

**CSSR & SRRM DEGREE & PG COLLEGE**  
**AUTONOMOUS**

Re-Accredited with 'A' Grade by NAAC(Cycle-II)  
Permanently Affiliated to Yogi Vemana University- Kadapa  
13/521 Reddy Colony, Kamalapuram, YSR District -516289

**BOARD OF STUDIES**

**Meeting-I**

(2024-2025)

**DEPARTMENT**  
**OF**  
**MATHEMATICS**

**SEMESTERS I**

**Dated:31-07-2024**

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Recognized Under 2(f) & 12(B) of UGC Act 1956

# 13/521, Reddy Colony, Kamalapuram-516 289, Kadapa Dist. A.P.



Date:25-07-2024

## PROCEEDINGS OF THE PRINCIPAL Present: Dr.G. Vinod Kumar M.Sc., Ph.D., Principal

The Board of Studies for Department of Mathematics has been constituted by the Principal of CSSR & SRRM Degree & PG College (A), Kamalapuram as per UGC autonomous 2023 regulations of BoS for the period of three years i.e., 2024-2025 to 2026-2027 with the following members.

Sl. No.	Category	Name	Designation	Position in BoS
1	In charge of the Department	T. Pravallika	Head	Chairperson
2	Faculty Member	Dr. G. Vinod Kumar	Lecturer	Member
3	Faculty Member	P. V. Pavani	Lecturer	Member
4	Faculty Member	Y. Nagashilpa Devi	Lecturer	Member
5	Two experts from Outside the Parent University nominated by Academic Council	Dr.S. Balakrishna Department of Mathematics SV College of Engineering Tirupathi Ph:8897791466 Email: balakrishna.sr@svcolleges.edu.in	Assistant Professor	Subject Expert
6		Dr. Y Madhusudhan Reddy Department of Mathematics Sri Ramanujan Institute of Technology, Ananthapuram Ph:9494931009 Email: ymsmadhu@gmail.com	Associate Professor	Subject Expert
7	One Expert Nominated by Vice Chancellor	Prof.Levaku Madhavi Department of Applied Mathematics Yogi Vemana University, Kadapa Ph:9441593301 Email: lmadhaviyvu@yvu.edu.in	Professor	Subject Expert University Nominee
8	One representative from Industry/ Corporate allied areas nominated by the Principal	B.Naga Tharun, Managing Director Abhaya Industries, Kamalapuram Ph:9494360201	Industrialist	Member
9	Alumni nominated by the Principal	B. Mamatha Lecturer in Mathematics PVSRM Jr College, Kamalapuram Ph:9573326682	Alumni	Member

*G. Vinod*  
25/7/24  
PRINCIPAL  
CSSR & SRRM Degree & PG College  
Autonomous  
Kamalapuram, YSR (Dist), A.P.

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**Dr G Vinod Kumar, M.Sc., Ph.D.**

**Principal**

**Ph: 9014064906**

**Date: 29-07-2024**

To  
The Members BoS  
Department of Mathematics

Respected Sir/Madam,

Sub: CSSR & SRRM Degree & PG College (A), Kamalapuram-  
Department of Mathematics-Board of Studies – I<sup>st</sup> Meeting for the  
academic year 2024-2025.

The Board of Studies I<sup>st</sup> Meeting, Department of Mathematics is  
scheduled to be held on **31<sup>st</sup> July, 2024** in the department of Mathematics.  
Hence all the members are requested to attend the meeting without fail.

Enclosed copies:  
Principal Proceedings

*G. Vinod* 29/7/24  
PRINCIPAL  
CSSR & SRRM Degree & PG College  
Autonomous  
Kamalapuram, YSR (Dist), A.P.

## AGENDA

1. To approve Syllabus,
2. To Approve Blue Print, Model Question Paper and End Semester Examination Pattern, for First Year Skill Course-Analytical Skills Common for B.A./B.Sc./B.Com<sup>pass</sup> Courses for the academic year 2024-2025.
3. To Approve List of Examiners and Question Paper Setters.
4. To approve other Academic Activities of the Department.
5. Any discussions with approval of the chair.

