S.K.R.GOVERNMENT DEGREE COLLEGE (W)
Accredited at B+ Level by NAAC
RAJAMAHENDRAVARAM-East Godavari Dist. (A.P.)

PERFORMANCE APPRAISAL REPORT FOR SELF APPRAISAL OF TEACHERS UPTO 2022

A. General Information :

a) Name   : Sri M.S.CHAKRAVARTHI
b) Date of Birth   : 15-02-1986
c) Residential Address   : D.No 3-165, Narayyagari Street
                                  Nadakuduru, Karapa Mandalam
                                  Kakinada – 16
   Designation   : Lecturer in Mathematics
d) Department   : Mathematics
e) Area of Specialization   : Pure Mathematics
f) Date of Appointment   : 09/07/2012
g) In the Institution   : 09/07/2012

B. Academic Qualifications:

A. Research Experience & Training :

Exam. Passed	Board/ University	Subject	Year	Division/ Grade Merit etc.,
High School	Board of Secondary Education , AP	---	2001	I
Higher Secondary or Pre-Degree	Board of Intermediate Education , AP	M.P.C	2003	I
Bachelor's Degree	AndhraUniversity, Vizag	B.Sc.	2006	II
Master's Degree	AndhraUniversity, Vizag	M.Sc.	2008	I

B. **Teaching Experience:**

Courses Taught	Name of the University/ College/ Institution	Duration
INTER	**NARAYANA Jr COLLEGE**	**2008 - 2010**
INTER	**DIVYA JR COLLEGE**	**2010 - 2012**
U.G	**S.K.R. Government Degree College (W), Rajamahendravaram**	**Since November 2012 till the date**

Total Teaching Experience   :
a) Intermediate   : **04 years**
a) Under Graduate   : **10 years**

    b) Post Graduate   :

C. **Cnnovations/ Contributions in Teaching:**

  a) Teaching Methods   : Blended-Lecture method,
                                         Discussion method. Bilingual

  b) Evaluations Methods   : summative evaluation, formative
                                         Evaluation.

    Remedial Teaching/ Student   : Taking Remedial classes for
    Counselling (Academic)   slow learners

  c) Any other

C. **Participation in Corporate Life**   **:**
      Please give a short account of your contribution to
  a) College /University/ Institution   : working as lecturer in
                                        Narayana jr college,
                                      divya jr college

  b) Co-Curricular Activities   : Always taking a role in the
    organisation of Seminars, Quiz, Guest Lectures, Activities and
    students union member

Academic & Administrative Audit of Degree Colleges (2021-22)

Format - III A (To be Filled by Faculty and handed over to Academic Advisor)

District:	E.G
Zone:	2
Name of the College and Address	S.K.R. college for women Rajahmundry
Name of the Lecturer	M.S. chakravarthi
Name of the Subject	Mathematics
Date of Joining in Degree College/Date	09-07-2012

Date of Retirement

S.No	Key Indicator	List of files/ documents to be kept ready as a proof of Key Indicator	Information in support of the key indicator	Key Aspect Scores	Predetermined Weightage (Wi) for Key Indicator	Key Indicator Grade Points (KIGP) (A =3; B=2; C=1; D=0)	Key Indicator Wise Weighted Grade Points (KIWWGP) = KIGP X Wi	KIWWGP as per Academic Advisor's grading	Guidelines
			I-CURRICULAR ASPECTS						
1	Curricular Planing and Implementation (for Autonomous Colleges - Efforts for Curriculum Desing and Development to be considered)	Preperation and Implementation of 1. Annual Academic Curriculum Plan 2 Course Objectives & Outcomes	Course wise Sem wise Records for the Academic Year	2x5=10	30	B	40		1)All five key indicators =3 Grade points/A 2)Any four key indicators =2 Grade points B 3)Any two key indicators =1 Grade points C 4)No Indicator 0/D
		3 Teaching Diary	Course wise Sem wise Records for the Academic Year	2x5=10					
		4 Lesson Plans	Invitation Letter & Attendance	10					1)All three key indicators = 3 Grade points A 2)Any two key indicators =2 Grade points B 3)Any one key indicator =1 Grade point C 4)No Indicator 0/D
		5 Active Participation in BOS		10					
2	Curriculum Flexibility/Enrichment	1. Additional inputs related to Curriculum of the courses taught 2 Value added courses offered & completed a)Certificate b)Diploma c)Any Online courses like MOOC's	a)Course wise Sem wise additional inputs Reports b)Report on Certificate/ Diploma c)Any Online courses like MOOCs	2x5=10	20	C	10		
3	Feedback system	Feedback on Curriculum by Students a) Collected b) Analyzed c) Action taken	Course wise/Sem wise a)Reports of Feedback b)Analysis Reports c)Action taken Report	10	10	A	30		1)All three key indicators =3 Grade points/A 2)Any two key indicators =2 Grade points B 3)Any one key indicator =1 Grade point C 4)No Indicator 0/D
			II-TEACHING, LEARNING & EVALUATION						
4	Catering to Student Diversity	1. Report on grouping of students into Slow, Moderate and Advanced learners 2. Course wise activities designed for Slow, Moderate and Advanced learners	1.Course wise/Sem wise Reports with lists of students (Slow, Moderate and Advanced learners) 2.Course wise/Sem wise Activities designed for Slow, Moderate and Advanced learners	10	20	A	30		1)All three key indicators =3 Grade points A 2)Any two key indicators =2 Grade points/B 3)Any one key indicator = 1 Grade point C 4)No Indicator 0/D
		1. Report on Course wise Bridge Courses conducted 2. Report on Course wise Remedial coaching conducted	1 Course wise/Sem wise Reports on Bridge Courses conducted 2 Course wise/Sem wise Report on Remedial coaching conducted	2x5=10		A	30		

S.No	Key Indicator	List of files/ documents to be kept ready as a proof of Key Indicator	Information in support of the key indicator	Key Aspect Scores	Predetermined Weightage (Wi) for Key Indicator	Key Indicator Grade Points (KIGP) (A=3; B=2; C=1; D=0)	Key Indicator Wise Weighted Grade Points (KIWWGP) = KIGP X Wi	KIWWGP as per Academic Advisor's grading	Guidelines
5	Teaching-Learning Process	1. Report on student centered methods implemented (Course wise) 2 Report on implementation of ICT in teaching and learning (Course wise) or Report on implementation of Computer/Internet assisted learning (Course wise) 3. Report on the Use of LMS tools (Course wise) 4. Contribution for the development of LMS in the concerned subject 5. Report on innovative pedagogical Tools used	Course wise/ Sem wise Reports	50	50	C	50		1)All five key indicators =3 Grade points A 2)Any three key indicators =2 Grade points B 3)Any two key indicator =1 Grade point C 4) Below two =0/D
6	Teacher Profile and Quality	1. Report on Seminars/Conferences/ Workshops/ Guest Lectures organized 2. Report on Participation in Seminars/Conferences/Workshops/ Guest Lectures Invited talks 3. Awards and recognition 4. Participation in Short term/ Orientation Refresher courses/FDPs 5. E- Content Development /MOOCs (Massive Open Online Courses) 6. Additional Qualifications acquired during the last two years	Reports and Certificates	30	30	C	30		1)Any five key indicators =3 Grade points A 2)Any three key indicators =2 Grade points B 3)Any two key indicator =1 Grade point C 4) Below two=0/D
7	Evaluation Process and Reforms	1. Report on Formative Evaluation (CIE) 2. Assignments-Critical, Innovative, text book and Internet based 3. Involvement in Summative evaluation 4. Maintaining Marks Register & Result Analysis register	Department wise reports regarding 1. Mid exams, Seminar Reports, Assignment books, Projects and any other tools of Internal Assessment 2. Departmental Internal Marks Register for CIA verified by the Principal	10 10 5 5	30	A	90		1)All four key indicator Metrics =3 Grade points A 2) Metrics 1, 2, 4 =2 Grade points B 3)Metrics 1, 2,3 =1 Grade point C 4) Below two =0/D
8	Student Performance and Learning Outcomes	1. Announcement and Attainment of Course Outcomes 2. Report on Student seminars/ Student demonstrations (Course wise) 3. Report on activities like Quiz/ Group discussion/ Poster presentation (Course wise) 4. Report on Field trips (Course wise) 5. Report on Student Study projects (Course wise)	Course wise Reports	5x6=30	30	B	60		1)All five key indicators =3 Grade points A 2)First KI Metric and any three other =2 Grade points B 3)First KI Metric and any two other =1 Grade point C 4) Below two= 0/D

