



GOVERNMENT DEGREE COLLEGE

RAMPACHODAVARAM, ALLURI SEETHA RAMARAJU DISTRICT, A.P
(Affiliated to Adikavi Nannaya University)



DEPARTMENT OF MATHEMATICS



CERTIFICATE COURSE

ANALYTICAL SKILLS

(2024-2025)

**SRI.G. DURGA PRASAD,
LECTURER IN MATHEMATICS**

Date:- 25-01-2025

TO
THE PRINCIPAL
GOVERNMENT DEGREE COLLEGE,
RAMPACHODAVARAM,

Respected Madam

SUB: Permission for conducting certificate course reg.. Respected sir,
I G.DURGA PRASAD, Lecturer in mathematics was Planned
to conduct a certificate course for 2nd year B sc (chemistry,Botany) students 25-01-2025
to 28-02-2025.so I request you to give me permission for to conduct certificate course

Thanking you Madam

Yours faithfully

G.Durga prasad
Lecturer in mathematics

A BRIEF REPORT

I G DURGA PRASAD, lecturer in mathematics government degree college Rampachodavaram her with submit a brief report on certificate course don by the department of mathematics

The department of mathematics met the principal to discusses the implement of certificate course in ANALYTICAL SKILLS.

In the schedule the meeting course syllabus along with course objectives were tabled .after the approval a circular was sent to all II year students .

Interested students registered there names and appeared for the entry level test .

30students appeared for the entry test out of which 20 students were selected .The certificate course duration is 30 hrs . The course was held from 25-01-2025 to 28-02-2025 after the completion of the course exist exam was conducted on 21-03- 2025

The result was published successful candidates were presented certificate by the principal on 22-3-2025.

G.Durga Prasad,
Lecturer in Mathematics



GOVERNMENT DEGREE COLLEGE

RAMPACHODAVARAM, ALLURI SEETHA RAMARAJU DISTRICT, A.P
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Accredited by NAAC with "B" Grade



Entry Exam

TIME:2Hrs

max .marks : 50M

Answer all questions .each question carries Two marks

25 x02 =50M

1. Missing number in the series is -----
- 1 , 9, 25 , 49, ? , 121
a) 64 b) 81 c) 91 d) 100.
2. Choose the alternate term in the series -----
- 10, 18 , 28, 40 , 54, 70 , ?
a) 85 b) 86 c) 87 d) 88.
3. Find the wrong number in the given series -----
- 1 ,8,27,64,125,215.
a) 27 b) 64 c) 125 d) 215.
4. Missing number in the series is -----
- 22 , 24 , 28 , ? , 52 , 84s
a) 36 b) 38 c) 42 d) 46
5. Find the wrong number in the given series -----
- 3 , 8 , 15 , 24 , 34 , 48 , 63
a) 15 b) 16 c) 34 d) 63
6. CXDW, EVFU, GTHS, IRJQ
a) KPLO b) KPMO c) KPNO d) KPOL
7. MUMBAI : LTLAZH :: DELHI : ?
a) CDKGG b) IHLED c) CDKGH d) BCKGH
8. AZY , EXW, IVU, ?
a) MTS b) MQS c) NRQ d) LST
9. AC , FH, K --, PR , UW .
a) L b) J c) M d) N
10. 2, 6 , 18 , 54 , ?
a) 108 b) 140 c) 150 d) 162

