

Intermediate of science

Introduction:-

- Intermediate of Science is one popular career option after the completion of class 10.
- The students who have opted for the subject group of PCM- PHYSICS, CHEMISTRY & MATHEMATICS, or PCB- PHYSICS, CHEMISTRY, or BIOLOGY as the main subjects are called as science group students.
- **Learning Mode**-Full time
- **Course level**-10+2
- **Course Duration**-2 Years.

After 10th, depending upon under which school board you are enrolling for class 11th and 12th, you can have several subjects to choose from:-

- **Physical Science Subjects** – Physics, Chemistry
- **Biological Science Subjects** – Biology, Biotechnology, Agriculture, Food Science, Sports, Exercise & Health Science, etc.
- **Mathematical Science Subjects** – Mathematics, Statistics
- **Other Science Subjects** – Computer Science, Marine Science, Engineering Graphics, Informatics Practice, Electricity & Electronics, Engineering Science, Environmental Science, Geometrical & Building Drawing, Geometrical & Mechanical Drawing, Design Technology, Environmental Management, Home Science, etc.
- **Social Science Subjects** – Economics
- **Career-oriented subject like** – Information Technology, Information & Communication Technology, Multimedia & Web Technology, Fashion Studies/ Fashion Design, Media Studies, Travel & Tourism, etc.

Intermediate Science Course Eligibility-

- The applicant must have passed SSC or an equivalent level exam from Maharashtra Board or another recognised board.
- English has to be the main subject in the exam
- For the admission in bifocal subjects, the candidate must have opted for General Mathematics as one of the subjects for a qualifying degree.
- The student must have acquired a minimum total of 35 per cent in Class 10th for admission for Science stream.
- The students with the domicile of Maharashtra will be provided with Constitutional reservation for admission.
- The students who are out of the state or who have passed class 10th from CBSE or other board other than Maharashtra board will have to fill a separate form.

Course Fees:-

- Most of the college or institute for this course is managed by the state and central government themselves.
- Science subject detail information-

1) **Physics:-** Physics is the branch of science that deals with the structure of matter and how the fundamental constituents of the universe interact. It studies objects ranging from the very small using quantum mechanics to the entire universe using general relativity.

2) **Chemistry:-**the branch of science concerned with the substances of which matter is composed, the investigation of their properties and reactions, and the use of such reactions to form new substances.

3) **Biology:-**Biology is the study of everything that is, or was once, alive — whether it's a plant, animal or microorganism. Biology is the study of life. ... In general, biologists study the structure, function, growth, origin, evolution and distribution of living organisms.

4) **Mathematics:-**Mathematics is the science and study of quality, structure, space, and change. Through abstraction and logical reasoning mathematics evolved from counting, calculation, measurement, and the systematic study of the shapes and motions of physical objects.

5) **Computer Science:-** Computer science is the study of computers and computing as well as their theoretical and practical applications. Computer science applies the principles of mathematics, engineering, and logic to a plethora of functions, including algorithm formulation, software and hardware development, and artificial intelligence.

6) **Statistics:-**Statistics is the discipline that concerns the collection, organization, analysis, interpretation, and presentation of data. In applying statistics to a scientific, industrial, or social problem, it is conventional to begin with a statistical population or a statistical model to be studied.

List of Courses after 12th Science Stream PCM & PCB Subjects:-

Courses after 12th PCM-

- Class 12th is an important path that starts the journey of achieving many upcoming milestones.
- It's the time when students are opened up to so many booming opportunities in order to do great ahead.
- The aspirants are suggested to research various courses after 12th PCM in order to get acquainted with their personal interests and relevant fields for them.
- Pursuing the courses after 12th that match the aspirant's interest will help them grow more with flying colours.
- There are innumerable courses waiting to be pursued by class 12th students who are from the Science background with PCM (Physics, Chemistry & Mathematics) subjects.
- From being an engineer to becoming a CA or social worker, students can choose any course which suits their interests and makes a great amount of money out of it.
- Students with PCM can also opt for most of the courses in Biology To know more about various courses after 12th PCM

How to Choose the right course after 12th PCM?