S.No	Key Indicator	List of files/ documents to be kept ready as a proof of Key Indicator	Information in support of the key indicator	Key Aspect Scores	Predetermined Weightage (Wi) for Key Indicator	Key Indicator Grade Points (KIGP) (A=3; B=2; C=1; D=0)	Key Indicator Wise Weighted Grade Points (KIWWGP) = KIGP X Wi	KIWWGP as per Academic Advisor's grading	Guidelines
III-RESEARCH, INNOVATIONS AND EXTENSION									
9	Funding obtained for Research (Govt/ Non-Governmental Bodies)	1. Minor Research Projects 2. Major Research Projects 3. Consultancy Projects	Letter of intimation and award letters (For Current Year only. Either Ongoing OR Completed)	5 10 5	20				1)All three key indicators =3 Grade points A 2)Any two key indicators =2 Grade points B 3)Any one key indicator =1 Grade point C
10	Research Publications and Awards	1. Papers Published in Journals / Chapters published in edited volumes 2. Books published as single author 3. Books published as Co-Author 4. Papers/Chapters published as Co-Author (Note: A maximum of 3 publications in Scopus/Web of Science/ICI or UGC-CARE Listed journals/Any book with ISBN shall be considered) 5. Research Guideship 6. Awards in recognition of research work		10 15 10 5 10 10	60				1)Any three key indicators =3 Grade points A 2)Any two key indicators =2 Grade points B 3)Any one key indicator =1 Grade point C 4)No Indicator=0 D
11	Extension Activities	Academic Extension activities through DRC/ Faculty Outreach (Curriculum/ Skill/Domain related)	Reports in the NAAC format	10	20	A	30		1)All three key indicators =3 Grade points A 2)Any two key indicators =2 Grade points B 3)Any one key indicator =1 Grade point C 4)No Indicator=0 D
		Involvement in activities related to community service a. Sensitising the students about the value of Community Service b. Organising the activity (A maximum of 5 Programmes resulting in Community Service like ODF/Swachh Bharat/UBA etc)	Reports in the NAAC format	5+5		A	30		
12	Functional MoUs /Collaborations with Govt and Non Governmental Organisations	1. Collaboration with University/ Industry/NGO/ Any other Agency 2. Consultancy offered 3. Amount generated through Consultancy	MoUs - 5 points Consultancy offered -10 Amount generated through Consultancy - 5 points	20	20	C	5		1)All three key indicators =3 Grade points A 2)Any two key indicators =2 Grade points B 3)Any one key indicator =1 Grade point C 4)No Indicator=0 D
IV - USE OF INFRASTRUCTURE & LEARNING RESOURCES									
13	Physical facilities	Infrastructural facilities in the Department/Colleges a. Use of Digital Classrooms b. Use of Virtual Classroom c. Use of Labs d. Use of Library e. Nlist usage f. Maintenance of Departmental Library	Log books related to usage	20	20	A	60		1)Any four key indicators =3 Grade points A 2)Any three key indicators =2 Grade points B 3)Any two key indicators =1 Grade point C 4)Below two Indicators=0 D

S No	Key Indicator	List of files/ documents to be kept ready as a proof of Key Indicator	Information in support of the key indicator	Key Aspect Scores	Predetermined Weightage (Wi) for Key Indicator	Key Indicator Grade Points (KIGP) (A =3; B=2; C=1; D=0)	Key Indicator Wise Weighted Grade Points (KIWWGP) = KIGP X Wi	KIWWGP as per Acdemic Advisor's grading	Guidelines
		V- ROLE IN STUDENT SUPPORT AND PROGRESSION							
14	Student Support	1 Counseling of students as Mentor/ Class teacher a Student Profile Collection b Semester wise updation and maintenance 2 Any other Study Material /Guidance a)Academic guidance for the advanced learner (offering suggestions/reference books) b)Handholding the slow learners (offering study material/ question banks) 3 Guiding/Monitoring Students for CSP/Internship 4 Organizing/Participation in Parent Teacher Meetings	Reports in the NAAC format	20 10 10 10 50	50	A	150		1)All Four key indicators =3 Grade points/A 2)Any Three key indicators =2 Grade points/B 3)Any Two key indicator =1 Grade point/C 4)Below two=0/D
15	Student Progression	Report on Programme/Course wise students' progression to a)Higher Education b)Employment c)Entrepreneurship	Reports in the NAAC format	10 10 10	30	B	60		1)All three key indicators =3 Grade points/A 2)Any two key indicators =2 Grade points/B 3)Any one key indicator =1 Grade point/C 4)No Indicator=0/D
		VI- ROLE IN INSTITUTIONAL GOVERNANCE							
16	Participation in Institutional Governance and Leadership	a)Contribution to Departmental Vision & Mission and Departmental Action Plan b)Participation in different institutional committees and preperation of committee reports c)Participation in different institutional activities that focus on value based education d)Contribution to IQAC/quality initiatives	Reports in the NAAC format	4x10	40	A	120		1)All Four key indicators =3 Grade points/A 2)Any Three key indicators =2 Grade points/B 3)Any Two key indicator =1 Grade point/C 4)Below two=0/D
		VII - BEST PRACTICES							
17	Best Practices	Identification and Contribution to a)The Departmental Best practices b)Institutional Best practices	Reports in the NAAC format	20	20	A	60.		1)All Two key indicators =3 Grade points/A 2)Any one key indicator =2 Grade points/B 3)No Indicator=0/D
	Total Grade points				500				

Name & Signature of the Principal

Name & Signatures of the Academic advisors

1)

2)

3)

PRINCIPAL
S.K.R. COLLEGE FOR WOMEN
HITHAKARINI SAMAJ
Endowments Dept.,Govt.of Andhra Pradesh
RAJAMAHENDRAVARAM

