



Since 1936

THE KANDIVLI EDUCATION SOCIETY'S SHRI TIKAMDAS PURSHOTAM BHATIA COLLEGE OF SCIENCE



COLLEGE OF SCIENCE

J 32-06-001

OUR ACADEMIC YEAR PLAN INFORMATION BOOKLET













Std. XI - Science: 2015 - 16







Shantilal Modi Road, Kandivli - (W), Mumbai - 400 067.
Tel. No. 28072152/9833133187
Email id : principal@kes.ac.in, Website: www.kes.ac.in

GENERAL RULES AND REGULATIONS

STUDENTS MUST DO THIS

-  I - Card is compulsory and students must put on, in person in college campus.
-  Office Time : Morning Session Students : 12.30 pm to 1.30 pm
Afternoon Session Students : 11.30 am to 12.30 pm
-  Students must keep track of their own Attendance.
-  Keep yourself updated for important information by referring Notice Boards, and college Website: www.kes.ac.in
-  Must use free news paper (NIE Times of India) available in college, for their Knowledge and their Project Work.
-  Must refer to college website: www.kes.ac.in for information posted there, and give their feedback on the website.
-  Must use library efficiently, to update yourself with science magazines and other science based books available. Give your feedback to library staff.
-  For participation in Sports and / or Cultural Activity, submit parent's consent form to class teacher.
-  Must use dustbins to avoid littering (the garbage) and to keep the campus clean. They must follow discipline & rules laid down by the authorities.
-  Must keep track of timely completion of your Journals and other study material, keep track of the same before and after submitting to teachers.

STUDENTS MUST NEVER DO THIS

-  Never use Mobile Phones in College Campus.
-  Strict action will be taken if a student is found to
 - Misbehave with any one.
 - Damage College property.
 - Remain absent for long period without information.
-  Don't bunk your Lectures and never fall in Attendance Defaulters' List.
-  Don't hang around in campus, without any reason. Use Library or Canteen to be seated, than walking around!

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

PLEASE READ THIS CAREFULLY !!

The new academic year 2015 - 16 has begun on a very positive note with wonderful results of STD XII & JEE - Mains/Advance. Our students have come out with flying colours.

We welcome you all to this college for the 2 year programme of H. S. C. This information leaflet is to make you understand the entire working system, to help you sail smoothly through your first year of junior college.

The biggest advantage of this is that you know well before hand, how you need to prepare for exams. We strongly recommend and advise you all to make a systematic plan for the entire year, prepare and schedule your daily activities. You must make use of this detailed information to score good marks in every subject, with as much ease as possible.

THE SUBJECTS OFFERED IN SCIENCE STREAM ... AT OUR COLLEGE -

English (100 marks), E. V. S. (50 marks) and Physical Training (P. T.) are **compulsory** subjects offered in every college in every stream. Along with these, Science subjects like Physics (P - 100 Marks), Chemistry (C - 100 Marks) and Mathematics* (M - 100 Marks) are compulsory for each student. The other 2 subjects for 200 marks are added as below:

Combination 1	Combination 2	Combination 3	Combination 4	Combination 5	Combination 6
PCM & Hindi [#] + Biology*	PCM & I. T. + Biology*	PCM & Comp. Science (Paper I and II)	PCM & Electronics (Paper I and II)	PCM & Elect. Maint. (Paper I and II)	PCM & Mech. Maint. (Paper I and II)
= General Science	= General Science with IT	= Science with Bifocal	= Science with Bifocal	= Science with Bifocal	= Science with Bifocal
<i>Any Combination: Total 7 Subjects for 650 Marks + P.T (Grade)</i>					

Note:

*: **For students passing STD X with “General Mathematics”, college offers General Science without Mathematics, as such students CAN'T opt Mathematics or any Bifocal Subject by rule. They can opt for Geography / Economics / Psychology or other allowed subjects in place of Mathematics.**

A student can drop Biology or Mathematics or both subjects, though it's NOT recommended, as it shuts doors for various career options for a science student later.

Allotment of such subjects is done only after scrutiny of student and his/her performance(s) / marks. College reserves the right to disallow any such change, if required.

#: You can take any other language (like Marathi, Gujarati, Sanskrit, French, etc) in place of Hindi language. However, these optional subjects are not offered in college with full time teaching facilities. Though, guidance lectures and exams are arranged.

Please Note:

- 1. Information Technology or Vocational (Bifocal) Subject cannot be changed in STD XII.**
- 2. Students are encouraged to approach class teachers directly, for any help/doubt/clarification, etc.**
- 3. Students are encouraged to report loss of their articles or loss / damage of property in college. In any case, they can always report their grievances or complaints in writing to authorities. They can also drop in their suggestions or complaints in the drop box opposite Principal/Vice-Principal Office.**

RULES AND REGULATIONS

🔑 **General**

1. **College Office:** Its timing for students is 11 am – 1 pm strictly. However, parents can approach between 10 am to 1 pm.
2. **College Timing:** As the College runs in two shifts (Morning : 7.20 am – 12.20 pm and Noon : 1 pm – 6.20 pm), parents and students must be clear regarding Shift choice at the time of admission, the request for change of shift may not be granted later.
3. **Activities:** Students are motivated to participate in curricular and co-curricular activities. However, they **must not waste time** in the campus in the name of practice. Students get certificates, appreciations and prizes, for participating in the events. Students willing to participate in sports and/or cultural activities must submit consent form (available with supervisors) to class teachers.
4. **For Parents:** Parents must ensure that their ward is healthy and fit. If there is any severe health problem, parents are required to let college know about such details related to their ward. Please preserve your original fee receipt till the end of Std XII to claim the deposits and Std XI mark sheets for Std XII admission. PH category students, meet office for PH Certificates before August end.

🔑 **I - Cards:**

Students must wear (put on) college I - Cards every day. Putting on the College I-Card is **COMPULSORY**, during entire college hours. Without College I – Cards, **they may NOT be allowed in the college**. If a student loses I– Card, duplicate I-Card is issued on the **fine amount of Rs. 100/-**. Until they get their I- Cards, they must produce their original fee-receipt to enter the college. Students should note that some amount of the fees is refunded back to them after H. S. C (Next academic year, June' 2016). **If they lose the original fee receipt, they can NOT claim the refund money.**

🔑 **Attendance:**

Every student is required to maintain the minimum of 75% attendance in each term separately. **A student is debarred from appearing the exams, if attendance is NOT satisfactory in both terms taken separately.** Medical certificates should be produced in time if absent due to medical reasons.