## RESOLUTIONS

In BoS meeting the members has unanimously resolved and approved the following items:

1. The members of BoS Unanimously decided and changed the syllabus as per requirements of present competitive examination in the analytical skill paper.
2. The Members also approved the pattern of Question paper (Objective type), blue print., End Semester Pattern.
3. The List of Question Paper Setters and Evaluation Examiners are approved by the BoS Members.
4. The panel members have decided and guided to conduct more academic activities like Seminars/workshops/Faculty Development Programmes.
5. The members instructed to introduce of Mathematics Major course and select Mathematics subject as minor paper.

1. Madhavi  
31.07.2024

P  
31/07/24

2. Prasad  
31/7/24

G. Vinod  
31/7/24

3. Prasad  
31/7/24

P.V. Anand  
31/07/2024.

B. Mamatra  
31/7/24

Shikha  
31/7/24

## Skill Course: Analytical Skill Course Structure

Year	Semester	Course Code	Title of Paper	No. Hours /per week	Credits	IA	EA	Total
I	I	Skill Course-1- SC101	Analytical Skills (AS)	2	2	-	50	50

1. Anadhari  
31.07.2024

[Signature]  
31/07/24

2. [Signature]  
31/7/24

G. Vinod  
31/7/24

3. [Signature]  
31/7/24

P. V. [Signature]  
31/07/24

B. Mamatha  
31/7/24

[Signature]  
31/7/24

I Year: B.A., B.Com., B.Sc., BBA,

**SKILL COURSE  
ANALYTICAL SKILLS**

**Course Objective:** Intended to inculcate quantitative analytical skills and reasoning as an inherentability in students.

**Course Outcomes:**

After successful completion of this course, the student will be able to

**CO1:** Understand the basic concepts of arithmetic ability, quantitative ability, logical reasoning, business computations and data interpretation and obtain the associated skills.

**CO2:** Acquire competency in the use of verbal reasoning.

**CO3:** Apply the skills and competencies acquired in the related areas

**CO4:** Solve problems pertaining to quantitative ability, logical reasoning and verbal ability inside and outside the campus.

**UNIT – I (10 Hrs)**

**Arithmetic ability:** Algebraic operations, BODMAS, Fractions, Number System, Divisibility rules, LCM & GCD (HCF).

**Verbal Reasoning:** Number Series, Coding & Decoding, Blood relationship, Directions, Clocks, Calendars.

**UNIT – II (10 Hrs)**

**Quantitative aptitude:** Averages, Ratio and proportion, Problems on ages, Time-distance-speed.

**Business computations:** Percentages, Profit & loss, Partnership, simple and compound interest.

**UNIT – III (10 Hrs)**

**Data Interpretation:** Tabulation, Bar Graphs, Pie Charts, line Graphs. Venn diagrams.

**Recommended Co-Curricular Activities (03 Hrs)**

Surprise tests / Viva-Voice / Problem solving/Group discussion.

**Text Book:**

Quantitative Aptitude for Competitive Examination by R.S. Agrawal, S. Chand Publications.

**Reference Books:**

1. Analytical skills by Showick Thorpe, published by S. Chand And Company Limited, Ramnagar, New Delhi-110055.
2. Quantitative Aptitude and Reasoning by R V Praveen, PHI publishers.
3. Quantitative Aptitude for Competitive Examination by Abhijit Guha, Tata Mc Graw Hill

1. Madhavi  
G. Vinod 31/7/24

2. Praveen  
B. Mameetha 31/7/24

3. Praveen  
P. V. Praveen 31/07/2024

Praveen  
Shilpa 31/7/24

Sl. No	Name of Unit	Addition	Remarks
1	UNIT-I	Number System, Letter Series, Directions	Algebraic Operations are basic level to graduate students and Number system, Letter series and Directions are important in all competitive examinations
2	UNIT-II	Simple Interest	Without simple interest students cannot understand compound interest

1. dnadhani  
31.07.2024

P  
31/07/24

2. fishnu  
31/7/24

G.vinod  
31/7/24

3. Prasanna  
31/7/24

P.v. Anand  
31/07/2024

Shilpa  
31/7/24

B.Mamatha  
31/7/24

**SKILL COURSE  
ANALYTICAL SKILLS**

**BLUE PRINT FOR QUESTION PAPER PATTERN**

Unit	TOPIC	Questions
I	Arithmetic ability & Verbal reasoning	20
II	Quantitative aptitude & Business computations	20
III	Data interpretation	20

The question paper is in the form of Multiple choice of answered 50 out of 60 questions.