Name of the Department: MATHEMATICS

Name of the Lecturer: M. S. CHAKRAVARTHI

Date / Month / Year	Day	Class	Period / Time	Medium EM / TM	Theory / Practical	Topic Covered	Methodology Adopted	No. of Students attended	Teaching Aids used	Student Activity conducted	Remarks
1	2	3	4	5	6	7	8	9	10	11	12
25/10/21	Monday	Jr- inter	1000 - 1055	E.M	Theory	Limits problem	Lecture	41	Learning Package		
		Sr- inter	2:40 - 3:35	E.M	Theory	Indefinite integration	Lecture	44	Learning Package		
		III - B.Sc	3:35 to 4:30	E.M	Theory	Vector caliculus Introduction	Lecture	61	Learning Package		
26/10/2021	Tuesday	Jr - inter	10:55-11:50 & 2:40 to 3:35	E.M	Theory	Exercise 7(a) problem	Lecture	39	Learning Package		
		Sr - inter.	11:45 to 2:40	E.M	Theory	problem solved problems. Ex 6(a)	Lecture	43	Learning Package		
27/10/2021	wednesday	Sr - inter	10:55 to 11:50	E.M	Theory	problem an Integration bisection method	Lecture	44	Learning Package		
		Jr - inter	11:45 - 2:40	E.M	Theory	Exercise 7(b) problem	Lecture	41	Learning Package		
		Sr - inter	3:35 to 4:00	E.M	Theory	Integration by parts rules.	Lecture	41	Learning Package		
28/10/2021	Thursday	Sr - inter	11:45 - 2:40	E.M	theory	Reduction formulas	Lecture	42	Learning Package		
		Jr - inter	10:55 to 11:50	E.M	Theory	Solved problem an limits	Lecture	34	Learning Package		
29		IV - B.Sc	2:40 to 3:45	E.M	Theory	vector differential problem.	Lecture	63	Learning Package		
29/10/2021	Friday	Jr - inter	11:45 to 2:40	E.M	Theory	solved problem an limits	Lecture	38	Learning Package		
30/10/2021	Saturday	Sr - inter.	10:55 to 11:50	E.M	Theory	Reduction formuls.	Lecture	43	Learning Package		

Signature of the Lecturer   Signature of the Department I/C   Signature of the Principal

Commissionerate of Collegiate Education, Andhra Pradesh.
PROFORMA FOR TEACHING PLAN

Name of the Department	MATHEMATICS
Name of the Lecturer	M. SRINIVASA CHAKRAVARTHI
Course / Group	III – B.Sc Sem-V
Paper	Ring theory and vector calculus
Name of the Topic	Vector Differentiation
Hours required	12
Learning Objectives	Definition of vector's, ordinary derivative of vector.
Previous Knowledge to be reminded	The concept of vectors.

Topic Synopsis

DERIVATIVE

Let f be a vector function on an interval I and $a \in I$. Then $\lim_{t \to a} \dfrac{f(t) - f(a)}{t - a}$ if it exists

it called the derivative of f at 'a' and is denoted by $f'(a)$ or $\left(\dfrac{df}{dt}\right)_{t=a}$

Let A, B and C be three differentiable vector functions of scalar variable t over a domain s then

① $\dfrac{d}{dt}[ABC] = \left[\dfrac{dA}{dt} BC\right] + \left[A \dfrac{dB}{dt} C\right] + \left[AB \dfrac{dC}{dt}\right]$

② $\dfrac{d}{dt}[A \times (B \times C)] = \dfrac{dA}{dt} \times (B \times C) + A \times \left(\dfrac{dB}{dt} \times C\right)$.

If $f = f_1(t)i + f_2(t)j + f_3(t)k$ where $f_1(t), f_2(t)$ and $f_3(t)$ are the cartesian components of the vector f then $\dfrac{df}{dt} = \dfrac{df_1}{dt}i + \dfrac{df_2}{dt}j + \dfrac{df_3}{dt}k$.

Problem

If $r = a\cos t\, i + a\sin t\, j + at\tan\theta\, k$

find $\left|\dfrac{dr}{dt} \times \dfrac{d^2r}{dt^2}\right|$ and $\left|\dfrac{dr}{dt} \dfrac{d^2r}{dt^2} \dfrac{d^3r}{dt^3}\right|$

Sol.

$r = a\cos t\, i + a\sin t\, j + at\tan\theta\, k$

$\dfrac{dr}{dt} = -a\sin t\, i + a\cos t\, j + a\tan\theta\, k$.

$\dfrac{d^2r}{dt^2} = -a\cos t\, i - a\sin t\, j + 0$ $\dfrac{d^3r}{dt^3} = a\sin t\, i - a\cos t\, j$

$\dfrac{dr}{dt} \times \dfrac{d^2r}{dt^2} = \begin{vmatrix} -a\sin t & a\cos t & a\tan\theta \\ -a\cos t & -a\sin t & 0 \end{vmatrix}$

$= a^3 \sin t \tan\theta\, i - a^3 \cos t \tan\theta\, j + a^2 k$

$\left|\dfrac{dr}{dt} \times \dfrac{d^2r}{dt^2}\right| = a^2 \sqrt{\sin^2 t \tan^2\theta + \cos^2 t \tan^2\theta + 1} = a^2 \sqrt{\tan^2\theta + 1}$

$= a^2 \sec\theta$.

Examples / Illustrations	vectors, Examples
Additional Inputs	-
Teaching Aids used	learning package
Reference cited	S.chand volume - III
Student Activity planned after the teaching	Question and Answering
Activity planned outside the class room if any	Problem solving
Any other activity	Seminar.

Signature of the Lecturer

Signature of the Department I/C

PROFORMA FOR ANNUAL CURRICULAR PLAN (Department wise) : 20↑↑ —20↑-2 (June – oct)

| Name of the College : **S.K.R. COLLEGE FOR WOMEN, RAJAHMUNDRY** | Name of the Department : Mathematics. | Class & Group : IBSc MPC, MPy, MSS |

Names of the Lecturers : C. V. Prasad.
H. Veenapi.
M. S. Chakravarthi.

Month	Paper	Hours available	Syllabus topic	Additional Input / Value Addition to be Provided / taught	Curricular Activity				Co-curricular Activity				Remarks
					Activity to be Conducted	Hours allotted	Whether conducted	If not, alternate Dt.	Activity to be Conducted	Hours allotted	Whether conducted	If not, alternate Dt.	
JUNE evaluation	I		No admissions for IBSc										
	II	18	3D Geometry – Introduction DRs and DKs of a line	S. chand.	Group discuss	1 hr	yes	—	Conference lecture 20 230 Geometry (Intermediate)				
	IV	17	Real Analysis Introduction Properties.	S. chand & Shanti Narayan	Q&A	1 hr	yes	—					
	VI	18	Special functions Second order diff eqn solving.	JN Sharma	Q&A	1 hr	yes	—					
JULY	I												
	II	21	Planes & System of planes.	S. chand.									
	IV	22	Sequences & Series.	S. chand & Shanti Narayan	Group discuss	2 hrs	yes	—	Assignment on sequences and series				
	VI	20	Legendre's polynomials	JN Sharma									
AUGUST	I	13	Introduction Integration	S. chand									
	II	16	lines , shortest distance	S. chand.									
	IV	15	Limits & continuity	S. chand Shanti Narayan									
	VI	16	Hermite polynomials	JN Sharma					Mod exam I				
SEPTEMBER	I	18	First order diff. eqns. $\frac{dy}{dx} + P(x) y = Q(x)$	S. chand									
	II	19	Spheres & system of spheres.	S. chand.					Mod exam I				
	IV	18	Coherents & uniform continuity	S. chand. Shanti Nar									
	VI	17	Laguerre's Polynomials	JN Sharma					Mod exam I (Again)				
OCTOBER	I	18	Solving exact diff eqn solving for x, y, p	S. chand.									
	II	21	Cones, enveloping cone, Reciprocal cone	S. chand.									
	IV	20	Differentiability & Riemann Integration	S. chand Chanti Narayan									
	VI	20	Bessel functions Gamma Beta functions	JN Sharma					Mod exam II				

Contd...