- Introspect regarding your interest area and try to research relevant career choices for the same.
- Research about several courses after 12th PCM that suit your interest and deduce if that career option offers a great package and position.
- Dwell upon the top universities and look for the several courses they offer along with a fee structure and its ranking on a National or International level.
- Go through the entire syllabus of that course and decide if that is relevant for you.
- Research well about the course's future relevance and package which may be offered to you once you pursue the same.

Top Courses after 12th PCM:-

1)B.Tech/Engineering:

- B.Tech/Engineering is one of the most chosen courses after 12th PCM.
- It offers booming opportunities to aspirants in the field of technology.
- As per the sources, it is found that the streams of computer science and mechanical offers more opportunities in a career than others.
- Apart from being an engineer by profession, students can also opt for opportunities like being a digital analyst, marketer, data analyst, etc.
- Students are advised to further pursue MBA/ M.Tech/ M.E in order to reach the heights of success.

Bachelor of Architecture (B.Arch.)

- After engineering, a highly preferred course after 12th PCM is Bachelor of Architecture (B.Arch.), a degree course that involves the designing, study of process, and construction of buildings.
- It is a work of art and mathematical calculations that offers several career opportunities such as an interior designer.
- Students can also give several government exams in order to be selected in government-related designations of the same.
- Aspirants can also pursue M.Arch/ Masters in designing etc in order to learn more and earn better in this field.

Merchant Navy:-

- Merchant Navy acts as the backbone of international trade, carrying cargo all over the world.
- The merchant ships employ a huge amount of workers to carry and supply goods from one country to another.
- There are several job opportunities in this field. From being a chief engineering officer to becoming a radio officer, Merchant Navy offers several positions and posts in order to employ deserved aspirants.
- It's a respected field that provides a decent income as well.

Pilot (Commercial/ Fighter)-

- Airline pilots transport cargo and people on a planned flight for an airline at a fixed schedule.
- It's one of the best career options that can be pursued under courses after 12th PCM.
- Candidates have to own a certification course to be a pilot in India. There are many kinds of Pilot like air force, airline, commercial, private etc. Aspirants can choose any of these types as per their interests and qualification of the desired exam.
- They are provided with a license according to their training. This profession allows one to explore the world and offers great income as well. The process of becoming a pilot might be a little expensive but in the end, it's all worth it.

Bachelor of Science (B.Sc):-

- There is an abundance of opportunities after pursuing a Bachelor of Science. Students can do a major in their interest-related subjects.
- An honours degree will help them know the depth of their desired subject and open up many career options as well.
- Students can further pursue M.Sc and appear for the NET/JRF examination in order to become a professor or a scientist in the long run.
- Students can also pursue an MBA degree and carry forward their careers in marketing and business.

National Defense Services:-

- National Defense Services offers prestigious and dignified career opportunities. It involves three professional uniformed services:
- The Indian Army, the Indian Navy and Indian Air Force. Therefore it offers innumerable respected positions along with a decent income.
- From being an Army Linguist to becoming a Navy Operation Specialist, National defence services put forth many dignified career opportunities.
- There are several great coaching centres in order to crack this exam.

Railway Apprentice Exam:-

- Railways engross apprentices in the workshops of the Civil, Mechanical and S&T Engineering Departments, Production Units, Diesel and Electric Loco Sheds, Electrification Projects Carriage and Wagon Depot.
- It offers secured career opportunities with a decent income.
- RRB\ conduct the Railway Apprentice exam.
- Students need to prepare well in order to be selected for this exam.
- There are many coaching centers for its preparation.

Bachelor of Business Administration (BBA)

- Bachelor of Business Administration involves courses related to business and marketing.
- This course offers several career opportunities in the marketing field. BBA graduates can further choose an MBA or any other master's course like MA or M.Com as per the interest and choice of an aspirant.

