ABON-2021** Computer centre based online Entrance test will be held in 58 centres throughout the country giving students a wide choice of test centres.

The list of cities where the Computer centre based online Entrance test are located is as below:

Sr No	City	Sr No	City	Sr No	City	Sr No	City
1	Guwahati	16	Amritsar	31	Bangalore	46	Thane
2	Patna	17	Jammu	32	Ernakulam/cochi/kochi	47	Aurangabad
3	Muzafurpur	18	Jaipur	33	Hyderabad	48	Sangli
4	Ranchi	19	Kota	34	Raipur	49	Kohlapur
5	Jamshedpur	20	Jodhpur	35	Panaji	50	Karad
6	Imphal	21	Allahabad	36	Ahmedabad	51	Nasik
7	Bhubaneswar	22	Lucknow	37	Baroda	52	Pune
8	Kolkata	23	Varanasi	38	Surat	53	Jalgaon
9	Chandigarh	24	Meerut	39	Rajkot	54	Akola
10	Ghaziabad	25	Bareily	40	Indore	55	Ahmednagar
11	Faridabad	26	Gorakhpur	41	Bhopal	56	Latur
12	New Delhi	27	Kanpur	42	Jabalpur	57	Solapur
13	Rohtak	28	Agra	43	Amrawati	58	Srinagar
14	Karnal	29	Noida	44	Nagpur		
15	Shimla	30	Dehradhun	45	Mumbai		

<sup>\*</sup>Note: If the candidates count for a centre is less than 25, then the candidate will be allocated to the nearest available centre. NO REQUEST FOR CHANGE IN EXAMINATION CENTRE WILL BE CONSIDERED UNDER ANY CIRCUMSTANCES.

- 7.1 The candidates must also bring along the admit card. Candidate shall appear for the entrance test at the computer centre as shown on their admit cards.
- 7.2 To attend the entrance test at the computer centre, candidates must compulsorily bring their valid admit card and any on of the valid authorized photo ID (must be original, valid and non-expired): Aadhaar Card /PAN card/Driving license/Voter ID/Passport. The name on the photo identification must match with the name as shown

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- on the Admit card. Candidate reporting to Computer centre without the above said requisite documents shall not be allowed to appear for the Computer centre based online Entrance test.
- 7.3 Candidates have the option of selecting their city to appear for the Computer centre based online Entrance test during filling up of online application form.
- 7.4 Candidates are advised to familiarize themselves with the route and location of the Computer centre to appear for the Entrance test.
- 7.5 Possession and use of electronic devices such as Mobile Phone, Micro Phone or any other Associated Accessories, Calculator, Log Tables, Pager, Digital Diary Books etc are strictly prohibited in the Examination Hall. If any candidate is found in possession of any these devices/ documents his/her candidature is liable to be cancelled. As such the candidates should not bring Mobile Phone/ Micro Phone etc at the Computer centre based online Entrance test. BHARATI VIDYAPEETH & EXAM CENTER will not be responsible for its safe custody.
- 7.6 The authorities of Bharati Vidyapeeth (Deemed to be University) however reserve the right to make suitable changes in the test venue or schedule of the Computer centre based online Entrance test.
- 7.7 Only registered candidates with valid admit card and identity card will be allowed at the examination center
- 7.8 The candidates must reach the test centre at least one and half hour prior to the commencement of test on the day of the Computer centre based online Entrance test.

#### 8. ENTRANCE TEST FEE:

- 8.1 Entrance test fee: Rs 1,100/-
- 8.2 The online computer based entrance test fee shall be paid through payment gateway using internet banking mode or through debit/credit card. Service charges and other taxes for transaction as applicable by bank has to be paid by the applicant.
- 8.3 The online computer based entrance test fee, once paid, will not be refunded under any circumstances. Candidates who remain absent for the online computer based entrance test will forfeit their computer based online entrance test fee.

#### 9. APPLICATION PROCEDURE:

A candidate desirous of appearing for the "B.Tech, B.Pharm/Pharm D., ABON-2021" is required to complete and submit the prescribed application form, online along with entrance test fee.

The application form is available online at: www.bvuniversity.edu.in

The candidates should strictly follow the instructions given in the website while filling up the application form online, and must read the instructions carefully before filling up the online application form. Instructions are mentioned at 'Registration Guide' menu which is available on website. Before filling up the application form online, candidates should:

- a) Create their login credential
- b) Have a scanned image of their recent passport size photograph (Refer to guidelines mentioned on the Website)
- c) Have a scanned image of their signature, ready before filling up the online application form.
- d) Read the procedure and guidelines for online payments of test fee which is to be made through Credit Card / Debit Card/ Internet Banking. (Refer to guidelines, terms and conditions for using online payment mentioned on the website)

The candidate may then proceed to fill the form and submit the completed online application form. The candidate should take a print of payment receipt and completed online application form for reference and as

a record.

Candidates should submit the completed online application form on or before the last date mentioned in the website. (See "Important dates" in the brochure.)

Candidate should ensure that all information entered during the online application process is correct.

Applications of candidates producing false or fabricated information will not be considered.

The authorities of the University do not edit /modify/alter any information entered by the candidates at the time of online application process under any circumstances. Any request for change in information there after will not be entertained.

For any queries related to filling online application form, Email to : cet@bharatividyapeeth.edu Tel. No. 020-24407131/132/133/163

\*Note: NO REQUEST FOR CHANGE IN EXAMINATION DATE AND EXAMINATION CENTRE WILL BE CONSIDERED UNDER ANY CIRCUMSTANCES.

The university will not be responsible if the candidate has filled in and submitted an application for a different test from the one intended to appear. In such cases the university will not refund the entrance test fees. For any queries please mail us at email: <a href="mailto:cet@bharatividyapeeth.edu">cet@bharatividyapeeth.edu</a>

#### 10. A) INSTRUCTIONS REGARDING COMPUTER CENTRE BASED ONLINE ENTRANCE TEST.

#### **About Question Paper:**

- 1) All questions are compulsory. for each question, four alternatives answers have been provided out of which only one answer is correct.
- 2) Only one question will be displayed on the computer screen at a time.
- 3) There is one mark for each question which will be displayed at the top right hand corner of each question.
- 4) There is no negative marking.
- 5) The question paper will appear in English language.
- 6) Candidates can attempt question in any sequence by clicking on the question number in the **Section wise Summary Report** reflecting on the left hand side of the screen.
- 7) The exam screen will continuously display the remaining time at the top right hand corner of the question paper.
- 8) The candidates may ask the Invigilator their doubts or questions before the commencement of test. No queries shall be entertained after the commencement of the examination.
- 9) Additional rough Sheet (if required) shall be provided to the candidates for rough work during the test. All the rough sheets need to be returned to the Invigilator before leaving the test venue.

#### **About Answering Questions:**

- 1) In order to answer a question, you have to `Click' the option you think is appropriate/ correct. The alternative which has been clicked on will be highlighted and shall be treated as the answer given by you for the question.
- 2) If you do not wish to attempt the question then you should not click on any option for that question and may click `Next'.
- 3) You can `Bookmark' questions to review before submitting.
- 4) You can navigate between questions either by clicking on `Previous/Next' or by directly clicking on the question numbers which are displayed as attempted/ unattempted /book marked in the Section wise Summary Report.

#### **About Preview and Submission:**

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- 1) The answers are saved whenever the candidate navigates e.g. by clicking on Next/ Previous button or by clicking on other question number.
- 2) The candidates can make changes in their choice of alternative only before the paper is **auto** submitted.
- 3) Candidate can switch to any of the qustion by clicking on summary panel shown at the left hand side of the screen.
- 4) After the expiry of the test time, the candidates will not be able to attempt any question or check their answers. The answers of the candidate would be saved and submitted automatically by the computer system.
- 5) A "Thank you" message will appear confirming the completion and submission of the examination.

