## **IIT JAM Test Pattern 2013**

The IIT JAM 2013 questions for Biological Science (BL), Biotechnology (BT) and Computer Applications test pattern will be fully objective type. There will be negative marking for wrong answers to the objective type questions in BL, BT and CA test papers. Candidates will get negative 1/3 for a wrong answer. These test papers have to be answered in an Objective Response Sheet (ORS) by darkening appropriate bubbles using black HB pencil.

Since the ORS will be evaluated by electronic means, it is imperative that the instructions given on the ORS are carefully read and followed by the candidates. All other test papers will be objective-cumdescriptive type. There will be a "question-cum-answer booklet" for each of these six test papers. Answers to various questions are to be given at appropriate places in the "question-cum-answer booklet" itself. No supplementary sheet will be provided.

Each of these six test papers will have multiple choice type questions (MCQ), fill-in-blank type questions, and descriptive type questions, carrying weightages of 20%, 30% and 50%, respectively. The objective type questions in these test papers will have four choices as possible answers, of which, only one will be correct. There will be negative marking for wrong answers to the objective type questions. Each objective type question carries 02 marks for a correct answer and negative 0.50 marks for a wrong answer. There will be no negative marking for fill-in-the-blank type questions.

## Note:

- Use of any kind of Cellular Phone/ Electronic Gadgets (other than non-programmable calculator) is NOT permitted in the examination hall.
- Use of calculator ( non programmable ) is permitted.
- All answers to the subjective type questions must be written in blue / black / blue black ink only. Sketch Pen, Pencil or Ink of any other colour is not permitted.
- The medium for all the test papers will be English only.
- Use of unfair means by a candidate in JAM 2013, whether detected at the time of test, evaluation or at any other stage, will lead to cancellation of his / her candidature as well as disqualification of the candidate from appearing in JAM in future.
- Disclosure of identity in any form, such as writing registration number or name inside the question cum answer booklet, making any kind of distinguishing marks, may lead to disqualification of the candidate.

## **IIT JAM 2013 Test Papers:**

IIT JAM 2013 Test papers with codes, corresponding academic programs and minimum educational qualifications for admission.

Test Paper /
Test Paper Academic Program(s) Institute(s)
Code

Minimum Educational Qualification(s) for Admission

Test Paper / Test Paper Code	Academic Program(s)	Institute(s)	Minimum Educational Qualification(s) for Admission
Biotechnology (BT)	M.Sc. Biotechnology	IITB, IITR	Bachelor's degree in any branch of Science / Agriculture / Pharmacy / Veterinary / Engineering / Medicine (MBBS). NOTE: For IITB only, M.Sc. Biotechnology and M.Sc Ph.D. Dual Degree in Biotechnology, the candidate should have passed Mathematics at the (10+2) Level.
	M.Sc Ph.D. Dual Degree in Biotechnology	IITB	
	M.Sc Ph.D. Dual Degree in Environmental Science & Engineering	IITB	Bachelor's degree with any one of Biology, Biotechnology, Chemistry, Mathematics and Physics for two years / four semesters, and any one of the other four subjects for at least one year / two semesters. The candidate should have passed Mathematics at (10+2) level.
Chemistry (CY)	M.Sc. Chemistry	IITB, IITD, IITG, IITH, IITK, IITM, IITR	Bachelor's degree with Chemistry as a subject for three years / six semesters and Mathematics at ( 10+2 ) level.
	Joint M.Sc Ph.D. Program in Chemistry M.Sc Ph.D. Dual Degree Program in Chemistry	IITKgp	
		IITB	
	M.Sc Ph.D. Dual Degree Program in Energy	IITB	Bachelor's degree with any one of Chemistry, Mathematics and Physics for two years / four semesters and any one of the remaining two subjects for at least one year / two semesters.
	M.Sc Ph.D. Dual Degree in Environmental Science & Engineering	IITB	Bachelor's degree with any one of Biology, Biotechnology, Chemistry, Mathematics and Physics for two years / four semesters, and any one of the other four subjects for at least one year / two semesters. The candidate should have passed Mathematics at (10+2) level.
Computer Applications (CA)	Master of Computer Applications	IITR	Bachelor's degree with Mathematics as a subject for at least one year for annual system candidates / at least two papers of Mathematics for semester system candidates.
Geology (GG)	M.Sc. Applied Geology	IITB, IITR	Bachelor's degree with Geology as a subject for three years / six semesters and any two
	Joint M.Sc Ph.D.	IITKgp	for three years / six semesters and any two