- One can opt for a decent job after BBA as well, like - Digital Marketer, Business Manager, Marketing head, etc.
- Students are advised to work on their communication skills in order to do well in these professions.

Arts and Humanities (Bachelor of Arts):-

- Students can pursue courses after 12th arts which will add feathers to their creativity along with a booming career.
- Arts and Humanities offer courses like - Journalism, Copywriting, Designing, etc.
- Students can also opt for government jobs by preparing for Civil Services ahead after pursuing B.A.
- There are innumerable career opportunities and masters programs that can be taken up after completing graduation.

Course after 12th Physics:-

- The best courses after 12th Physics can be B.Tech/ Engineering, Scientist, Lecturer etc.
- Students are advised to dwell upon several opportunities after 12th with Physics and choose according to their preference and interest.
- Passing 12th grade with a science stream opens up every door for aspirants.
- Apart from choosing the core physics field, students can also pursue BBA/B.Sc/BA/B.Arch after their 12th.
- These courses also offer great opportunities ahead with a handsome salary and help aspirants become Designer, Writer, Marketing Head, Analyst etc.

Course after 12th Chemistry:-

- There are many courses that can be pursued after 12th Chemistry.
- These can be B.Sc. honours in Chemistry or Applied Chemistry. Students can further go for M.Phil./Ph.D (Analytical Chemistry) to pursue research and become a scientist or a lecturer.
- Aspirants can consider doing B.Pharma in Chemistry will open up their career opportunities in Pharmaceutical companies with great designations and good salaries.
- This can also help in becoming a scientific advisor on several governments, health, and industrial projects.

Courses after 12th Mathematics:-

- There can be an abundance of career opportunities and courses that can be taken up after 12th Mathematics.
- Some of them can be - B.Tech/Engineering from Mechanical/IT/Computer Science etc. Apart from choosing engineering, aspirants can also appear for the CA/CS exam.
- This is a great option after 12th Mathematics.
- Students can also choose BCA/B. Arch etc as their career option as these fields also offer successful careers with good salaries.

List of Courses after 12th Science PCB Group:-

1. MBBS
2. BDS-Dentistry
3. BAMS-Ayurveda
4. BHMS-Homeopathy
5. BUMS-Unani
6. BNYS–Naturopathy & Yogic Science
7. BSMS – Siddha Medicine & Sciences
8. Veterinary Science & Animal Husbandry (BVSc. AH)
9. Physiotherapy (BPT)
- 10.B.Sc. Occupational Therapists
- 11.B.Sc. Nutrition and Dietetics
- 12.Integrated M.Sc
- 13.B.Sc. – Biotechnology
- 14.B.Sc. Bioinformatics
- 15.B.Sc Nursing
- 16.B.Sc. (Dairy Technology/Nursing/ Radiology/ Prosthetics & Orthotics, Optometry)
- 17.B.Sc. Speech and Language Pathology
- 18.B.Sc. Anthropology
- 19.B.Sc. Radiography
- 20.B.Sc. Rehabilitation Therapy
- 21.B.Sc. Food Technology
1. B.Sc Anthropology
2. B.Sc Microbiology
3. B.Sc. Horticulture
4. B.SC Pathology
5. B.Sc Sports Science
6. B.Sc Horticulture
7. B.Sc in Genetics
8. B.Sc In X-ray technology
9. B.Sc. Home Science/Forensic Science
- 10.Bachelor of Pharmacy
- 11.Bachelor in Environmental Science
- 12.BMLT (Medical Lab Technology)
- 13.Gynaecology
- 14.BOT (Occupational Therapy)
- 15.GNM and ANM
- 16.Paramedical Courses
- 17.Bachelor of Physiotherapy
- 18.Bachelor of Speech Therapy
- 19.Bachelor of Dialysis technology
- 20.B.Sc of Anaesthesia
- 21.B.Sc. of Optometry
- 22.B.Sc in Audiology