🔑 **Library:**

Open for students for 13 hours, 7 am to 8 pm.

Students must make complete use of library facilities, during regular days as well as vacation. They must maintain “**Silence**” there. A student who is disturbing the silence, and violating the rules made by the library in-charge, s/he will face strict action. **Library is not a place to sit and complete journals. Students must approach Library-in-Charge to get their Library Cards after July, to help them issue the books. Without I-Cards / Library Cards, students will not be issued the books.**

A student has to pay a **penalty of Rs. 1/- per day if home-issued books are returned after due date.**

🔑 **Lost and Found:**

Students must NOT put on any jewellery or carry expensive items. College shall not be responsible for any lost articles. If we (or any student) find(s) any lost item, it shall /must be, reported directly to office. Any one claiming that article must produce proof of it, and collect from the college office, at ‘Lost and Found’ counter.

🔑 **Mobile Phone:**

Students **MUST** not use Mobile Phone(s), in the college at all. As per the instructions from the education department, it is banned in the premises of educational institution. So, use of **mobile phones is banned in the College.**

🔑 **Documents for Eligibility (for Students of different Educational Boards):**

Eligibility form : Students of different Boards, like, Gujarat state Board, IGCSE, ICSE, CBSE, or Maharashtra state Board but different divisional board etc, must get their eligibility done through Mumbai Divisional board, Vashi

For this they need to submit following documents as early as possible to the office -

- a) Original Migration Certificate
- b) Statement of undertaking, with notary done, on page 4 of Eligibility form.
- c) Original Leaving Certificate
- d) Attested copies of Mark sheet and / or passing certificate (Original / Passing).
- e) Requisite fees (Max Rs 600/- depending on type of board) for H. S. C. Board in cash.

CCTV Surveillance: The College premises are under CCTV surveillance, the guidance for the same can be sought from the Principal / Vice Principal, in case any assistance is required.

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

PATTERN OF EXAMINATION for 2015 – 16. SUBJECT WISE MARKS DISTRIBUTION and FORMAT OF EXAM PAPER, THEORY, PRACTICAL, etc. (How Average 100 Marks Total Is Calculated In Each Subject)

ENVIRONMENTAL STUDIES (E. V. S.)

E.V.S is a compulsory subject and it is compulsory to pass in E.V.S. There is no written exam for E.V.S. Each student has to do project work individually, in both terms and must appear group seminars in both terms individually.

S1: For first Semester : Project (30 Marks) + Group seminar (20 Marks) = 50 Marks
S2: For second Semester : Project (30 Marks) + Group seminar (20 Marks) = 50 Marks
On Final Mark-sheet/Result : Average of S1 and S2, is added to the Grand total, i.e. added into Grand total of 600 marks for calculation of aggregate percentage.
E.V.S Marks = 50 Marks = $(S1 + S2) / 2 = (50+50)/2 = 100/2 = 50,$

* Failing in E. V. S will lead to failure in that Academic year.

INFORMATION TECHNOLOGY, ENGLISH AND HINDI (100 Marks Each) : We are proud to announce that this year onwards all I. T. theory exams will be in the form of ONLINE EXAMS (Computer Based Exams). Refer details below

Optional Subjects: MARATHI, GUJARATI, SANSKRIT, FRENCH, GEOGRAPHY AND PSYCHOLOGY (100 Marks Each).

Co-ordinator Teachers for these subjects:

Trupti Bhatt, Vinod Dubey (Morning Shift) & Ganga Sharma, Priti Kaushik (After Noon Shift).

For all above subjects the first internal assessment (U1: to be held in Aug'15, for 25 Marks) shall be conducted in the form of MCQs/ Tutorial/ Seminar/ Unit test. For particular subject, precise format will be discussed in lecture and will be given to students. The second exam (S1: Semester-I, for 50 Marks) to be held in Oct' 15, will be subjective exam the details of which are given in next section. The third exam, i.e. second internal assessment (U2: Unit Test, for 25 Marks) to be held in Jan'16, will again be as the first internal assessment format of which will be notified to students during lecture.

The fourth and the final exam will be S2: Semester –II exams, in March'2016, for 100 marks. It will have 80 marks theory paper (In detail-Subjective type, written exam) and 20 marks oral exam (Skills of Listening, Writing, Speaking, and Conversation) or project work or practical exam (for I. T.), with predefined schedule given to students, well in advance. Syllabi for question papers are given in next section.

U1: Internal Assessment (Aug'15)	:	Written (Objective type) Exam	=	25 Marks
S1: Semester – I (Oct'15)	:	Written (Subjective type) Exam	=	50 Marks
U2: Internal Assessment (Jan'16)	:	Written (Objective type) Exam	=	25 Marks
S2: Semester – II (March'16)	:	Written (Subjective type)Exam for 80 marks + Oral Exam/project / Practical for 20 marks	=	100 marks
Average 100 marks are calculated as	:	(U1 + S1 + U2 + S2) / 2	=	100 Marks

Note: From this academic year, the pattern of semester written paper of languages will include more objective type questions, to facilitate students to score better in languages.

For Geography: Second Semester Exam will have 20 marks Practical Exam, in month of April'15. Practical session will be arranged with prior notice to students.

For Psychology: There will be 20 marks project work to be done by students individually, and submitted to the concerned subject teacher at the end of the second term, as per teacher's instructions. This project mark will be added with second semester theory Exam that makes up to 100 marks total.

For Languages: There will be regular lectures for languages - English and Hindi in College as per fixed time table. For rest of the above mentioned subjects proper guidance lectures and all exams will be arranged.

PHYSICS, CHEMISTRY and BIOLOGY (100 Marks Each)

The first internal assessment (U1: to be held in Aug'15, for 25 Marks) shall be conducted in the form of MCQs/ Tutorial/ Seminar/ Unit test. The second exam (S1: Semester-I, for 50 Marks) to be held in Oct'15, will be subjective exam the details of which are given in next section. The third exam, second internal assessment (U2: Unit Test, for 25 Marks) to be held in Jan'16, will again be an objective type exam.

