

Rayat Shikshan Sansth's
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani
Commerce College, Kopargaon 423601,
Dist. Ahmednagar, (MS)-India

**Internal Quality Assurance Cell
(IQAC)
Syllabus Approval Letter**

The IQAC committee has approved to submitted syllabus of short term/COC courses planted to be conducted by Department Mathematics.

Sr. No.	Name of the Courses	Type of Course
1	Mathematics for Competitive Examinations	Short Term Course

HOD of Mathematics may proceed accordingly.



Date :-21/12/2017
Department of Mathematics,
S.S.G.M. College, Kopargaon



IQAC- Coordinator

S.S.G.M. College, Kopargaon

Rayat Shikshan Sanstha's,
S.S.G.M. College, Kopargaon
Department of Mathematics
SHORT-TERM COURSE (2017-2018)
“Mathematics for Competitive Examinations”
SYLLABUS

Introduction:

Mathematics department has decided to start a short-term course “Mathematics for Competitive Exam”. Taking into consideration a new approaches in different areas of Mathematics. Mathematics department has prepared the syllabus for stated course.

The committee was constituted as follows

1. Prin. Dr. K. P. Kakde
2. Ms. D. R. Chouhan (Head and member)
3. Mr.R. J. Ukirde (Member)
4. Dr. P. G. Andhare (Member of BOS, SPPU, Pune)

Aims:

1. Develop mathematical curiosity and inductive and deductive reasoning when solving problems.
2. Develop the knowledge, skills, and attitudes necessary to pursue further study in mathematics.
3. Develop abstract, logical and critical thinking.

Objectives:

1. Use appropriate mathematical concepts and skills to solve problems.
2. Know and demonstrate understanding of the mathematical concepts.
3. Select and apply general rules correctly to solve problems.

Details of Syllabus:

Real Analysis –

(08 Lect.)

Sequence and series of real numbers, Limit, Continuity, Differentiation, Mean Value Theorems, Partial Derivatives and Euler's theorem, Convergence and divergence, Cauchy sequences, Tests of convergence, Alternate series and their convergence

Linear Algebra –

(08 Lect.)

Matrix Algebra and System of Linear equations, Vector spaces, Linear Dependence, Basis, Dimension, Linear Transforms, Rank-Nullity theorem, Eigen values and Eigen vectors, Cayley-Hamilton theorem, Diagonalization of matrices, Hermitian and skew hermitian matrices.

Abstract Algebra –

(06 Lect.)

Group, Subgroup, Cyclic group, Normal subgroup, Lagrange's theorem, Permutation group, Quotient group, Homomorphism's and Isomorphism

Metric Spaces –

(06 Lect.)

Metric spaces, Open and Closed sets, Interior points, Closure of a set, Convergent sequence, Cauchy sequences, Complete spaces, Dense set, compactness, Connectedness

Basics of Set Theory-

(06 Lect.)

Cantor's concept of a set, Intuitive set theory, Inclusion, Operations for sets, Algebra of sets, Ordering relations, Power sets, Numerical Equivalence of sets. Natural Number sequence, Induction and Recursion, Cardinal numbers and Cardinality, Cardinal arithmetic, Countable and Uncountable sets, Paradoxes set theory, Russell's Paradox.

Expected Number of Students = 15

Course Duration: 2 Months. Jan.18, Feb.18

Fees : Nil

Rayat Shikshan Sanstha's,
S.S.G.M. College, Kopargaon
Department of Mathematics
SHORT-TERM COURSE (2017-18)

Notice

Date:11/12/2017

All the students of T.Y.B.Sc .Mathematics are hereby informed that, Mathematics Department is going to start a Short Term Course --"Mathematics for Competitive Examinations". Duration of the course is two months (Jan.2018, Feb.2018). Syllabus of the course is displayed on the notice board. The course will start on Monday 1st Jan 2018.

Interested students should give their names to Prof. D. R. Chouhan on or before 20/12/2017.



Head,

Department of Mathematics,
S.S.G.M. College, Kopargaon.