Entrance & Competitive Exams after 10th:-

Sr No	Name of the exam	Full Form	What it's for?
1	KVPY	Kishore Vigyan Protsahan Yojana	For admission into 5 year Integrated MS program in IISER
2	ASSET	Assessment of Scholastic Skills Through Educational Testing	Test students' skills and knowledge in specific subjects
3	NTSE	National Talent Search Examination	Selected candidates get cash scholarship for a year
4	NSTSE	National Level Science Talent Search Examination	Gauge Science skills and knowledge in students
5	NCO (Cyber)	National Cyber Olympiad	Science Olympiad focusing on Computer Science
6	NSO (Science)	National Science Olympiad	Science Olympiad
7	IMO	International Maths Olympiad	Mathematics Olympiad
8	IEO	International English Olympiad	English Olympiad
9	NBO	National Biotechnology Olympiad	Biotechnology Olympiad
10	INO	Indian National Olympiad	National Level Olympiad
11	IESO	International Earth Science Olympiad	Earth Science Olympiad
12	State-Wise Polytechnic Admission Exam	—	For admission into Diploma in Engineering programs
13	Indian Navy Matric Recruitment	—	Sailor recruitment after 10th
14	IAF Airmen Recruitment	—	Airmen recruitment after 10th
15	Indian Army Soldier Recruitment	—	Army Soldier recruitment after 10th
16	JNVST	—	For securing admission into Navodaya Vidyalayas
17	FYJC	—	For securing admission into Junior Colleges (11th and 12th class) across Maharashtra
18	TSRJC CET	—	For securing admission into Junior Colleges (11th and 12th class) across Telangana

Government Jobs after 12th PCB (Career Options):-

1. Government Hospitals.
2. Civil Service.
3. Armed Forces.
4. Police.
5. Teaching Field.
6. SSC Exam
7. Railway.
8. Banking Sector.

NDA (National Defence Academy):-

- If you want to join the Indian Army field. Then the government gives you the opportunity through the NDA (National Defence Academy) exam.
- It is the best career options after 12th science PCB other than medical.
- The eligibility for this exam is 10+2 pass out. Students who are just appearing on the 11 class exam are not eligible.
- One more requirement is your married status, which should be unmarried. Physically fitness is required. The minimum Height is required 157 cms.

SSC Combined Higher Secondary Level (CHSL):-

- For PCB students' next government job exam after 12 is CHSL. Many students do the SSC course after 12th for this entrance exam.
- One more best career options after 12th science stream. SSC's full form is the Staff Selection Commission.
- After clearing this exam you will get the position of Lower Division clerks, Junior Secretariat Assistant, Postal Assistant, Sorting Assistant, and data entry operators.
- If right after 12th you want to start earning in the government sector. Then you can choose the SSC as your career option.
- SSC is one of the best government jobs in India. The age limit for this exam is approx. 18 years to 27 years of students.
- Education qualification is required 10+2 pass out with a recognized board or university.
- After clearly the exam and training you will get assign under a post of ministries, officers of the government, and departments.
- The exam gets conducted by the SSC only. Happens every year. It has two exam modes Tier I (Online), Tier II (Offline).
- The exam duration is 60 minutes. The exam language of this government exam is Hindi and English both are available. The age limit is between 18 years to 27 years.
- Qualification should be pass out with the recognized board.

SSC Stenographer (Grade c & Grade D):-

- Stenographer another government jobs after 12th PCB. This exam is also conducted by the SSC (Staff Selection Commission).
- This government exam happens online and the minimum eligibility is 10+2 pass out. If you get clear the govt exam then.
- You can be recruit under Stenographer Grade C & Grade D.
- In other words, posting under the ministry department and other government departments.
- You can prepare for the SSC exam through the SSC course after 12th. We have so many government jobs after class 10 is also available. Which comes under SSC only.
- The age limit for the Stenographer Grade C is 18 years to 30 years. And Age limit for the Stenographer Grade D is 18 years to 27 years.

Railway Recruitment Board (RRB).

