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Career in  
**'Allied Health Sciences /  
Health Care industry'**  
After 10+2

## Introduction:-

- Allied Health Practitioners are a separate group of health practitioners who apply their skills to prevent, diagnose, treat and rehabilitate people of all ages and all specialties from transmitting diseases.
- They will provide direct medical care, recovery, medication, diagnostics and health development measures along with a range of technical.
- It is support personnel to recover and sustain optimum physical, sensory, psychological, cognitive and social functions.
- Allied health sciences deal with all sorts of medical diagnostic techniques (e.g. blood analysis, histopathology, pathological analysis, radiography) that are used in the medical field and are very relevant for patient care.
- The role of allied health workers in providing effective care has become critical with diagnosis based on technology.

## **Eligibility:-**

- Students planning to pursue Allied Health Science courses must belong to the science stream.
- Biology is an obligatory subject for certain related medical disciplines.
- Applicants are shortlisted for admission to good institutions based on their results at the +2 level.
- Therefore, a high aggregate percentage is significant.
- So, in all subjects, the student should strive to score high.
- To be able to evaluate and interpret data and take decisions, allied medical science students should learn strong critical thinking capacity and research skills.
- To take up this career area, the ability to persevere in difficult conditions and strong physical endurance are both necessary requirements.
- Most institutions demand a minimum of 50 percent or above in aggregate for admission to undergraduate courses.
- In Biology, some courses may also require a separate minimum 50 percent requirement.

## **Allied Health Science Courses:-**

1. **Pharma D**
2. **B. Pharma**
3. **D. pharma**
4. **BSc.- Nursing**
5. **BSc.- Anesthesia Tec.**
6. **BSc.- Cardiac Tec.**
7. **BSc.- Medical Lab Tec.**
8. **BSc.- Radio Therapy Tec.**
9. **BSc.- Clinical Optometry**
10. **BSc.- Nuclear Medicine**
11. **BOT- Occupational therapy**
12. **BSc.- Operation Theatre**
13. **BSc.- Physician assistant**
14. **BSc.- Respiratory care**

# 1) Career opportunities in Pharma D (Doctor of Pharmacy):-

## Introduction:-

- Pharm. D is an important course that deals with the study of pharmaceuticals, medicine and drug related practice.
- The course is divided into two stages.
- The **first stage includes academic study**.
- The total duration of this stage is for a period of 5 years.
- The **second stage is the internship** and residency training that involves pharmacy practice or clinical pharmacy service.
- The course was launched in India in 2008 and is regulated by the Pharmacy Council of India.
- Doctor of Pharmacy is a combination of science and art of dispensing medicines.
- Students are acknowledged as practical in clinical pharmacy, medical pharmacy.
- After completing the course, students are gained with the skills in diagnosis, therapeutics usage of drugs, treatment and selection of diseases, etc.
- They perform tasks like monitoring patients, diagnosing the disease, etc.

## Eligibility Criteria:-

- To be apply for Pharm D Course candidate but fit in the eligibility criteria:
- Qualify 10+2 with minimum of 60% marks from a recognized board.
- Relaxation of up to 5% marks is considered for reserved categories such as SC/ST/OBC.
- Candidates who have completed their D. Pharm course with 40% in aggregate are also eligible to study for the Pharm. D course.
- Science stream with PCB (Physics, chemistry, Biology) or PCM (Physics, chemistry, Mathematics) as subjects are preferred.
- Some colleges or universities have different eligibility criteria as a common entrance test for admission.

## Pharm. D Admission Process 2021:-

- The admission to the majority of the Pharm. D courses is done mainly on the basis of entrance examination.
- However few of the colleges provide admission on the basis of merit list.
- The merit list is prepared on the basis of the marks obtained in 12th or equivalent exams.
- Pharm. D admissions to the top colleges are done mainly through the entrance examination.
- The admission process generally takes place between May and June of each year.

However, the candidates are required to follow the following steps in case of admission-

- The registration form will be released on the official websites of the respective colleges or universities.
- The candidates are required to register themselves and fill in the application details. Then the candidates must fill up their admission form and upload the necessary documents

- Students have to submit the registration/application fee on the online portal before the last date and take out a receipt for further reference.
- The candidates must download the admit card and appear in the entrance exam
- Some colleges conduct counseling or GD/PI for the final selection.
- After final selection the candidates are required to pay the admission fee and confirm their seat.

### **Pharm D Course Highlights:-**

- The course highlight includes the duration, eligibility, admission process, colleges, top recruiters, job profiles, fee and salary.

Course type	Doctorate
Duration	6 years
Examination Type	Semester wise
Eligibility	10+2 with minimum 50% marks with science stream
Admission process	Entrance exam
Course Fee	INR 6,00,000 - INR 20,00,000
Average Salary (per month)	INR 3,00,000 – INR 10,00,000
Top Recruiting companies	Home health care, community pharmacy, clinical pharmacy, geriatric pharmacy, managed care, governmental agencies, etc.
Job Position	Pharmacists, drug experts, retail pharmacists, hospital pharmacy director, hospital staff pharmacists, clinical pharmacists, etc.

### **PharmD Future Scope:-**

After completing Pharm D there are a plethora of opportunities in the academic field as well as job opportunities. You can explore your path according to your liking:

- For further studies, you can pursue a Bachelor's in pharmacy or 2nd year in B.Pharm if you have completed PharmD.
- You can secure a job at drug stores of private and government hospitals. You can work in health clinics, NGOs, etc. by checking the dispensing medicines and advising them on the directions.
- You can become an entrepreneur by opening your own pharmacy store as retail, wholesale.
- The top recruiting areas of Pharm.D are health centers, drug control administration, and medical dispensing stores.

## **2) Career opportunities in B. Pharma (Bachelor of Pharmacy):-**

### **Introduction:-**

- B Pharmacy or Bachelor of Pharmacy is a 4 years Undergraduate degree program.
- It deals with the intricacies of the pharmaceutical industry, starting from manufacturing medicines and drugs to dispensing them across various medical stores, distributors and stockists.
- Bachelor of Pharmacy, as the name suggests, has a course structure which is particularly specialised for pharmaceutical studies.
- Few of the most vital subjects included in B Pharm course study are Biochemistry, Human Anatomy and Physiology, Computer Applications in Pharmacy etc.

### **Who Should Pursue B Pharmacy?**

- Students who want to make a career in the Pharmaceutical Industry should pursue B Pharmacy
- Students who want to make career into clinical research and scientific writing should opt for B Pharmacy
- Students who wants to join the healthcare industry and work at various hospitals, nursing homes etc can pursue B Pharmacy
- B Pharmacy can also be pursued by students who want to make a career in the pharmaceutical industry abroad, by studying courses in B Pharmacy Abroad.

### **B Pharmacy Admission Process:-**

- Candidates who are seeking B Pharmacy Admissions have to sit for various Entrance Exams that are conducted by various Universities.
- Some colleges like Annamalai University enroll students on the basis of Merit as well.

### **B Pharmacy Eligibility:-**

- The eligibility criteria for B Pharmacy courses are very simple and easy to follow. Below mentioned points discusses elaborately the eligibility criteria for B Pharmacy,
- Students should have cleared Class 12 board exams with 50% aggregate marks from a recognised board
- They must have studied Physics, Chemistry, Biology and Mathematics at their 10+2 level.
- After fulfilling the eligibility criteria, students should thereafter sit for Entrance exams or can be selected on the basis of merit, depending on the colleges they are applying to.

### **B Pharmacy Entrance Exams:-**

- B Pharmacy admissions are done on the basis of the score a student achieves in various entrance exams that are conducted by different colleges.
- The cut off scores generally vary from college to college.
- MHT-CET

### **B Pharmacy Jobs:-**

- As already discussed, after the successful completion of B Pharmacy course, one can opt from a wide range of choices to pursue their career into.

- B Pharmacy degrees also give the opportunity to work for both Government and Private sector organizations.
- The average salary post the completion of this course ranges from INR 4 - 6 LPA.

### **Top Recruiters:-**

- After completion of B Pharmacy courses one can choose to study further, like M Pharmacy, PharmD and others.
- However, the majority of the students prefer joining the bandwagon once they complete their degree.
- Graduating from a top Pharmacy college guarantees top placements with an opportunity to settle abroad.