Each question carries 1 mark

Questions : 50X 1 = 50M

.....

Total Marks = 50

.....

1. dnadhani  
31.07.2024

P  
31/07/24

2. Jyothi  
31/7/24

G. Vinod  
31/7/24

3. Prasanna  
31/7/24

P.V. Thomas  
31/07/24

B. Mamatha  
31/7/24

Shilpa  
31/7/24

Skill Course: Analytical Skills

MODEL QUESTION PAPER

Time: 2 hours

Total Marks: 50 M

Answer any 50 questions. Each question carries 1marks

$50 \times 1 = 50M$

1. Simplify  $0.32 \times 0.32 + 0.64 \times 0.68 + 0.68 \times 0.68$

- (a) 1 (b) 0  
(c) 2 (d) 0.5

2.  $(1 - \frac{1}{3})(1 - \frac{1}{4})(1 - \frac{1}{5}) \dots \dots (1 - \frac{1}{n})$  is equal to

- (a)  $\frac{1}{2}$  (b)  $\frac{2}{n}$   
(c)  $\frac{2}{n(n+1)}$  (d)  $\frac{2(n-1)}{n}$

3. Which is greater  $\frac{6}{13}$  or  $\frac{5}{7}$  ?

- (a)  $\frac{6}{13}$  (b)  $\frac{5}{7}$   
(c)  $\frac{42}{65}$  (d) None of these

4. What decimal of an hour is a second ?

- (a) 0.0025 (b) 0.0256  
(c) 0.00027 (d) 0.000126

5. Which of the following numbers divisible by 8?

- (a) 106598304 (b) 9801642  
(c) 5967013 (d) 36870521

6. What is the total of all the odd numbers from 1 to 180 ?

- (a) 8400 (b) 8300  
(c) 8200 (d) 8100

7. Find the HCF of 70 and 90

- (a) 20 (b) 10  
(c) 30 (d) 40

8. Find the LCM of  $\frac{2}{5}$ ,  $\frac{3}{10}$  and  $\frac{6}{25}$

- (a)  $\frac{5}{6}$  (b)  $\frac{6}{5}$   
(c)  $\frac{2}{5}$  (d)  $\frac{5}{2}$

9. The HCF of two numbers is 12 and their difference is 12. The numbers are

(a) 66,78

(b) 70,82

(c) 94,106

(d) 84,96

10. LCM of two numbers is 120 and their HCF is 10. If one of the numbers is 75, then the other number is

(a) 15

(b) 16

(c) 17

(d) 18

11. A Number is a much greater than 36 as is less than 86 .Find the number?

(a) 51

(b) 41

(c) 61

(d) 71

12. 11,13,17,19,23,29,.....

(a) 31

(b)33

(c) 51

(d) None of these

13. If EODGH is the code for BLADE, what is the code for CRICKET ?

(a) WHNFLUF

(b) FULFNHW

(c) DSJDLFU

(d) ETKEMGV

14. If EARTH if coded as 41590 and PALE as 2134 , what is the code for PEARL?

(a) 12345

(b) 54123

(c) 21534

(d) 24153

15. A is brother of B. C is mother of B . M is sister of C.How is M related to B ?

(a) Nephew

(b) Niece

(c) Aunt

(d) None of these

16. Pointing towards a person , a man said to a women , "His mother is the only daughter of your father". How is the women related to that person?