- If you want a railway job after 12th science. No worries, you can give the railway exam too. Indian railway always comes with lots of vacancies for the 12th pass students.
- As you know minimum qualification in 12 passes out is required. Age between 18 years to 33 years for the railways' exam (RRB Group D).
- Many students attempt the railway exam after 12th science. So, if you have an interest in a railway job. Then you can prepare for this exam.
- This exam happens every year with lakhs of vacancies. RRCs (Railway recruitment cells) are taking care of the conducting railway group D exam.
- However, RRBs taking care of the railway group C exams.
- Railway Grade C means technical Recruitments & non-Technical. Railways Government jobs also come under the best Indian govt jobs.
- The best part of this exam is that it provides lots of exam language. Such as Hindi, English, Bengali, Assamese, Kanada, Odia, Punjabi, Tamil Gujrat, Telugu, and so on.
- For the regular update about railway exams, you can visit the Indian railway official site.

Recruitment Processor:

- First stage Computer Based Test.
- Second Typing Skill Test or Computer aptitude test.
- Third Document Verification.
- Forth Medical Examination.

Railway Jobs (RRB undergraduate Post Names):-

Junior Clerk cum Typist-Trains Clerk

Accounts Clerk Cum Typist- Commercial Cum tickets Clerk

- You can see how easily you can make your career in the government sector. Apart from a career in medical after 12th.
- Railway gives government jobs after class 10 too. Most of the students want after 12th non-medical course. Then in my opinion apply for the government jobs.
- It's the best jobs opportunities after intermediate

Air Force Airmen (Group X & Group Y):-

- In the list of government jobs after 12th PCB. Air force army prestige's job name is also available. Yes, you can apply for the army exam too.
- First, understand what is Group X and Group Y exam means. This group basically defines the officer ranks.
- This exam is the national level exam. And it happens twice a year. Indian government comes up with this exam.
- Because they want to give opportunities to young undergraduates students. To make their PCB career in Indian Air Force.
- Group X defines technical trade. This means if you have physics and math's in your 12th. Then you are eligible for the grade X.

- However, Group Y defines the non-technical trade. Means students who passed out the 10+2 exam.
- Can apply for the group Y exam and get work under accounts, administration, etc. The student's age limit must be less than 21 years.

Forest Guard:-

- First, understand the profile of the forest guard. These days as humans begin is growing fast but globalize is getting hurt.
- Humans are doing many wrong things which are not good for our environments and climates.
- So, through this profile, you will protect nature. You will be in-charge to see no creeper cutting will happen.
- Clearing of fire lines and repair and renewal of boundary marks are also part of the job.
- In other words, you will be protecting the forest. This profile is again the best government job exam after 12.
- The age limit for the forest guard is between 18 years to 32 years. So no matter you have physics or biology you can apply for the forest guard government jobs after 12th PCB except medical?
- One of the highest posts in the forest department, you can plan for is Principle Chief Conservator of Forest.

Indian Navy Jobs:-

- If you have an interest in the Indian navy. Then let me tell you only passing with PCB in 12th will not be enough to get hired in this area.
- For the Indian navy job, you have to clear the NDA exam first.
- Plus students have to get pass-out their 12th standard with mathematics and physics subjects only can apply for the NDA exam.
- A ton of PCB students have this question "can we join the Indian navy after PCB".
- Therefore I have touched on this profile here. To let you know that Indian navy jobs are not possible with PCB. But, if you are in 10th now and planning for navy jobs only.
- Then you can pursue your 12th standard with mathematics and physics. Later you can apply for the NDA and proceed for your dream job.

Postal Assistant:-

- The next career option for PCB students is Postal Assistant (PA). It comes under SSC CHSL recruitment. It has a good salary structure in government jobs.
- After 12th in PCB also you can easily apply for this government job. Postal Assistant post is at the same rank as Sorting Assistant.
- Basically Postal Assistant works for the postal department of the Indian government.
- The best part of this government job is that you can give your preference for the posting. Either your home town or any other preferred place.
- The responsibilities of these jobs are multiple. Such as providing customer support, locating the correct address, maintain the data, disposal of mails, and much more.