## Candidates can be debarred/disqualified by the Chief Proctor of the Exam Centre for any of the following reasons:

- 1. Creating a disturbance.
- 2. Impersonation Attempting to take the examination for someone else.
- 3. Giving or receiving assistance of any kind during the examination and communication in any form between candidates or with outsiders.
- 4. Smoking or eating in the Examination Hall.
- 5. Attempting to tamper with the operation of the computer or meddling with system.
- 6. Exchanging any papers, documents or any other material with other candidates.
- 7. Leaving the test centre without the permission from the invigilator.
- 8. Using prohibited aids, items not allowed, such as:
- o Stationary items including Pens, Pencils, Scales, Papers, Books, Notebooks, Calculators, Watch calculators, etc.
- o Mobile phones, Pagers, Health bands, Watches, any other electronic gadgets etc
- o Jewellery including Earrings, Finger rings, Metal Bangles, Pendants, Nose pins, Chains, Necklace etc
- o Shoes & socks, Wallets, Sunglasses, Jackets etc are not allowed. Candidates will be asked to remove their Jackets, Footwear before entering the Test Hall.
- 9. Attempting to copy examination questions and /or examination responses (in any format) from the examination centre.
- 10. Attempting to access any unauthorized software/program during the examination.
- 11. Failing to follow invigilators directions.
- 12. Manhandling of invigilators or test centre staff.
- 13. Resorting to unfair means or trying to influence in any way for examination results shall be considered as a serious offence and any candidate found guilty of such offence on the report of any person duly authorized in conduct of the examination, shall be liable to have his/her name removed from the list of candidates entered for the Examination and may also be further dealt with in such manner as the examination authority may deem fit.
- 14. Candidates shall maintain silence while appearing for the exam. Any conversation or gesticulating or disturbance or attempt to change seats/question paper in the Examination Hall shall be deemed as unfair means.
- 15. If a candidate is found indulging in unfair means or impersonation, the candidature of such candidate shall be cancelled. The candidate shall be expelled from the examination by the Test Centre Administrator and such matter shall be reported to concerned authorities for appropriate action.
- 16. The Test Centre Administrator at the Exam Centre is authorized to debar the candidate/s from the examination centre for any misconduct.

17. A mock test will be available on the bruniversity.edu.in website for practice for all candidates who have been issued Admit Cards for the exam.

#### B) INSTRUCTIONS REGARDING REMOTE PROCTORED HOME BASED ONLINE ENTRANCE TEST

#### RULES AND REGULATIONS of Remote Proctored Home based Online Test

Note: Rules and Regulations will remain same for Mock (Practice) and Live Actual Final Test. Attempting Mock (Practice) test is mandatory, you will not be able to give your Final Final Test if you have not completed your Mock (Practice) test

The online test will be held only through desktop / laptop.

Instructions for the CANDIDATE appearing for ONLINE EXAMINATION using their infrastructure like desktop/laptop, internet, web camera, microphone, etc.

- Exam Start Time: As per schedule sent to you through email
- Candidate will not be allowed to appear after 30 minutes from his/her scheduled time. Under no circumstances, the test can be rescheduled.
- Candidates should log in 15 minutes before the scheduled start time of the exam.
- Accessing Your Exam Online: You must have received an email from the Institute with login credentials.
   Candidate to keep login details safe and DO NOT share with anyone else.

Before starting the exam, please ensure the following:

- You are using a computer system equipped with Windows Operating System (version 8 and above).
- You have installed Google Chrome Browser (80.0 and above version) with cookies & popups enabled.
- There is an active & stable Internet Connection with more than 2 mbps (with high-frequency Wifi)
- There is a minimum available data pack (3GB 4 GB)
- Your device has a working integrated web camera and microphone. A webcam is a must to take the test.
- You have your ID card (issued by Local Government Authorities / Passport / Employer ID ) ready with you for the candidate verification process. We don't issue any separate ID cards.

#### **Code of Conduct:**

- Though the test is being taken at the candidates' place of stay, their conduct during the examination will be proctored using Artificial Intelligence as well as a Human proctor (invigilator) through continuous video and audio feed.
- There is a zero-tolerance policy for unethical behaviour.
- It is strongly advised that the candidate takes the examination with utmost solemnity and ensures that all the instructions are strictly followed.
- Exam authority reserves the right to disqualify any candidate who is found to be indulging in any kind of malpractice.

#### **Authentication Process:**

Please go through the following 2-step verification process

- Step 1: Show your face to the camera and click submit
- Step 2: Show your ID Card (issued by Local Government Authorities / Passport / Employer ID) and click submit.
- An authorizer will connect to you for verification. This may take 20-30 minutes. You may get this message while you are waiting: "We are currently processing your authorization submission" or "You are in the queue. Please wait while your details are being authorized". Please note the exam time will not be counted during the

verification process. Your actual test time will start once you start attempting the questions, so please don't panic.

• Upon authorization, you will be allowed to enter the examination interface.

#### **Examination environment rules:**

- 1. No other person is allowed to enter the room once your test starts.
- 2. The lighting in the room must be bright enough to be considered 'daylight' quality. Overhead lighting is preferred. If overhead lighting is not available, the source of light must not be behind you.
- 3. Please make sure your face is visible at all times with enough light on your face. Do not look away from the screen or hide/cover your mouth or face
- 4. You must sit at a clean desk or table.
- 5. The desk or walls around you must not have any writing on them.
- 6. The room must be as quiet as possible. No sounds (such as music or television) are permitted.
- 7. The following items must not be on your desk or used during your proctored exam:
  - Books Textbooks Notebooks Mobile Phones or any other electronic device
- 8. You may keep the following with you:
  - A water bottle Two sheets for rough work Pen or Pencil for rough work. Calculators
- 9. Please ensure that your laptop is fully charged for the examination and your webcam is working properly.

#### The computer/laptop you use to take the examination:

- 1. The computer you would be using to take the exam must not have more than one display or monitor. For example, if you usually use a laptop with a monitor connected, please disconnect your monitor and use only the laptop screen.
- 2. You must close all other programs or windows on your testing computer before you begin the exam.

#### Minimum Computer/System Requirement:

#### Desktop/Laptop:

- Internet Browser: Google Chrome version 80 & above, with cookies & popups enabled
- Video/Audio: Webcam min. 1.3 MP and a good quality Mic is required
- Operating system: Windows 8 or 10
- RAM & Processor: 4 GB+ RAM, i3 5th Generation 2.2 GHz or equivalent/higher
- Pop-up blocker: Disabled
- Uninterrupted power supply (UPS/Inverter, etc.)

#### II) Internet Connection:

 $\bullet$  Dedicated Internet and Internet Bandwidth of minimum 2 MBPS (4G/ Wi-Fi) or above + upload speed

#### Some Do's and Don'ts:

- Candidates are requested to keep attention on the chat window with the proctor/invigilator. You may ask your queries related to the test with the proctor.
- Candidates must be in front of their screen at all times.
- Candidates' activities will be constantly observed, monitored, and recorded.
- The web Camera and Mic should not be covered with any article during the entire exam duration.
- Don't Position the camera too low, too high, or hooked onto a different monitor. Weird camera angles can be very distracting and unflattering during the examination. The candidate should make sure that the camera is at eye level and on the monitor which is used for the examination.

- Browsing other windows or applications is prohibited. After few warnings, the system will automatically end the exam leading to disqualification.
- IMP: The Candidate must ensure that he/she attempted every question and reviewed the accuracy of his/her answers before submitting the paper. Once submitted (even by mistake), re-examination will not be permitted.
- IMP: Candidates are not permitted to logout/ switch off the computer for sake of going to the washroom and if they log out / switch-off, re-login will not be permitted.
- Please don't click on the taskbar or anywhere outside the test window or any notification which you get on your desktop / laptop during the test. You will get few warnings for moving away from the test window and despite that, if it repeats, your test will be terminated automatically.
- You must not use headphones, earbuds, or any other type of listening equipment.
- You must not communicate with any other person by any means once you start taking the examination.
- You must not use a phone for any reason.
- You must not leave the room during the exam for any reason, during the test.
- Do NOT press the F5 key or refresh the screen, while you are taking the exam, as it will terminate the exam.
- Candidate must dress decently.