Month	Paper	Hours available	Syllabus topic	Additional Input / Value Addition to be Provided / taught	Curricular Activity				Co-curricular Activity				Remarks
					Activity to be Conducted	Hours allotted	Whether conducted	If not, alternate Dt.	Activity to be Conducted	Hours allotted	Whether conducted	If not, alternate Dt.	
NOVEMBER	I	16	Higher order diff-eqns. Powers for x, e^x, p	S.chout.	Problem Solvers	2	yes	—					Mid exam I
	II	17	Revision	S.chout. Shantirani									
	IV	18	Reunown Integrat Revision	Shanti Navya									Mid exam II
	VI	14	Project work Special funct Reug	J.N Sharan									
DECEMBER	I	18	Higher order diff-eqns.	S.chous.	Problem Solves	2	yes	—		Assignments			
	II		Preparation for exam										
	IV		"										
	VI		"										
JANUARY	I	12	Higher order diff-eqn Variation parameters	S.chous									
	II												
	III												
	IV												
FEBRUARY	I	14	Cauchy, Legendres diff-eqn	S.chous	Problem Solving	2	yes	—					
	II												
	III												
	IV												
MARCH			**UNIVERSITY PUBLIC EXAMINATIONS :**										

Signature of the Department I/C

SKR COLLEGE FOR WOMEN ,RAJAMAHENDRAVARAM

Department of Mathematics odd Sem 2021-2022

Programme & Course outcomes

		Programme outcomes
	B.Sc – M.P.C , M.P.Cs, M.S.Cs	The Bachelor of Science in Mathematics prepares graduates to understand fundamental concepts in the discipline of MATHEMATICS. The academic program will promote and realize gainsin student success. The academic program will promote and realizeefficiency in the delivery and completion of the program
SEM	Name of the course	Course outcomes
Sem- 1	DEFFERENTIAL EQUATION	After successful completion of this course, the student will be able to; Solve linear differential equations Convert non exact homogeneous equations to exact differential equations by using integrating factors Know the methods of finding solutions of differential equations of the first order but not of the first Degree. Solve higher-order linear differential equations, both homogeneous and non homogeneous, with constant coefficients. Understand the concept and apply appropriate methods for solving differential equations.
Sem-3	ABSTRACT ALGEBRA	After successful completion of this course, the student will be able to; acquire the basic knowledge and structure of groups, subgroups and cyclic groups. get the significance of the notation of a normal subgroups. get the behavior of permutations and operations on them. study the homomorphisms and isomorphisms with applications. Understand the ring theory concepts with

		the help of knowledge in group theory and to prove theorems.
SEM-5B	LINEAR ALGEBRA ,	After successful completion of this course, the student will be able to; understand the concepts of vector spaces, subspaces, basis, dimension and their properties. understand the concepts of linear transformations and their properties apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods Learn the properties of inner product spaces and determine orthogonality in inner product spaces
Sem-5A	RING THEORY AND VECTOR CALICULUS	After successful completion of this course, the student will be able to get clear idea about the Ring theory, sub rings, integral domain, ideals , commutative ring, gradient of a vector, curl of a vector, divergent of a vector, greens theorem., gauss theorem, stokes theorem

SKR COLLEGE FOR WOMEN,RAJAMAHENDRAVARAM		
Department of Mathematics Even Sem 2021-2022		
Programme & Course outcomes		
		Programme outcomes
	B.Sc – M.P.C , M.P.Cs, M.S.Cs	The Bachelor of Science in Mathematics prepares graduates to understand fundamental concepts in the discipline of MATHEMATICS. The academic program will promote and realize gainsin student success. The academic program will promote and realizeefficiency in the delivery and completion of the program
SEM	Name of the course	Course outcomes
Sem-2 (course 2)	THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY	get the knowledge of planes. basic idea of lines, sphere and cones. understand the properties of planes, lines, spheres and cones. express the problems geometrically and then to get the solution.
Sem-4 (course 4)	REAL ANALYSIS	After successful completion of this course, the student will be able to get clear idea about the real numbers and real valued functions. obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/series. Test the continuity and differentiability and Riemann integration of a function. Know the geometrical interpretation of mean value theorems.

SEM-4 (course 5)	LINEAR ALGEBRA ,	After successful completion of this course, the student will be able to; understand the concepts of vector spaces, subspaces, basis, dimension and their properties. understand the concepts of linear transformations and their properties apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods Learn the properties of inner product spaces and determine orthogonality in inner product spaces
Sem-6(Elective)	NUMERICAL ANALYSIS	After successful completion of this course, the student will be able to get clear idea about the Error in numerical computations, Algebraic and transcendental equations, forward and backward difference table, Newton Forward and Backward interpolation formulas, gauss forward and backward interpolation formula, Strilling – formula, Legranges , Newton divided difference formula in Interpolation
Sem-6(cluster)	SPECIAL FUNCTION	After successful completion of this course, the student will be able to; understand the concepts of Beta and Gamms functions, Hermite polynomials, Legendrs polynomials, Bessels equations, Laguerre polynomials.
Sem-6(cluster)	ADVANCE NUMERICAL ANALYSIS	Newton forward and newton backward differentiation formula, numerical differentiation and numerical integration, curve fitting, numerical solutions of ordinary differential equation.

S.K.R. COLLEGE FOR WOMEN RAJAHMUNDRY

DEPARTMENT OF MATHEMATICS & STATISTICS

ACTION PLAN FOR THE YEAR 2021-22

S.NO	Date	Proposed Activity	REMARKS
1	10-09-21	The living legend INDIAN – AMERICAN MATHEMATICIAN & STATISTICIAN C.RADHA KRISHNA RAO Birthday celebrations. On this vocation our department conducted elocution competition for b.sc students	Done
2	15-09-2021	GROUP DISCUSSIN. Prize distribution for the winners	Done
3	16-11-2021	Guest lecture on Probability for II M.S.Cs students by K.B.RAJA , Samhitha degree college, Rajamahendravaram	Done
4	14-12-2021	PEER TEACHING on descriptive statistics for I M.S.Cs students BY II M.S.Cs students	Done
5	22-12-21	**National mathematics day on the occasion of greatest Indian mathematician Srinivasa Ramanujan birthday**	Done
6	20 - 01 - 2022	SEMINAR on simplex method For III M.S.Cs	Done
7	20- 01 - 2022	GROUP DISCUSION on GAME THEORY For III M.S.Cs	Done

REMEDIAL COACHING(EVEN SEM)

Name of the Lecturer: M.S CHAKRAVARTHI,LECTURER IN MATHEMATICS

Class : III B.Sc - SEM VI(ELECTIVE)   **Year-2021-22**

S.NO	Name of the Student	Marks obtained in the previous semester Mid 25 MARKS	TOPIC COVERED					Marks obtained tin the internal exam	Signature of the student	Remarks
			Dt:20-6-21	Dt:21-6-21	Dt:22-6-21	Dt:23-6-21	Dt:24-6-21			
			ERRORS IN NUMERICAL COMPUTATIONS	SOLUTIONS OF ALGEBRAIC TRANCEDENTAL EQUATIONS	INTERPOLATION I	INTERPOLATION II	INTERPOLATION III			
1	G.DIVYA	9	✓	✓	✓	✓	✓	13	G.Divya	
2	K.VENKATALAKSHMI	8	✓	✓	✓	✓	✓	13	K.venkata lakshmi	
3	P.SRAVANTHI	10	✓	✓	✓	✓	✓	12	P. Sravanthi.	
4	M.AKHILA	7	✓	✓	✓	✓	✓	12	M. Akhila	
5	V.DEVANAKUMARI	9	✓	✓	✓	✓	✓	13	v.Devanakumari	
6	S.FAREDHA	8	✓	✓	✓	✓	✓	12	S. Faredha	
	R.LAKSHMI	9	✓	✓	✓	✓	✓	13	R.Lakshmi	
	P.LASYA PRIYA	8	✓	✓	✓	✓	✓	12	P.lasya priya	
	N. GAGANA SHARVANI	9	✓	✓	✓	✓	✓	13	N. Gagan Sharvani	
	T.NIHARIKA	9	✓	✓	✓	✓	✓	14	T.Niharika	