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

The fourth and the final exam will be S2: Semester – II exams in March' 2016, for 100 marks. It will have 70 marks theory paper (In detail-Subjective type, written exam) and 30 marks practical exam. This 70-Mark question paper will comprise of both sections of the subject (part-I and part-2 of 35 marks each) in the same question paper, to be held on same day, at same time. The Practical exam will be conducted on separate days with predefined schedule given to students, well in advance. Syllabi for Exams are given in next section.

U1: Internal Assessment (Aug'15)	:	Written (Objective type) Exam	= 25 Marks
S1: Semester – I (Oct'15)	:	Written (Subjective type) Exam	= 50 Marks
U2: Internal Assessment (Jan'16)	:	Written (Objective type) Exam	= 25 Marks
S2: Semester – II (March'16)	:	Written (Subjective type) Exam for 70 marks + Practical Exam for 30 marks	= 100 marks
Average 100 marks are calculated as	:	(U1 + S1 + U2 + S2) / 2	= 100 Marks.

Please Note: - In Semester – II exam, 20% weight-age will be on chapters from first semester in Section-I and II both.

MATHEMATICS (100 Marks)

The first internal assessment (U1: to be held in Aug'15, for 25 Marks) shall be conducted in the form of MCQs/ Tutorial/Seminar/Unit test). The second exam (S1: Semester-I, for 50 Marks) to be held in Oct'15, will be subjective exam whose details are given in next section. The third exam (U2: Unit Test, for 25 Marks) to be held in Jan'16, will again be as first unit test. Precise format/Question types will be discussed in lectures. This unit test will be conducted as per given schedule for all divisions on same day.

The fourth and the final exam will be S2: Semester – II exams in March' 2016, for 100 marks. It will have 80 marks theory paper (In detail-Subjective type, written exam) and 20 marks practical exam. This 80-Mark question paper will comprise of both sections of the subject (part-I and part-2 of 40 marks each) in the same question paper, to be held on same day, at same time. The 20-mark practical exam will be conducted on separate days with predefined schedule given to students, well in advance. Syllabi for exams are given in next section.

U1: Internal Assessment (Aug'15)	:	Written (20 Marks Objective + 5 Marks Subjective) Exams	= 25 Marks
S1: Semester – I (Oct'15)	:	Written (Subjective type) Exam	= 50 Marks
U2: Internal Assessment (Jan'16)	:	Written (20 Marks Objective + 5 Marks Subjective) Exam	= 25 Marks
S2: Semester – II (March'16)	:	Written (Subjective) Exam for 80 marks + Practical Exam for 20 marks	= 100 marks
Average 100 marks are calculated as	:	(U1 + S1 + U2 + S2) / 2	= 100 Marks.

Please Note: - In Semester – II exam, 20% weight-age will be given to chapters from first semester in Section-I and II both.

VOCATIONAL (BIFOCA) SUBJECTS (200 Marks for Each)

The vocational subjects were introduced into the curriculum of Higher Secondary Education with the purpose of giving technical knowledge to junior college students. The syllabus of these Bifocal subjects is part of curriculum in engineering courses and other professional courses like, B.Sc-IT, B.Sc.-CS, etc.

Each bifocal subject is of 200 marks (Two papers of 100 marks each) with practical and theory marks bifurcated as below -

Format of Computer Science and Electronics				Format of Electrical Maintenance and Mechanical Maintenance			
Exam Type →	Theory	Practical	Total	Exam Type →	Theory	Practical	Total
Paper – I	50	50	100	Paper – I	40	60	100
Paper – II	50	50	100	Paper – II	40	60	100
Total	100	100	200	Total	80	120	200

COMPUTER SCIENCE AND ELECTRONICS – Paper I and II

The 4 exams in each paper of these subjects will be held in following manner –

U1: First Unit Test (Aug'15)	:	Single Theory Exam (Written paper)	= 25 Marks
S1: First Semester (Oct'15)	:	Theory Exam for 50 Marks + Practical Exam for 50 Marks	= 100 Marks
U2: Second Unit Test (Jan'16)	:	Single Theory Exam (Written paper)	= 25 Marks
S2: Second Semester (Mar'16)	:	Theory Exam for 50 Marks + Practical Exam for 50 Marks	= 100 Marks
Total Marks in Each Paper	:	U1 + S1 + U2 + S2 = 50 + 100 + 50 + 100	= 300 Marks
AVG Marks in Each Paper	:	Total Marks of the respective paper / 3	= Out of 100

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

ELECTRICAL MAINTENANCE AND MECHANICAL MAINTENANCE – Paper I and II

The 4 exams in each paper of these subjects will be held in following manner –

U1: First Unit Test (Aug'15)	:	Theory exam for 25 marks + 25 Internal Assessment	=	50 Marks
S1: First Semester (Oct'15)	:	Theory Exam for 40 Marks + Practical Exam for 60 Marks	=	100 Marks
U2: Second Unit Test (Jan'16)	:	Theory exam for 25 marks + 25 Internal Assessment	=	50 Marks
S2: Second Semester (Mar'16)	:	Theory Exam for 40 Marks + Practical Exam for 60 Marks	=	100 Marks
Total Marks in Each Paper	:	U1 + S1 + U2 + S2 = 50 + 100 + 50 + 100	=	300 Marks
AVG Marks in Each Paper	:	Total Marks of the respective paper / 3	=	Out of 100

For all 4 Bifocal Subjects:

Both the Unit Test's Theory Exam will be written papers which may include long answers also. Though, student must keep focus on more of objective type questions, but programs and diagrams are also expected. The Semester Theory Exams (1ST Sem in Oct'15 and 2ND Sem in Mar'16) generally follow the standard pattern of H.S.C Board question paper. It highlights more subjective type questions and covers the entire syllabus. Detailed paper pattern will be discussed with students during lecture hours as and when required. **Marks of unit test will be calculated out of 50, even though the written exam will be of 25 marks**

INFORMATION REGARDING OLYMPIAD EXAMS:

In Charge Teacher (Mathematics Olympiads)	-	MRS. NEETA PRAMOD
In Charge Teacher (Science Olympiads and IAPT)	-	MRS. SWATI RANDIVE
In Charge Teacher (English Olympiads)	-	MRS. SHALINI MUNDRA & MRS. MADHAVI JOSHI

National Cyber Olympiad (NCO), National Science Olympiad (NSO), International Mathematics Olympiad (IMO), International English Olympiad (IEO) exams are conducted by Science Olympiad foundation (SOF), New Delhi. For more information, details are –/ 09312680857, Website: www.sofworld.org

These are 3 level-examinations (all MCQs), which are conducted, all over the nation. Selection in such exams are facilitated by scholarships for higher education, highest cash award of Rs. 1 lakh (for 1st prize), and certificates.