LIST OF STUDENTS ENROLLED FOR CERTIFICATE COURSE FROM IIBSC CHEMISTRY&BOTANY(Honour s) 2024-25

S.NO	REGISTER NO	NAME OF THE STUDENT	COURSE	MARKS	QULIFIED/NOT QULIFIED
1	231017169033	CH.VARALAKSHMI	II B.SC CHEMISTRY HONOURS	12	QULIFIED
2	231017169034	D.BHUVANESWARI	II B.SC CHEMISTRY HONOURS	14	QULIFIED
3	231017169035	D.SHASHANKA	II B.SC CHEMISTRY HONOURS	12	QULIFIED
4	231017169036	E.PRAVALLIKA	II B.SC CHEMISTRY HONOURS	15	QULIFIED
5	231017169038	G.CHINNA GANGOTHRI	II B.SC CHEMISTRY HONOURS	16	QULIFIED
6	231017169039	K.ESTHARI	II B.SC CHEMISTRY HONOURS	14	QULIFIED
7	231017169040	K.LALITHA	II B.SC CHEMISTRY HONOURS	18	QULIFIED
8	231017169042	M.RAJESWARI	II B.SC CHEMISTRY HONOURS	18	QULIFIED
9	231017169043	M.VASANTHI	II B.SC CHEMISTRY HONOURS	18	QULIFIED
10	231017169044	N.SIMHADRI	II B.SC CHEMISTRY HONOURS	14	QULIFIED
11	231017169045	P.THANMAI SRI	II B.SC CHEMISTRY HONOURS	16	QULIFIED
12	231017169046	S.VASU REDDY	II B.SC CHEMISTRY HONOURS	12	QULIFIED
13	231017168002	CH,MOUNIKA	II B.SC BOTANY HONOURS	02	NOT QULIFIED
14	231017168003	G.TEGASWANI REDDY	II B.SC BOTANY HONOURS	03	NOT QULIFIED
15	231017168004	G.AMRUTHA STELLA	II B.SC BOTANY HONOURS	02	NOT QULIFIED
16	231017168005	G.SUJANA	II B.SC BOTANY HONOURS	02	NOT QULIFIED
17	231017168006	T.DEVENDRA REDDY	II B.SC BOTANY HONOURS	02	NOT QULIFIED
18	231017168007	K.JAYANTH	II B.SC BOTANY HONOURS	02	NOT QULIFIED
19	231017168008	K.ESWARI	II B.SC BOTANY HONOURS	12	QULIFIED
20	231017168009	K.JASWANTH	II B.SC BOTANY HONOURS	02	NOT QULIFIED
21	231017168010	K.KUSULU KUMARI	II B.SC BOTANY HONOURS	14	QULIFIED
22	231017168013	K.VARA LAKSHMI	II B.SC BOTANY HONOURS	16	QULIFIED
23	231017168015	K.VRA PRASAD	II B.SC BOTANY HONOURS	02	NOT QULIFIED
24	231017168016	K.SUBHA LAKSHMI	II B.SC BOTANY HONOURS	14	QULIFIED
25	231017168017	K.RASI	II B.SC BOTANY HONOURS	16	QULIFIED
26	231017168024	N.HIMA BINDU	II B.SC BOTANY HONOURS	12	QULIFIED
27	231017168025	P.LAKSHMI PRIYANKA	II B.SC BOTANY HONOURS	16	QULIFIED
28	231017168026	P.SAROJINI	II B.SC BOTANY HONOURS	12	NOT QULIFIED
29	231017168030	B.SARAMMA	II B.SC BOTANY HONOURS	04	NOT QULIFIED
30	231017168023	M.PRAVEENA	II B.SC BOTANY HONOURS	06	QULIFIED

COURSE SYLLABUS

<u>UNIT-I</u>	10hrs
Analogies of numbers and alphabets completion of blank spaces following the pattern in A:b::C: d relationship odd thing out; Missing number in a sequence or a series.	
<u>UNIT-II -</u>	10hrs
Algebraic operations BODMAS, Fractions, Divisibility rules, LCM&GCD (HCF). Date, Time and Arrangement Problems: Calendar Problems, Clock Problems, Blood Relationship.	
<u>UNIT-III</u>	10hrs
Averages, Ration and proportion, Problems on ages, Time-distance – speed.	