(a) Daughter

(b) Sister

(c) Mother

(d) Wife

17. How many times in a day, are the hands of a clock in straight line but opposite in direction ?

(a) 20

(b) 22

(c) 24

(d) 44

18. At what time between 9 and 10'o clock will the hands of a watch be together?

(a) 45 min past 9

(b) 50 min past 9

(c)  $49\frac{1}{11}$  min past 9

(d)  $49\frac{2}{11}$  min past 9

19. The calendar for the year 2021 will be the same as the year?

(a) 2027

(b) 2026

(c) 2025

(d) 2024

20. Today is Friday, after 152 days what will be the day?

(a) Monday

(b) Tuesday

(c) Wednesday

(d) Thursday

21. The average marks obtained by 20 students in a certain examination is 45. Find the total marks?

(a) 650

(b) 720

(c) 840

(d) 900

22. Find the average of all the prime numbers from 17 to 31.

(a) 20.8

(b) 23.8

(c) 20.5

(d) 20.4

23. Find the mean proportional between 48 and 12

(a) 27

(b) 26

(c) 24

(d) 25

24. Two numbers are in the ratio of 4:5 and the sum of these numbers is 27. Find the two numbers

(a) 12,17

(b) 12,16

(c) 12,15

(d) 12,14

25. The present age of Anitha is 6 times of Vani's age. Vani's present age is 10 years less than Anitha's age. Find the present age of Anitha?

(a) 12

(b) 13

(c) 14

(d) 15

26. Present age of Rohith is 28 years. What was his age before 9 years?

(a) 20 years

(b) 18 years

(c) 17 years

(d) 19 years

27. A cyclist covers a distance of 750 m in 2 min 30 sec. What is the speed in km/hr of the cyclist?

(a) 18 km/hr

(b) 15 km/hr

(c) 14 km/hr

(d) 16 km/hr

28. A car is running at a speed of 108 kmph what distance will it cover in 15 seconds?

(a) 45 meters

(b) 55 meters

(c) 450 meters

(d) cannot be determined

29. A boy goes to his school from his house at a speed of 3 km/hr and returns at a speed of 2 km/hr. If he takes 5 hours in going and coming the distance between his house and school is

(a) 5 km

(b) 5.5 km

(c) 6 km

(d) 6.5 km

30. 60 % of 240=?

(a) 144

(b) 384

(c) 180

(d) 300

31. 5% of (25% of Rs.1600)is

(a) Rs.5

(b) Rs.17.50

(c) Rs.20

(d) Rs.27

32. A man buys a toy for Rs.25 and sells it for Rs.30. Find his gain percent

(a) 10%

(b) 40%

(c) 30%

(d) 20%

33. Anjan sold an article for Rs.6000 at a loss of 25%. Find the cost price?

(a) Rs.7500

(b) Rs.7200

(c) Rs.8500

(d) Rs.8000

34. Ravi and Kavi start a business by investing Rs.80000 and Rs.72000 respectively. Find the ratio of their profits at the end of year

(a) 2 : 9

(b) 5 : 9

(c) 7 : 9

(d) 10 : 9

35. Rakesh, Dinesh and Mahesh start a business by investing Rs.5000, Rs.8000 and Rs.12000 respectively. At the end of year, they got the profit of Rs.12500, what is the share of Dinesh in profit?

(a) Rs.4000

(b) Rs.4500

(c) Rs.6000

(d) Rs.7500

36. Find the simple interest on Rs.5200 for 2 years at 6% per annum

(a) Rs.622

(b) Rs.623

(c) Rs.624

(d) Rs.625

37. In what time will Rs.1200 earn an interest of 240 at 5% per annum?

(a) 5 years

(b) 4 years

(c) 3 years

(d) 2 years

38. Find compound interest on Rs.5000 for 2 years at 4 % per annum

(a) Rs.405

(b) Rs.406

(c) Rs.407

(d) Rs.408

39. What will be the difference between simple and compound interest on a sum of Rs.4500 put for 2 years at 5 % per annum?