Regional Mathematics Olympiad (RMO), a subjective exam, is governed and conducted by dept of atomic energy (DAE) which leads to participation in RMO. More information can be collected from www.hbcse.tifr.res.in
Pre RMO Exam is compulsory to qualify to appear for RMO Exam.

IAPT Exams - Indian Association of Physics Teachers, is an institute that conducts National Level exams in Physics, Chemistry, Mathematics, Astronomy, in Month of Nov, each year. Refer www.iapt.org.in for more details.

STUDENTS WHO WISH TO PURSUE B.SC., M.SC. IN PURE SCIENCE (PHY, CHEM, MATH, BIO AND THEIR BRANCHES), ARE GRANTED A SCHOLARSHIP BY GOVERNMENT @ 80,000/- PER YEAR FOR 5 YEARS.

OUR RESULTS OF 2014 - 15

TOPPERS OF STD XII

✽ Tank Darshan P.	-	Agg. 94%	✽ Vaze Chinmayee M.	-	Agg. 93.69%
✽ Gohil Kamini J.	-	Agg. 93.69%	✽ Nayak Simran D.	-	Agg. 92.92%
✽ Patel Pawan N.	-	Agg. 92.92%			

TOPPERS OF STD XI

✽ Mamtora Hemal K.	-	Agg. 94.15%	✽ Sonecha Dhairya K.	-	Agg. 90.77%
✽ Moraes Roshal S.	-	Agg. 90.62%			

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

EXAM WISE – PORTION
[for both Morning & Noon Shift]
(Subject to change under unavoidable circumstance.)

ENGLISH (Reference Books: Govt. Text Books).... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Prose - Unit: 1, 2	Prose - Unit: 3, 4	Prose - Unit: 5, 6	Prose - Unit: 7, 8
Rapid Reading: 1 & 5	Rapid Reading: 3	Rapid Reading: 2	Rapid Reading: 4, 5
Grammar: Articles, Tense, Prepositions, Active - Passive Voice, Transformation of Sentences Affirmative-Negative Interrogative-Exclamatory, Removal of Adverb 'too', Not Only - But Also, No Sooner-Than, as soon as	Grammar: Direct - Indirect Speech, Rhetorical Questions, Infinitive Gerund and Participle Model Auxiliary	Grammar: Simple, Compound and Complex Sentences If... Unless	Grammar: Degrees of Comparison Revision
Writing Skills: Interview Questions, Letter Writing, Tree diagram, Information Transfer (Non Verbal to Verbal)	Writing Skills: Speech Writing, View-Counter view, Note Making-Summarizing	Writing Skills: Tourist Leaflet, Appeal Writing	Writing Skills: Job - Application, Report writing Dialogue Writing

Paper Pattern for English Unit Test 1 and Unit Test 2 [25 Marks Each]

- Q. 1. (A) Seen Prose (MCQs Only) for 6 Marks + (B) Seen Poem (Figures of Speech) for 2 Marks
 Q.2. (A) Seen and Unseen Grammar for 7 Marks + (B) Seen Prose (Vocabulary Only) for 2 Marks
 Q.3. (A) Letter Writing (Formal) for 4 Marks +
 Q.3. (B) For Unit Test 1: Interview Questions (Non verbal to Verbal) / Tree Diagram for 4 Marks
 and For Unit Test 2: Sumarising / Note Making / Tourist Leaflet / Appeal Writing for 4 Marks.
 Kindly refer college website for paper pattern of semester I & II

HINDI (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Prose Chapters - 1, 2 Poem - 1, 2	Prose Chapters - 3, 4, 5, 6 Poem - 3, 4, 5 Drutvachan - 1, 2, 3	Prose Chapters - 7, 8 Poem - 6, 7,	Prose Chapters - 9, 10, 11, 12, 13 Poem - 8, 9, 10 Drutvachan - 4, 5, 6, 7
Grammar Muhavare, Vachan, Ling Parivartan	Grammar:- Kal Parivartan, Vakya Bhed, Pratyay : 1) Bhav vachak, Noun pratyay, Vishesh Pratyay, Ling Vachan. 2) Adjective pratyay Vakya suddhikaran (Punctuation) Muhavare, Vakya Bhed. Letter & Essay writing	Grammar Muhavare, Vachan, Ling Parivartan.	Grammar - Kal Parivartan, Vakya Bhed, Pratyay : 1) Bhav vachak, Noun pratyay, Vishesh Pratyay, Ling Vachan. 2) Adjective pratyay Vakya suddhikaran (Punctuation) Muhavre , Vakya Bhed. Essay writing , Letter + II Unit test

PHYSICS (Reference Books: Govt. Text Books)... 100 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Section: 1	1) Measurements 2) Scalars and vectors	3) Measurements 4) Scalars and vectors 5) Projectile Motion 6) Force	7) Friction in solids and liquids	8) Sound wave 9) Thermal expansion + unit II Topics +20%of semester I
Section: 2	1) Refraction of Light 2) Current Electricity	3) Refraction of Light 4 Current Electricity 5) Magnetic effect of electric current 6) Magnetism	7) Ray Optics	8) Electrostatics 9) Electromagnetic Waves +Unit II Topic +20% of Semester I