#### What to do if your online exam is interrupted?

- In case the candidate gets disconnected from the exam for any reason, try logging out and in again If you continue to face technical issues, please email immediately at helpdesk@onlineregistrationform.org with your Registration Id and Subject ID
  - 1. If you are not able to log in on the examination portal.
  - 2. In case you have any issue with starting the examination.
  - 3. If examination will get disconnected if your webcam gets closed due to any reason.
  - 4. In case of any system/internet issue or power failure at your place during the examination, then

## Please email immediately at helpdesk@onlineregistrationform.org with your Registration Id and Subject ID

• If you get repeated warnings, your test will be terminated automatically. To resume the test, please mail at helpdesk@onlineregistrationform.org

#### **Privacy:**

During the remote proctored Final Test, Images/Videos/Sounds of the candidates and their computer systems will be captured and stored for Final Test proctoring purposes. It is envisaged that candidates who register for the remote proctored Final Test agree for the same.

#### 11. DECLARATION OF RESULT:

A separate merit list will be declared for candidates registered for B.Sc.Nursing based on the computer based online entrance test (based on 200 marks), will be declared as per the dates mentioned at Important Dates page(after front page). The combined merit list for all the Colleges together will be declared. Separate merit list will be prepared for Regular category and Foreign/NRI/PIO/OCI/Institutional Quota Merit Category.

The merit list of computer based online entrance test will be declared and displayed at all the Nursing Colleges of Bharati Vidyapeeth (Deemed to be University) and will also be displayed on its website

#### www.bvuniversity.edu.in

It is not possible to send individual invitation for counselling to the candidates. It shall be the responsibility of the individual candidate to see their own merit number and appear for the counselling at the centre of his/her choice as per the dates mentioned at Important Dates page (after front page).

#### 12. COUNSELING AND SPOT ADMISSIONS:

**12.1 The counselling schedule** will be held as per the dates mentioned at Important Dates page(after front page):

The candidate must report for counselling at 10.00 a.m. only, on the date of the counselling at the respective centers.

FAILURE TO REPORT FOR COUNSELLING ON THE SCHEDULED DATE AND TIME WILL RESULT IN INSTANTANEOUS CANCELLATION OF A CLAIM OF THE CANDIDATE TO THE SEAT.

The candidate must note that appearance for the online computer based entrance test and inclusion of name in the merit list does not necessarily mean that he/she will get admission to the college & course. The admission will depend upon the availability of seats to the particular programme and college at the time of his counselling.

It shall be candidates responsibility to see the result online computer based entrance test and confirm their merit no. The candidate should remain present for counselling as per the schedule.

Individual counselling letters are not going to be sent. The candidate should attend counselling & on the spot admissions on their own as per the schedule given. The candidate should bring along with them proof of having appeared for the online computer based entrance test such as Admit Card or photo copy of application form / Demand Draft etc.

The candidate will be offered a seat in the college of their choice and course as per the combined merit list prepared by Bharati Vidyapeeth (Deemed to be University), Pune for all the colleges and all the courses. The candidate will be called for counselling as per their merit number and will be offered a seat as per availability of the seat in the particular College and particular programme.

- 12.2 The following certificates in original along with self-attested two copies each of the same are to be submitted at the time of counselling and on the spot admission.
  - a) Proof of date of Birth (S.S.C. certificate/School leaving certificate/birth certificate)
  - b) Statement of marks 10th std.
  - c) Statements of marks 12th std.
  - d) Passing/Degree certificate (Last qualifying examination)
  - e) Migration certificate from the University from which the candidate has passed the last examination. other than Bharati Vidyapeeth (Deemed to be University).
  - (f) Transference / Leaving Certificate from the College last attended.
  - (g) Character Certificate from Principal of the College last attended.
  - (h) Affidavit regarding Gap in education.
  - (i) Caste Certificate (in case of SC/ST Candidates)
  - (j) Caste Validity Certificate (for SC/ST Candidates)
  - (k) Change in Name Certificate (if any for married female students).
  - (I) Attempt certificate
  - (m) Medical fitness certificate from a Registered Medical Practitioner

- (n) Demand Draft of the requisite fees as per the fee structure.
- (o) 5 Passport size recent photographs.
- 12.3 After scrutiny of their certificates, the candidates are offered admission according to their rank and availability of seats.

#### 13.FEE STRUCTURE for 2021-2022 only:

The fees to be paid for the first year of the B. Sc. Nursing programme at respective Colleges are given below—

Name of College	Regular Merit Category	Institutional Quota Merit Category	Foreign/NRI/PIO/OCI Merit Category
College of Nursing, Pune	₹80,000	₹90,000	US\$ 4000
College of Nursing, Mumbai	₹80,000	₹90,000	US\$ 3000
College of Nursing, Sangli	₹80,000	₹1,00,000	US\$ 3550

<sup>\*</sup>Note: The above fees are per annum. The Fees shall be revised upwards @ 5% per annum.

#### Mode of Payment of Fees shall be as given below

The fee is to be paid either through online mode or Bank Draft of any Nationalized bank drawn in the name of "The Principal, College of Nursing", Pune/Navi Mumbai/Sangli. payable at Pune/Navi Mumbai/Sangli". The details of payment through online mode will be informed.

At the time of admission a candidate has to pay library deposit. This deposit shall be refunded upon completion of the course.

If a candidate fails to confirm admission given to him/her, the same shall stand cancelled and the resultant vacancy will be offered to the next eligible candidate from the list. However, if candidate is unable to report in person, he /she can depute a representative with an authority letter signed by the candidate (appended in this brochure) along with requisite documents under sec. 12 above and Demand Draft of fees.

There are a few seats available in the hostel which will be allotted on first come first served basis.

Those who are desirous of getting admission to the hostel will be required to pay the entire amount of rent for the year as well as the mess charges for the entire academic year at the time of admission only. The details of hostel fees will be given in counselling letter. The payment for the hostels should be made by separate Demand Draft.

The date and commencement of the programme and detailed time table will be communicated to the candidate by the respective College.

#### 14. REFUND OF FEE:

If the student chooses to withdraw from the program of studies in which he/she is enrolled, the refund of the fees paid will be made as per the following UGC guidelines.

Sr. No.	Percentage of Refund of Aggregate Fees*	Point of time when notice of withdrawal of admission is submitted to the university	
1	100%	15 days or more, before the formally- notified last date of admission.	
2	90%	Less than 15 days before the formally- notified last date of admission.	
3	80%	15 days or less, after the formally notified last date of admission.	
4	50%	30 days or less, after the formally notified last date of admission.	
5	0%	More than 30 days after the formally notified last date of admission.	

- \*(inclusive of course fees but exclusive of caution deposit)
- · In case of (1) in the table above, the University shall deduct Rs. 5,000/- as processing charges from the refundable amount.
- · Any student who withdraws form the course as mentioned in Sr. No.5 and thereafter will be required to remit to the University, in addition to the amount already forfeited, the course fee payable for the remaining period of the course.
- · In case of Foreign/NRI candidates, the refund will be made in accordance with RBI/ Foreign exchange regulations.
- All refunds will be processed by the respective unites of the University upon receiving the approval from the Registrar based on the recommendation of the head of the Institution. Refund will be made only after the candidate has surrendered the ID card, original fee receipt and the dues clearance certificate.
- Application and Entrance Test Fees, wherever applicable, once remitted shall NOT be refunded under any circumstances.
- The refund information given above is indicative only and Bharati Vidyapeeth (Deemed to be University) reserves the right to make changes as per the notifications received form the concerned statutory / regulatory authorities from time to time.
- \*\* The date of opening of the college shall be deemed to be the last date of admission for the limited purpose of admission and refund of fees.

#### 15. CONDUCT AND DISCIPLINE:

If any student is found indulging in antinational activities, or in activities that run contrary to the letter and spirit of the provisions of Acts and Laws enforced by the Government, or any activity that causes his/her behavior to be contrary to rules of discipline, will be liable to be expelled from the College forthwith without any notice by the Principal of the College.

If any of the statements made in application form or any information supplied by the candidate in connection with his/her admission is, at any time, found to be false or incorrect and willful suppression of facts, his/her admission will be cancelled forth with. The fees will be forfeited and he/she may be expelled from the College by the Principal and prosecuted, if deemed necessary.