Rayat Shikshan Sanstha's
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani
Commerce College, Kopargaon, Dist.-Ahmednagar

DEPARTMENT OF MATHEMATICS

Mathematics For Competitive Examination
YEAR 2017-2018

Sr. No.	Name of the Teacher	Topics Taught
1	Mrs. D.R.Chouhan	Chapter-III Abstract Algebra (06 Lectures) Group, Subgroup, Cyclic group, Normal subgroup, Lagrange's theorem, Permutation group, Quotient group, Homomorphism's and Isomorphism
2	Miss.N.T,Shinde	Chapter-IV Metric Spaces (06 Lectures) Metric spaces, Open and Closed sets, Interior points, Closure of a set, Convergent sequence, Cauchy sequences, Complete spaces, Dense set, compactness, Connectedness
3	Mr. R.J.Ukirde	Chapter-I Real Analysis (08 Lectures) Sequence and series of real numbers, Limit, Continuity, Differentiation, Mean Value Theorems, Partial Derivatives and Euler's theorem, Convergence and divergence, Cauchy sequences, Tests of convergence, Alternate series and their convergence
4	Miss.N.T,Shinde	Chapter-II Linear Algebra (08 Lectures) Matrix Algebra and System of Linear equations, Vector spaces, Linear Dependence, Basis, Dimension, Linear Transforms, Rank-Nullity theorem, Eigen values and Eigen vectors, Cayley-Hamilton theorem, Diagonalization of matrices, Hermitian and skew hermitian matrices.
5	Mrs. D.R.Chouhan and Mr. R.J.Ukirde	Chapter-V Basics of Set Theory (06 Lectures) Cantor's concept of a set, Intuitive set theory, Inclusion, Operations for sets, Algebra of sets, Ordering relations, Power sets, Numerical Equivalence of sets. Natural Number sequence, Induction and Recursion, Cardinal numbers and Cardinality, Cardinal arithmetic, Countable and Uncountable sets, Paradoxes set theory, Russell's Paradox


for Head
 Dept. of Mathematics


Chairman
 Short Term Course Committee




Principal
 S.S.G.M.Science, Gautam Arts and
 Sanjivani Commerce College, Kopargaon

List of Students For Short-Term Course
“Mathematics For Competitive Examinations”
(2017-2018)

Sr.No.	Name of Student	Class
1.	Bhagure Malti Vilas	T.Y.B.Sc.
2.	Bhagure Poonam Dattatraya	T.Y.B.Sc.
3.	Bhagwat Suresh Sanjay	T.Y.B.Sc.
4.	Thore Mangal Uttam	T.Y.B.Sc.
5.	Wabale Mayuri Vijay	T.Y.B.Sc.
6.	Gagare Pradip Suresh	T.Y.B.Sc.
7.	Yeole Snehal Digambar	T.Y.B.Sc.
8.	Jarande Pooja Appa	T.Y.B.Sc.
9.	Teke Maya Shivaji	T.Y.B.Sc.
10.	Thorat Nikita Madhukar	T.Y.B.Sc.
11.	Malik Aarti Govindrao	T.Y.B.Sc.
12.	More Rohini Arun	T.Y.B.Sc.
13.	Pawar Darshana Datta	T.Y.B.Sc.
14.	Punde Amruta Kailas	T.Y.B.Sc.
15.	Roham Pooja Vijay	T.Y.B.Sc.


Head,
Department of Mathematics,
S. S. G. M. College, Kopergaon



Rayat Shikshan Sanstha's
S.S.G.M.College, Kopargaon.

Mathematics Department

Short-Term Course

"Mathematics For Competitive Examinations"

Time- Table (2017-2018)

Duration: 02 Months (Jan.18, Feb.18)

w.e.f. 01/01/2018

Time	Monday	Tuesday	Wednesday
03.45-04.45	Ms. D. R. Chouhan (A-101)	Mr. R. J. Ukirde (A-101)	Ms. N. D. Shide(A-101)



Head

Dept. of Mathematics

List of Students For Short-Term Course
“Mathematics For Competitive Examinations”

(2017-2018)