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

MATHEMATICS (Reference Books: Govt. Text Books)... 100 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Part 1	1) Compound Angles 2) Linear Inequations	1) Compound Angles 2) Factorization Formulae 3) Linear Inequations 4) Determinants	5) Matrices	6) Straight Line 7) Vectors 8) Matrices 9) Conics 10) Circle 11) Linear Inequations
Part 2	1) Complex Numbers 2) Logarithm	1) Complex Numbers 2) Logarithm 3) Sequence and Series 4) Permutation and Combination	5) Limits 6) Differentiation (theorems-u.v, u/v)	7) Method of Induction & Binomial Theorem 10) Limits 11) Derivatives 8) Integration 9) Probability 12) Logarithm

Important Notices For MATHEMATICS PRACTICAL

Display of Practical Question Sets (Total 3 Sets & Question Bank)			
First Term Dates		Second Term Dates	
SET - I: Mon, 20/07/15	SET - II: Thu, 01/10/15	SET - III: Tuesday, 07/12/15	
Students are required to solve above question sets as per instructions given in lectures/practical sessions and submit as per dates below-			
First Term Journal Submission Dates			Display of Index Page Format on 19/01/15. Second Term Journal Submission & Correction will be done on dates of exam for mathematics practical in march /April.
Dates & Days	Morning Divisions	Afternoon Divisions	
30/11/15, Mon	D, at 7.15 Am	B, at 12.45 Pm	
01/12/15, Tue	E, at 7.15 Am	C, at 12.45 Pm	
02/12/15, Wed	L, at 7.15 Am	F, at 12.45 Pm	
03/12/15, Thu	M, at 7.15 Am	K, at 12.45 Pm	
04/12/15, Fri	H, at 7.15 Am	I, at 12.45 Pm	
05/12/15, Sat	J, at 7.15 Am	G, at 12.45 Pm	
All journals must be submitted in Mathematics staff room and collect the journals from the same staff room the same day after correction.			

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

CHEMISTRY (Reference Books: Govt. Text Books)... 100 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Section: 1	1) Some Basic concepts of chemistry	1) Some Basic concepts of chemistry 2) Structure of atom 3) Periodic Table 4) Redox Reactions	5) States of matter	5) States of matter 6) Surface Chemistry 7) Chemical Equilibrium 8) Nature of Chemical bond + 20% portion of semester - I
Section: 2	1) Basic principles & techniques in organic Chemistry	1) Basic principles & techniques in organic Chemistry 2) Alkanes 3) Hydrogen 4) s-Block Elements	5) Alkenes 6) Alkynes	5) Alkenes 6) Alkynes 7) Aromatic compounds 8) p-Block elements (Gr. 13, 14) 9) Environmental Chemistry + 20% portion of semester - I

BIOLOGY (Reference Books: Govt. Text Books)... 100 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Part 1	Kingdom Plantae	Kingdom Plantae Cell Division Morphology of Flowering-plants Biochemistry of Cell	Diversity in Organisms	Diversity in Organisms Plant Water Relation & -Mineral Nutrition Plant Growth
Part 2	Kingdom Animalia	Kingdom Animalia Organization of Cell Study of Animal Tissues Human Respiration	Study of Animal Types	Study of Animal Types Human Nutrition Human Skeleton and Locomotion

COMPUTER SCIENCE (C. S.)... 200 Marks Avg.

With subject seeming relatively difficult initially, students are facilitated with solution of First Unit Exams of past 3 years, which are posted on website. Students are advised to derive maximum benefit from it. They can also give feedback on website or to teacher directly.

	UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (50)
Paper 1	1) Algorithm 2) Flow Chart	1) Syllabus of UNIT - I 2) C (Using Syntax of C++) a. Data Types, constants, variables, keywords b. Input and Output statements c. Arithmetic, Logical, Relational Operators and Expressions d. Decision control statements e. Loops	1) C - Language (Using Syntax of C++) a. Syllabus of Sem - I b. Functions	1) C - Language (Using Syntax of C++) a. Syllabus of UNIT - II b. Arrays c. Strings d. Storage Class
Paper 2	1) Number System 2) Logic gates	1) Syllabus of UNIT - I 2) Logic Gates and Boolean Algebra	1) Syllabus of Sem-I 2) HTML 3) Computer Fundamentals : Peripheral Devices	1) Syllabus of UNIT - II 2) HTML

References: Though notes given in lectures/practicals are sufficient but for further and concrete knowledge students can prefer referring - 'Modern Digital Electronics' by R P Jain (for Logic Gates), 'Computer Fundamentals' by Pradeep K Sinha, 'HTML in easy steps' by Andy Holyer.

For Paper I: Main Reading: 'Let Us C' by Yashwant Kanetkar, Supplementary Reading: Schaum's Outlines with Programming with C.

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

ELECTRONICS... 200 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (50)
Paper 1	Study of Components- Resistors, Capacitors, Relays & Switches, Inductors & Transformers	The syllabus of first-unit test is also included. + Network Theorems	AC Fundamentals	a. AC Fundamentals, b. Instruments
Paper 2	a. Semiconductors, b. Study of special-purpose diodes	The syllabus of first unit-test is also included. a. Study of Transistors, b. Amplifiers (Part I)	Amplifiers (Part II)	a. Amplifiers (Part II), b. Oscillators
Reference: Text book on Electronics by Nirali Prakashan or Phadke Prakashan				

ELECTRICAL MAINTENANCE (Text Book Prescribed by Govt.)... 200 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (40)	UNIT TEST - II (25)	SEMESTER - II (40)
Paper 1	1) Electrical Symbols, 2) Common Electrical Tools, 3) Engineering Drawing	4) Electric Current 5) Work, Power & Energy 6) Effects of Electric Current	7) Types of Wires & Wiring Accessories 8) Wiring System	9) Acid & Alkaline cells & Batteries, 10) Measuring Instruments 11) Safety Measures
Paper 2	1) Alternating Current 2) D.C. & A.C. 3) Electromagnetism	4) D. C. Generator 5) D. C. Motors	6) Alternators 7) Single Phase Motors	8) 3 phase motors & starters 9) Polyphase Circuits.
Reference: Text book on Electrical Maintenance by M. A. Chaudhary				

MECHANICAL MAINTENANCE... 200 Marks Avg.