(a) Rs. 11

(b) Rs.12

(c) Rs.11.25

(d) Rs.12.25

40. Find the amount on Rs.15625 for 2 years at 4% p.a.

(a) Rs.1275

(b) Rs.2175

(c) Rs.16900

(d) Rs.19600

41. If  $3x + 4 = 10$  then  $x$  is

(a) 3

(b) 4

(c) 2

(d) 1

42. If  $a : b = 2 : 3$  and  $b : c = 5 : 7$  find  $a : c$

(a) 21 : 10

(b) 15 : 21

(c) 14 : 21

(d) 10 : 21

43.  $\frac{2}{5}$  of  $\frac{1}{3}$  of 360 =?

(a) 48

(b) 56

(c) 60

(d) 68

44. Which ratio is least 14 : 17 or 18 : 21 ?

(a) 18 : 21

(b) 14 : 17

(c) 12 : 19

(d) None of these

45. Express 25 mps in kmph.

(a) 80 kmph

(b) 85 kmph

(c) 90 kmph

(d) 95 kmph

Study the following table and answer the questions.

Classification of 100 students based on the Marks obtained by them in Physics and Chemistry in an Examination.

Subject	Marks out of 50				
	40 and above	30 and above	20 and above	10 and above	0 and above
Physics	9	32	80	92	100
Chemistry	4	21	66	81	100
Average(Aggregate)	7	27	73	87	100

46. What is the different between the number of students passed with 30 as cut -off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

- (a) 3 (b) 4  
(c) 5 (d) 6

47. If at least 60% marks in Physics are required for pursuing higher studies in Physics, how many students will be eligible to pursue higher studies in Physics?

- (a) 27 (b) 32  
(c) 34 (d) 41

48. The percentage of number of students getting at least 60% marks in Chemistry over those getting at least 40% marks in aggregate ,is approximately?

- (a) 21% (b) 27 %  
(c) 29% (d) 31%

49. The number of students scoring less than 40% marks in aggregate is ?

- (a) 13 (b) 19  
(c) 20 (d) 27

50. If it is known that at least 23 students were eligible for a Symposium on Chemistry ,then the minimum qualifying marks in Chemistry for eligibility to Symposium would lie in the range?

- (a) 40-45 (b) 30-40  
(c) 20-30 (d) Below 20





# List of Examiners / SETTERS

Sl. No	Name of the lecturer	Phone	College
1	L.V. SIVARAMI REDDY	9849568205	GDC, YERRAGUNTLA
2	E Sudhakar	9989618418	GDC Vempalli
3	Dr A C Venkata Ramudu	9492411378	SCNR DEGREE COLLEGE, PRODDATUR
4	Mallikarjuna Reddy	8985259613	GDC Raychoti
5	S Navaneeswar Reddy	9866927509	GDC Mydukur
	K Nagesh	9440518296	SCNR Degree College, Proddatur
6	S. LAKSHMI DEVI	9491518264	SKSC DC, PRODDATUR
7	K. OBULAMMA	7995874167	SP DC JAMMALAMADUGU
8	K. RAMESH REDDY	8919195664	SAHITHYA DEGREE COLLEGE, KHAJIPET
9	RAJU	9441012923	SRI VENKATESWARA DC, KADAPA
10	B. RAMIREDDY	7799896955	CBIT, PRODDATUR
11	S. LAKSHMI DEVI	9491518264	SKSC DC, PRODDATUR