References:

1. R.Sagarwal,QuantitativeAptitudeforcompetiti
veexa minations,S.chandpublications.
2. R.V.Praveen,QuantitativeAptitudeandReasoning.PHIpublishers
3. Pratogitaprakasan,KicX,Quantitative
Aptitude:NumericalAbility(fullysolved)Objectiv
eques tions,KiranPrakasanPublishers.
4. Abhijitguha,QuantitativeAptitudeforcompetitiveexami
nation, TMGHillpublications.
5. OldquestionpapersoftheExamsconductedby(Wipro,TCS,Info
sysetc.) attheirRecruitmentprocess,source-internet.

Report on the certificate course mathematics competitive exams

Introduction:-

The department of mathematics conducted certificate course in mathematical competitive exam during the academic year 2024-2025 under the curriculum enrichment program.

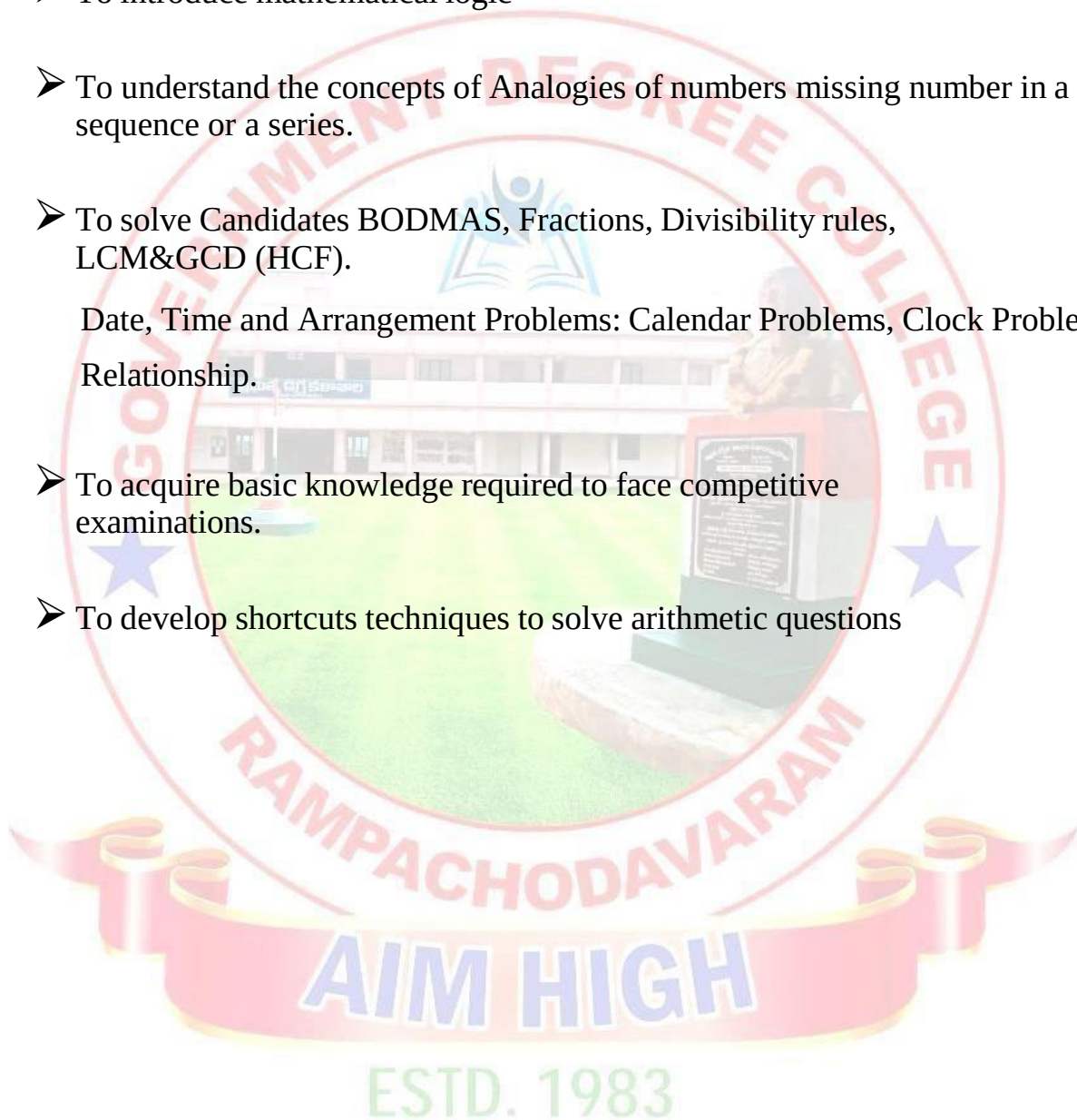
The mathematics is a very important component in competitive examinations .As such it is essential to acquire basic knowledge in solving arithmetic problems.