Each of the candidates seeking admission in the college is required to give the following undertaking at the time of admission:-

- A)" I have read all the Rules of Admission for the current year and after fully understanding these rules, I have filled in this application form for admission for the current year.
- B) The information given by me in my application is true to the best of my knowledge and belief.
- C) I have not been debarred from appearing at any examination conducted by any Government constituted or Statuary autonomous examination authority in India.
- D) I fully understand that the Principal of the College will have right to expel, rusticate me from the College for any infringement of the Rules of good conduct and discipline in general and particularly the ones referred to above and the rules of good conduct and discipline prescribed by the College / University and in the undertaking given above."

#### 16. MISCELLANEOUS:

- 16.1 The candidates are informed that the medium of instruction, for all programmes is English.
- 16.2 At the time of seeking admissions, a candidate will be provisionally admitted to Programme at the Institute subject to the production of the Provisional Eligibility Certificate from the University.
- 16.3 The Institution shall have the right to satisfy about the conduct and character of a candidate by verifying antecedents of a candidate through the appropriate police-authority, before admitting him/her to the College.
- 16.4 The Attention of the candidates is particularly invited to the provisions of rules regarding the eligibility of candidates for admission to the **B.Sc.Nursing-2020-21** Programme. If at any stage it is found that a candidate is not eligible either for admission to **B.Sc.Nursing-2021-22** Programme, his/her candidature and admission even if granted provisionally will be cancelled forthwith.
- 16.5 Differences of opinion and disputes arising in the interpretation and implementation of the clauses in this Brochure, if any, will be referred to the Vice-Chancellor of the Bharati Vidyapeeth (Deemed to be University), Pune and his decision shall be final and binding on all the concerned.

#### **RECOMMENDED SYLLABI FOR ABON-CET-2021**

#### **PHYSICS**

#### CONTENTS OF CLASS XI SYLLABUS

#### Units and Measurements

 System of units, Measurement of length, Measurement of mass, Measurement of time, Dimensions and dimensional analysis, Accuracy, Precision, and uncertainty in measurement, Errors in measurements, Significant figures, order of magnitude.

#### 2. Mathematical Methods

Vector analysis: - Scalers, Vectors, Vector operations (multiplication, addition, subtraction of vectors
 Triangle law for vector addition, Law of parallelogram of vectors), Resolution of vectors, Multiplication of
 vectors (scaler product, vector product), Introduction of calculus.

#### 3. Motion in Plane

Rectilinear motion (Displacement, path length, average velocity, average speed, instantaneous speed, acceleration, relative velocity), Motion in two dimensions — Motion in plane (average and instantaneous velocity, acceleration. Equation of motion for object travelling in plane with uniform acceleration, relative velocity, Projectile motion). Uniform circular motion: period, radius vector, angular speed, centripetal acceleration, conical pendulum.

#### 4. Law of Motion

Aristotle's Fallacy , Newton's laws of motion , Inertial and non-inertial frame of reference .
 Types of forces (fundamental forces in nature , contact and non-contact forces , real and pseudo forces ,
 conservative and non-conservative forces , concept of potential energy , work done by variable force) . Work –
 Energy theorem . Principle of conservation of linear momentum . Collisions(elastic and inelastic collisions,
 coefficient of restitution) . Impulse of force. Rotational analogue of force – moment of force or torque, couple
 and its torque , mechanical equilibrium , centre of mass , centre of gravity .

#### 5. Gravitation

 Kepler's law, Universal law of gravitation, Measurement of gravitational constant, Acceleration due to gravity, Variation in 'g' with altitude, depth, latitude and shape Gravitational potential and potential energy, Escape velocity, Earth Satellite, Projection of satellite, Critical velocity, Weightlessness in satellite, Time period of satellite, Binding energy of an orbiting satellite.

#### 6. Mechanical Properties of Solids

• Elastic behavior of solids, Stress and strain, Hooke's law Elastic modulus, Stress – Strain curve, Strain energy, Hardness, Friction in solids (static friction, kinetic friction, rolling friction).

#### 7. Thermal Properties of Matter

Temperature and Heat, Measurement of temperature, Absolute temperature and Ideal gas equation,
Thermal expansion (linear expansion, areal expansion, volume expansion, relation between coefficients of
expansion, Specific heat capacity, Colorimetry, Change of state, Heat transfer (conduction, convection,
radiation), Newton' laws of cooling.

#### 8. Sound

Waves-Types of waves, Common properties of all waves, Tranverse Waves and Longitudinal waves,
 Mathematical expression of waves, Speed of travelling waves, Newtons Formula for velocity of sound,

Laplace's correction, Factors affecting speed of the sound, Principle of superposition of the waves, Echo, reverberation and acoustics, Qualities of sound, Doppler effect.

#### 9. Optics

• Nature of light, Ray Optics, Cartesian Sign convention, Reflection (Reflection from Curved mirrors, Spherical abbreviation) Refraction, Total internal reflection and its applications, Refraction at spherical surface and lenses (Refraction at single spherical surface, Lens maker's equation), Dispersion of light and prism (Prism formula, deviation of light through thin prism, angular dispersion, dispersive power), Natural phenomena due to sunlight, Defects of lenses (Chromatic abbreviation, Spherical abbreviation), Optical instruments—Magnifying power of simple microscope, compound microscope, telescope.

#### 10. Electrostatics

• Electric charges, basic properties of the electric charges, Coulomb's law, Principle of superposition, Electric field, Electric lines of force, Electric flux, Gauss Law, Electric dipole (Couple acting on the electric dipole in the uniform electric field, Electric intensity at a point due to electric dipole), Continuous charge distribution.

#### 11. Electric Current through conductors

• Electric current, Flow of the current through the conductor, Drift Speed, Ohm's Law, Electrical energy and power, Registers Rheostat, Combination of the registers, Specific Resistance (Resistivity), Variation of the resistance with the temperature, Electromotive force, Cell's in series, Cell's in parallel, Types of cells.

#### 12. Magnetism

• Magnetic lines of force and magnetic field, Bar magnet (Magnetic field due to bar magnet at a point along its axis and along it's equator, Magnetic field due to bar magnet at an arbitrary point), Gauss law of magnetism, Earth's magnetism.

#### 13 Electromagnetic waves and Communication system

 EM wave , Characteristics of EM waves , Electromagnetic spectrum – Properties and uses of Radio waves , Microwaves , Infrared waves , Visible Light , Ultraviolet rays , X-rays , Gamma Rays .

 $\label{eq:continuous} Propagation of EM \ Waves-Ground \ wave propagation \ , Space \ wave propagation \ , Sky \ wave propagation \ .$  Introduction to communication system \ , Modulation \ .

#### 14. Semiconductors

Electrical conduction in solids, Band theory of solids – Brief introduction, Intrinsic Semiconductor, Extrinsic semiconductor, P-N junction, P-N junction diode. Semiconductor devices, Application of semiconductors and P-N junction diode.

#### 15. Magnetic Field due to Electric Current

Magnetic force , Cyclotron motion , Cyclotron accelerator, Helical motion , Magnetic force on wire carrying current – 1) Straight wire 2) Arbitrarily shaped wire. Force on a closed circuit in a magnetic field , Torque on current loop , Moving coil galvanometer , Magnetic dipole moment , Magnetic potential energy of dipole , Magnetic field due to current (Biot – Savart law), Force of attraction between two long parallel wires , Magnetic field produced by current in circular arc of wire, Axial magnetic field produced by current in circular loop , Magnetic lines for current loop , Ampere's Law , Magnetic field of Solenoid and Toroid .

#### 16. Magnetic Materials

 Torque acting on a magnetic dipole in uniform magnetic field, Location of magnetic poles of current carrying loop, Origin of magnetism in materials, Magnetization and Magnetic intensity, Magnetic properties of materials, Hysteresis, Permanent magnet and electromagnet, Magnetic shielding.

#### 17. Electromagnetic Induction

• Faraday's experiment in connection with generation of electric current, Faraday's laws of electromagnetic induction, Lenz's law and its applications, Flux of field, Motional electromotive force, Induced emf in stationary coil in a changing magnetic field, Generators, Back emf and back torque, Induction and energy transfer, Eddy currents, Self-inductance, Energy stored in magnetic field, Energy density of magnetic field, Mutual inductance, Transformer.