1. dnadhau'  
31.07.2024

P  
31/07/2024

2. Komal  
31/7/24

G.vinod  
31/7/24

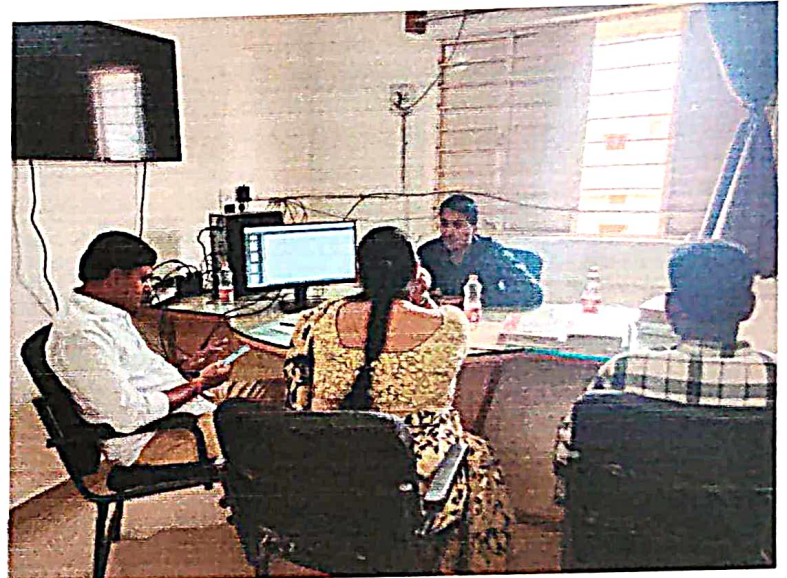
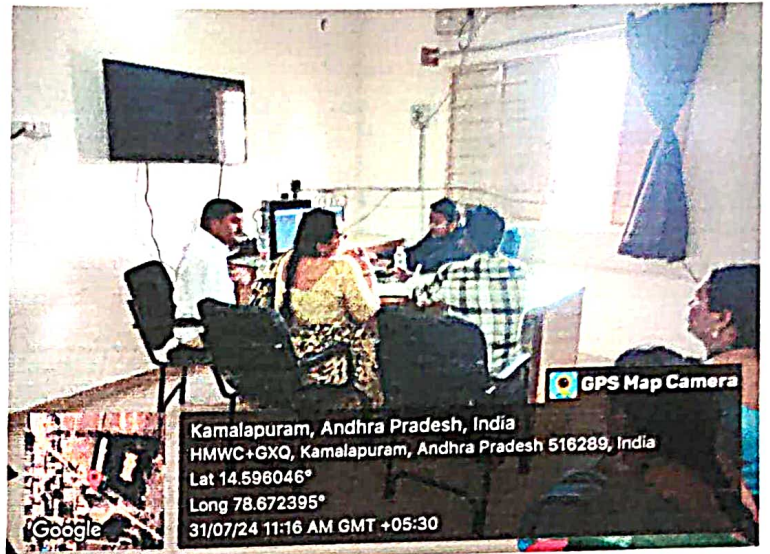
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P.V. [Signature]  
31/07/2024

[Signature]  
31/7/24

B. Mamatha  
31/7/24

# Pics Board of Studies Meeting-I in Mathematics for the AY 2024-2025 date 31-07-2024



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# 13/521, Reddy Colony, Kamalapuram-516 289, Kadapa Dist. A.P.

**Department of Mathematics****2024-2025****Members Present for the Board of Studies**

Sl. No.	Name	Designation	Position in BoS	Signature
1	T. Pravallika	Head	Chairperson	31/7/24
2	Dr. G. Vinod Kumar	Lecturer	Member	31/7/24
3	P. V. Pavani	Lecturer	Member	31/7/24
4	Y. Nagashilpa Devi	Lecturer	Member	31/7/24
5	Dr.S. Balakrishna Department of Mathematics SV College of Engineering Tirupathi Ph:8897791466 Email: balakrishna.sr@svcolleges.edu.in	Assistant Professor	Subject Expert JNTU Ananthapuram	31/7/24
6	Dr. Y Madhusudhan Reddy Department of Mathematics Sri Ramanujan Institute of Technology, Ananthapuram Ph:9494931009 Email: ymsmadhu@gmail.com	Associate Professor	Subject Expert JNTU Ananthapuram	31/7/24
7	Prof.Levaku Madhavi Department of Applied Mathematics Yogi Vemana University, Kadapa Ph:9441593301 Email: lmadhaviyvu@yvu.edu.in	Professor	Subject Expert University Nominee	31.07.2024
8	B. Naga Tharun, Managing Director Abhaya Industries, Kamalapuram Ph:9494360201	Industrialist	Member	Absent
9	B. Mamatha Lecturer in Mathematics PVSRM Jr College, Kamalapuram Ph:9573326682	Alumni	Member	31/7/24