	UNIT TEST - I (25)	SEMESTER - I (40)	UNIT TEST - II (25)	SEMESTER - II (40)
Paper 1	1) Carpentry 2) Engineering Drawing a. Drawing Equipments b. Lines & Lettering	1) Smithy 2) Engineering Drawing c. Engineering Curves	1) Fitting & Bench work a. Fitting Tools b. Marking & Measuring Tools c. Precision Measuring Instruments 2) Engineering Drawing a. Orthographic Projection	1) Fitting & Bench work d. Limits & Fits e. Hacksaw Blades f. Filing processes g. Care & Precautions 2) Engineering Drawing b. Geometrical Construction c. Isometric Projection
Paper 2	1) Welding a. Welding, Welding Tools and Equipments b. Welding Processes 2) Machine Drawing a. Fasteners	1) Welding c. Types of weld d. Welding in different position e. Care and precautions 2) Machine Drawing b. Threads	1) Engineering Materials & their Properties 2) Machine Drawing c. Keys, Cotter Joints & Pin Joints	1) Heat Treatment 2) Machine Drawing d. Foundation bolt e. Blue print reading

INFORMATION TECHNOLOGY (All Exams will be Online)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (80)
1. Introduction to IT 2. Office Suite	1. Multimedia 2. Web browsers, E-mail Clients and Messenger Utilities	1. Introduction to Networking 2. Visual Basic.NET	Full Syllabus of I. T. with - 1. HTML 2. Introduction to JavaScript

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

ALL OPTIONAL SUBJECTS

SANSKRIT (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Prose वालिका पाठ पाठयति	Prose १ . बालिका पाठ पाठयति २ . श्रीरामस्य वन गमनम् ३ . उपनिपात प्रतिकार :	Prose विज्ञानविशारदा कमला	Prose १ . विज्ञानविशारदा कमला २ . उमाहैमवती कथा ३ . तारपीड चन्द्रापीडमुपदिशति
Poems सुभाषितमाला	Poems १ . सुभाषितमाला २ . बुद्धजन्म ३ . दिलीप - सिंह संवाद :	Poems कविप्रशंसा	Poems १ . कविप्रशंसा २ . पाण्डितलक्षणानि ३ . कष्टकाञ्जलिः
	Rapid Readings: अविवेक परमापदां पदम्		Rapid Reading: गङ्गास्तोत्रम्

PSYCHOLOGY (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Introduction to Psychology	1) Introduction to Psychology 2) Method of Psychology Inquiry 3) Foundation of Human Behavior 4) Human Development	Attention and Perception	5) Attention and Perception 6) Learning 7) Human Memory 8) Motivation and Emotion

Note:- Student have to make a project on any one of the following topics in scrap book and to be submitted in November (stick pictures relevant to the project topic, project must have minimum 10 text pages - without picture.)

- Branch Of Psychology
- Psychology In Everyday Life
- Role Of Psychologist And Type Of Psychology Test
- Types Of Psychological Test
- Brain And Its Part Function
- Stages Of Life Span
- Piaget Stages Of Cognitive Development
- Adhd (Attention Deficit Hyperactivity Disorder)
- How To Improve Memory
- Stages Of Memory

FRENCH (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
1) 0 TO 01 Chapter (25 Marks)	1) 0 TO 04 Chapter (50 Marks)	1) 05 To 06 Chapter (40 Marks)	1) 0 To 08 Chapter (80 Marks)

Note:- (Second Semester Oral Exam) 20 Marks

- 1) Dictation Of Words And Sentences
- 2) Reading Of Any Chapter
- 3) Oral Essay (All Topics To Be Prepared)
 - A) Le Repas Indien
 - B) Le Repas Francais
 - C) Mon Lycee
 - D) La Mousson En Inde
 - E) La Printemps En France

Question Will Be Asked Based On Chapter As Well As Oral Topic

GUJARATI (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Prose Chapter - 01 Poem - 01	Prose Chapter - 01 To 04 Poem - 01 To 04 Rapid Reading - 01 To 02	Prose Chapter - 07 Poem - 08	Prose Chapter - 07 To 11 Poem - 08 To 13 Rapid Reading - 04 , 05, 06

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

MARATHI (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
१. गदय १ २. पदय ४,	१. विषय प्रवेश १, २ २. गदय १, २ ३. पदय ४, ५, ६, ७	१. गदय ३ २. पदय ७	१. विषय प्रवेश १, २ २. गदय २, ३ ३. पदय ७, ८, ९, १०
लेखन कौशल्य : औपचारिक पत्रव्यवहार, आंकलन सारांश लेखन, भाषांतर, वृत्तलेखन .		लेखन कौशल्य : जाहिरात क्षेत्र आणि भाषा सूत्र संचालन, संगणकांची भाषा कोशवंडःमय .	

GEOGRAPHY (Reference Books: Govt. Text Books)... 100 Marks Avg.

UNIT TEST - I (25)	SEMESTER - I (50)	UNIT TEST - II (25)	SEMESTER - II (100)
Physiography of The World	1) Physiography of The World 2) Movement of The Earth 3) Climate 4) Drainage System and Water Resource	Oceans And Marine Ecosystem	5) Oceans And Marine Ecosystem 6) Forests 7) Biomes and Diversity 8) Disaster

ENVIRONMENTAL STUDIES (E.V.S)... Refer pattern on page no. 3

FIRST TERM	SECOND TERM
1. People and environment 2. Social , Economic, Political institution & the environment 3. Legal & Cultural institution & the environment	4. Knowledge, Science, Technology & the environment 5. Human –made Artifacts, system & the environment
There will be no written exam for E. V. S. Subject. Topics for project and seminar will be given to each student and must be done individually, which will be related to environment and may or may not be based on topics above. The chapters given above are for reference purpose to facilitate students for preparation of project and seminar, well before they are assigned the topic, or they choose the topic.	

A word of 'Kind Advice' for our young and aspiring Engineers, Doctors and budding Scientists -

Dear children, this booklet is not a college brochure, or prospectus or a magazine ! You must understand the importance of having an entire 'Year Plan' of college in your hands, at the start of academics. You must plan all your activities(like intense preparation of entrance exam, taking holidays etc) keeping in mind all exam dates and college tours. Students are encouraged to take all Olympiad Exams, which helps them prepare better for entrance exams.