Attendance

Month: January

Sr.No.	Name of Student	01/01	02/01	03/01	08/01	09/01	10/01	15/01	16/01	17/01	22/01	23/01	24/01
1.	Bhagure Malti Vilas	P	P	P	P	P	P	P	P	A	P	P	P
2.	Bhagure Poonam Dattatraya	P	P	P	P	P	P	P	P	P	P	P	P
3.	Bhagwat Suresh Sanjay	P	P	P	P	P	P	P	P	P	P	P	P
4.	Thore Mangal Uttam	P	P	P	P	A	P	P	P	P	P	P	P
5.	Wabale Mayuri Vijay	P	P	P	P	P	P	P	P	P	P	P	P
6.	Gagare Pradip Suresh	P	P	P	P	P	P	P	A	P	P	P	P
7.	Yeole Snehal Digambar	P	P	P	P	P	P	P	P	P	P	P	P
8.	Jarande Pooja Appa	P	P	P	P	P	P	P	P	P	P	P	P
9.	Teke Maya Shivaji	P	P	P	P	P	P	P	P	P	P	P	P
10.	Thorat Nikita Madhukar	P	P	P	P	P	P	P	P	P	P	P	P
11.	Malik Aarti Govindrao	P	P	P	P	P	P	P	P	P	P	P	P
12.	More Rohini Arun	P	P	P	A	P	P	P	P	P	P	P	P
13.	Pawar Darshana Datta	P	P	P	P	P	P	P	P	P	P	P	P
14.	Punde Amruta Kailas	P	P	P	P	P	P	P	P	P	P	P	P
15.	Roham Pooja Vijay	P	P	P	P	P	P	P	P	P	P	P	P



[Signature]
 HOD,
 Department of Mathematics,
 S. S. G. M. College, Kopargao

List of Students For Short-Term Course
“Mathematics For Competitive Examinations”
(2017-2018)
Attendance

Month: January

Sr.No.	Name of Student	29/01	30/01	31/01															
1.	Bhagure Malti Vilas	P	P	P															
2.	Bhagure Poonam Dattatraya	P	P	P															
3.	Bhagwat Suresh Sanjay	P	P	P															
4.	Thore Mangal Uttam	P	P	P															
5.	Wabale Mayuri Vijay	P	P	P															
6.	Gagare Pradip Suresh	P	P	P															
7.	Yeole Snehal Digambar	P	P	P															
8.	Jarande Pooja Appa	P	P	P															
9.	Teke Maya Shivaji	P	P	P															
10.	Thorat Nikita Madhukar	P	P	P															
11.	Malik Aarti Govindrao	P	P	P															
12.	More Rohini Arun	P	P	P															
13.	Pawar Darshana Datta	P	P	P															
14.	Punde Amruta Kailas	P	P	P															
15.	Roham Pooja Vijay	P	P	P															




Department of Mathematics,
S. S. G. M. College, Kopargao

List of Students For Short-Term Course
“Mathematics For Competitive Examinations”

(2017-2018)

Attendance

Month: *February*

Sr.No.	Name of Student	05/02	06/02	07/02	12/02	14/02	20/02	21/02	26/02	27/02	28/02		
1.	Bhagure Malti Vilas	P	P	P	P	P	P	P	P	A	P		
2.	Bhagure Poonam Dattatraya	P	P	P	P	P	P	P	P	P	P		
3.	Bhagwat Suresh Sanjay	P	P	P	P	P	P	P	P	P	P		
4.	Thore Mangal Uttam	P	P	P	P	P	P	P	P	P	P		
5.	Wabale Mayuri Vijay	P	P	P	P	P	P	P	P	P	P		
6.	Gagare Pradip Suresh	P	P	P	A	P	P	P	P	P	P		
7.	Yeole Snehal Digambar	P	P	P	P	P	P	P	P	P	P		
8.	Jarande Pooja Appa	P	P	P	P	P	P	P	P	P	P		
9.	Teke Maya Shivaji	P	P	P	P	P	P	P	P	P	P		
10.	Thorat Nikita Madhukar	P	P	P	P	P	P	P	P	P	P		
11.	Malik Aarti Govindrao	P	P	P	P	P	P	P	P	P	P		
12.	More Rohini Arun	P	P	P	A	P	P	P	P	P	P		
13.	Pawar Darshana Datta	P	P	P	P	P	P	P	P	P	P		
14.	Punde Amruta Kailas	P	P	P	P	P	A	P	P	P	P		
15.	Roham Pooja Vijay	P	P	P	P	P	P	P	P	P	P		



[Signature]
Head,
Department of Mathematics,
S.S.G.M. College, Kopargaoon

Rayat Shikshan Sanstha's,
S. S. G. M. COLLEGE KOPARGAON
Department of Mathematics

Short Term Course, 2017-2018

Sub: Mathematics for Competitive Examinations

Test

Day & Date: Tuesday, 13/03/2018

Time: 3.45 pm To 4.45 pm [1.00 Hr]

Max. Marks: 50

Note: 1) Attempt *all* the questions. *Each* question carries 2 marks.

1.