#### 18. AC Circuits

• AC generator, Average and RMS values, Phasors, Different types of AC circuits: - AC voltage applied to resistor, AC voltage applied to an inductor, AC voltage applied to capacitor, AC circuit containing resistance, inductance, capacitance in series (LCR circuit), Power in AC circuit, LC oscillations, Electric resonance,

Q-Factor, Choke coil.

#### 19. Dual Nature of Radiation and Matter

• Photoelectric effect, (Experiment and its observations), Failure of wave theory to explain observations from experiments on photoelectric effect, Einstein's postulate of quantization of energy and photoelectric equation, Wave-particle Duality of electromagnetic radiation, Photo Cell, De Broglie Hypothesis, Davisson an Germer experiment, Wave-particle Duality of matter.

#### 20. Structure of Atoms and Nuclie

Geiger – Marsden experiment, Rutherford's atomic model, Atomic spectra, Bohr's atomic model, Expressions for radius of orbit, energy of electron, Bohr formula, De Broglie's explaination, Atomic nuceus, nuclear forces, Nuclear binding energy, Radioactive decays, Law of radioactive decay, Half life of radioactive material, Average life of radioactive species, Nuclear energy (Nuclear fission, Nuclear fusion).

#### 21. Semiconductor Devices

P-N junction diode as a rectifier, Filter circuits, Special purpose junction diodes: - Zener diode, Photo diode, Solar cell, Light emitting diode (LED), Bipolar junction transistor, Transistor configuration, Transistor as an amplifier, Logic gates.

#### **CONTENTS OF CLASS XII SYLLABUS**

#### 1. Rotational Dynamics

- Circular motion: Kinematics of circular motion, Dynamics of circular motion (Centripetal force, Centrifugal force) Applications of UCM: Vehicle along horizontal circular track, Vehicle on banked road, Conical pendulum: Period of revolution of bob, Frequency of revolution. Vertical circular motion.
- Moment of inertia: M.I. as an analogous quantity for mass, Rotational K.E., angular momentum, torque in terms of M.I., M.I. of ring, disc, solid sphere, thin uniform rod, circular cone, uniform plate, uniform spherical shell, radius of gyration, Theorem of parallel axes and perpendicular axes, conservation of angular momentum, Rolling motion: Linear acceleration and speed while pure rolling down an inclined plane.

#### 2. Mechanical Properties Of Fluids

Fluid – Properties of fluid, Pressure: Pressure due to liquid column, Absolute pressure and Gauge pressure,
Hydrostatic paradox, Pascal's Law, Applications of Pascal's Law, Measurement of pressure (mercury
barometer, open tube manometer). Surface Tension, Surface energy, Relation between S.T. and surface

energy , Angle of contact , Effect of impurity and temperature on S.T. Excess pressure across free surface of liquid , Formation of drop and bubble. Capillary action Expression for capillary rise . Fluids in motion , Critical velocity and Reynold number , viscosity , Stokes' law , Equation of continuity , Bernoulli equation and its applications.

# 3. Kinetic Theory Of Gases And Radiation

• Behaviour of gas, Ideal gas and real gas, Mean free path, Pressure of ideal gas, Interpretation of temperature in kinetic theory, Law of equipartition of energy, Degrees of freedom, Specific heat capacity (Mayer's relation), Absorption, reflection, and transmission of heat radiation, Perfect black body (Ferry's black body). Emission of heat radiation. Kirchhoff's law of heat radiation and its theoretical proof. Spectral distribution of black body radiation. Wien's displacement law, Stefan-Boltzmann law of radiation.

# 4. Thermodynamics

• Thermal equilibrium, Zeroth law of thermodynamics, Heat, Internal Energy, Work. First law of thermodynamics (work and heat related), Thermodynamic state variables, Thermodynamic process, Classification of thermodynamic processes (Reversible and Irreversible process), Assumptions of thermodynamic process. Thermodynamics of isothermal process, Isobaric process, Isochoric process, Adiabatic process, Cyclic process, Free expansion. Heat Engine, Heat engine cycle and P-V diagram, Refrigerators and heat pumps. Second law of thermodynamics, Carnot cycle and Carnot engine, Carnot refrigerator, Second law of thermodynamics and Carnot cycle, Sterling cycle.

#### Oscillations

Periodic motion, Linear S.H.M., Differential equation of S.H.M., Acceleration, velocity and displacement
of S.H.M. and their expressions, Amplitude, period and frequency of S.H.M., Reference circle method,
Phase in S.H.M., Graphical representation of S.H.M., Composition of two S.H.M. s having same period and
along the same path, Energy of particle performing S.H.M., Simple pendulum, Second's pendulum,
Angular S.H.M. and its differential equation, Magnet vibrating in uniform magnetic field, Damped
oscillations, Free oscillations, Forced oscillations and resonance.

#### 6. Superposition of waves

Progressive wave, Reflection of waves, Superposition of waves, Stationary waves, Properties of stationary waves, Free and Forced vibrations, Harmonics and Overtones: Vibrations of air column in pipe closed at one end and in pipe open at both ends, Vibrations produced in string, Laws of vibrating string, Sonometer(verification of first, second, and third law of vibrating string), Beats (analytical method to determine beat frequency), Applications of beats, Characteristics of sound (loudness, pitch, quality or timbre), Musical instruments.

#### 7. Wave Optics

• Nature of light:- Corpuscular nature, wave nature, dual nature of light. Huygens' wave theory, Huygens' principle, Reflection of light at plane surface, Refraction of light at plane boundary between two media, Dependence of wavelength on refractive index of medium, Polarization, Brewster's Law(polarization by reflection), polarization by scattering, Interference: Young's double slit experiment, Conditions for steady interference, Method for obtaining coherent sources Optical path, Diffraction of light: Fresnel and Fraunhofer diffraction, Fraunhofer diffraction at a single slit, Double slit diffraction pattern, Resolving

power – Rayleigh's Criterion for resolving power , Resolving power of microscope , Resolving power of telescope.

#### 8. Electrostatics

Applications of Gauss' Law, Electric potential and potential energy, Electric potential due to point charge, electric dipole and system of charges, Equipotential surfaces, Electrical energy of two point charges and of a dipole in an electrostatic field, Conductors and insulators, free charges and bound charges inside a conductor, Dielectrics and electric polarization. Capacitors and capacitance, Combination of capacitors in series and parallel, Capacitance of parallel plate capacitor with and without dielectric medium between the plates. Displacement current, Energy stored in capacitor, Van de Graaff Generator.

# 9. Current Electricity

• Kirchhoff's Laws of Electrical Network , Wheatstone Bridge , Application of Wheatstone bridge :- Metre bridge , Kelvin's method , Post office box . Potentiometer:- Use of potentiometer (Compare emf of cells , To find internal resistance of cell ), Application of potentiometer (Voltage divider , Audio control, potentiometer as a sensor) , Advantages of potentiometer over voltmeter , Galvanometer :- Galvanometer as an ammeter , Galvanometer as a voltmeter .

# 10. Magnetic Field due to Electric Current

• Magnetic force, Cyclotron motion, Cyclotron accelerator, Helical motion, Magnetic force on wire carrying current – 1) Straight wire 2) Arbitrarily shaped wire. Force on a closed circuit in a magnetic field, Torque on current loop, Moving coil galvanometer, Magnetic dipole moment, Magnetic potential energy of dipole, Magnetic field due to current (Biot – Savart law), Force of attraction between two long parallel wires, Magnetic field produced by current in circular arc of wire, Axial magnetic field produced by current in circular loop, Magnetic lines for current loop, Ampere's Law, Magnetic field of Solenoid and Toroid.

# 11. Magnetic Materials

• Torque acting on a magnetic dipole in uniform magnetic field, Location of magnetic poles of current carrying loop, Origin of magnetism in materials, Magnetization and Magnetic intensity, Magnetic properties of materials, Hysteresis, Permanent magnet and electromagnet, Magnetic shielding.

#### 12. Electromagnetic Induction

• Faraday's experiment in connection with generation of electric current, Faraday's laws of electromagnetic induction, Lenz's law and its applications, Flux of field, Motional electromotive force, Induced emf in stationary coil in a changing magnetic field, Generators, Back emf and back torque, Induction and energy transfer, Eddy currents, Self-inductance, Energy stored in magnetic field, Energy density of magnetic field, Mutual inductance, Transformer.

