

# St. Michael's College, Cherthala

Alappuzha, Kerala-688 539 Affiliated to University of Kerala and Re-accredited by NAAC with 'A' Grade



Name of the Programme : BASIC MATHEMATICS Name of the Department : MATHEMATICS Course Code : MM 085



# St. Michael's College

MAYITHARA P.O., CHERTHALA, ALAPPUZHA-688539 An institution with Minority Status Affiliated to the University of Kerala and

Re-accredited by NAAC with 'A' Grade

## Add on Course - 2018-19



NAME OF COURSE : BASIC MATHEMATICS

COURSE CODE : MM 085

NO OF STUDENTS ENROLLED : 40

#### **CONTENTS**

- SYLLABUS
- > CLASS SCHEDULES
- > ATTENDANCE STATEMENT
- > QUESTION PAPER
- MARK LIST
- > CERTIFICATE
- REPORT

## St. Michael's College, Cherthala Department of Mathematics Certificate Course in Basic Mathematics Syllabus

### **COURSE OBJECTIVES**

- To enhance the problem-solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of competitive examinations.
- Effort has been made to accommodate fundamental, mathematical aspects to instil confidence among students.
- Enrich their knowledge and to develop their logical thinking ability

#### **COURSE OBJECTIVES**

After successful completion of this course, students will have the knowledge and skills to

- Solve the problems easily by using Short-cut method with time management which will be helpful to them.
- to clear the competitive exams for better job opportunity. Analyze the Problems logically and approach the problems in a different manner.

### UNIT I (10 Hours)

Average, Problems on Numbers and Ages

• Basic Concepts, Practise questions

### UNIT II (10 Hours)

Percentage and Ratio

• Basic Concepts, Results on population, Results on Depreciation, Practise questions

#### UNIT III (10 Hours) Time, Distance and Work

• Basic Concepts, Train problems, Calendar problems, Clock problems, Practise questions

Text Book: R. S. Aggarwal, Quantitative Aptitude (Fully solved), Reprint 2016, S. Chand.

### Reference Books:

- 1. R.V. Praveen, Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt. Ltd.
- 2. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008, Himalaya Publishing House

## Add-On Cell

## St. Michael's College, Cherthala

## **Department Of Mathematics**

### **Basic Mathematics**

### **Class Schedule 2018-19**

Date	Day	Time Name of Teac		Class Room No		
05-11-18	1	3.30 to 4.30	Asha Babu	A13		
08-11-18	2	3.30 to 4.30	Asha Babu	A13		
12-11-18	3	3.30 to 4.30	Asha Babu	A13		
15-11-18	4	3.30 to 4.30	Asha Babu	A13		
19-11-18	5	3.30 to 4.30	Asha Babu	A13		
23-11-18	6	3.30 to 4.30	Asha Babu	A13		
16-11-18	7	3.30 to 4.30	Asha Babu	A13		
28-11-18	8	3.30 to 4.30	Asha Babu	A13		
30-11-18	9	3.30 to 4.30	Asha Babu	A13		
3-12-18	10	3.30 to 4.30	Asha Babu	A13		
06-12-18	11	3.30 to 4.30	Asha Babu	A13		
10-12-18	12	3.30 to 4.30	Asha Babu	A13		
12-12-18	13	3.30 to 4.30	Asha Babu	A13		
17-12-18	14	3.30 to 4.30	Asha Babu	A13		
18-12-18	15	3.30 to 4.30	Asha Babu	A13		
21-01-19	16	3.30 to 4.30	Asha Babu	A13		
07-01-19	17	3.30 to 4.30	Asha Babu	A13		
11-01-19	18	3.30 to 4.30	Asha Babu	A13		
15-01-19	19	3.30 to 4.30	Asha Babu	A13		
22-01-19	20	3.30 to 4.30	Asha Babu	A13		
24-01-19	21	3.30 to 4.30	Asha Babu	A13		
05-02-19	22	3.30 to 4.30	Asha Babu	A13		
13-02-19	23	3.30 to 4.30	Asha Babu	A13		
18-02-19	24	3.30 to 4.30	Asha Babu	A13		
26-02-19	25	3.30 to 4.30	Asha Babu	A13		

05-03-19	26	3.30 to 4.30	Asha Babu	A13
11-03-19	27	3.30 to 4.30	Asha Babu	A13
14-03-19	28	3.30 to 4.30	Asha Babu	A13
20-03-19	29	3.30 to 4.30	Asha Babu	A13
26-03-19	30	3.30 to 4.30	Asha Babu	A13