Define $f_1, f_2: [0,1] \rightarrow \mathbb{R}$ by

$$f_1(x) = \sum_{n=1}^{\infty} \frac{x \sin(n^2 x)}{n^2} \quad \text{and} \quad f_2(x) = \sum_{n=1}^{\infty} x^2(1-x^2)^{n-1}.$$

Then

- (A) f_1 is continuous but f_2 is NOT continuous
- (B) f_2 is continuous but f_1 is NOT continuous
- (C) both f_1 and f_2 are continuous
- (D) neither f_1 nor f_2 is continuous

2.

The system of linear equations

$$x - y + 2z = b_1$$

$$x + 2y - z = b_2$$

$$2y - 2z = b_3$$

is inconsistent when (b_1, b_2, b_3) equals

- (A) $(2, 2, 0)$
- (B) $(0, 3, 2)$
- (C) $(2, 2, 1)$
- (D) $(2, -1, -2)$

3.

Let $x_n = 2^{2^n} \left(1 - \cos\left(\frac{1}{2^n}\right) \right)$ for all $n \in \mathbb{N}$. Then the sequence $\{x_n\}$

- (A) does NOT converge
- (B) converges to 0
- (C) converges to $\frac{1}{2}$
- (D) converges to $\frac{1}{4}$

4.

The set $\left\{ \frac{x^2}{1+x^2} : x \in \mathbb{R} \right\}$ is

- (A) connected but NOT compact in \mathbb{R}
- (B) compact but NOT connected in \mathbb{R}
- (C) compact and connected in \mathbb{R}
- (D) neither compact nor connected in \mathbb{R}

5.

Let $\sum_{n=1}^{\infty} a_n$ and $\sum_{n=1}^{\infty} b_n$ be two series, where $a_n = \frac{(-1)^n n}{2^n}$, $b_n = \frac{(-1)^n}{\log(n+1)}$ for all $n \in \mathbb{N}$. Then

- (A) both $\sum_{n=1}^{\infty} a_n$ and $\sum_{n=1}^{\infty} b_n$ are absolutely convergent
- (B) $\sum_{n=1}^{\infty} a_n$ is absolutely convergent but $\sum_{n=1}^{\infty} b_n$ is conditionally convergent
- (C) $\sum_{n=1}^{\infty} a_n$ is conditionally convergent but $\sum_{n=1}^{\infty} b_n$ is absolutely convergent
- (D) both $\sum_{n=1}^{\infty} a_n$ and $\sum_{n=1}^{\infty} b_n$ are conditionally convergent

6.

For all $(x, y) \in \mathbb{R}^2$, let $f(x, y) = \begin{cases} x & \text{if } y = 0, \\ x - y^3 \sin(1/y) & \text{if } y \neq 0. \end{cases}$

Then at the point $(0, 0)$,

- (A) f is NOT continuous
- (B) f is continuous but NOT differentiable
- (C) $\frac{\partial f}{\partial x}$ exists but $\frac{\partial f}{\partial y}$ does NOT exist
- (D) f is differentiable

7.

The value of $\int_{x=0}^1 \int_{y=0}^{x^2} \int_{z=0}^y (y+2z) dz dy dx$ is

- (A) $\frac{1}{53}$ (B) $\frac{2}{21}$ (C) $\frac{1}{6}$ (D) $\frac{5}{3}$

8.

Let G be a cyclic group of order 24. The total number of group isomorphisms of G onto itself is

- (A) 7 (B) 8 (C) 17 (D) 24

9.

Which of the following groups contains a unique normal subgroup of order four?

- (A) $\mathbb{Z}_2 \oplus \mathbb{Z}_4$ (B) The dihedral group, D_4 , of order eight
- (C) The quaternion group, Q_8 (D) $\mathbb{Z}_2 \oplus \mathbb{Z}_2 \oplus \mathbb{Z}_2$

10. Let S be the oriented surface $x^2 + y^2 + z^2 = 1$ with the unit normal \mathbf{n} pointing outward. For the vector field $\mathbf{F}(x, y, z) = x\mathbf{i} + y\mathbf{j} + z\mathbf{k}$, the value of $\iint_S \mathbf{F} \cdot \mathbf{n} \, dS$ is

(A) $\frac{\pi}{3}$ (B) 2π (C) $\frac{4\pi}{3}$ (D) 4π

11. The value of $\iint_R xy \, dx \, dy$, where R is the region in the first quadrant bounded by the curves $y = x^2$, $y + x = 2$ and $x = 0$ is _____

12. The radius of convergence of the power series $\sum_{n=0}^{\infty} 4^{(-1)^n n} z^{2n}$ is _____

13. Let
- $$f(x, y) = \begin{cases} \frac{2(x^3 + y^3)}{x^2 + 2y}, & (x, y) \neq (0, 0) \\ 0, & (x, y) = (0, 0). \end{cases}$$

Show that the first order partial derivatives of f with respect to x and y exist at $(0, 0)$. Also show that f is not continuous at $(0, 0)$.