### **B Pharma Course Highlights:-**

<b>Course Level</b>	<b>Undergraduate</b>
Full Form	Bachelor in Pharmacy
Duration	4 years
Examination Type	Semester
Eligibility	Class XII with 55-60% with Science subjects. D Pharma (For lateral entry into second year of B Pharm)
Admission Process	Merit and Entrance Examinations
Course Fee	The average B.Pharm course fee ranges from INR 40,000 to 1 lakh per annum. The fees may differ according to universities/colleges standards. Entrance exam which the candidates take to get admission will also be a factor for deviation in fees.
Average Initial Salary	INR 3.5 - 6 LPA
Top Recruiting Companies	Covance , Medical Clinics, Government Drug research Institutes, Novartis, Baxter, Novo Nordisk, GlaxoSmithKline, Hospitals Nestle, Abbott, Cipla etc.
Job Positions	Drug Safety Associate, Medical Writer, Clinical Research Associate, Pharmaceutical Scientist, Drug Inspector, sales and marketing Positions in Pharma/ Biotech firms, etc.
B Pharmacy Higher Studies	M Pharm, PhD, PharmD, LLB, MBA in Healthcare Management, MBA

### **3) Career opportunities in D. pharma (Diploma in Pharmacy):-**

#### **Introduction:-**

- Diploma in Pharmacy is a 2 years long career-oriented, diploma course.
- Students who wish to pursue a long term career in the medical field of pharmaceutical sciences, starting in entry-level positions are suitable for this course.
- This program is designed to prepare candidates to work under the supervision of a licensed pharmacist in hospitals, community pharmacies, and other pharmaceutical-related fields.
- Candidates can also pursue MBA Pharmaceutical Management after this course, though they would need to complete their bachelors first.

#### **D Pharmacy Admission Process:-**

##### **Eligibility:-**

- Students who wish to pursue a Diploma in Pharmacy course must fulfil the following eligibility criteria.
- The candidate must have passed Class 12 or equivalent from a recognized board.
- Students must have studied Physics, Chemistry, and Biology or Mathematics as compulsory subjects.
- The candidate must have a minimum of 50% marks in aggregate.
- 10% relaxation in marks will be given to candidates belonging to SC/ST/OBC (non-creamy layer), differently abled, and other categories.

##### **D Pharmacy Admission 2021:-**

- Admission to the course is usually based on the score obtained by a candidate in an entrance exam.
- Some of the major entrance exams conducted for this purpose is GPAT, AU AIMEE etc.
- Some colleges also offer admission on merit basis.
- Submit the application to the colleges or universities you wish to seek admission into.
- Get a good score in Class 12 exams.
- In due course of time, colleges release their merit lists.
- Check if you are eligible for admission into the desired course.
- If eligible, visit the college and submit all the required documents.

##### **D Pharmacy Jobs:-**

- D.Pharmacy is a diverse course that offers a lot of scope for candidates pursuing it.
- Candidates after completing a degree in Pharmacy do have a wide scope of job opportunities such as Pharmacists, Production Executive, Analytical Chemists etc.
- Following are some of the some of the areas where D Pharma graduates can work:
  1. Pharmaceutical Firms
  2. Sales and Marketing Department
  3. Research Agencies
  4. Clinics
  5. Food and Drug Administration
  6. Government hospitals
  7. Community health centres

## D Pharmacy Scope:-

- After completing D Pharmacy, there awaits numerous scope for candidates, in both the academic and well as job fields.
- You can pursue them according to your favours and likings,
  1. For higher studies you can pursue Bachelor in Pharmacy or 2nd year B.Pharm if you have completed PharmD
  2. You can secure job at a drugstore at various private and government hospitals
  3. You can become an entrepreneur by opening your own pharmacy store, or retail or wholesale
  4. Top D.Pharm recruiting areas are health centres, drug control administration or medical dispensing stores

## D Pharma Course Highlights:-

Course Full Form	Diploma In Pharmacy
Course Duration	Course Duration of Diploma in Pharmacy [D.Pharm.] is 2 Years.
Age Eligibility	Minimum age limit is 17 years
Minimum Qualification	10+2 (From any recognized Board)
Minimum Aggregate Score Requirement	35%- 45%
Selection Process	Merit-Based/ Entrance Exam
Subjects Required	10+2 examination with Physics and Chemistry as compulsory subjects along with Mathematics or Biology
Average Course Fees	INR 45,000 - 1 lakh per annum
Advanced Options of Study	B.Pharm, M.Pharm, Pharm.D
Average Salary Offered	INR 3.0 lakhs per annum
Employment Roles	Hospital Pharmacist, Community Pharmacist, Production Chemist, Production Technician, Medical Representative, Pharmaceutical Wholesaler.
Placement Opportunities	<ol style="list-style-type: none"><li>1. Govt. Hospitals: AIIMS, PGI, ESIC, Etc.</li><li>2. Private Hospitals: Max, Fortis, Apollo, Etc.</li><li>3. Pharmaceutical Industries: Alkem, Cipla, Abbott, Dr.Reddy's, Mankind, Unichem, Etc.</li><li>4. Private Clinics &amp; Nursing Homes</li><li>5. Wholesale Drug Distribution</li></ol>



## **4) Career opportunities in BSc. Nursing:-**

### **Introduction:-**

- BSc in Nursing is a 4-year undergraduate course that focuses on providing detailed nursing to medical aspirants.
- Admission to BSc Nursing is provided through NEET which has been initiated by the Indian Government or several other university level entrance exams.
- BSc Nursing is provided through the MNS Nursing exam to offer admission in the Indian Army.
- Students who wish to pursue a career in the healthcare sector can pursue the BSc Nursing Course.
- Candidates who are interested in serving the society as nurses, midwives, assistants must pursue this course.
- Candidates who are compassionate in serving the patients and assisting doctors to treat them can also pursue the BSc Nursing course.

### **BSc Nursing Admission Process:-**

- BSc in Nursing Admission Process in India is conducted through both entrance exam score and merit, though the top medical colleges in India mostly consider entrance exams scores.
- BSc Nursing Application forms are generally released between April to June and the same is expected for the Admission 2021 also.
- Students who qualify the eligibility criteria for entrance exam based admission, mainly need to go through 2 steps before the final selection in BSc Nursing colleges.
  1. Filling the Application Form
  2. Appearing in the Entrance Exam

### **BSc Nursing Eligibility:-**

- BSc Nursing is catered in two segments, which are BSc Basic and BSc Post Basic.
- The eligibility criterion for BSc Nursing is a 10+2 or equivalent examination completion certificate from Science stream with PCB and English as compulsory subjects.
- For BSc Nursing Post Basic, the basic criteria are the same as BSc Nursing eligibility criteria.
- Apart from it, for BSc Nursing Post Basic, candidates need to acquire a General Nursing Midwifery (GNM) certificate and register her/himself from State Nurses Registration Council as Registered Nurse Registered Midwife (RNRN).

### **After BSc Nursing: Scope in India:-**

- The candidates who wish to polish their knowledge and skills with more information and experience of practical work can go for higher studies like masters and doctoral degrees.
- Higher education adds value to your skills, experience, and knowledge. A few of those master courses in the nursing discipline are listed below:

## MSc Nursing:-

- MSc Nursing is a postgraduate qualification program of 2 years that can be sought after the completion of a 4-year BSc Nursing program.
- The course centers on thinking about the patients, both truly and intellectually, and helping them to carry on with their life in a profitable manner.
- To secure admission in MSc Nursing, one must have completed BSc Nursing or Post Basic BSc Nursing (P.B.B.Sc.), with a minimum of 55% marks.
- Admissions to this course are usually entrance-based. An average fee charged to pursue this course ranges from INR 30,000 to INR 1 lakh per annum.

## BSc Nursing Jobs & Placement:-

- The candidates after completing BSc Nursing will have a lot of options for jobs at this stage. There are various BSc Nursing jobs available for graduates.
- Some of the options they can choose are:
  1. Clinical nurse in government or private hospitals, nursing homes, clinics, health departments, medical services of the army, navy, or air force.
  2. Nurse educators in nursing colleges, training institutes, etc.
  3. Nurse researchers in research institutes and health care companies.
  4. Nurse Managers or administrators in hospitals.