This course can develop ability to understand and solve different questions related to mathematics in competitive examinations.



Course objectives :-

- To introduce mathematical logic
- To understand the concepts of Analogies of numbers missing number in a sequence or a series.
- To solve Candidates BODMAS, Fractions, Divisibility rules, LCM&GCD (HCF).
Date, Time and Arrangement Problems: Calendar Problems, Clock Problems, Blood Relationship.
- To acquire basic knowledge required to face competitive examinations.
- To develop shortcuts techniques to solve arithmetic questions



Class :
Section :

Pupils Attendance Register

for the Month of January - 25

No. of Working Days :

Assessment Attendance:

[illegible]

G. Dine Prof
Lecturer in Mathematics

Prasanna
Principal 11.4.25
Government Degree College
Rampachodavaram
Afuri Seetha Ramasulu District
Andhra Pradesh - 533 288

Class Teacher

H.M.

Class :
Section :

Pupils Attendance Register

for the Month of Feb-25

No. of Working Days :

Average Attendance :

[illegible]

G. D. Prasad
Lectures in Mathematics

Principal 11/4/25
Government Degree College
Rampachodavaram
Aturi Seetha Ramaraju District
Andhra Pradesh - 533 288

for the Month of March-25.....

No. of Working Days :

Average Attendance :

[illegible]

G. Meißner
Lecturer in Mathematics

Principals 11.4.25
Government Degree College
Rampesheavaram
Alluri Seetha Ramanna District
Andhra Pradesh - 533 288

Class Teacher H.M.

LIST OF PARTICIPANTS ATTENDANCE REPORT OF THE STUDENTS FOR CERTIFICATE COURSE-
2024 25

S.NO	REGISTER NO	NAME OF THE STUDENT	COURSE	ATTENDANCE 30Hrs
1	231017169033	CH.VARALAKSHMI	II B.SC CHEMISTRY HONOURS	28Hrs
2	231017169034	D.BHUVANESWARI	II B.SC CHEMISTRY HONOURS	28Hrs
3	231017169035	D.SHASHANKA	II B.SC CHEMISTRY HONOURS	29Hrs
4	231017169036	E.PRAVALLIKA	II B.SC CHEMISTRY HONOURS	28Hrs
5	231017169038	G.CHINNA GANGOTHRI	II B.SC CHEMISTRY HONOURS	29Hrs
6	231017169039	K.ESTHARI	II B.SC CHEMISTRY HONOURS	28Hrs
7	231017169040	K.LALITHA	II B.SC CHEMISTRY HONOURS	29Hrs
8	231017169042	M.RAJESWARI	II B.SC CHEMISTRY HONOURS	30Hrs
9	231017169043	M.VASANTHI	II B.SC CHEMISTRY HONOURS	29Hrs
10	231017169044	N.SIMHADRI	II B.SC CHEMISTRY HONOURS	26Hrs
11	231017169045	P.THANMAI SRI	II B.SC CHEMISTRY HONOURS	28Hrs
12	231017169046	S.VASU REDDY	II B.SC CHEMISTRY HONOURS	26Hrs
13	231017168008	K.ESWARI	II B.SC BOTANY HONOURS	26Hrs
14	231017168010	K.KUSULU KUMARI	II B.SC BOTANY HONOURS	26Hrs
15	231017168013	K.VARA LAKSHMI	II B.SC BOTANY HONOURS	27Hrs
16	231017168016	K.SUBHA LAKSHMI	II B.SC BOTANY HONOURS	26Hrs
17	231017168017	K.RASI	II B.SC BOTANY HONOURS	26Hrs
18	231017168023	M.PRAVEENA	II B.SC BOTANY HONOURS	26Hrs
19	231017168024	N.HIMA BINDU	II B.SC BOTANY HONOURS	26Hrs
20	231017168025	P.LAKSHMI PRIYANKA	II B.SC BOTANY HONOURS	26Hrs