P. Rao

M.S.Chakra

Clayan
In charge

PRINCIPAL
S.K.R. COLLEGE FOR WOMEN
HITHAKARINI SAMAJ
Endowments Dept.,Govt.of Andhra Pradesh
RAJAMAHENDRAVARAM

S.K.R.COLLEGE FOR WOMEN

RAJAMAHENDRAVARAM

DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE

Year	No of certificate course	Name of the course	Duration	Intake	Date	Target Group
2017-18	NIL	NIL	NIL	NIL	NIL	NIL
2018-19	NIL	NIL	NIL	NIL	NIL	NIL
2019-20	01	MATHEMATICS FOR COMPTITIVE EXAMS	35hrs	22	01-11-19 to 11-12-19	B.Sc 3rd YEAR STUDENTS
2020-21	NIL	NIL	NIL	NIL	NIL	NIL
2021-22	01	MATHEMATICS FOR COMPTIVE EXAMS	30hrs	22	01-11-21 to 07-12-21	B.Sc 3rd YEAR STUDENTS

S.K.R.COLLEGE F OR WOMEN

RAJAMAHENDRAVARAM (Estd.1968)

(Re-Accredited at B+ Grade by NAAC,

Affiliated to Adikavi Nannayya University)

CERTIFICATE COURSE IN

MATHEMATICS

(2021-2022)

COURSE COORDINATOR

Sri.C.V.PRASAD

S.G.LECTURER IN MATHEMATICS

Date:- 25-10-2021

To

The Principal,

S.K.R.Degree College For Women,

Rajamahendravaram

       SUB: Permission for conducting certificate course reg..

       Respected Madam,

           I C.V.PRASAD, Lecturer in mathematics have planned to conduct a certificate course for all 3rd year students From 01-11-2021 to 07-12-2021. So I request you to give permission to conduct certificate course programme

     Thanking You Madam

                          Yours Faithfully

A BRIEF REPORT

I C.V.PRASAD lecturer in mathematics S.K.R.COLLEGE FOR WOMEN, Rajamahendravaram, here with submit a brief report on certificate course to be done by the Department of Mathematics

The department of mathematics met the principal to discuss the implement of certificate course in mathematics .

In the meeting the schedule of the course, syllabus and course objectives were framed. After the approval a circulated to all final year B.Sc., students .

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

42 students appeared for the entry test out of which 22 students were selected .The certificate course duration was 30hrs . The course was held from 01-11-2021 to 07-12-2021 and after the completion of the course final exam was conducted on 21-12- 2021

The successful candidates were being presented certificate by the principal on 22-12-2021.

C.V.PRASAD

Lecturer in Mathematics

<u>MINUTES OF THE MEETING</u>

The department of mathematics staff meeting held on

29-10-2021 and passed resolution to organize certificate coursethat on **MATHEMATICS FOR COMPETITIVE EXAMS**

under the guidelines of Sri. C.V.PRASAD lecturer in mathematics for 30 hours.

The certificate course was organized from

01-11-2021 to 07-12-2021 for the academic year 2021-2022 for III BSC students under curriculum enrichment programme.

Signature of the Committee members:-

1) Sri. C.V.PRASAD , Incharge & SG Lecturer in mathematics

2) Sri. M.VEERRAJU , Lecturer in mathematics

3) Sri. M.S.CHAKRAVARTHI, Lecturer in mathematics

4) Smt. E.KEERTHI, Lecturer in Statistics

Signature of the Prinicipal

S.K.R.DEGREE COLLEGE FOR WOMENRAJAMAHENDRAVARAM
DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE

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

11. Evaluate $8 - [5 - \{6 + 2(7 - \overline{8 - 5}) \}]$

a) 13   b) 15   c) 27   d) 32

12. Find the H.C.F of 108, 288 , 360..
   a) 33   b) 34   c) 35   d) 36

13. What was the day of the weak on , 16th july , 1776 ?.
   a) Tuesday   b) Friday   c) Sunday   d) Saturday

14. Find the value 28% of 450 + 45% of 280.
   a) 250   b) 251   c) 252   d) 255

15. Find the H .C . F of 513 , 1134 , and 1215
   a) 31   b) 19   c) 27   d) 35

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

   a) 231   b) 230   c) 233   d) 232

17. What was the day of week on 15th August , 1947 ?
   a) Tuesday   b) Friday   c) Sunday   d) Saturday

18. X and Y are children of Z. Z is the father of X but Y is not the son of Z .What is Y to Z ?
   a) Sister   b) Daughter   c) Nephew   d) Cousin
19. Evaluate (313 x 313 + 287 x 287)
   a) 180338   b) 185086   c) 190338   d) 195086

20. If Ajay's son is the uncle of sunil's son what is the relationship between Ajay and sun is

   a) Cousin b) Brothers - c) Father and son d) Grand father and grandson-

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

   a) 10   b) 9   c) 8   d) 12

22. The average of the first five prime numbers greater than 20 is ?

   a) 31.00   b) 31.01   c) 32.00   d) 32.20

23. How many minutes does Aditya tack to cover a distance of 400m, if he runs at a speed of 20 km/hr
   ?
   a) $1\frac{1}{5} min$ b) $2\frac{1}{5} min$ c) $1\frac{1}{3} min$ d) $2\frac{1}{3} min$

24. The average age of 8 men increase by 2 years when two women are included in place of two
   menof ages 20 and 24 years . Find the average age of the women.
   a) 36 years   b) 24 years   c) 30 years   d) 18 years
25. The speed of a train is 90kmph . What is the distance convered by it in 10 minutes.
   a) 250 m   b) 220m   c) 150m   d) 100m