## BSc. Nursing Course Highlights:-

Particulars	Specifications
Degree Level	Undergraduate (UG)
Full Form	<b>Bachelor of Science in Nursing</b>
Duration	<b>4-Years.</b>
Minimum Percentage	50% in 10+2 from a recognized board
Subjects Required	Physics, Chemistry and Biology
Average Fees Incurred	Fee ranges from Rs. 8,500 - 1.3 lakhs per annum
Similar Options of Study	PB B.Sc. (Nursing)
Average Salary Offered	Rs 3.2 lakhs per annum
Employment Roles	Staff Nurse, Registered Nurse (RN), Nurse Educator, Medical Coder, Registered Nurse (RN) - Emergency Room, Nurse - Intensive Care Unit (ICU), Neonatal Intensive Care Unit (NICU) Registered Nurse etc.
Placement Opportunities	Apollo Group, Inc., Fortis Hospitals, Manipal Group, Medica etc.

## **5) Career opportunities in BSc. Anesthesia Tec:-**

### **Introduction:-**

- B.Sc. in Anaesthesia Technology is a 3-year full-time undergraduate degree course.
- The eligibility for this course is the 12th or equivalent examination in the Science stream with a minimum of 45% marks in Physics, Chemistry, and Biology.
- Under B.Sc. in Anaesthesia Technology program, the eligible candidates are provided training in all the types of equipment that are used for anaesthesia, different anaesthesia agents, the techniques that need to be used for giving anaesthesia as well as its allowable dosage which depends on the patient and operational conditions.
- The subjects that are taught during the three years of graduation include Anaesthesia Technology, Medical Technology, Fundamentals of Operation Theatre, and Anaesthesia and Operation Theatre techniques.
- The main objective of B.Sc. in Anaesthesia Technology course is to equip students with the knowledge of anaesthetic equipment, their usage and how to monitor the patients.
- The course has both theoretical and practical ways of helping the students in becoming successful anaesthetists and deploying their knowledge in operation theatres before the beginning of an operation.
- Sometimes they also have to perform these tasks during or even after the surgery.
- The students are also taught about anaesthesia supplies and anaesthesia technology.
- They are taught in a way that they have good knowledge not just of anaesthesia techniques but also of techniques pertaining to operation theatres.

### **Eligibility:-**

The eligibility criteria for the students to successfully apply for B.Sc. in Anaesthesia Technology are as given below:

- 10+2 or equivalent with a minimum of 45% on Physics, Chemistry, and Biology.
- Along with this, the candidates might also need to clear the entrance exam which is compulsory for admission to some of the institutes.

### **Admission Process:-**

- The admission process for B.Sc. in Anaesthesia Technology is different for different institutes.
- Some institutes select students on a merit basis, that is, on the marks obtained by the students in the subjects of Physics, Chemistry, and Biology in their 10+2 examination.
- Some of the institutes grant admission to the students on the basis of the score which they get in the entrance examination for the course.
- NEET (National Eligibility cum Entrance Test)

### **Career Prospects:-**

- There are many different career options that the graduates of B.Sc. in Anaesthesia Technology can go for.
- Majority of the top hospitals and institutes hire them at a good pay scale and on a good post.

- Some of the posts which are available for a graduate in Anaesthesia Technology are Anaesthesia Technician, Medical Consultant, Anaesthetist, Paediatrician, Clinical Associate, Certified Registered Nurse Anaesthetist, Anaesthesiologist Assistant, Associate Consultant among many others.
- They are also appointed in the workplaces of physicians or surgeons who perform surgery.
- The specializations which they can choose from are General Anaesthetics, Cardiothoracic Anaesthetists, Neuro Anaesthetists, Intensive care, Obstetric Anaesthetics, Paediatric Anaesthetics, and a few others.

### **B.Sc. in Anaesthesia Technology: Course Highlights:-**

Course Level	Graduate
Course Duration	3 years
Examination Type	Annual
Eligibility	10+2 (or equivalent) with a minimum of 45% in the main Science subjects
Admission Process	Entrance exam based, merit-based
Average Course fee	25,000 - 41,000 per year
Average Starting Salary	20,000 - 30,000 per month
Top Recruiting Companies	Narayana Hrudayalaya Health City - Bangalore, Jupiter Lifeline Hospital Limited- Thane, Mewar Hospital Private Limited - Udaipur, Aster Medcity - Kochi, Apollo Cradle - Bangalore, Max Super Specialty Hospital - Vaishali, World College of Medical Sciences and Research Hospital - Jhajjar and many more
Job Positions	Anaesthesia Technician, Medical Consultant, Anesthetist, Pediatrician, Clinical Associate, Certified Registered Nurse Anesthetist, Anesthesiologist Assistant, Associate Consultant and so on

## **6) Career opportunities in BSc. Cardiac Tec.:-**

### **Introduction:-**

- Bachelor of Science in cardiac technology is a 3-4 year undergraduate course.
- Study of cardiac technology helps doctors to diagnose the disarray in the heart.
- In this course students learn about the heart and circulatory system.
- After doing this course students tend to know about the invasive procedures during the case of emergency and also technical knowledge about the cardiovascular system.
- BSc in Cardiac Technology is surely a lucrative career option in terms of salary and job opportunities.
- After the completion of the course, candidates can easily find highly paid jobs in private as well as government sectors.
- Some of the top recruiters for the graduates of BSc in Cardiac Technology include Fortis Healthcare, AIIMS, Apollo Hospital and many others.
- According to Payscale, the average annual salary of a Cardiac Technician is around INR 5,50,000 which increases with experience.

### **BSc in Cardiac Technology: Course Details:-**

- Bachelor of Science in cardiac technology is a course in which students learn about the technical knowledge of the cardiovascular systems.
- The Bachelor of Science in Cardiac Technology course involves theory as well as practical knowledge.
- Students who pursue the course are called cardiac technologists. Cardiac technologists play a vital role when it comes to the treatment of heart disorder.
- The course lets the students learn about cardiac care technology, human anatomy, etc.
- Cardiac technologist helps doctors in tacking and takes care of the patients who suffer from the heart disorders.
- Also students during the course are required to observe the cardiac procedure so that while performing it they can excel in it.

### **Admission Process:-**

- The admission process for BSc in Cardiac Technology is quite easy and similar to some other bachelor courses.
- Admission is granted through both entrance-based and merit-based.
- After clearing their class 10+2 exam, students need to appear in an entrance exam conducted by different colleges or at a National level like AIIMS, NEET, etc. and qualify the entrance exam with good marks to get admission to the course.
- Some colleges admit students on merit basis and students need to apply for the admission and wait for the selection list to take further action for the admission.
- Every college or university follows a different admission procedure for the BSc in Cardiac Technology course.
- After qualifying the entrance exam candidates may also be required to face Group discussion or personal interview rounds followed by a Document verification process.

### **Eligibility Criteria:-**

- The prescribed eligibility criteria for the BSc in Cardiac Technology course that must be fulfilled by an aspirant to get admission into the course is mentioned below:
1. Aspirants must have completed 10+2 in the science stream from a recognized university.
  2. Aspirants must have studied chemistry, physics, biology and English as main subjects.
  3. Candidates must have completed their 10+2 with a minimum aggregate of 55% aggregate marks.
  4. For admission to some of the best colleges/universities candidates may also be required to qualify the entrance exam conducted by the University or any National body.

### **Merit-Based Admissions:-**

- Most of the colleges in India offer admission based on merit-based. Candidates should have scored good scores in their 10+2 board examination to secure admissions to a good college or university.
- Candidates are selected based on their marks obtained by them in their 10+2 board exam which is followed by the list of selected students published by the university.

### **Entrance-Based Admissions:-**

- Some colleges and universities conduct their own entrance exam to offer admission in Bsc in Cardiac Technology course to the candidates.
- These institutes accept the results of entrance exams such as NEET, AIIMS, SSSUTMS, etc.
- After qualifying the entrance exam, candidates may be required to face Group Discussion or Personal Interview rounds followed by Documents Verification rounds and finally students are offered admission.

### **BSc in Cardiac Technology: Job Profiles:-**

- Bachelor of Science in cardiac technology has plenty of job options in the market. After graduating, students' get jobs in various hospitals, clinics, nursing centers, etc.
- There they assist doctors in the treatment and diagnosis of patients with heart problems.