GOVERNMENT DEGREE COLLEGE RAMPACHODAVARAM

FINAL EXAM

Name of the student: -

Group: -

REG NO:-

DATE:-

Answer any 25 questions each question carries two marks $25 \times 2 = 50M$

1. 1,3,5,7,9,? Find the missing term?

- a) 10 b) 11 c) 12 d) 13.

2. 1,2,10,37,101,442? based on addition/subtraction of cubes?

- a) 402 b) 206 c) 226 d) 320

3. Find the missing number in the series. 4, 18,

- a) 32 b) 36 c) 48 d) 40

4 Find the wrong number in the given series 1, 8, 27, 64, 125, 215.

- a) 27 b) 64 c) 125 d) 215.

50, 3, 8, 15, 24, 7, 48

- a) 41 b) 29 c) 37 d) 35

6 CXDW, EVFU, GTMS, IRJQ.....

- a) KPLO b) KPMO c) KPNO d) KPOL

7 C, F, I, L find the next term.

- a) R b) S c) T d) U

8 AZY, EXW, IVU, ?

11. MTS b) MQS c) NRQ d) LST

9 AC, FH, K--, PR, UW

- a) L b) J c) M d) N

10 2, 6, 18, 54, ?

- a) 108 b) 140 c) 150 d) 162

11) The value of $25 - 5[2 + 3\{2 - 2(5 - 3) + 5\} - 10] \div 4$ is;

- a) 5 b) 23.5 c) d) 25

12 If a, b, c are integers ; $a^2 + b^2 = 45$ and $b^2 + c^2 = 40$, then the values of a , b and c respectively are:

- a) 2, 6, 3 b) 3, 2, 6 c) 5, 4, 3 d) none of this

13 $4003 \times 77 - 21015 = ? \times 116$

- a) 2477 b) 2478 c) 2467 d) 2476

14. Solving $1111.1 + 111.11 + 11.111 = ?$

a) 1111.1

b) 1232.231

c) 1323.132

d) 1233.321

15 Find $68 \times \sqrt{?} - 3421 = 591$

a) 3249

b) 3481

c) 3364

d) 3136

16 Find the value of $\left(\frac{343 \times 343 \times 343 - 113 \times 113 \times 113}{343 \times 343 + 343 \times 113 + 113 \times 113}\right) =$

a) 231

b) 230

c) 233

d) 232

17 find $\{(45)^3 + (65)^2\} \div ? = 1907$

a) 80

b) 70

c) 60

d) 50

18 Find the value of $\sqrt{3}$ up to three decimal places.

a) 1.736

b) 1.732

c)

d) 1.745

19 By how much is $\frac{3}{4}$ th of 968 less than $\frac{7}{8}$ th of 1008

a) 154

b) 146

c) 165

d) 156

20) Find the value of $\sqrt{53824} = ?$

a) 202

b) 232

c)

d) 332

21 The average of 1, 3, 5, 7, 9, 11, 13, 15, 17 ----- ?

a) 10

b) 9

c) 8

d) 12

22 The mean properties of 4 and 9 is

a) 6

b) 4

c) 9

d) 36

23 If the sides of two cubes are in the ratio 3:5 then the ratio of their volume are...

a)

b)

c) 9:25

d) non

24 The ratio of $4^{3.5} : 2^5$ is same as:

a) 2:1

b) 4:1

c)