#### 13 AC Circuits

• AC generator, Average and RMS values, Phasors, Different types of AC circuits: - AC voltage applied to resistor, AC voltage applied to an inductor, AC voltage applied to capacitor, AC circuit containing resistance, inductance, capacitance in series (LCR circuit), Power in AC circuit, LC oscillations, Electric

resonance,

# Q-Factor, Choke coil.

#### 14. Dual Nature of Radiation and Matter

Photoelectric effect, (Experiment and its observations), Failure of wave theory to explain observations from
experiments on photoelectric effect, Einstein's postulate of quantization of energy and photoelectric
equation, Wave-particle Duality of electromagnetic radiation, Photo Cell, De Broglie Hypothesis,
Davisson an Germer experiment, Wave-particle Duality of matter.

#### 15. Structure of Atoms and Nuclie

Geiger – Marsden experiment, Rutherford's atomic model, Atomic spectra, Bohr's atomic model,
Expressions for radius of orbit, energy of electron, Bohr formula, De Broglie's explaination, Atomic
nuceus, nuclear forces, Nuclear binding energy, Radioactive decays, Law of radioactive decay, Half
life of radioactive material, Average life of radioactive species, Nuclear energy (Nuclear fission,
Nuclear fusion).

#### 16. Semiconductor Devices

P-N junction diode as a rectifier, Filter circuits, Special purpose junction diodes: - Zener diode, Photo diode, Solar cell, Light emitting diode (LED), Bipolar junction transistor, Transistor configuration, Transistor as an amplifier, Logic gates.

# **CHEMISTRY**

#### **CONTENTS OF CLASS XI SYLLABUS**

#### Some basic Concepts of chemistry

 Nature of chemistry, Properties of matter and their measurement, laws of chemical combination, Dalton's Atomic Theory, Atomic and molecular masses, mole concept and molar mass

#### 2. Introduction to analytical chemistry

• Importance of analytical chemistry, analysis, mathematical operation and error analysis, determination molecular formula, chemical reactions and stoichiometric calculations, limiting reagent, concentration of solution, use of graph in analysis

#### 3. Basic Analytical Techniques

Purification of solids, Distillation, solvent extraction, chromatographic techniques,

#### 4. Structure of Atom

 Subatomic particles, Atomic number ,atomic mass number, Isotopes, Isobars, Isotones, Drawbacks of Rutherford atomic model, Developments leading to Bhor's atomic model, Bhor's model for hydrogen atom, Quantum mechanical model of atom,

#### Chemical Bonding

 Kossel and Lewis approach to chemical bonding, Steps to write Lewis dot structures, Formal charge, Valence shell electron pair repulsion theory, Valence bond theory, Hybridization, Molecular orbital theory, Parameters of covalent bond, Dipole moment, resonance

#### 6. Redox Reactions

 Classical ideas of redox reactions, Oxidation number, Balancing of redox reactions, Redox reaction and Electrode potential,

#### 7. Modern Periodic Table

 Introduction, Structure of modern periodic table, Periodic table and electronic configuration, Blockwise characteristics of elements, Periodic trends in elemental properties

# 8. Element of Group 1 and Group 2

• Hydrogen: Occurrence, Position, Isotopes of Hydrogen, Prepration, Properties, Uses. Alkali metals and element of group 2, Some important compounds of element of S Blocks

# 9. Elements of groups 13,14,15

• Introduction, Electronic configuration of elements of groups 13,14,15, Chemical properties of elements of groups 13,14,15, Catenation, Allotropy, Molecular structure of some important compounds of groups 13,14,15 elements, Chemistry of notable compounds of elements of group 13,14,15

# 10. States of Matter: Gaseous and Liquid States

 Introduction, Intermolecular forces, Characteristic properties of gases, Gas Laws, Ideal gas equations, Kinetic molecular theory of gases, Deviation from ideal behavior, Liquefaction of gases and critical constant, Liquid state

# 11. Adsorption and Colloids

 Adsorption, Types of adsorption, Factors affecting adsorption of gases on solids, Adsorption isotherm, Applications of adsorption, Catalysis, Adsorption theory of heterogeneous catalysis, Colloids

# 12. Chemical Equilibrium

 Reversible reactions, Equilibrium in physical processes, Equilibrium in chemical process, Law of mass action and equilibrium constant, Homogeneous and Heterogeneous eqilibria, Characteristics of equilibrium constant, Application of equilibrium constant, Le Chatelier's Principle, Industrial application

# 13. Nuclear chemistry and Radioactivity

Similarity between solar system and structure of atom, Classification of nuclides, Nuclear stability,
 Radioactivity, Radioactive decay, Modes of decay, Nuclear reactios, Applications of radio isotopes

# 14. Basic principles of Organic Chemistry

 Structural representation of organic molecules, Classification of organic compounds, Nomenclature of organic compounds, Isomerism, Therotical basis of organic reactions

# 15. Hydrocarbons

Alkanes: Isomerism, Conformation, preparation, Physical properties, chemical properties, uses.
 Alkene:Isomerism, preparation, physical properties, chemical properties, uses.
 Alkynes: Isomerism, preparation, physical properties, chemical properties, uses.
 Aromatic Hydrocarbons(Benzene):Structure, Preparation, physical properties, chemical properties.
 Huckel Rule, Directive influence of a functional groups in monosubstituted benzene, Carcinogenicity and Toxicity

# 16. Chemistry in Everyday Life

Basics of food chemistry, Compounds with Medicinal properties, Cleansing agents.

#### CONTENTS OF CLASS XII SYLLABUS

#### 1. Solid State

 Types of solids, Classification of crystalline solids, Crystal structure, Cubic system, Packing of particles in crystal lattice, Packing efficiency, Crystal defects, Electrical properties of solids, Magnetic properties of solids

#### 2. Solutions

 Types of solutions, Capacity of solution to dissolve solute, Solubility, Vapour pressure of solutions of liquids in liquids, Colligative properties of non electrolyte solutions, Vapour pressure lowering, Boiling point elevation, Depression in freezing point, Osmotic pressure, Colligative properties of electrolytes

### 3. Ionic Equilibria

 Types of electrolyte, Acids and Bases, Ionisation of acids and bases, Autoionisation of water, pH scale, Hydrolysis of salts, Buffer solutions, Solubility product, Common ion effect

# 4. Chemical Thermodynamics

 Introduction, Terms used in Thermodynamics, Nature of heat and work, Expression for pressure-volume work, Concept of maximum work, Internal energy, First law of Thermodynamics, Enthalpy, Enthalpies of physical transformations, Thermochemistry, Spontaneous prosess.

# 5. Electrochemisry

• Introduction, Electric conduction, Electrical conductance of solutions, Electrochemical cells, Electrolytic cell, Galvanic cell, Electrode potential and cell potential, Thermodynamics of galvanic cell, Galvanic cells useful in day to day life, Fuel cell, Electrochemical series.

#### 6. Chemical kinetics

 Rate of reactions, Rate of reaction and reactant concentration, Molecularity of elementary reactions, Integrated Rate law, Collision theory of bimolecular reactions, Temperature dependence of reaction rates, Effects of catalyst on rate of reaction.

#### 7. Elements of groups 16,17,18

 Occurrence, Electronic configuration, Atomic and physical properties, Anomalous behavior of oxygen and fluorine, Chemical properties, Oxoacids, Oxygen and compounds of oxygen, Compound of sulphur, Chlorine and compounds of chlorine, Interhalogen compounds, Compounds of Xenon.