### **Top recruiters:-**

- There is a high demand for the graduates of BSc in Cardiac Technology.
- Most of these graduates are hired by Hospitals, Medical Centers, etc.
- Below given are some of the popular and the top recruiters of graduates in this field.

### **BSc in Cardiac Technology Scope:-**

- Bachelors of Science in cardiac technology have a vast range of job opportunities in the market.
- Cardiac technologists assist the doctor in the treatment of patients suffering from heart problems. They get jobs in hospitals, nursing centers, heart clinics, etc.
- There are plenty of options available as jobs for cardiac technologists as there are only 4000 technologists over 80,000 heart patients.
- They also get jobs according to their experience in the field.
- Apart from getting a job one can also go for higher education.

### Higher Education:-

- After completing BSc. in Cardiac technology students can also opt for higher studies in this field, or can opt courses like MSc in cardiac technology and PG Diploma in Cardiac Technology.
- Students can also opt for MD in cardiology or MSc in cardiology.
- These courses help the students in doing specialization in the field.
- As having specialization in the field and higher education can ultimately help in the increase in the scope of getting a high package job.
- Doing MD in cardiology and MSc in cardiology or MSc in cardiac technology can increase the chances of getting jobs in the market with a good salary package.
- As there are plenty of jobs present in the market for specialists in heart problems.

### BSc in Cardiac Technology: Highlights:-

Course Name	BSc in Cardiac Technology
Course type	Under graduate program
Course Duration	3-4 years
Course Examination type	Semester type
Course Eligibility	10+2 in science
Course admission process	Entrance exam/ Merit-based
Course fee	INR 10,000 to INR 5,00,000
Course Average Salary	INR 4,00,000 lakh to INR 20,00,000 per annum
Top recruiting companies	Fortis Healthcare, Max Super- Specialty, AIIMS, Apollo Hospital, BLK Super Specialty, Manipal Hospital, Lilavati Hospital and Research Centre
Job position	ICU Assistant, Dialysis Technician, Cardiologist, Cardiovascular Technologist , Nephrologists Technology

## **7) Career opportunities in BSc.Medical Lab Tec.:-**

### **Introduction:-**

- Bachelor of Science in Medical Laboratory Technology or BSc MLT is an undergraduate course of 3-year, which is divided into six years (two semesters per year).
- In this course professionals are taught about various aspects of health care.
- The students perform various diagnostic analysis on body fluids, which include haematology, bacteriology, immunologic, chemical and microscopic during the course.
- The subjects taught in the program are Clinical Endocrinology & Toxicology Lab, Diagnostic Molecular Biology Lab, Diagnostic Cytology etc.

### **BSc MLT Course Admission Process:**

- Admission to the BSc MLT course is usually entrance based but some colleges and universities grant direct admission for this course.
- The marks obtained in the qualifying examinations are considered for the purpose of offering admission to the students.

### **Merit based:-**

- After successfully applying for admission to the respective colleges, candidates will be asked to appear for the selection processes as defined by each individual college.
- Prior to the selection process, the medical universities/colleges will release the appropriate merit lists containing the names of the candidates along with their ranks, which would be calculated based on the previous academic records.
- The medical college/institutions will then call the students for counselling rounds, where each candidate will be able to select the course and college of their choice.
- Depending on the rank of the candidate as per the merit list, their preferred choice of college/university and the availability of seats in the preferred choices, the medical college/university will offer admission to the aspirant.

### **Entrance Based:-**

- After applying for the required entrance test, as per the regulations of the respective colleges, candidates must appear for the entrance test on the stipulated date and time.
- After attempting the entrance exam, the conducting body will release the appropriate merit list containing the name of the candidates along with their scores and ranks.
- Unlike other disciplines, medical institutions depend on counselling processes to offer admissions to the candidates.
- Based on the ranks and the scores of the aspirants as per the entrance test and the merit lists prepared by the institution, each candidate will be asked to appear for the counselling processes conducted by the authorised body.
- At the counselling centre, candidates will be asked to select their preferred course and college/university.
- The medical college/institution will offer admission to the courses based purely on ranks and scores obtained by the applicants in the entrance examination, the course & college chosen and the availability of seats in the preferred choices.



### **BSc MLT Course Eligibility Criteria:-**

- Students who wish to pursue BSc MLT course must meet up with the following eligibility criteria.
  - The minimum marks required in 12th class may vary from one college to another college.
1. The basic eligibility criteria of the BSc MLT course are that the candidates should have qualified their 10+2 in the area of Science with mandatory subjects such as Mathematics, Physics, Chemistry and Biology.
  2. The candidate should pass their 10+2 with a minimum aggregate of 50% or equivalent from the recognized education board.

### **BSc MLT Course Entrance Exams:-**

- In an entrance-based method, students are required to qualify an entrance examination in order to seek admission in any concerned college or university.
- Some of the top entrance exams conducted in order to shortlist students for admission into BSc MLT course is given below:

#### **JEE Mains: -**

- The full form of JEE is the Joint Entrance Examination. It is a national level entrance examination conducted by National Testing Agency (NTA) twice in a year.
- The duration of the exam is 3 hours i.e., 180 minutes and each correct answer consists of +4 marks & -1 mark for wrong Answers.

#### **JEE Advanced: -**

- Joint Entrance Exam [JEE] Advanced, formerly known as Indian Institutes of Technology-Joint Entrance Examination is an entrance examination conducted across India for admission to a wide number of educational institutions and colleges.
- JEE Advanced is one of the toughest exams to crack.
- Top institutes like IITs, NITs, IIITs, etc provide admissions to students on the basis of their performance in JEE Advanced.
- The candidates get 3 hours to solve all the questions.

### **BSc MLT Scope:-**

- The scope of this course is very wide and after B.Sc. (Medical Laboratory Technology) course, candidates can get so many best opportunities in many fields anywhere in the world.
- The scopes after this course are:
  1. A career in Medical Laboratory Technology field is one of the most challenging and satisfying careers in today's market.
  2. Every day, a technician/ technologist gets to learn something new, which is great for their career.
  3. A number of Medical Laboratory Technicians can find employment in pathology labs, research labs, urologist offices, pharmaceuticals, hospitals and in many other areas.
  4. Apart from the above opportunities, an aspirant can also pursue a career in the education line as lecturer/teacher.
  5. With the passing years, the course has multiplied in terms of what a student learns during the course, thereby multiplying the scope as well and the scope has expanded with a number of opportunities have been on the rise.

6. The Medical Laboratory Technology field includes areas such as blood banking, clinical chemistry, haematology, immunology, microbiology, cytotechnology, urine analysis, and blood sampling, etc. There are 'n' numbers of fields that can serve as suitable career options for the graduates.

#### **Job opportunities:-**

- B.Sc. in MLT provides ample job opportunities in the Healthcare sector.
- Every hospital and healthcare sector needs clinical lab technicians to detect problems and diseases causing the patients hence it is creating more job opportunities for the graduates of B.Sc. in MLT.
- Medical Laboratory Technology professions have a positive impact on people's health.
- Some of the jobs that are offered for B.Sc. in MLT graduates are:
  1. CT scan technicians
  2. Pathology Technician
  3. MRI technicians
  4. Optical Laboratory Technician
  5. X-ray Technicians
  6. Dental Machine Technician
  7. Radiology Technician
  8. Laboratory Technician
  9. Laboratory Manager
  10. Medical Officer
  11. Research Associate
  12. Medical Record Technician
  13. Resident Medical Officer
  14. Lab Assistant
  15. Laboratory Testing Manager

#### **BSc MLT Course Highlights**

Course	B.Sc. (Medical Laboratory Technology)
Full form	Bachelor of Science in Medical Laboratory Technology
Level	Graduate
Duration	3-year
Eligibility	50% in 10+2 from any Recognized Education Board
Admission Process	Entrance exam and Merit-Based
Average tuition fees	INR 10K - 4L per annum
Job Positions	Medical Laboratory Technician, Clinical Laboratory Technician, Phlebotomist, Clinical Laboratory Technologist, Medical Laboratory Technologist, Lab Technologist, Biochemist, Medical Phlebotomist etc.
Average salary	INR 2L - 6L per annum

## 8) Career opportunities in BSc. Radio Therapy Tec.:-

### Introduction:-

- Radiotherapy technology is one of the treatment lines for cancer.
- The process involves the deposition of energy in the targeted cells through ionising radiation causing destruction of the cells and ceasing their growth.
- Radiotherapy can be used as a primary treatment option for cancer before surgery to shrink a cancerous tumour.
- It can also be used after surgery to stop the growth of any remaining cancer cells or in combination treatment with chemotherapy or to alleviate symptoms caused by cancer.