7:5

d) 7:10

25 20 men can do a piece of work in 20 days working 8 hrs/day. In how many days can 25 men

Can do the same work if they work 16 hrs/day

a) 10

b) $09 \frac{2x-3y}{1}$

c) 08

d) 07

a) -13

ESTD. 1983



a)



DEPARTMENT OF MATHEMATICS MARKS OF FINAL EXAMINATION

S.no	Reg number	Name of the student	CLASS/GROUP	GRADE
1	231017169033	CH.VARALAKSHMI	II B.SC CHEMISTRY HONOURS	B
2	231017169034	D.BHUVANESWARI	II B.SC CHEMISTRY HONOURS	B
3	231017169035	D.SHASHANKA	II B.SC CHEMISTRY HONOURS	B
4	231017169036	E.PRAVALLIKA	II B.SC CHEMISTRY HONOURS	B
5	231017169038	G.CHINNA GANGOTHRI	II B.SC CHEMISTRY HONOURS	A
6	231017169039	K.ESTHARI	II B.SC CHEMISTRY HONOURS	B
7	231017169040	K.LALITHA	II B.SC CHEMISTRY HONOURS	B
8	231017169042	M.RAJESWARI	II B.SC CHEMISTRY HONOURS	A
9	231017169043	M.VASANTHI	II B.SC CHEMISTRY HONOURS	A
10	231017169044	N.SIMHADRI	II B.SC CHEMISTRY HONOURS	B
11	231017169045	P.THANMAI SRI	II B.SC CHEMISTRY HONOURS	A
12	231017169046	S.VASU REDDY	II B.SC CHEMISTRY HONOURS	B
13	231017168008	K.ESWARI	II B.SC BOTANY HONOURS	B
14	231017168010	K.KUSULU KUMARI	II B.SC BOTANY HONOURS	B
15	231017168013	K.VARA LAKSHMI	II B.SC BOTANY HONOURS	B
16	231017168016	K.SUBHA LAKSHMI	II B.SC BOTANY HONOURS	B
17	231017168017	K.RASI	II B.SC BOTANY HONOURS	B
18	231017168023	M.PRAVEENA	II B.SC BOTANY HONOURS	B
19	231017168024	N.HIMA BINDU	II B.SC BOTANY HONOURS	B
20	231017168025	P.LAKSHMI PRIYANKA	II B.SC BOTANY HONOURS	B

OTHER DETAILS

Duration course	:- 30hrs
Class starting date	:- 25-01-2025
Classes end date	:- 28-02-2025
Exam conducted on	:- 21-03-2025
Classes starting	:- 4-00 AM TO 5-00 AM

REPORT ON CERTIFICATE COURSE

The Department of Mathematics, Govt. Degree College, Rampachodavaram, successfully conducted a certificate course in **ANALYTICAL SKILLS** for II BSc Chemistry Honors & BOTANY Honours program, 4th semester, 2024-2025.

Course Details

Duration: 30 hours (20 hours theory)

Number of Students: 30

-Course Period: [25-01-2025 to 21-3-2025]

Course Structure

- Theory Sessions: 30 hours, covering topics related to water quality assessment
- Entry Exam: Conducted at the beginning of the course to assess prior knowledge
- End Exam: Conducted at the end of the course to evaluate student learning outcomes

Certification

- Certificates: Issued to all 20 students upon successful completion of the course

Outcome

The certificate course provided students with a comprehensive understanding of water quality assessment, enhancing their skills and knowledge in this area.