### St. Michael's College, Cherthala

### Department of Mathematics Attendance Statement– Basic Mathematics

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Date	115303	1182018	11/12/2018	11/15/2018	11/19/2018	1.292018	10152618	11/28/2018	1,5920.8	1252018	1260018	12/10/2018	12122018	12/17/2018	12/18/2018	10:2019	172019	0112019	1540-09	22-01-19	2401-19	64249	B-02-19	3403-15	26-02-19	(646-19	11-45-19	146-3	20-16-19	26-05-19
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1 2351813600. Aiswaya layapal	x	X	x	X	x	X	X	X	X	X	A	X	x	X	X	A	x	X	A	X	x	X	X	X	X	X	X	x	X	X
2 23518136000 Arakha \$	x	X	X	X	X	A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3 23518136008 Aparta S.	4	X	Х	X	Х	X	X	X	Σ	X	X	Х	X	A	X	Х	х	Х	X	A	X	X	X	X	X	χ	A	Х	X	X
4 2351813609 Hezino Mosas	X	Х	Х	X	Х	X	X	X	A	X	X	Х	X	X	X	Х	Х	Х	X	X	X	X	X	χ	X	χ	ï	Х	X	X
5 2351813600 Maria Gracy A.	X	X	Х	X	Х	X	X	Х	X	X	X	Х	X	Х	Х	Х	Х	X	X	X	X	X	X	X	X	X	X	Х	X	A
6 23518136011 Milan Issac	X	Х	Х	X	X	X	х	X	Σ	X	X	Х	X	X	X	X	х	Х	X	X	X	X	X	X	X	X	X	X	X	X
7 23518136012 Nice Theresa Paul	X	X	X	X	Х	X	X	X	Σ	X	X	Х	X	X	X	Х	X	X	X	X	X	X	X	X	X	X	X	X	X	A
8 23518136915 Smelakshmi S L	X	X	X	X	X	A	X	X	X	X	X	X	X	A	X	X	X	X	4	X	X	X	X	X	X	X	A	X	X	X
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13 23518136054 Angelia P. S.	x x	x	x	X	x	A	X	X	x	X	x	X	x	Å	X	x	x	X	x	X	X	X	X	X	X	X	Å	x	X	X
14 23518136092 Nable T, J	A	Х	Х	X	Х	X	X	X	A	X	X	Х	X	X	X	Х	х	X	X	X	X	A	X	X	X	χ	X	Х	X	X
15 23508136093 Nideil Van	X	Х	X	X	Х	X	X	X	χ	X	X	Х	X	X	X	Х	х	X	X	X	X	X	X	χ	X	χ	X	Х	X	A
16 23518136094 Nincal Sarath Alby	X	Х	X	X	х	X	X	X	Χ	X	X	Х	X	Х	Х	X	х	X	ł	X	X	X	X	X	X	Х	X	X	X	X
17 23518136096 Priyanka Raja	X	X	Х	X	X	X	X	X	Σ	X	X	X	X	X	X	Х	X	X	X	X	X	X	X			X	X	X	X	X
18 23518136057 Sandra Nelson	X	X	X	X	х	A	X	Х	X	Х	X	Х	X	A	X	X	X	X	X	X	X	X	X			X	X	X	X	X
15 23518136040 Sufiya Hashiri	Å	X	X	X	X	X	X	X	A	X	X	X	X	X	X	X	X	X	X	X	X	A	A	X	X	Å	A	Å	Å	x
20 23518136041 Witchie Matian Joseph	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	Ă		X	A
21 23GIN136002 AKSHAYA MAHESH	X	X	X	X	X	X	X	X	X	X	I	X	X	X	X	X	4	X	X	X	X	X	X	X	A	X	X	X	X	X
22 23018136004 AMRUTHLAL 23 23018136005 ANUU VINCENT	X	X X	X	X X	X	X	X	X	x	X	1	X X	X	X	X	X X	X	X	Ŷ	8 v	1 V	X v	X	X	X X	, ,	X.	Å	X.	A X
24 2301813606 ANUSREEB	Â	x	X	X	X	Y	A Y	X	â	X	Ŷ	X	x	X	X	X	x	x	Ŷ	A Y	Y	Ŷ	X	x	X	Ŷ	X	Ŷ	Y	X
25 230313607 SAIRAID	Î x	x	x	x	x	x	x	X	ĩ	X	r	X	Ŷ	x	x	x	x	Â	x	x	ĩ	Å	x	x	X	x	x	î	Ŷ	x
26 236181360:8 SHAJOON XAVER	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	х	X	X	X	X	X	Х	X	X	х	X	X
27 2361813609: VISMAYA ANDONY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28 23618136022 ABITHA PRASANNAN	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28 23018136023 AMALGIREESH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	х	X	X	X	X	X	X	Х	X	X	X	X
36 23618136025 ATHIRA S	X	Х	X	X	X	X	X	X	χ	X	X	X	χ	χ	X	X	Х	Х	X	X	X	X	X	χ	X	χ	X	X	X	X
31 23018136022 SWASANKAR K PRASAD	x	X	X	X	X	X	X	X	X	X	I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32 15018136005 APARNA UDATAN	X	X	X	X	X	X	X	X	χ	X	I	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
33 15018136017 SREELAKS-WIB	X	X	X	X	X	X	X	X	Σ	X	X	Х	X	X	X	X	Х	X	X	Х	X	X	X	X	X	X	X	X	X	X
34 15018136023 AKSHAY ASOK	X	X	X	X	X	X	X	X	Χ	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
35 15018136038 APARNA K V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
36 15018136041 JAAZINAMOLU 37 15018136053 MEENU PUSHKARAN	X	X X	X X	X X	X X	X	X	X	Σ Υ	X	X Y	X	X X	X X	X	X X	X	X X	X	X	Å	X	X	X	X	X	X	X X	X	X
37 15018136053 MEERU PUSHAKAAN 38 15018136058 RAEAL MARTIN	X	X	X	X	X	X	X	X	λ Σ	x	A Y	X	X	X	X	X	X	X	X	ă X	Ŷ	X	X	X	X	Y	A Y	Y	A Y	X
38 15018136054 SANAMOLS	x	x	X	X	X	X	x	ž	Σ	X	ĩ	X	Ŷ	X	X	X	x	X	Ŷ	X	Ŷ	Ŷ	x	x	X	Ŷ	X	Ŷ	x	X
46 15018136059 SVAMATS	Ŷ	x	ĩ	X	x	X	x	X	X	X	x	X	x	Ŷ	ĩ	x	ĩ	X	X	X	X	X	x	x	X	X	X	x	x	x