### Eligibility Criteria for BSc Radiotherapy Technology (BMRT):-

- BSc. Radiotherapy Technology teaches the students to focus on the primary method used to treat cancer and the students can work as a therapeutic radiographer - delivering technically advanced and caring services in hospitals.
- The aspiring candidates should have cleared 10+2 examinations in physics, chemistry, biology, and English with Biology or Mathematics as optional subjects with at least 45% to 50% marks and should have passed out from the recognized institution or board.
- Many reputed institutes conduct entrance examination for the admission as well.
- The students with BMRT degree can pursue further studies such as M.Sc, M.Phil & Ph.D., etc.

### Required Skillset/Qualities/Attributes To Become Highly-Skilled Radiotherapy Professionals:-

- Radiotherapy Professionals are very special people due to their challenging job responsibilities.
- They face challenges every day.
- Their job demands few attributes to ensure they provide physical and psychological support to their patients.
- Here are the skillsets/attributes required to become excellent radiotherapy professionals:
  1. **Compassion** - Ability to calm patients who are under physical and emotional stress.
  2. **Interpersonal skills** - they should be able to interact with patients effectively.
  3. **Effective Communication Skills** - they should possess excellent written and oral communication skills.
  4. **A sense of sensitivity** - they should possess a sense of sensitivity to support the patient psychologically.
  5. **Critical Thinker** - the radiotherapy professional should be good with the analytical skills to review the radiation reports of the patients.
  6. **Problem Solving** - the problem-solving skill is very much essential to become radiotherapy professional.

### Job Profiles With the Job Description and Average Salary:-

- The starting salary of a radiotherapy technician/professional depends upon the factors like job location, the profile of the employer, and the aptitude of the employee.
- The job types for a graduate in radiotherapy technology are as below:

1. **Dermatology Consultants** - are medical practitioners who are specialized in treating skin cancer, skin problems, sunburns, and other skin-related issues. The average salary of MDs is around INR Lakh per month in the private sector.
2. **Nuclear Medicine Technologist** - The nuclear medicine technologist is a highly specialized profession with the primary focus on how the body functions in order to help in the diagnosis and treatment of a wide range of diseases. They prepare and administer small amounts of radioactive substances known as “Radiopharmaceuticals” along with other medications and treatments. The average salary of Nuclear Medicine Technologist is INR 700,000.
3. **Radiation Oncologist** - they are responsible for monitoring the patient and organizing imaging and other-related tests, work closely with radiation oncology medical physicists and radiation therapists. The average salary offered to radiation Oncologists ranges between INR 40,000 to 50,000 per month in a reputed cancer hospital.
4. **Radiation Therapist** - they treat cancer and other diseases by administering radiation treatments.
5. **Radiation Therapy Technologist** - provides radiation therapy to patients as prescribed by radiologists.
6. **Teacher & Lecturer** - impart knowledge to the students on the radiotherapy.
7. **Radiology Nurse** - the person is involved with the assessment, planning, and to undergo diagnostic, interventional and the therapeutical procedure.
8. **MRI Technician** - the person is responsible to administer image scans on patients to produce quality images of the specific part of the body. They work under the supervision of physicians and nurses.

### **BSc MLT Course Highlights:-**

<b>Popular Courses</b>	<ul style="list-style-type: none"> <li>• <b>Certificate:</b> A excessive of topics ranging Dosimetry, Patient care practices, Treatment planning, Pathology, Radiation physics</li> <li>• <b>Diploma:</b> DMRT or Diploma in Radiology Therapy</li> <li>• <b>UG:</b> BSc Radiotherapy, etc.</li> <li>• <b>PG:</b> PG Diploma, MD, etc.</li> </ul>
<b>Duration</b>	<ul style="list-style-type: none"> <li>• <b>Certificate:</b> Few days to 3 months (for Online)</li> <li>• <b>Diploma:</b> 1-2 years</li> <li>• <b>UG:</b> 3 years</li> <li>• <b>PG:</b> 3 years</li> </ul>
<b>Eligibility</b>	<ul style="list-style-type: none"> <li>• <b>Certificate:</b> Pass in Class X or XII from a recognized board</li> <li>• <b>Diploma:</b> Pass in Class XII from a recognized board</li> <li>• <b>UG:</b> Pass in 10+2 from a recognized board</li> <li>• <b>PG:</b> Pass in UG from a recognized University with Radiotherapy as a subject</li> </ul>
<b>Average Fees</b>	<ul style="list-style-type: none"> <li>• <b>Certificate:</b> free to INR 10,000</li> <li>• <b>Diploma:</b> INR 27,000 to 66,000</li> <li>• <b>UG:</b> INR 20,000 to 3,50,000</li> <li>• <b>PG:</b> INR 800 to 10,00,000</li> </ul>
<b>Online Courses</b>	Available
<b>Types of Online Courses</b>	e-Learning for Health Care, Integrity, Future Learn, etc. (Includes Paid and Unpaid courses)
<b>Top Job Prospects</b>	Database Administrator, Games Developer, Information Systems Manager, IT Consultant, Web Designer, Systems Analyst, Applications Analyst, etc.

## 9) Career opportunities in BSc.- Clinical Optometry:-

### Introduction:-

- Bachelor of Science degree in Optometry field provides extensive training and medical knowledge about the human eye.
- Apart from making the fundamentals of the human eye clear, this course will also teach how to operate various types of medical equipment that are a must for every optometry student and practitioner to know.
- Communication skills will also be focused on since it is imperative that the students know how to properly communicate with patients.
- The duration of the course is three years (four years in some universities which include one year of internship) and it is an important and career orienting in nature which provides widespread scopes to the candidates.

### Admission Process:-

- The admission to the students in BSc Optometry course is granted based on the candidates' performance in the entrance exam and according to the marks obtained in 10+2 level. Some of the universities also grant admission based on merit.

**Step 1:** The candidates who are considering applying to this course at a particular college/university should check the eligibility and the kind of entrance exams conducted to shortlist the students.

**Step 2:** Students can apply online or can visit the college to fill the application form which is necessary to apply for the course.

**Step 3:** Give the entrance exam

**Step 4:** The admission to BSc Optometry is granted based on entrance exam and the application forms are made available in May and on the completion of the application form the universities and colleges start declaring their respective cut off which is the minimum required percentage for admission to BSc Optometry program. The cut-off list will be announced by the colleges and the shortlisted students are called for the next round of counselling as well.

**Step 5:** Final Admission Round: For this course the colleges conduct different rounds aiming to test the individual's ability and skills through counselling.

### Documents required for BSc Optometry admission:

1. Mark sheet and pass certificate of Class X or XII examination.
2. Proof of date of birth.
3. School leaving certificate
4. Transfer certificate
5. Domicile certificate/ residential proof or certificate
6. Provisional certificate
7. Character certificate
8. Scheduled Caste/ Scheduled Tribe/Other Backward Caste certificates
9. Proof of disability (if any)
10. Migration Certificate

## **Eligibility for BSc Optometry:-**

- Students who aspire to seek admission to BSc Optometry course is required to follow the minimum eligibility criteria given below:
- The candidates must have completed their 10+2 from a recognized board of education with the minimum marks required.
- The minimum marks required for admission into BSc Optometry courses may vary from institute to institute, but the students are expected to have at least 50% in PCB/PCM/PCMB group.
- Some reputed colleges and institutes also conduct BSc Optometry entrance examination to take admission to the degree course.
- The aspirants appearing for 10+2 examinations can also apply for this course, but they need to produce their exam scores at the time of counselling (with at least 50% marks aggregate required in the Science stream).
- Selection to the BSc Optometry course in the colleges is based on marks secured in the final merit i.e. total marks aggregated in the final exams of 10+2 and the entrance exam.
- The candidates should have attained the age of 17 years on the first November of the year of admission. There is no maximum age limit.
- **NEET**- The National Testing Agency (NTA) conducts NEET annually to provide admission to the eligible candidates. It is the most sought-after medical entrance examination. A NEET aspirant must attempt to answer 180 questions in 3 hours. The exam paper is divided into three different sections, which are Physics, Chemistry, and Biology.