Test Paper / Test Paper Code	Academic Program(s)	Institute(s)	Minimum Educational Qualification(s) for Admission
	Program in Geology M.Tech. in Geological Technology M.Sc Ph.D. Dual Degree Program in	IITR IITB	subjects among Mathematics, Physics, Chemistry, and Biological Science. The candidate must have Mathematics at (10+2) level.
Geophysics (GP)	Applied Geology M.Sc. Applied Geophysics M.Sc Ph.D. Dual Degree Program in	IITB IITB	Bachelor's degree with both Mathematics and Physics as subjects for two years and atleast one of them as a subject for three years.
	Applied Geophysics  M.Tech. in Geophysical Technology	IITR	Bachelor's degree with Mathematics and Physics as subjects and anyone of the following subjects: Chemistry, Geology, Statistics, Electronics and Computer Science.
	M.Sc. Mathematics M.Sc. Mathematics & Computing M.Sc. Applied Mathematics M.Sc. Industrial Mathematics and Informatics	IITB, IITD, IITK, IITM IITG IITR	Bachelor's degree with Mathematics as a subject for at least two years / four semesters.
Mathematics (MA)	Joint M.Sc Ph.D. Program in Mathematics M.Sc Ph.D. Dual Degree in Operations Research	IITKgp IITB	Bachelor's degree with Mathematics / Statistics as a subject for at least two years / four semesters.
	M.Sc Ph.D. Dual Degree in Environmental Science & Engineering	IITB	Bachelor's degree with any one of Biology, Biotechnology, Chemistry, Mathematics and Physics for two years / four semesters, and any one of the other four subjects for at least one year / two semesters. The candidate should have passed Mathematics at (10+2) level.
	M.Sc Ph.D. Dual Degree Program in Energy	IITB	Bachelor's degree with any one of Chemistry, Mathematics and Physics for two years / four semesters and any one of the remaining two subjects for at least one year / two semesters.

Test Paper / Test Paper Code	Academic Program(s)	Institute(s)	Minimum Educational Qualification(s) for Admission
Mathematical Statistics (MS)	M.Sc. Applied Statistics and Informatics M.Sc Ph.D. Dual Degree in Operations Research	IITB IITB	Bachelor's degree with either Mathematics or Statistics as a subject for at least two years or four semesters.
	M.Sc. Statistics	IITK	
	M.Sc. Physics	IITB, IITD, IITG, IITH, IITK, IITM, IITR	
	Joint M.Sc Ph.D. Program in Physics	IITKgp	Bachelor's degree with Physics as a subject for
	M.Sc Ph.D. Dual Degree Program in Physics	IITB, IITK	at least two years / four semesters and Mathematics for at least one year / two semesters.
Physics (PH)	M.Sc.( Physics ) - M.Tech ( Materials Sciences with Specialization in Nano - Science & Technology )	IITB	
	M.Sc Ph.D. Dual Degree Program in Energy	IITB	Bachelor's degree with any one of Chemistry, Mathematics and Physics for two years / four semesters and any one of the remaining two subjects for at least one year / two semesters.
	M.Sc Ph.D. Dual Degree in Environmental Science & Engineering	IITB	Bachelor's degree with any one of Biology, Biotechnology, Chemistry, Mathematics and Physics for two years / four semesters, and any one of the other four subjects for atleast one year / two semesters. The candidate should have passed Mathematics at (10+2) Level.