S.K.R.DEGREE COLLEGE FOR WOMENRAJAMAHENDRAVARAM
DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE

QULIFIED/NOT QULIFIED LIST

SNO	REG.NO	NAME OF THE STUDENT	GROUP	MARKS	QULIFIED/NOT QULIFIED
1	190907101003	ANNAMREDDY KALYANI	III B.Sc- MPC	38	QULIFIED
2	190907101005	BANDI JAHNAVI DEVI	III B.Sc- MPC	22	NOT QULIFIED
3	190907101006	BORRA SANTHI PRASANNA	III B.Sc- MPC	28	QULIFIED
4	190907101009	JATLA SATYAPRASANTHI	III B.Sc- MPC	30	QULIFIED
5	190907101013	KANDULA VEERA VENI	III B.Sc- MPC	32	QULIFIED
6	190907101016	KUDIPUDI LAKSHMI PRIYA	III B.Sc- MPC	20	NOT QULIFIED
7	190907101018	KUNJAM SANGEETHA	III B.Sc- MPC	20	NOT QULIFIED
8	190907101028	SEERAPU DURGA AVANTHI	III B.Sc- MPC	34	QULIFIED
9	190907101030	TELU SUREKHA	III B.Sc- MPC	36	QULIFIED
10	190907101032	UKA HEMA SRI	III B.Sc- MPC	20	NOT QULIFIED
11	190907102035	AKASAPU SRI SURYA SUBRAHMANYESWARI	III B.Sc- MPCs	28	QULIFIED
12	190907102038	DULI SATHWIKA	III B.Sc- MPCs	22	NOT QULIFIED
13	190907102040	GALLA SWARNA LATHA	III B.Sc- MPCs	28	QULIFIED
14	190907102041	GELLA AKSHITHA	III B.Sc- MPCs	22	NOT QULIFIED
15	190907102042	GUDALA DIVYA	III B.Sc- MPCs	30	QULIFIED
16	190907102049	KODI SUSMITHA	III B.Sc- MPCs	18	NOT QULIFIED
17	190907102053	KOVVASI SOWJANYA	III B.Sc- MPCs	28	QULIFIED
18	190907102054	KUNJAM LAKSHMI BHAVANI	III B.Sc- MPCs	20	NOT QULIFIED
19	190907102057	MEDIBOINA UMADEVI	III B.Sc- MPCs	28	QULIFIED
20	190907102066	PATHRI SRAVANTHI	III B.Sc- MPCs	18	NOT QULIFIED
21	190907102069	POLINA SEETHA MAHA LAXMI	III B.Sc- MPCs	16	NOT QULIFIED
22	190907102071	REGANI LAKSHMI	III B.Sc- MPCs	28	QULIFIED
23	190907102072	RELANGI DIVYA	III B.Sc- MPCs	22	NOT QULIFIED
24	190907102077	TADICHERLA RAMYAJYOTHI	III B.Sc- MPCs	28	QULIFIED

25	190907102079	THIRAGATI HEMALATHA	III B.Sc- MPCs	20	NOT QULIFIED
26	190907102081	VEDURUPARTI MARY GRACE	III B.Sc- MPCs	34	QULIFIED
27	190907102082	VEERELLI DEEVENA KUMARI	III B.Sc- MPCs	18	NOT QULIFIED
28	190907102083	VIPPARTHI KARUNA	III B.Sc- MPCs	38	QULIFIED
29	190907109085	ADDALA UMADEVI	III B.Sc- MSCs	34	QULIFIED
30	190907109087	BHAVANI GEDALA	III B.Sc- MSCs	23	NOT QULIFIED
31	190907109088	CHALLAPALLI VENKATA SRAVANI	III B.Sc- MSCs	34	QULIFIED
32	190907109089	CHINTA JYOTHIKA SOWJANYA	III B.Sc- MSCs	22	NOT QULIFIED
33	190907109092	GIRIJALA SIVA PRASANNA	III B.Sc- MSCs	36	QULIFIED
34	190907109094	JUTTUKA SUNEETHA	III B.Sc- MSCs	18	NOT QULIFIED
35	190907109095	KOMAKULA KRISHNAVENI	III B.Sc- MSCs	28	QULIFIED
36	190907109099	LANKA DURGADEVI	III B.Sc- MSCs	28	QULIFIED
37	190907109100	MAJJI KAVITHA	III B.Sc- MSCs	22	NOT QULIFIED
38	190907109104	PANCHALA LIKHITHA LAKSHMI	III B.Sc- MSCs	22	NOTQULIFIED
39	190907109106	PILLALA LASYAPRIYA	III B.Sc- MSCs	30	QULIFIED
40	190907109108	SHEIK BLESSY PRIYA	III B.Sc- MSCs	20	NOT QULIFIED
41	190907109109	THUMUROTHU NIHARIKA	III B.Sc- MSCs	28	QULIFIED
42	190907109110	YANDAMURI NAGA DEEPIKA	III B.Sc- MSCs	18	NOT QULIFIED

S.K.R.DEGREE COLLEGE FOR WOMENRAJAMAHENDRAVARAM
DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE

MATHEMATICS FOR COMPETITIVE EXAMS
COURSE SYLLABUS

UNIT-I   11hrs

Analogies of numbers and alphabets completion of blank spaces following the pattern in A:B::C: drelationship odd thing out; Missing number in a sequence or a series.

UNIT-II -   11hrs

Algebraic operations BODMAS, Fractions, Divisibility rules, LCM&GCD (HCF). Date, Timeand Arrangement Problems: Calendar Problems, Clock Problems, Blood Relationship.

UNIT-III   8hrs

Averages, Ration and proportion, Problems onages, Time-distance – speed.

References:

1. R.Sagarwal,   Quantitative Aptitude for competitive examminations, S.chand publications.
2. R.V.Praveen, Quantitative Aptitude and Reasoning. PHI publishers
3. Pratogitaprakasan, KicX, Quantitative Aptitude: Numerical Ability(fullysolved) Objective questions, Kiran Prakasan Publishers.
4. Abhijitguha, Quantitative Aptitude for competitive examination,TMGHill publications.
5. Oldquestionpapers of the Exams conducted by(Wipro,TCS,Infosysetc.) attheirRecruitmentprocess,source-internet.

A BRIEF REPORT

The department of mathematics conducted certificate course in mathematical competitive exam during theacademic year 2021-2022 under the curriculum enrichment program.

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

This course can develop ability to understand andsolve 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

S.K.R.DEGREE COLLEGE FOR WOMEN RAJAMAHENDRAVARAM
DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE EXAM
ON
MATHEMATICS FOR COMPETITIVE EXAMS
ABSENTEES STATEMENT- 2021-22

Date: 21-12-2021
Class : III B.Sc

S.NO	Reg. Number	Name Of The Student	Signature Of The Student
1	190907101003	ANNAMREDDY KALYANI	
2	190907101006	BORRA SANTHI PRASANNA	
3	190907101009	JATLA SATYAPRASANTHI	
4	190907101013	KANDULA VEERA VENI	
5	190907101028	SEERAPU DURGA AVANTHI	
6	190907101030	TELU SUREKHA	
7	190907102035	AKASAPU SRI SURYA SUBRAHMANYESWARI	
8	190907102040	GALLA SWARNA LATHA	
9	190907102042	GUDALA DIVYA	
10	190907102053	KOVVASI SOWJANYA	
11	190907102057	MEDIBOINA UMADEVI	
12	190907102071	REGANI LAKSHMI	
13	190907102077	TADICHERLA RAMYAJYOTHI	
14	190907102081	VEDURUPARTI MARY GRACE	
15	190907102083	VIPPARTHI KARUNA	
16	190907109085	ADDALA UMADEVI	
17	190907109088	CHALLAPALLI VENKATA SRAVANI	
18	190907109092	GIRIJALA SIVA PRASANNA	
19	190907109095	KOMAKULA KRISHNAVENI	
20	190907109099	LANKA DURGADEVI	
21	190907109106	PILLALA LASYAPRIYA	
22	190907109109	THUMUROTHU NIHARIKA	

S.K.R.DEGREE COLLEGE FOR WOMENRAJAMAHENDRAVARAM
DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE EXAM
ON
MATHEMATICS FOR COMPETITIVE EXAMS