## **What after BSc Optometry?**

- An BSc Optometry graduate has ample opportunities waiting around, all one needs to do is to grab it. All of this is because of the diverse skill set one possesses.
- There are many job opportunities for BSc Optometry graduates. The students become eligible enough to get job opportunities in various private and public sectors in relevant sectors.
- They can find jobs in lens manufacturing units, optician showrooms, multinational companies dealing with eye care products, etc.. Some of the posts are Optometrist, Optician, Sales Executive, Teacher, Eye Doctor, etc. The salary of the graduates depends on various factors including experience, skills and job profile.

## **What is the Future BSc Optometry Scope?**

- This degree course enables the students to go for various optometry jobs and they can establish an independent practice by starting their own eye clinic, optical shop, lens manufacturing unit etc. A graduate of BSc Optometry will find that there are many scopes in today's market.
- These professionals can assist ophthalmologists in hospital clinics, practice in optical establishments, run optical shops, and have excellent job opportunities overseas.
- They can offer clinical services to multinationals dealing with companies, with the manufacturing and distribution of ophthalmic lenses, contact lenses and ophthalmic instruments. BSc Optometry graduates can also start manufacturing units for optical lenses.
- Lastly, the students who are interested in higher studies can join for MSc and PhD. programs in the relevant field and can take up teaching as a career.

## BSc Optometry: Course Highlights

Course	B.Sc. (optometry)
Full form	Bachelor of Science in Optometry
Level	Undergraduate
Specialization	Contact lenses, vision therapy, sports vision, ocular disease, geriatric, paediatric, low vision, occupational vision, education and research.
BSc Optometry Course Duration	3-year
Eligibility	10+2 completed from a recognized board of education
Admission Process	Entrance exam followed by a counselling
BSc Optometry fees	INR 10,000 to 1 Lakh
Job Positions	Optometrist, Optician, Sales Executive, Teacher, Eye Doctor, etc.
Top recruiting areas	Lens manufacturing units, optician showrooms, multinational companies dealing with eye care products, Contact lens and ophthalmic lens industry, multinational companies dealing with eye care products, etc.
BSc Optometry Salary	INR 2.5 to 8 Lakhs per annum

## 10) Career opportunities in BSc.- Nuclear Medicine:-

### Introduction:-

- Bachelor of Science (B.Sc.) in Nuclear Medicine Technology is a course that deals with the study of imaging of internal organs of the human body using radioactive isotopes.
- The inception of Nuclear Medicine was with the invention of the cyclotron in 1930 by Ernest Orlando Lawrence.
- He started working on the research at the University of California in Berkeley in 1928.
- Without Nuclear Medicine Technology, it was very difficult to visualize the soft tissues like body muscles, intestines, blood vessels, and other internal organs using X-Ray.
- But Nuclear Medicine revolutionized everything, in this tiny amount of radioactive chemical/substance is induced by the person's body via injection, tablet, or gas through the nose.
- The tiny radioactive substance is absorbed by body tissues which then gives out radiation and is detected by radiation detectors.

### BSc Nuclear Medicine Technology Eligibility:-

- The minimum eligibility criteria for the course is as follows:
- Aspiring candidates need to have passed 10+2 or equivalent qualification from a recognized educational Board with Physics, Chemistry and English with Biology or Mathematics as main subjects.
- A minimum score of an aggregate 50% in Higher Secondary School.

### BSc Nuclear Medicine Technology: Admission process:-

- Admission to the course is based on the candidate's performance at the 10+2 level.
- Candidates with Mathematics as one of the main subjects in 10+2 are given separate ranks based on the aggregate score in PCM in the merit list.
- If two or more applicants obtain equal marks in the merit list, the final selection is determined respectively based on scores in English and the aggregate marks in the qualifying examinations.
- Entrance Exams:- NEET

### About BSc Nuclear Medicine Technology:-

- Bachelor of Science in Nuclear Medicine Technology is an undergraduate Chemical Engineering programme.
- The use of radioactive materials in the diagnosis and treatment of disease, it is a branch of medicine dealing with.
- The progression of a disease – long before some medical problems are apparent with other diagnostic tests, nuclear medicine can identify abnormalities early.
- In its course when there may be a more successful prognosis this allows a disease to be treated early.
- The pain and trauma associated with investigative surgery, Nuclear Medicine Technology can save patients from these sufferings.
- Three years is the duration of the course and after its successful completion, it offers many career scopes in various fields.



## **Benefits of BSc Nuclear Medicine Technology:-**

- To prepare and administer radiopharmaceuticals, Images different organs and bodily structures use sophisticated computers to process data and enhance images and analyse biological specimens in the laboratory, B.Sc. Nuclear Medicine Technology is suitable for this.
- In the government and defence sectors and the public sector applicants can find many jobs at atomic research organizations.
- In India and the developed western countries, nuclear engineering has an unlimited career.
- For the further higher degree programs it gives a solid base.

## **B.Sc (Nuclear Medicine Technology) Employment Areas:-**

1. Academic Institutes
2. All India Institute of Medical Sciences (AIIMS) - Rishikesh
3. Columbia Asia Facility - Doddaballapur - Bangalore
4. Manipal Health Enterprises - Bangalore
5. Solar Energy/Nuclear Energy Companies

## **B.Sc (Nuclear Medicine Technology) Job Types:-**

1. Associate and Lab Leader
2. Nuclear Medicine Technologist
3. Professor/Associate Professor
4. Radiologist
5. Research Assistant

## **BSc Nuclear Medicine Technology: Course Highlights**

Course Level	Undergraduate
Full Form	Bachelor of Science (Nuclear Technology)
Duration	3 year
Examination Type	Semester type
Eligibility	10+2 with Physics, Chemistry and Mathematics as main subjects
Admission Process	Merit-based direct admission or Entrance test
Course Fee (INR)	30,000 to 2,00,000
Average Fee (INR)	2,00,000 to 9,00,000

# **11) Career opportunities in BOT- Occupational therapy:-**

## **Introduction:-**

- Bachelor of Occupational Therapy (BOT Degree) is an allied health profession, associated with the study of subjects and therapies for assessment and intervention to maintain the meaningful activities of individuals with any injury or disease.
- Occupational therapists often work with people with mental health problems, disabilities, injuries, or impairments by providing them support in the form of rehabilitation. BOT degree is an undergraduate program of 4.5 years with 4 years of college coursework and 6 months of field internship experience.
- Students of BOT studies basic medicine subjects like Anatomy, Physiology, Pathology, Microbiology, Biochemistry, Pharmacology, General Medicine and Surgery, Clinical Psychology and Psychiatry.
- The work of occupational therapists deals primarily with improving the life, condition and rehabilitation of handicapped and limited people through different modes of treatments such as counselling sessions, exercises, functional training, aiding devices and equipment, ergonomic training and environmental restructuring and adaptation.

## **Bachelor of Occupational Therapy: Admission Process:-**

- The admission to the Bachelor of Occupational Therapy courses is done either on the basis of merit list or entrance examination.
- The admission to the Bachelor of Occupational Therapy courses is mainly done in the month of May or June every year.
- However, this year the admission process has been postponed due to the pandemic.
- The following are some of the important details of the admission process of the Bachelor of Occupational Therapy courses.

## **Bachelor of Occupational Therapy: Eligibility Criteria:-**

- Candidates aspiring for admission to the course are required to fulfill the following minimum eligibility criteria.
- 10+2, completed from a recognized educational Board.
- Physics, Chemistry, Biology, or Mathematics as the main subjects of study at the 10+2 level.
- A minimum aggregate score of 50% (45% for SC/ST/OBC candidates) at the level of graduation.
- Candidates appearing for their final 10+2 examination are also eligible to apply for the course on a provisional basis.