14. Evaluate
- $$\int_{1/4}^1 \int_{\sqrt{x-x^2}}^{\sqrt{x}} \frac{x^2 - y^2}{x^2} \, dy \, dx$$

by changing the order of integration.

15. Let $\vec{F} = 2z\hat{i} + 4x\hat{j} + 5y\hat{k}$, and let C be the curve of intersection of the plane $z = x + 4$ and the cylinder $x^2 + y^2 = 4$, oriented counter-clockwise. The value of $\oint_C \vec{F} \cdot d\vec{r}$ is

16. The set of points at which the function $f(x, y) = x^4 + y^4 - x^2 - y^2 + 1$, $(x, y) \in \mathbb{R}^2$ attains local maximum is

17. Let $u = \frac{y^2 - x^2}{x^2 y^2}$, $v = \frac{z^2 - y^2}{y^2 z^2}$ for $x \neq 0$, $y \neq 0$, $z \neq 0$. Let $w = f(u, v)$, where f is a real valued function defined on \mathbb{R}^2 having continuous first order partial derivatives. The value of $x^3 \frac{\partial w}{\partial x} + y^3 \frac{\partial w}{\partial y} + z^3 \frac{\partial w}{\partial z}$ at the point $(1, 2, 3)$ is

18.

The orthogonal trajectory of the family of curves $\frac{x^2}{2} + y^2 = c$, which passes through (1, 1) is

19.

The function to which the power series $\sum_{n=1}^{\infty} (-1)^{n+1} n x^{2n-2}$ converges is

20.

The value of $\frac{i}{4-\pi} \int_{|z|=4} \frac{dz}{z \cos(z)}$ is equal to _____

21.

Find all the critical points of the function $f: \mathbb{R}^2 \rightarrow \mathbb{R}$ defined by $f(x, y) = x^3 + xy + y^3$ for all $(x, y) \in \mathbb{R}^2$. Also, examine whether the function f attains a local maximum or a local minimum at each of these critical points.

22.

Consider the following linear programming problem:

$$\begin{array}{ll} \text{Maximize} & x + 3y + 6z - w \\ \text{subject to} & 5x + y + 6z + 7w \leq 20, \\ & 6x + 2y + 2z + 9w \leq 40, \\ & x \geq 0, y \geq 0, z \geq 0, w \geq 0. \end{array}$$

Then the optimal value is _____

23.

Let M be the real vector space of 2×3 matrices with real entries. Let $T: M \rightarrow M$ be defined by

$$T \left(\begin{bmatrix} x_1 & x_2 & x_3 \\ x_4 & x_5 & x_6 \end{bmatrix} \right) = \begin{bmatrix} -x_6 & x_4 & x_1 \\ x_3 & x_5 & x_2 \end{bmatrix}.$$

The determinant of T is _____

24.

Let $D = \{(x, y) \in \mathbb{R}^2: 1 \leq x \leq 1000, 1 \leq y \leq 1000\}$. Define

$$f(x, y) = \frac{xy}{2} + \frac{500}{x} + \frac{500}{y}.$$

Then the minimum value of f on D is equal to _____

25.

Let M be the space of all 4×3 matrices with entries in the finite field of three elements. Then the number of matrices of rank three in M is

- (A) $(3^4 - 3)(3^4 - 3^2)(3^4 - 3^3)$
- (B) $(3^4 - 1)(3^4 - 2)(3^4 - 3)$
- (C) $(3^4 - 1)(3^4 - 3)(3^4 - 3^2)$
- (D) $3^4(3^4 - 1)(3^4 - 2)$

Result of Examination conducted For Short-Term Course

“Mathematics For Competitive Examinations”

(2017-2018)