LIST OF PARTICIPANTS - ATTENDANCE REPORT OF THE STUDENTSFOR CERTIFICATE COURSE-2021-22

S.NO	NAME OF THE STUDENT	REGISTER NO	CLASS/GROUP	ATTENDANCE 30Hrs
1	ANNAMREDDY KALYANI	190907101003	III B.Sc- MPC	28Hrs
2	BORRA SANTHI PRASANNA	190907101006	III B.Sc- MPC	27Hrs
3	JATLA SATYAPRASANTHI	190907101009	III B.Sc- MPC	27Hrs
4	KANDULA VEERA VENI	190907101013	III B.Sc- MPC	30Hrs
5	SEERAPU DURGA AVANTHI	190907101028	III B.Sc- MPC	27Hrs
6	TELU SUREKHA	190907101030	III B.Sc- MPC	30Hrs
7	AKASAPU SRI SURYA SUBRAHMANYESWARI	190907102035	III B.Sc- MPCs	27Hrs
8	GALLA SWARNA LATHA	190907102040	III B.Sc- MPCs	29Hrs
9	GUDALA DIVYA	190907102042	III B.Sc- MPCs	26Hrs
10	KOVVASI SOWJANYA	190907102053	III B.Sc- MPCs	28Hrs
11	MEDIBOINA UMADEVI	190907102057	III B.Sc- MPCs	26Hrs
12	REGANI LAKSHMI	190907102071	III B.Sc- MPCs	26Hrs
13	TADICHERLA RAMYAJYOTHI	190907102077	III B.Sc- MPCs	27Hrs
14	VEDURUPARTI MARY GRACE	190907102081	III B.Sc- MPCs	27Hrs
15	VIPPARTHI KARUNA	190907102083	III B.Sc- MPCs	26Hrs
16	ADDALA UMADEVI	190907109085	III B.Sc- MSCs	28Hrs
17	CHALLAPALLI VENKATA SRAVANI	190907109088	III B.Sc- MSCs	28Hrs
18	GIRIJALA SIVA PRASANNA	190907109092	III B.Sc- MSCs	28Hrs
19	KOMAKULA KRISHNAVENI	190907109095	III B.Sc- MSCs	28Hrs
20	LANKA DURGADEVI	190907109099	III B.Sc- MSCs	26Hrs
21	PILLALA LASYAPRIYA	190907109106	III B.Sc- MSCs	27Hrs
22	THUMUROTHU NIHARIKA	190907109109	III B.Sc- MSCs	28Hrs

S.K.R COLLEGE FOR WOMEN RAJAMAHENDRAVARAM

DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE

MATHEMATICS FOR COMPETITIVE EXAMS QUESTION PAPER

Name of the student: -   Group: -

REG NO:-   DATE:- 21-12-2021

Answer any 25 questions each question carries two marks 25 x 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, ... 100,180,294.

   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

5. 0,3,8,15,24, ? 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 O find the next term .

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

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

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

   a) 5   b) 23.5 c)   23.75   d) 25

12If 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 $\left(\dfrac{343 \times 343 \times 343 - 113 \times 113 \times 113}{343 \times 343 + 343 \times 113 + 113 \times 113}\right) =$

   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 √3 up to three decimal places

   a) 1.736   b) 1.732   c) 1.785   d) 1.745

19 By how much is ¾ th of 968 less than 7/8th of 1008

   a) 154   b) 146   c) 165   d) 156

20) Find the value of √53824 = ?

   a) 202   b) 232   c) 242   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) 3

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

   a) 27:125   b) 125:27   c) 9:25   d) none

24 The ratio of 43.5 : 25is same as:

   a) 2 :1   b) 4:1   c) 7:5   d) 7:10

25 20 men can do a piece of work in 20days working 8 has/ day . In how many days can 25 men Cando the same

     work if they work 16 has/ day

   a) 10   b) 09   c) 08   d) 07

26 If $A/3 = B/4 = C/5$ then A: B: C is

   a) 3 : 4 : 5   b) 4 : 3 : 5   c) 5: 3: 4   d) 5: 4 : 3

27 I f $x : y = 2 : 3\ then\ \dfrac{2x+3y}{2x-3y}$ is

     a) $\dfrac{-13}{5}$ b) $\dfrac{13}{5}$ c) $\dfrac{5}{13}$ d) $\dfrac{-5}{13}$

28 If 4 man can do a piece of work in 10 days in how many days can 8 men do it ?

a) $4 days$ b) $3 days$ c) 5 days   d) none of this

29 A : B =1: 2; B: C = 3.4 then A : B: C is

   a) 6:8:3   b)3:6:8   c)3:8:6   d) 8:6:3

30 convert 30 m/sec speed to km/hr

a)84km/hr   b) 96km/hr   c) 108km/hr   d) 120km/hr

S.K.R.DEGREE COLLEGE FOR WOMENRAJAMAHENDRAVARAM DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE 2021-22

S.K.R COLLEGE FOR WOMEN RAJAMAHENDRAVARAM

DEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE 2021-22

MATHEMATICS FOR COMPETITIVE EXAMS RESULT

S.NO	NAME OF THE STUDENT	REGISTER NO	CLASS/GROUP	GRADE
1	ANNAMREDDY KALYANI	190907101003	III B.Sc- MPC	B
2	BORRA SANTHI PRASANNA	190907101006	III B.Sc- MPC	B
3	JATLA SATYAPRASANTHI	190907101009	III B.Sc- MPC	B
4	KANDULA VEERA VENI	190907101013	III B.Sc- MPC	B
5	SEERAPU DURGA AVANTHI	190907101028	III B.Sc- MPC	A
6	TELU SUREKHA	190907101030	III B.Sc- MPC	B
7	AKASAPU SRI SURYA SUBRAHMANYESWARI	190907102035	III B.Sc- MPCs	B
8	GALLA SWARNA LATHA	190907102040	III B.Sc- MPCs	A
9	GUDALA DIVYA	190907102042	III B.Sc- MPCs	C
10	KOVVASI SOWJANYA	190907102053	III B.Sc- MPCs	B
11	MEDIBOINA UMADEVI	190907102057	III B.Sc- MPCs	A
12	REGANI LAKSHMI	190907102071	III B.Sc- MPCs	A
13	TADICHERLA RAMYAJYOTHI	190907102077	III B.Sc- MPCs	B
14	VEDURUPARTI MARY GRACE	190907102081	III B.Sc- MPCs	B
15	VIPPARTHI KARUNA	190907102083	III B.Sc- MPCs	B
16	ADDALA UMADEVI	190907109085	III B.Sc- MSCs	A
17	CHALLAPALLI VENKATA SRAVANI	190907109088	III B.Sc- MPCs	B
18	GIRIJALA SIVA PRASANNA	190907109092	III B.Sc- MPCs	B
19	KOMAKULA KRISHNAVENI	190907109095	III B.Sc- MPCs	B
20	LANKA DURGADEVI	190907109099	III B.Sc- MPCs	B
21	PILLALA LASYAPRIYA	190907109106	III B.Sc- MPCs	B
22	THUMUROTHU NIHARIKA	190907109109	III B.Sc- MPCs	A

OTHER DETAILS

Duration course	:-	**30 hrs**
Class starting date	:-	**01-11-2021**
Classes end date	:-	**07-12-2021**
Exam conducted on	:-	**21-12-2021**
Classes starting	:-	**9-00 AM TO 10-00 AM**
Resource persons	:-	**Sri .C.V.PRASAD**
		Sri. M.VEERRAJU

Conclusion:-

This certificate course developed mathematical concepts and technique which should serve as a participation for more advanced quantitative courses .