## **Bachelor in Occupational Therapy Scope:-**

- The candidates after the completion of their Bachelor in Occupational Therapy can take up various courses such as MSc in Occupational Therapy

## **MSc in Occupational Therapy:-**

- It is a 2 year post graduate course which deals with the specialization of health care to solve physical, sensory and cognitive problems.
- The admission to MSc in Occupational Therapy course is done on the basis of entrance examination or merit list.
- The top colleges that offer the course are SRM University, Shivalik Institute of Paramedical Technology (SIPT), Tamil Nadu M.G.R. Medical University

## PhD:-

- PhD is a doctorate program that focuses on research and academics related to a particular subject area.
- The duration of the course is usually 3 years which can be extended to 5 years.
- Candidates need to have the relevant master's degree to study the PhD course.
- Students applying for PhD Admission 2021 should have a minimum aggregate of 50% marks in their postgraduate degree and must qualify the entrance exam to seek admission to the PhD course based on merit lists published by the universities.

## Job profiles available in front of BOT graduates are:-

1. Occupational Therapist
2. Rehabilitation Specialist
3. OT Consultant
4. OT Nurse
5. Instructor/Teacher
6. Social Worker
7. Marketer (supporting equipment/devices)

## Bachelor of Occupational Therapy: Course Highlights

Listed below are some of the major highlights of the Bachelor of Occupational Therapy course

Course Level	Graduate
Duration	4- 5 years
Examination Type	Yearly System
Eligibility	10+2 from a recognized educational Board
Admission Process	Direct admission to colleges. Entrance test in some cases.
Course Fee	INR 15,000 - 80,000
Average Starting Salary	INR 2-6 lacs
Top Recruiting Organizations	Hinduja Hospital, Medanta Hospital, Kokilaben Hospital, etc.
Top Recruiting Areas	Rehabilitation Centers, Multi-Specialty Hospitals, Non-governmental Organizations, Industry for rehabilitation of Injured workers, Private Practice/Private clinics, Mental Hospitals, Geriatric homes/ Old age Homes, Centers for Physically and Mentally Handicapped Children, Schools, Community health centers, Occupational health centers, GP practices/ primary care, education establishments, industrial and commercial organizations, prisons, social services and council departments, residential and nursing homes, charities and voluntary agencies, and such.
Top Job Profiles	Occupational Therapist, Occupational Therapy Nurse, among others.

## **12) Career opportunities in BSc.- Operation Theatre:-**

### **Introduction:-**

- The duration of BSc Operation Theatre Technology is 3 years.
- This is a full-time degree course and to pursue this course every student must complete their 12th final year examination or any equivalent examination in Science stream with Physics, Biology, and Chemistry as compulsory subjects from any recognized board.
- Students who want to pursue BSc Operation Theatre Technology course have to appear in the entrance examination before the admission process.
- More than 50% of marks are required to appear in the entrance examination and the minimum age of the student must be in-between 15-17 years.
- This course is all about managing the records of a patient and to notice every detail of an operation theatre including the disinfection and sterilization and taking care of all the surgical instruments.
- The job profiles that a student will get after completing this course are to assist the Surgeons and Doctors during the emergency and in the time of operation.
- After completing the BSc Operation Theatre Technology course, further students can opt for the course of Anaesthetist Consultant.
- An Anaesthetist Consultant is responsible to give the right amount of anesthesia dosage with accurate levels. Students can go for various MSc courses as well.

### **Admission Process followed for BSc Operation Theatre Technology:-**

- The admission process for BSc Operation Theatre Technology is as follows:-
- Admission to the BSc Operation Theatre Technology course is conducted based on the scores obtained by the student in the entrance examination.
- The dates for the release of admission forms are not declared yet. Only the online mode of application is available for the students.
- For admission, you have to fulfil all the requirements of admission.

### **The entrance based admission process of BSc Operation Theatre Technology is as follows:**

1. Visit the college website
2. Complete the sign-in and verification process of your mobile number and email id.
3. After successfully registered again login with essential credentials
4. Complete the online application form
5. Upload all the educational certificates like mark sheets, admit cards, and migration certificate (if any)
6. After filling up the application form, pay the application fees via Debit card/ Credit card or Net banking. You can also pay offline through the Demand draft.
7. After the payment submit the application form.

### **Eligible for BSc Operation Theatre Technology:-**

- The eligibility criteria for BSc Operation Theatre Technology are as follows:-
- The students must complete the 12th /higher secondary final examination in Science with Physics, Chemistry, and Biology as compulsory subjects.
- To appear for the entrance examination student must secure minimum 50% marks in the 12th final year.

- Before getting admission in any colleges in India to pursue the BSc Operation Theatre Technology course, all the student should appear for the entrance examination conducted by the respective colleges and must clear the cut-offs for that particular course
- Scoring good marks in personal interview is also very necessary for the admission.

### **After BSc Operation Theatre Technology:-**

The various job prospects for the BSc Operation Theatre Technology course are the following:-

- Hospitals and healthcare centers are the main recruiters for the operation theatre technologists.
- As a technologist, they can get a chance to work in the operation theatres, emergency departments of the hospitals, and in the ICUs
- The areas of employment for the students after completing a BSc Operation Theatre Technology course are as an OT technician, Lab Technician, OT Assistant, Associate Consultant, and Teacher /Lecturer.
- For the teaching profile, students must have to pursue a master's degree course.
- After completing this course, students get BSc Operation Theatre Technology jobs in hospitals and nursing homes.
- Most of the private reputed hospitals and nursing homes come for recruitment, and chances of getting jobs in private hospitals are high. However, students can also apply for government jobs as per vacancy.

### **The Future BSc Operation Theatre Technology Scope:-**

- This course is very demanding and there is a lot of future scope for the students after completing this course. They can even go for a master's degree course and pursue higher education as a technologist in the operation theatre.
- This course will help you to strengthen your personality and you can develop your technical as well as interpersonal skills as you will get a chance to work under the guidance of doctors, nurses, anesthetists, and other junior doctors.
- After completing a bachelor's degree you can pursue a further MSc in this course. Once completing the MSc degree, students are eligible to teach in any medical colleges or institutions as a teacher/lecturer by pursuing a PhD.

### **BSc Operation Theatre Technology Course Highlights:-**

Full-Form	Bachelor of Science (B.Sc) Operation Theatre Technology
Duration	3 years
Examination Type	Semester and Annual
Eligibility	12th /Higher Secondary in Science stream
Admission Process	Entrance based and merit-based
Course Fee	INR 50,000 –INR 10 lakhs
Average Salary	INR 2 lakhs -10 lakhs
Top Recruiting Companies	Bombay Hospital and Medical Research Centre, Fortis Hospital, Kokilaben Dhirubhai Ambani Hospital, Lilavati Hospital and Research Centre, AIIMS, New Delhi, Dr. LH Hiranandani Hospital.
Job Positions	OT Technologist, Lab Technician, OT Assistant, Associate Consultant, and Teacher and Lecturer

## 13) Career opportunities in BSc.- Physician assistant:-

### Introduction:-

- BSc Physician Assistant is a 3-year full time undergraduate medical course.
- This program is a specialization for people looking to add skills and knowledge needed to provide support to the senior doctors and physicians.
- To pursue this course, students must have passed Class 12 or equivalent with Physics, Chemistry and Biology as compulsory subjects with an aggregate of at least 55% marks from a recognized board.
- Admission to the BSc Physician Assistant course is strictly done on the basis of the candidate's marks obtained at the higher secondary level.
- However, some top colleges in India conducted their own entrance tests for getting admission to this course.
- After that, the qualifying candidates need to undergo a personal interview session for final selection.

### Admission Process for a BSc Physician Assistant:-

- The BSc Physician Assistant Admission Process can vary as per the university rules and regulations.
- Some universities grant admission to students in this course based on merit in the qualifying examination.
- Some of the top-most Indian universities prefer conducting entrance exams to grant admission to qualified candidates.
- The admission procedures followed in the Indian universities for admission to BSc Physician Assistant are given below.

### Merit-based admission:-

- In merit-based admission, the universities offering BSc Physician Assistant program grant admission to students based on their marks obtained in the graduation level.