At KES, we believe in 'JOY OF GIVING', be it education or a philanthropic activity. With the initiative by Dr. Girish Trivedi and madam Principal Dr. Srivastava, we have been giving motor wheelchairs to poor and needy students of TPB, SVP and other schools. Kids with permanent physical disability with urge for taking education, are the best receivers of this charity, who have motivated many others by their grit. A few among these could scale to level of doing masters and preparing IAS exams as well.

College has started with integrated batches (running into 4th year), to help students prepare better by focusing on 'College and Entrance Exam Preparations' at college campus itself, by senior and expert professionals. It not only saves times, but facilitates students to explore other areas of academics (in and outside college) and pursue their interests. For further details, students and parents can contact Principal / Vice-Principal.

College has uplifted its standard and is gaining huge response towards our INTERNATIONAL TOUR to NASA, USA. We have been organizing Local and National tours also. Though tours bring in plenty of JOY, MEMORIES and Learning, we ensure to club it with varieties of academics areas, which helps them in their profession in future. NASA TOUR facilitates students fetch US VISA with 10 yrs validity, which is very useful at the time of seeking education abroad.

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

EXAM SCHEDULE – XI STD - (Subject to change under unavoidable circumstance)

Examination In charge - Mr. Rajesh Singh

1st Unit Test: 20th August to 27th August' 2015

DAY	DATE	SUBJECT	Time
Thursday	20/08/15	French/ Marathi/ Gujarati/ Sanskrit and Psychology/ Geography	1 Hr
Friday	21/08/15	Mathematics Part I & II	1 Hr
Saturday	22/08/15	English	1 Hr
Monday	24/08/15	Chemistry Part I & II	1 Hr
Tuesday	25/08/15	Elx - I / C. S. - I / E. M. - I / M. M. - I / I. T. Theory Online Exam/ Hindi	1.5 Hr / 1 Hr
Wednesday	26/08/15	Physics Part I & II	1 Hr
Thursday	27/08/15	Elx - II / C. S. - II / E. M. - II / M. M. - II / Bio - I & II	1.5 Hr / 1 Hr

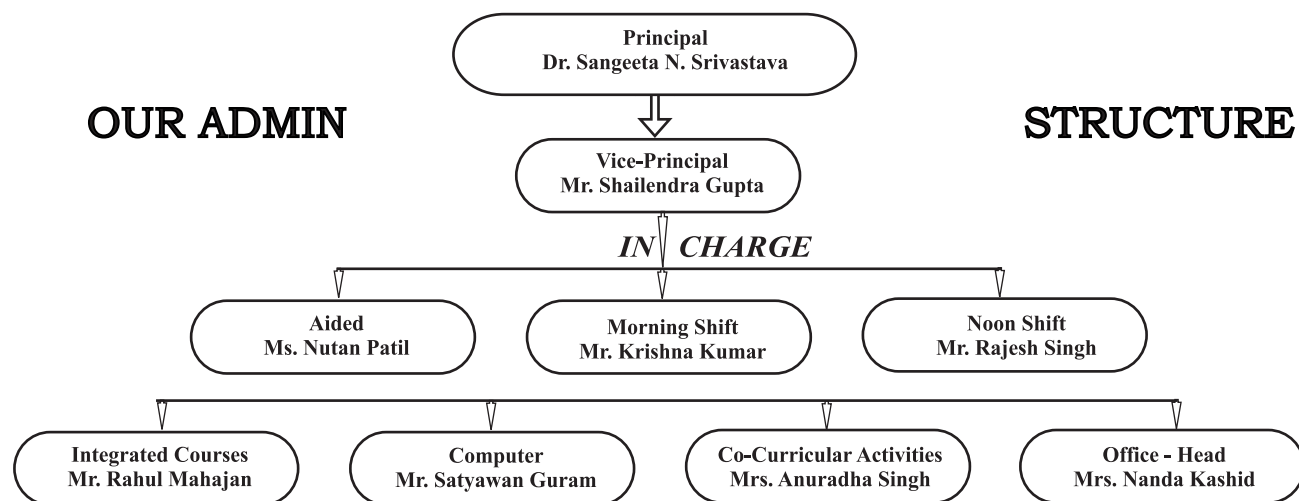
1st Semester Test: 23rd October to 7th November' 2015

DAY	DATE	SUBJECT	Time
Friday	23/10/15	Marathi / Gujarati / French / Sanskrit	2 Hrs
Monday	26/10/15	Mathematics Part I & II	2 Hrs
Tuesday	27/10/15	Physical Education (P. E.) - Sports	1 Hr
Wednesday	28/10/15	English	2 Hrs
Thursday	29/10/15	Psychology / Geography	2 Hrs
Friday	30/10/15	Hindi / Elx - I / C. S. - I / E. M. - I / M. M. - I	2 Hrs / 3 Hrs
Saturday	31/10/15	Blood Donation Camp (For Parents & Staff)	
Monday	02/11/15	Chemistry Part I & II	2 Hrs
Tuesday	03/11/15	I. T. Theory Paper Online Exam (2 Batches)	2 Hrs
Wednesday	04/11/15	Physics Part I & II	2 Hrs
Thursday	05/11/15	I. T. Theory Paper Online Exam (2 Batches)	2 Hrs
Friday	06/11/15	Bio - I & II / Elx - II / C. S. - II / E. M. - II / M. M. - II	2 Hrs / 3 Hrs
Saturday	07/11/15	Reserve Day	

First Semester Practical Exam & Second Unit Test For XI & Prelim Exam For H.S.C.: 2nd Jan to 18th Jan'16

DAY	DATE	SUBJECT	TIME
Saturday	02/01/16	Vocational Practical Exam	5 Hrs
Monday	04/01/16	Vocational Practical Exam	5 Hrs
Tuesday	05/01/16	Vocational Practical Exam	5 Hrs
Wednesday	06/01/16	Vocational Practical Exam	5 Hrs
Thursday	07/01/16	Vocational Practical Exam/	5 Hrs
		Unit Test - French/Mar/Guj/Sans/ I. T. Theory Paper Online Exam	1 Hr
Friday	08/01/16	Hindi/(Reserve day for I. T. Online) / Vocational Paper I	1Hr/1.5 Hr
Saturday	09/01/16	Vocational Practical Exam / Psychology/ Geography	5Hrs/1 Hr
Monday	11/01/16	Chemistry Part I & II	1 Hrs
Tuesday	12/01/16	English	1 Hrs
Wednesday	13/01/16	Vocational Practical Exam	5 Hrs
Thursday	14/01/16	Bio- I & II / Elx- II / C.S.-II / E.M.-II / M.M. -II	1Hr/1.5 Hr
Saturday	16/01/16	Physics Part I & II	1 Hr
Monday	18/01/16	Mathematics Part I & II	1 Hr
Tuesday	19/01/16	Regular Lectures Continue... (New Time Table)	---