References text book:-

S.K.R.COLLEGE FOR WOMEN

Re- Accredited by NAAC at 'B+ ' level, RAJAMAHENDRAVARAM – 533103

(Affiliated to Adikavi nannaya University)
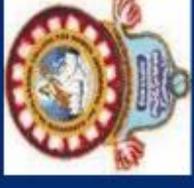
DSEPARTMENT OF MATHEMATICS & STATISTICS

CERTIFICATE COURSE MATHEMATICS FOR COMPETITIVE EXAMS

This is certify that .... of .... has participation in Certificate Course in "MATHEMATICS FOR COMPITITIVE EXAMS" organized by Department of Mathematics & Statistics for 30 hours From 1st November 2021 to 07th December 2022

C.V.PRASAD
LECTURER IN MATHEMATICS

Dr.P.RAGHAVA KUMARI
Principal

S.K.R.COLLEGE FOR WOMEN RAJAHMUNDRY

DEPARTMENT OF MATHEMATICS

I CT   ONLINECLASSES(2021-2022)

S.NO	NAME OF THE LECTURER	CLASS	TOPIC
1	C.V.PRASAD	I B.Sc	REAL LINES, SPHERS
2	C.V.PRASAD	II B.Sc	SERIES AND SEQUENCE
3	C.V.PRASAD	III B.Sc	SPECIAL FUNCTIONS
4	M.VEERRAJU	III B.Sc	ADVANCED NUMERICAL ANALYSIS
5	M.S.CHAKRAVARTHI	III B.Sc	NUMERICAL ANALYSIS

People   Information   Activities

P.   Pushpa Harika

R.   Ramu Madakam

R.   Riharika Bommana

Sailaja Goda

S.   Shaik Sufiya

S.   Siri Yadav

Sowjanya Surya

Sri lakshmi Priya

S.   Sri sai Harshitha

S.   Sruthi Sakireddi

S.   Sweety Nukathattu

Teeda Katchavani

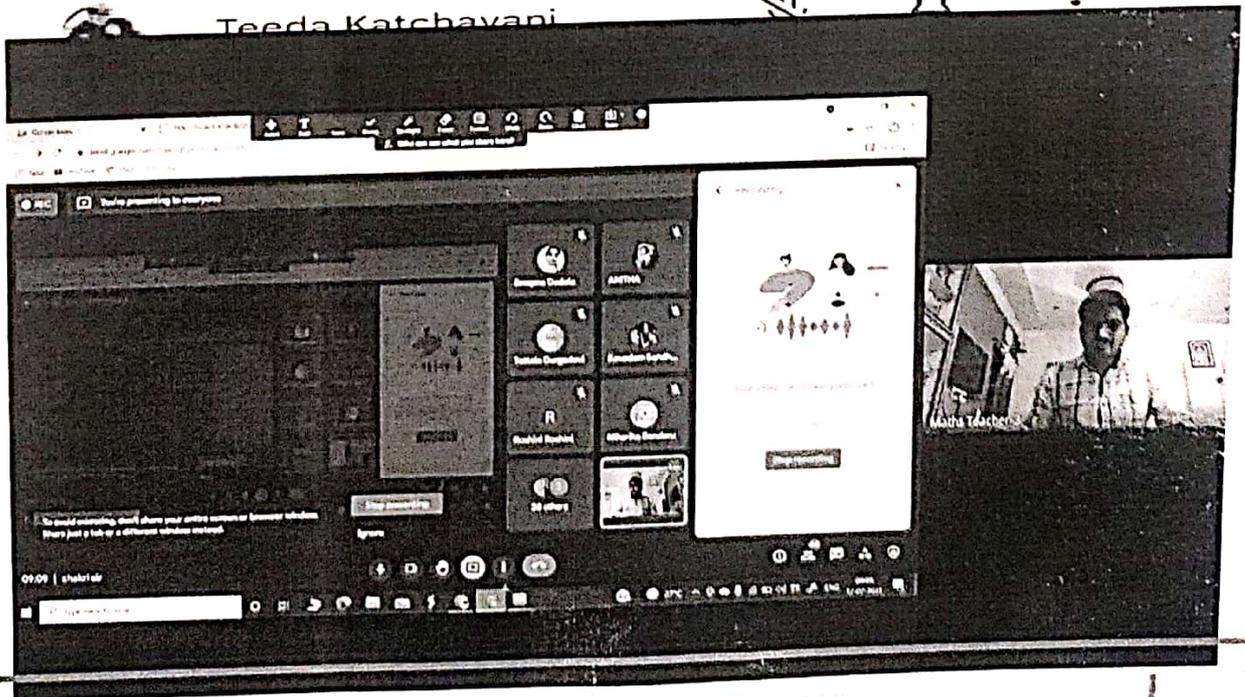Newton Backward interpolation formula

Let f be tabulated as a nth degree polynomial function then

$$x_n(x) = a_0 + p\nabla x_n + \frac{p(p+1)}{2!}\nabla^2 x_n + \cdots$$

$p = \frac{x - x_n}{h}$
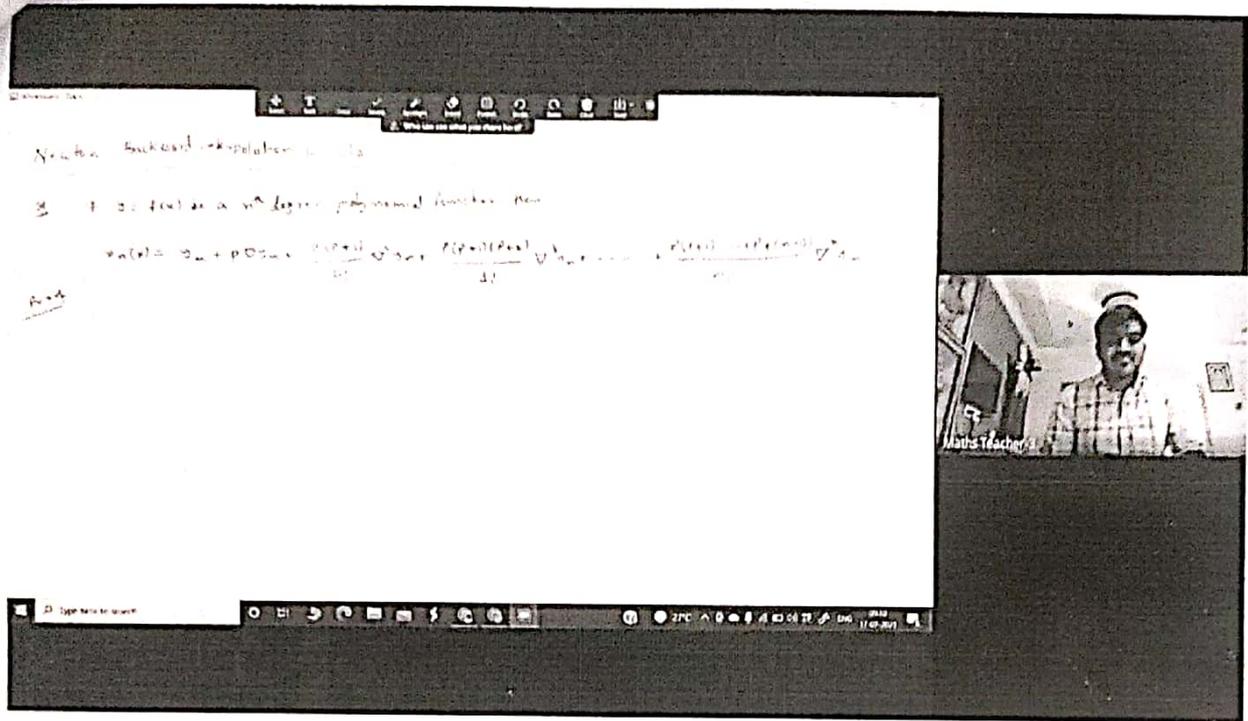
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S.K.R. Government Degree College (Women)
RAJAMAHENDRAVARAM.
East Godavari Dist., Andhra Pradesh