#### 8. Transition and Innertransition Elements

 General introduction, Position in periodic table, Electronic configuration, Trends in atomic properties of first transition series, Compounds of Mn and Cr(KMnO4 and K2Cr2O7), Common properties of d block elements, Metallurgy, Properties of f block elements

#### 9. Cordination compounds

Introduction, Types of ligands, Terms used in coordination chemistry, classification of complexes, IUPAC

#### 11. Alcohols, Phenols and Ethers

• Classification, Nomenclature, Methods of preparation, Physical properties, Chemical properties, Uses

# 12. Aldehydes, Ketones, Carboxylic Acids

Classification, Nomenclature, Methods of preparation, Physical properties, Chemical properties

#### 13. Amines

Classification, Nomenclature, Methods of preparation, Physical properties, Chemical properties

#### 14. Biomolecules

 Carbohydrates: Classifications, Nomenclature of monosaccharides, Preperation of Glucose, Structure and properties of Glucose. Proteins: alpha amino acids, Types of proteins, Structure of proteins, Denaturation of Proteins. Enzymes: Mechanism of enzyme catalysis. Nucleic acids.

# 15. Introduction to Polymer Chemistry

• Classification of polymers, Some important polymer, Molecular mass and degree of polymerization of polymer, Biodegeradable Polymers, Commercially important polymers.

# 16. Green Chemistry and Nanochemistry

 Introduction, Sustainable development, Principle of green chemistry, Roll of Green chemistry, Introduction to nanochemistry, Characteristic features of nanoparticles, synthesis of nanomaterial, History of nanotechnology, Application of nanomaterials, Nanoparticles and nanotechnology.

# **BIOLOGY**

#### **CONTENTS OF CLASS XI SYLLABUS**

# 1. Living World

• Basic Principles of Life, Herbarium, Botanical Gardens, Museum, Zoological Parks, Biodiversity Parks, Key

# 2. Systematics of Living Organisms

 Classification, Three domains of life, Chemotaxonomy, Numerical Taxonomy, Cladogram, Phylogeny, DNA Bar coding, Taxonomic Categories, Taxonomic Hierarchy, Units of Classification, Nomenclature, Salient Features of Five Kingdoms, Acellular Organisms (Viruses, Viroids, Lichens)

# 3. Kingdom Plantae

• Kingdom Plantae Classification, Salient features of major plant groups under Cryptogams and Phanerogams, Plant life cycle and Alternation of generations

#### 4. Kingdom Animalia

Criterion used for animal classification, Animal body plan, Animal Classification and Phylums

# 5. Cell structure and organization

• Cell, Kinds of Cells, Procaryotic cells, Eucaryotic cell and its components

#### 6. Biomolecules

 Carbohydrates, Lipids, Proteins, Nucleic acids and their significance, Enzymes and their properties, Nomenclature, Mechanism of Enzyme action. Concept of metabolism

#### 7. Cell Division

Cell Cycle, Types of Cell Division-Amitosis, Mitosis, Meiosis and their significance

#### 8. Plant Tissue and Anatomy

 Tissue, Meristematic tissue, Simple and Permanent Tissues, Tissue Systems, Secondary growth in plants, Wood, Cork cambium and secondary growth, Anatomy of Dicot and Monocot, root stem and leaf

# 9. Morphology of Flowering Plants

• Classification of Flowering plants, Root, Stem, Leaf their structure and modifications, Inflorescence, Structure of Flower, Placentation, Fruit and Seed. Study of some important families: Fabaceae and Solanaceae

# 10. Animal Tissues

Histology and Types: Epithelial, Connective, Muscular and Nervous Tissue

# 11. Study of Animal Type-Cockroach

 Habit and habitat, Systematic Position, External morphology, Body Cavity, Digestive System of cockroach, Circulatory or Blood vascular system, Respiratory System, Nervous System, Reproductive system, Interactions with mankind

#### 12. Photosynthesis

• Meaning, Chloroplasts, Nature of Light, Mechanism of Photosynthesis, Light Reaction,

Photophosphorylation, Dark reaction, Photorespiration, C4Pathway, Crassulacean Acid Metablism, Factors affecting Photosynthesis, Significance

# 13. Respiration and Energy Transfer

• Formation of ATP, Anaerobic respiration, Glycolysis, Aerobic respiration, Krebs Cycle, ETS, Significance

#### 14. Human Nutrition

 Meaning, Human Digestive System, Digestive glands, Physiology of Digestion, Absorption assimilation and egestion, Nutritional disorders and disorders of digestive system

# 15. Excretion and Osmoregulation

 Excretion and excretory products, Two Major types of Nephridia, Excretory system in Human being, Physiology of Urine formation, Composition of Urine, Role of skin in excretion, Disorders and Diseases, Dialysis

#### 16. Skeleton and Movements

 Movements and Locomotion, Location, structure and working of Skeletal muscles, Structure of myosin and actin filaments, mechanism of muscle contraction, Physiology of muscle relaxation, Properties of muscles on electrical stimulation, Skeletal System, Group of Skeleton: Axial and Appendicular Skeleton, Types of Joints, Disorders related to muscles and bones

#### CONTENTS OF CLASS XII SYLLABUS

# 1. Reproduction in Lower and Higher Plants

 Asexual Reproduction, Sexual Reproduction, Microsporogenesis, Structure of Ovule, Megasporogenesis, Polynation, Outbreeding devices, Double Fertilization, Post fertilization changes, Apomixis Parthenocarpy

# 2. Reproduction in Lower and Higher Animals

 Asexual Reproduction, Sexual Reproduction, Human Reproductive Systems, Puberty, Menstrual Cycle, Gametogenesis: Spermatogenesis, Oogenesis, Fertilization, Embryonic Development, Placenta, Parturition, Lactation, Birth Control Methods, Amniocentesis, Sexually Transmitted Diseases (STD), Infertility and Treatment, Adoption

#### 3. Inheritance and Variation

 Chromosomes and Mechanism of Inheritance, Genetic Terminology, Mendel's Laws of Inheritance, Back Cross and Test Cross, Deviations, Chromosomal Theory of Inheritance, Chromosomes, Linkage and Crossing over, Autosomal Inheritance, Sex Link Inheritance and Diseases, Sex determination, Genetic Disorders

#### 4. Molecular Basis of Inheritance

 The Discovery of DNA, The Genetic Material is a DNA, DNA Packaging, DNA Replication, Protein Synthesis, Genetic Code, Regulation of Gene Expression, Operon Concept, Genomics, Human Genome Project, DNA Fingerprinting

# 5. Origin and Evolution of Life

• Protobiogenesis, Chemical Evolution of Life, Organic Evolution, Darwinism, Mutation Theory, Modern Synthetic Theory of Evolution, Mechanism of Organic Evolution, Hardy-Weinberg's Principle, Adaptive Radiation, Evidences of Organic Evolution, Speciation, Geological Time Scale, Human Evolution

#### 6. Plant Water Relation

• Properties of Water, Water absorbing Organ, Availability and absorption of water by roots from soil, Water Potential([]), Plasmolysis, Path of water across the root, Mechanism of absorption of water, Ascent of Sap, Transport of mineral ions, Transport of food, Transpiration, Structure of Stomatal apparatus, Significance of Transpiration

#### 7. Plant Growth and Mineral Nutrition

 Meaning, Phases of Growth, Conditions for Growth, Growth Rate and Types of Growth, Growth Curve, Differentiation, De-Differentiation, Re-Differentiation, Development, Plasticity, Growth Hormones: Physiological Effects and Applications, Photoperiodism, Vernalization, Mineral Nutrition: Classification and Role of Mineral Elements in Plants, Nitrogen Cycle

# 8. Respiration and Circulation

Meaning, Organs of Respiratory exchange in plants and animals, Human Respiratory System, Mechanism
of Respiration, Regulation of Breathing, Common disorders of Respiratory system, Transportation in Living
Organisms, Circulation in animals, Human Circulatory system: Blood and its components, Heart: External
and Internal Structure, Conducting system of Heart, Mechanism of working of human heart, Blood Vessels,
Blood Pressure, Heart Diseases, ECG, Lymphatic system

# 9. Control and Co-ordination

Nervous Co-ordination: Nervous system in Hydra, Planaria. Neural Tissue, Synapse, Transmission of nerve impulse. Human Nervous System: Central Nervous System (CNS), Peripheral Nervous System(PNS), Autonomous Nervous System(ANS). Sensory Receptors, Eye, Ear, Disorders of Nervous System, Chemical Co-ordination, Endocrine System: Hormones, Properties, Mechanism of Hormone Action. Major Endocrine Glands, Hormones, Mode of Action, Disorders