Sr.No.	Name of Student	Class	Marks
1.	Bhagure Malti Vilas	T.Y.B.Sc.	32
2.	Bhagure Poonam Dattatraya	T.Y.B.Sc.	40
3.	Bhagwat Suresh Sanjay	T.Y.B.Sc.	45
4.	Thore Mangal Uttam	T.Y.B.Sc.	35
5.	Wabale Mayuri Vijay	T.Y.B.Sc.	50
6.	Gagare Pradip Suresh	T.Y.B.Sc.	40
7.	Yeole Snehal Digambar	T.Y.B.Sc.	42
8.	Jarande Pooja Appa	T.Y.B.Sc.	38
9.	Teke Maya Shivaji	T.Y.B.Sc.	46
10.	Thorat Nikita Madhukar	T.Y.B.Sc.	40
11.	Malik Aarti Govindrao	T.Y.B.Sc.	44
12.	More Rohini Arun	T.Y.B.Sc.	39
13.	Pawar Darshana Datta	T.Y.B.Sc.	50
14.	Punde Amruta Kailas	T.Y.B.Sc.	34
15.	Roham Pooja Vijay	T.Y.B.Sc.	43




Head:
Department of Mathematics,
S. S. G. M. College, Kopergaon

DEPARTMENT OF MATHEMATICS
Report of Short-Term Course
“Mathematics For Competitive Examinations”
(2017-2018)

The Department of Mathematics has conducted a Short Term Course on “Mathematics For Competitive Examinations”. The duration of the course was 2 months (January 2018-February 2018). Lectures were taken by the faculties of the Department. 15 students of T. Y. B. Sc have participated in this course. This course was conducted free for the students. Overall performance of the students was evaluated on the basis of 50 marks exam which was objective type containing 25 questions each carrying 2 marks. 2 students have scored 100 % marks.




Head,
Department of Mathematics,
S. S. G. M. College, Kopergaon

“EDUCATION THROUGH SELF - HELP IS OUR MOTTO” - Karmaveer

Rayat Shikshan Sanstha's



**Shri Sadguru Gangageer Maharaj Science,
Gautam Arts & Sanjivani Commerce College**



Kopargaon, Dist. Ahmednagar (M.S.)

Certificate of Completion
Short Term Course

This is to Certify that Shri/Kum. _____

of Class _____ has Completed Short Term Course in _____

_____ conducted by the department of _____

during the academic year 201 /201

Course Co-ordinator

Co-ordinator

Principal

Rayat Shikshan Santha's
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani Commerce College,
Kopargaon, Dist- Ahmednagar- 423601, (M.S) India

Department of Mathematics

Short Term Course: Mathematics For Competitive Examination

2017-18

Feedback form

Class: T. Y. B. Sc.

Date: 28/02/2018

Name of the student: Bhagwat Suresh Sanjay

About the Course Information on the Respondent: (Tick (✓) Appropriate Option)

Questionaries		Excellent A	Very Good B	Good C	Satisfactory D	Poor E
1.	Quality of the Teaching/lecture	✓				
2.	Were objectives of the course clear to you?	✓				
3.	The course contents compared with your expectations?	✓				
4.	Level of preparation		✓			
5.	Overall evaluation of the course		✓			
6.	Level of Interaction	✓				

Sign of the Student

Rayat Shikshan Santha's
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani Commerce College,
Kopargaon, Dist- Ahmednagar- 423601, (M.S) India

Department of Mathematics

Short Term Course: Mathematics For Competitive Examination
2017-18

Feedback form

Class: T.Y.B.Sc.

Date: 28/02/2018

Name of the student: Rohan Raja Vijay

About the Course Information on the Respondent: (Tick (✓) Appropriate Option)

Questionaries	Excellent A	Very Good B	Good C	Satisfactory D	Poor E
1. Quality of the Teaching/lecture					
2. Were objectives of the course clear to you?					
3. The course contents compared with your expectations?					
4. Level of preparation					
5. Overall evaluation of the course					
6. Level of Interaction					


Sign of the Student

Rayat Shikshan Sanstha's
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani
Commerce College, Kopargaon 423601,
Dist. Ahmednagar, (MS)-India

**Internal Quality Assurance Cell
(IQAC)
Syllabus Approval Letter**

The IQAC committee has approved to submitted syllabus of short term/COC courses planted to be conducted by Department Mathematics .

Sr. No.	Name of the Courses	Type of Course
1	Mathematics for Competitive Examinations	Short Term Course

HOD of Mathematics may proceed accordingly.

Date :-21/12/2016

Place: Kopargaon

P. S. G.
Department of Mathematics,
S. S. G. M. College, Kopargaon



[Signature]
IQAC Co-ordinator
S.S.G.M. College, Kopargaon
S.S.G.M. College, Kopargaon