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16



Std & Div Class Teachers

MORNING SHIFT : 07.20 AM onwards			AFTERNOON SHIFT : 01.00 PM onwards		
Div	Room	Class Teacher(s)	Div	Room	Class Teacher(s)
A	107	Sandhya Puntambekar	B	103	Sapna Indulkar
D	204	Rashmi Tiwari	C	G-1	Sakshi Nanwani
E	101	Sachin Salvi	G	Rao Integrated	Rakesh Parab
H	Rao Integrated	Padmavati Naikar	K	104	Sanjay Maharana
J		Vikrant Sawant	I	TPB Integrated	Andeep Singh
L	103	Minal Jain	F		
M	104	Chandrasen Kewat	Note: Students must ensure any change in address, contact numbers or any medical problem must be informed to the respective class teacher with immediate effect in person or by parents.		

Second Semester Theory Exam: 19th March to 31st March'16

DAY	DATE	SUBJECT	TIME
Saturday	19/03/16	Practical and Oral Exam Begins... On 19, 21, 22 and 23 rd March	-
Saturday	26/03/16	French / Marathi / Gujarati / Sanskrit	3 Hrs
Monday	28/03/16	Mathematics Part I & II	3 Hrs
Tuesday	29/03/16	Elx- II / C. S.-II / E. M.-II / M. M. -II / Hindi / I. T. Theory Paper Online Exam (2 Batches)	3 Hrs 3 Hrs
Wednesday	30/03/16	Geography/ Psychology / I. T. Theory Paper Online Exam (1 Batch)	3 Hrs
Thursday	31/03/16	Biology Part I & II	3 Hrs
Friday	01/04/16	Physical Education (P. E.) - Sports + I. T. Theory Paper Online Exam (1 Batch)	1 Hr 3 Hrs
Saturday	02/04/16	English	3 Hrs
Monday	04/04/16	Chemistry Part I & II	3 Hrs
Tuesday	05/04/16	Reserve Day	-
Wednesday	06/04/16	Physics Part I & II	3 Hrs
Thursday	07/04/16	Practical and Oral Exam Continues....	-

Shri T. P. Bhatia College of Science - STD-XI - Year Plan: 2015-16

TERM SCHEDULE... COLLEGE ACTIVITIES		LIST OF HOLIDAYS	
ACTIVITY	DATE	DAY & DATE	SUBJECT
College Begins...	13/07/15, Mon	18/07/15, Sat	Ramzan Eid
Parent's Orientation	25/07/15, Sat	27/07/15, Mon	Ashadhi Ekadashi
Imagica Trip Enrollment	28/07 - 10/08/15	15/08/15, Sat	Independence Day
Freshers' Party (by Std XII, for Std XI)	08/08/15, Sat	18/08/15, Tue	Parsi New Year
1-Day Picnic to Imagica	28/08/15, Fri	29/08/15, Sat	Raksha Bandhan
6-Day Sikkim Tour Enrollment	01/09 - 19/09/15	05/09/15, Sat	Teachers' Day
Navaratri... 'Garba Day'	10/10/15, Sat	17/09 - 21/09/15: 5 Days	Ganesh Utsav
Blood Donation Camp (for Parents & Staff)	31/10/15, Sat	24/09/15, Thu	Bakri-Eid
Second Term Begins... (With Regular Lectures and Practical)	26/11/15, Fri	02/10/15, Fri	Gandhi Jayanti
6-Day Sikkim Tour	27 Nov - 5 Dec' 15	22/10/15, Thu	Dasera
Vigyasa Science Fest ... National Science Quiz	07/12 - 12/12/15	24/10/15, Sat	Moharam
Sports week and Annual Sports Day	16/12 - 19/12/15	08/11 - 25/11/15: 18 Days	Diwali Vacation
Fare-Well Party (For Std XII by Std XI)	23/12/15, Wed	24/12/15, Thu	Eid-E-Milad
Std XI Practical Continues, New Time Table	21/02/16, Mon	25/12/15 - 01/01/16: 8 Days	Christmas Vacation
S. Y. J. C. (Std. XII) Admissions begin	25/04 - 30/04/16	15/01/16, Fri	Makar Shankranti
College Tour to NASA (11-Days)	Mid - May 2016	26/01/16, Tue	Republic Day

Schedule of All the Exams

First Unit Test (Theory)	21/08 /15, Fri	19/02/16, Fri	Shivaji Jayanti
National Cyber Olympiad (NCO)	23/09/15, Wed	07/03/16, Mon	Maha-Shivratri
First Semester (Theory)	23/10/15, Fri	23/03/16, Wed	Dhuleti (Holi)
National Science Olympiad (NSO)	20/10/15, Tue	25/03/16, Fri	Good Friday
Open House Day (First Semester Exam)	05/12/15 - Sat	08/04/16, Fri	Gudi Padwa
iEOL (Silver Zone, Eng. Olympiad) Level - 1	11/12/15, Fri	14/04/16, Thu	Ambedkar Jayanti
IMO (International Mathematics Olympiad)	10/12/15, Thurs	15/04/16, Fri	Ram Navmi
1 st Sem Pract Exam (Only Vocational Subjects, refer time table)	16/01/16, Fri	19/04/16, Tue	Mahavir Jayanti
Second Unit Test (Theory)	04/01/16, Mon		
Second Semester (Theory)	26/03/16, Sat		
Second Sem Practical Exam (All Subjects)	08/04/16, Fri		
Open House Day (Second Sem Exam)	16/04/16, Sat		
Result Declaration	23/04/16, Sat		
Std XII Admissions	25/04/16, Mon		

We wish you all the best for your academic year here and bright future ahead.