#### 10. Human Health and Diseases

 Immunity and its types, Cells of Immune System, Vaccination, Structure of Antibody, Formation of antigenantibody complex, ABO blood groups and Rh factor, Common Human Diseases: Mode of Transmission, Symptoms, Diagnosis and Treatment, Prevention and Control, Adolescence, Mental Health and Adolescence, Addiction, Drug Abuse, Effects of Drugs, Prevention and Control

# 11. Enhancement of Food Production

 Improvement in Food Production, Plant Breeding, Tissue Culture, Single Cell Protein (SCP), Biofortification, Animal Husbandry: Management of Farm and Farm Animals, Dairy Farm Management, Poultry Farm Management, Apiculture or Bee Keeping, Fishery, Lac Culture. Microbes in Human Welfare: Microbes in Food Production, Role of Microbes in Industrial Production, Microbes in Sewage Treatment, Microbes in Energy Generation, Role of microbes as biocontrol agents and biofertilizers

# 12. Biotechnology

 Meaning, Principles and Processes of Biotechnology: Technique of Gene Cloning and rDNA Technology, Methodology for rDNA Technology, Applications of Biotechnology: Healthcare, Agriculture, Gene Therapy, Genetically Modified Organisms(GMOs), Advantages of GM food-plants. Bioethics: Effects of Biotechnology on Environment and Human Health. Bio-piracy and Bio-patent

# 13. Organisms and Populations

• Organisms and the environment around, Major abiotic factors, Adaptation, Population, Interactions,

# 14. Ecosystems and Energy Flow

• Ecosystems : Structure and Function. Energy Flow, Ecological Pyramids, Nutrient Cycles: Carbon and Phosphorous Cycle. Ecological Succession

# 15. Biodiversity, Conservation and Environmental Issues

 Definition of Biodiversity, Levels of Biodiversity, Biodiversity current scenario, Loss of Biodiversity, Causes of Biodiversity Losses, IUCN System and Categories, Conservation of Biodiversity, Biological Diversity Act 2002, Environmental Issues: Air, Noise, Water Pollution, Its Causes, Effects and Control Measures, Green House Effect and Global Warming, Ozone Depletion, Deforestation, Conservation of Forests, Mission Harit Maharashtra

# **IMPORTANT NOTICE**

The students and the parents will have to submit the printouts of antiragging undertaking online on the following websites

website 1: www.antiragging.in

2: www.amanmovement.org

This has to be submitted immediately after the conformation of the admission.

#### Note:

As per the directions of Hon'ble Supreme Court of India Order No. SLP(C) No. 24295/2004 and SLP No. 143656/2005, WP (C) No. 173/2006 and SLP(C) No. 24296-24299/2004 all the students are hereby informed the following.

"If any incidents of ragging comes to the notice of the authority, the concerned students shall be given liberty to explain and if his explanation is not found satisfactory the authority would expel him from the institution."

All the students should note the above directives from the Supreme Court.

Registrar Bharati Vidyapeeth (Deemed to be University)

Annexure - I

# **AUTHORISATION FOR REPRESENTATIVE**

l,	
son /daughter of	
being unable to attend the counselling session 2021, hereby authorize	for admission to the B.Sc. Nursing course in August,
G	ow, to represent me at the counselling and on-the-spot- resent all the necessary documents, pay the appropriate
Name of the candidate :	
(IN CAPITAL LETTERS)	
Seat No. (B.Sc. Nursing-2021 Examination):	
Place:	
Date:	
Reason for absence:	
A recent passport size photograph of the representative should be affixed here.	A recent passport size photograph of the Candidate should be affixed here.

# Bharati Vidyapeeth, Pune

Bharati Vidyapeeth Bhavan, Lal Bahadur Shastri Marg, Pune - 411 030. Phone: (020) 24325701, 24322279 Fax: (020) 24339121

#### Dr. PATANGRAO KADAM M.A., LL.B., Ph.D.

• Founder-Chancellor, Bharati Vidyapeeth & Bharati Vidyapeeth (Deemed to be University), Pune

# **AT A GLANCE**

### EDUCATIONAL CAMPUSES:

• Pune • Navi Mumbai • Navi Delhi • Panchgani (Satara) • Sangli • Karad • Kolhapur • Solapur • Jawhar • Jat

# ■ BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY)

- ★ Accredited with 'A+' Grade (2017) by NAAC ★ ★ Category-I University Status by UGC ★
- \* 'A' Grade University Status by MHRD, Govt. of India \* ★ NIRF Ranking 62 \*
- Medical College, Pune
  Dental College & Hospital, Pune
  College of Ayurved, Pune
  Homoeopathic Medical College, Pune
  College of Nursing, Pune
  Yashwantrao Mohite College of Arts, Science and Commerce, Pune
  New Law College, Pune
  Social Sciences Centre (M.S.W.), Pune
  Yashwantrao Chavan Institute of Social Science Studies & Research, Pune
  Research and Development Centre in Pharmaceutical Sciences & Applied Chemistry, Pune
  College of Physical Education, Pune
  Institute of Environment Education & Research, Pune
  College of Engineering, Pune
  Poona College of Pharmacy, Pune
  Institute of Management & Entrepreneurship Development, Pune
  Rajiv Gandhi Institute of Information Technology & Bio-Technology, Pune
  Interactive Research School for Health Affairs, Pune
  Medical College & Hospital, Sangli
  Dental College & Hospital, Navi Mumbai
  Institute of Management & Catering Technology, Pune
  Yashwantrao Mohite Institute of Management, Karad;
  Institute of Management, Kolhapur;
  Institute of Management & Rural Development Administration, Sangli
  Abhijit Kadam Institute of Management and Social Sciences, Solapur
  Dental College & Hospital, Sangli
  College of Nursing, Sangli
  College of Nursing, Sangli
  College of Nursing, Navi Mumbai.

#### **■ FACULTIES / DISCIPLINES :**

- Arts
   Science
   Commerce
   Engineering
   Medicine
   Dentistry
   Management
   Pharmaceutical Science
- Ayurved Homoeopathic Nursing Hotel Management Law Social Sciences Social Work Architecture
- Environmental Sciences
   Physical Education
   Kala (Art)
   Agriculture
   Biotechnology

# ■ INSTITUTE BRANCHES:

- Research Institutes 3 Colleges (including proposed 2): 50 Technical Institutes: 8 Junior Colleges: 15
- Primary Schools and High Schools (Marathi): 40 Pre-Primary Schools and Primary Schools (English): 20
- Balvikas Mandir: 4 Public School: 1 Adivasi Vikas Ashram Shala: 1 I.T.I.(Girls): 1 Other Sections: 17

# ■ ASSOCIATE INSTITUTIONS:

- Bharati Vidyapeeth English-Maths Exam Department Bharati Vidyapeeth's Bharati Printing Press
- Bharati Sahakari Bank Ltd.
   Bharati Madhyawarti Sahakari Grahak Bhandar Ltd.
   Sonhira Sahakari Sakhar Karkhana Ltd.
   Wangi, Kadegaon, Dist. Sangli
   Sagareshwar Sahakari Soot Girni Ltd.
   Kadegaon, Dist. Sangli
- Krishna Verala Sahakari Soot Girni Ltd., Kundal-Palus, Sou. Vijaymala Patangrao Kadam Mahila Auodyogik Sahakari Santha, Kadegaon, Dist. Sangli Mahatma Gandhi Hospital & Research Centre Bharati Vidyapeeth Medical Foundation Bharati Hospital & Research Centre Eye Bank Mobile Health Care Unit & Ambulance
- Foundation for Rural Development
   Bharati Vidyapeeth Krida Pratishthan
   Bharati Vidyapeeth Kala Academy
- Sonhira Milk Producers and Allied Agro Co-op. Soc. Ltd., Kadegaon Sonhira Co-op. Poultry Society Ltd., Kadegaon, Dist. Sangli





College of Nursing, Pune



College of Nursing, Navi Mumbai



College of Nursing, Sangli



Bharati Hospital, Pune



Bharati Hospital, Sangli



# **Bharati Vidyapeeth** (Deemed to be University) Pune, India.

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Fax No.: 020-24329675

Website: www.bvuniversity.edu.in E-Mail: cet@bharatividyapeeth.edu