#### St. Michael's College, Cherthala Add-on Course Examination March 2019 Department of Mathematics Certificate Course in Basic Mathematics

Time: 1 Hour

#### Section A

(Answer all questions. Each question carries 1 mark)

- 1. Define average of a set of numbers.
- 2. The average lies above the lowest number of the set and below the highest number of the set. State above statement is either true or false.
- 3. The sum of ages of 5 children born at the intervals of 3 years each is 50 years, What is the age of youngest child?
- 4. The population of a city grew from 20 lakh to 22 lakh. Find the percentage change?
- 5. A 25% of a number is 75. Then 45% of that number is....
- 6. The ratio between two numbers is 3:4 and their LCM is 180. Find the first number.
- 7. 6 men can do a piece of work in 12 days. How many men are needed to do the work in 18 days?
- 8. Today is Monday. After 61 days it will be....
- 9. Find the angle between the hands of a clock at 10.25.
- 10. A train running at the speed of 60km/hr crosses a pole in 9 sec. What is the length of the train?

(10 x 1 = 10 marks)

Max. Marks: 30

#### Section A

(Answer any 5 questions. Each question carries 2 marks)

- 11. Find the average of 4 numbers 12,13,17,18.
- 12. One year ago, the ratio of Ram and Sam ages was 2:3. After 5 years from now the ratio become 4:5. How old is Sam now?
- 13. After three successive equal percentage rises in the salary the sum of 100 rupees turned into 40 rupees. Find the percentage rise in the salary?
- 14. What number must be taken from each term of the fraction  $\frac{27}{35}$  that it may become 2:3.
- 15. What was the day of the week on 28<sup>th</sup> May 2019?
- 16. At what time between 3 and 4'O clock the hands make an angle of  $10^{\circ}$ .

(5 x 2 = 10 marks)

#### Section C

(Answer any 1 question. Each question carries 10 marks)

17. (A) A shop sold 64 kettles of 2 different capacities. The smaller kettle cost a rupee less than the larger one. The shop made 100 rupees from the sale of large kettle and 36 rupees from the sale of small one. How many kettles of either capacity did the shop sell and what was the price for each kettle?