### Entrance-Based Admission:-

The steps of the entrance-based admission are provided below:

- **Step 1- Registration:** Students are required to register themselves for the entrance test by providing their email address, mobile number and password after which a login id will be created.
- **Step 2- Filling up of application form:** After creating the login id, candidates are required to enter the required information correctly.
- **Step 3- Uploading of required documents:** In this step, candidates have to upload the necessary documents such as photograph, signature, id proof, Class 10 and 12 certificates, Bachelor's degree etc.
- **Step 4- Payment of Application Fee:** After uploading the requisite documents, students have to pay the requisite amount of application fee online.
- **Step 5- Issuing of Admit Card:** Based on the details submitted by the students, the admission authority will issue the admit cards to the eligible students.
- **Step 6- Entrance Examination:** After getting the admit card, exam dates will be released by different conducting bodies. Candidates have to sit for the entrance test and qualify the same to get admission.

- **Step 7- Result:** In the final stage, admission authorities will release the results of the entrance test they have appeared for.
- **Step 8- Enrolment:** Successful candidates will then be allotted seats to the respective institutes.

### **The Eligibility Criteria for Admission to BSc Physician Assistant:-**

- The minimum eligibility criteria for students who want to pursue an BSc Physician Assistant from Indian universities are given below:
  1. Students must have passed Class 12 or equivalent in Science stream with Physics, Chemistry and Biology as compulsory subjects.
  2. The student must get a minimum of 55% of the aggregate of marks from any recognized board.
  3. Clearing cut-off marks in the entrance examination is the prime requirement in some medical colleges for getting admission to this course.
  4. The students also have to do well in the Personal Interview round.

### **The Future Scope After Completing a BSc Physician Assistant Course:-**

- Students who have completed their graduation in Physician Assistant have a large number of career options.
- The future scopes for students of BSc Physician Assistant course are given below:
  1. **Higher Education:** Students can opt for higher education post completion of BSc Physician Assistant degree course. The higher education options they can pursue are :
  2. **MSc.:** If one wishes to pursue studies in the same field of education, he/ she can opt for MSc in related discipline i.e. MSc Physician Assistant, MSc Nursing etc.
  3. **Check out the Top MSc Nursing Colleges in India.**
  4. **Competitive Exams:** Students, after completing their graduation in Physician Assistant, can appear in different competitive examinations for government jobs, including UPSC CSE, IFS, and PSC of different states.
- So, after completing BSc Physician Assistant course students will be able to choose a career as per their skills and area of interest.
- You can go for higher education or you can also opt for a decent job.

### **BSc Physician Assistant Course Highlights:-**

<b>Course Level</b>	Undergraduate
<b>Full-Form</b>	Bachelor of Science in Physician Assistant
<b>Duration</b>	3 years
<b>Examination Type</b>	Semester/ Annual
<b>Eligibility Criteria</b>	Passed Class 12 or equivalent in relevant discipline from a recognized board
<b>Admission Process</b>	Entrance/ Merit-Based
<b>Average Fees</b>	INR 1,00,000 - 4,00,000
<b>Average Salary</b>	INR 2,00,000 - 5,00,000
<b>Top Recruiting Companies</b>	Max Hospital, Apollo Hospital, Fortis Hospital, Ranbaxy
<b>Job Positions</b>	Dietician, professor/teacher, nutritionist, and family health care physician.

## **14) Career opportunities in BSc.- Respiratory care:-**

### **Introduction:-**

- B.Sc. Respiratory Therapy or Bachelor of Science in Respiratory Therapy is a 3-year undergraduate course which is a branch of Biology course.
- The objective of this course is to train students in the methodologies and process of analyzing, treating, and carrying out the diagnostic checks.
- The candidates who have completed 10+2 with Physics, Biology, and Chemistry and have secured at least 60% marks in aggregate are eligible to pursue a B.Sc. Respiratory Therapy course.
- Admission granted to the course is done through merit-based or entrance-based conducted National/ State level or by the University.

### **About BSc in Respiratory Therapy Course:-**

- The B.Sc. Respiratory Therapist course helps the enrolled students to learn and understand how to diagnose and treat cardiopulmonary problems.
- The main objective of the B.Sc. Respiratory Therapist course is to train the students in the processes or methodologies of analyzing, treating, and carrying out diagnostic checks.
- Completion of the clinical practice hours during internship is an essential part of the degree requirements.
- Students having an interest in pursuing B.Sc. Respiratory Therapist course, must match the crucial information related to duration, eligibility, fee, syllabus, admission, jobs, and salary offered.
- The course enables the candidates to research different technological advancements and focus on human anatomy and much more.

### **BSc in Respiratory Therapy: Admission Process:-**

- The admission process for BSc in Respiratory Therapist course would either be granted on the basis of marks obtained by the candidates in the entrance exam or direct admission which is Mark's obtained by a candidate in 10+2.
- To get admission into the top colleges, candidates must qualify the entrance exams conducted by the university or any state/ national level entrance test.
- After qualifying the test, aspirants must face group discussion or personal interview round followed by Documents verification round.
- For Direct admission or merit-based admission candidates must score good grades in their 10+2 Board exam.
- Candidates are selected for the BSc in Respiratory Therapist course by their scores and then a list of selected students is released by the college/ university

### **Eligibility Criteria:-**

- Aspirants applying for B. Sc Respiratory Therapist course should have cleared their class 12th board's examinations in the science stream from a recognized board of education.
- Students must have secured 60% minimum aggregate marks or higher in PCB (Physics, Chemistry, Biology) subjects or equivalent.
- Various colleges and universities have their criteria and conduct an entrance exam. Candidates may be asked to score at least passing marks in the entrance examination.



## **BSc. in Respiratory Therapy: Jobs:-**

- After the completion of the BSc Respiratory Therapy, candidates can easily find lucrative and highly paid jobs.
- Due to rising Respiratory diseases, graduates in this field are in very high demand. The employment of respiratory therapists is projected to grow 23% from the year 2020 to 2030, much faster than the average for all other occupations.
- There are many job profiles available for the graduates after completing BSc in Respiratory Therapy.
- Candidates can work in various reputed profiles such as Respiratory Therapist, Consultant Pulmonologist, Clinical Application Therapist and many others.

## **BSc in Respiratory Therapy Scope:-**

- Post completing BSc in Respiratory Therapy, graduates can prefer to do jobs after completion as a therapist or can go for higher studies.
- Due to the influence of various kinds of viruses and respiratory diseases the demand for the professionals in this field is increasing day by day.

## **Higher Education:-**

The most popular choices of education post completing a BSc in Respiratory Therapy egrees are as follows.

1. The graduates can go for further higher degree programs such as research work.
2. The graduates can also become a school teacher as per their qualification.
3. After the completion of the course candidates can also have the option of running their own clinics and starting their own business which provides them flexibility of time.
4. Respiratory therapists also have job options in the case of management, disease prevention, emergency care, and the early detection of pulmonary disorders.
5. Apart from career options, B.Sc. Respiratory Therapy graduates may also be able to higher education after courses like M.Sc. Respiratory Therapy, B.Ed, MBA.

## **BSc in Respiratory Therapy: Highlights:-**

Course Name	BSc in Respiratory Therapy
Course Level	Undergraduate
Course Duration	3 years
Examination Type	Yearly
Eligibility	10+2 in Science stream with at least 60% marks
Admission process	Merit or Entrance based
Course Fee	INR 50,000 to INR 2,50,000
Course Average Salary	INR 2,00,000 to INR 15,00,000 per annum
Top Recruiting companies	Fortis Healthcare, Molecular Connections, Apollo Hospitals Enterprise Limited, Suvitas Holistic Healthcare Pvt. Ltd. etc.
Job Position	Clinical Application Specialist, Consultant Pulmonologist, District Manager, Export Sales Executive, Medical Services Manager, Product Manager, Product Specialist/Product Trainer, Respiratory Therapist etc.

## Some Website for Allied Health Sciences:-

1. [www.collegedekho.com](http://www.collegedekho.com)
2. [www.collegedunia.com](http://www.collegedunia.com)
3. [www.getmyuni.com](http://www.getmyuni.com)
4. [www.indiraicp.edu.in](http://www.indiraicp.edu.in)
5. [www.leverageedu.com](http://www.leverageedu.com)
6. [www.galaxyeduworld.com](http://www.galaxyeduworld.com)
7. [www.careers360.com](http://www.careers360.com)