(B) If the total age of Manu and Sanu is twelve years more than the total age of Sanu and Charu. Charu is how many years younger than Manu?

18. (A) The population of a village is 1 lakh. Increase rate per annum is 10%. Find the population at the starting of the fourth year.

(B) A train moves at a constant speed of 120 km/hr for 1 km and at 40 km/hr for the next 1 km. What is the average speed of train?

 $(1 \times 10 = 10 \text{ marks})$ 

# Add-On Cell 2018-19

## St. Michael's College, Cherthala Department of Mathematics Mark List– Basic Mathematics

Sl No.	Candidate Code	Name	Department	Max. Marks 30
1	23518136001	Aiswarya Jayapal	Chemistry	30
2	23518136002	Anakha S.	Chemistry	30
3	23518136003	Aparna S.	Chemistry	29
4	23518136009	Hezline Moses	Chemistry	28
5	23518136010	Maria Gracy A.	Chemistry	22
6	23518136011	Milan Issac	Chemistry	22
7	23518136012	Nice Theresa Paul	Chemistry	30
8	23518136015	Sreelakshmi S L	Chemistry	30
9	23518136017	Swarna K. V.	Chemistry	30
10	23518136018	Thomas K. Mariyan	Chemistry	29
11	23518136021	Akshaya Prakasan	Chemistry	30
12	23518136022	Alwin Sarathi T. S.	Chemistry	29
13	23518136024	Anagha P. S.	Chemistry	28
14	23518136032	Nable T. J.	Chemistry	30
15	23518136033	Nikhil Venu	Chemistry	30
16	23518136034	Nirmal Sarath Alby	Chemistry	28
17	23518136036	Priyanka Raja	Chemistry	29
18	23518136037	Sandra Nelson	Chemistry	30
19	23518136040	Sufiya Hashim	Chemistry	27
20	23518136041	Winnie Mariam Joseph	Chemistry	28
21	23018136002	AKSHAYA MAHESH	Physics	30
22	23018136004	AMRUTHLAL	Physics	30
23	23018136005	ANJU VINCENT	Physics	30
24	23018136006	ANUSREE B	Physics	28
25	23018136017	SAIRAJ D	Physics	29
26	23018136018	SHAJOON XAVIER	Physics	26
27	23018136021	VISMAYA ANTONY	Physics	23
28	23018136022	ABITHA PRASANNAN	Physics	30
29	23018136023	AMAL GIREESH	Physics	29
30	23018136025	ATHIRA. S	Physics	29
31	23018136032	SIVASANKAR K PRASAD	Physics	30
32	15018136005	APARNA UDAYAN	Economics	30
33	15018136017	SREELAKSHMI B	Economics	28
34	15018136023	AKSHAY ASOK	Economics	28

35	15018136033	APARNA. K. V	Economics	29
36	15018136041	JAAZNAMOL. J	Economics	30
37	15018136053	MEENU PUSHKARAN	Economics	30
38	15018136058	RAISAL MARTIN	Economics	20
39	15018136064	SANAMOL S	Economics	29
40	15018136069	SYAMA T S	Economics	20



ST. MICHAEL'S COLLEGE

CHERTHALA, ALAPPUZHA - 688 539

(Affiliated to University of Kerala and Re-accredited by NAAC with 'A' Grade)

# ADD-ON COURSE CERTIFICATE

*This is to certify that*. Miss. Aiswarya Jayapal (23518136001) B.Sc Chemistry 2018 Admission

has completed Certificate/Add-on course in ..... Basic Mathematics (MM 085)

offered by the Department of Mathematics during the academic year 2018-2019. He/Shee is awarded with ......A

Head of the Department Course Coordinator **Principal** 

## St. Michael's College, Cherthala Department of Mathematics Certificate Course in Basic Mathematics Report

The course aimed to enhance the problem-solving skills, to improve the basic mathematical skills and to help students who are preparing for any type of competitive examinations. Effort has been made to accommodate fundamental, mathematical aspects to instil confidence among students. Students could enrich their knowledge and developed their logical thinking ability.

A total of 40 students from various departments joined the course. An examination of 30 marks conducted after the completion of course and everyone passed in the examination with better marks. Certificates issued by Add-on cell.



