

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**  
**BONAFIDE CERTIFICATE**

Certified that this project work "SEQUENCES" is the bonafide work of "BOBBADI REVATHI DEVI" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

*P.Mangamma 24/5/18*  
SIGNATURE  
(P.Mangamma)  
Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

*P.Mangamma 24/5/18*  
SIGNATURE  
(P.Mangamma)  
HEAD OF THE DEPARTMENT  
Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

SCHEME OF PROJECT  
**DEPARTMENT OF MATHEMATICS**

**VISAKHA GOVT. DEGREE COLLEGE (W)**

**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**


Certified that this project work "APPLICATIONS OF DIFFERENTIAL EQUATIONS IN PHYSICS AND CHEMISTRY" is the bonafide work of "SHAIK KATHIJA BEGUM" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

  
SIGNATURE

(P.Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

  
SIGNATURE

(P.Mangamma)

**HEAD OF THE DEPARTMENT**

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

DEPARTMENT OF MATHEMATICS  
VISAKHA GOVT. DEGREE COLLEGE (W)  
VISAKHAPATNAM

BONAFIDE CERTIFICATE

Certified that this project work "MATRICES" is the bonafide work of "RADA HIMARANI" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature 26/1/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*N. S. S. S.*  
1/3/19

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Head of the Department VISAKHAPATNAM-20

Lecturer in Mathematics

Lecturer In Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**

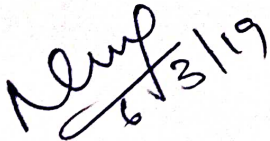
**BONAFIDE CERTIFICATE**

Certified that this project work "DIFFERENTIAL EQUATIONS" is the bonafide work of "Dunga Laxmi Priyanka" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

  
SIGNATURE

(P. Mangamma)  
Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

  
6/3/19

  
SIGNATURE

(P. Mangamma)  
HEAD OF THE DEPARTMENT  
Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "VECTOR CALCULUS" is the bonafide work of "JERRIPOTHULA MEGHANA HARSHA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature 2/5/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*P. Mangamma*  
Signature 2/5/19

(P. Mangamma)

Head of the Department

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

DEPARTMENT OF MATHEMATICS  
VISAKHA GOVT. DEGREE COLLEGE (W)  
VISAKHAPATNAM

BONAFIDE CERTIFICATE

Certified that this project work "SEQUENCE" is the bonafide work of "POTNURU VENKATA LAKSHMI" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature 2/5/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*N. Srinivas*  
6/3/19

*P. Mangamma*  
Signature 2/5/19

(P. Mangamma)

Head of the Department

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**

**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "APPLICATIONS OF DIFFERENTIAL EQUATIONS IN PHYSICS AND CHEMISTRY" is the bonafide work of "CHELLURI PAVANI" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

*P. Mangamma 24/1/18*  
SIGNATURE

(P.Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

*P. Mangamma 24/1/18*  
SIGNATURE

(P.Mangamma)

HEAD OF THE DEPARTMENT

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road

VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work “**GROUP THEORY**” is the bonafide work of “**PEDDENTI VINITHA**” who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*N. Srip*  
6/3/19

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Head of the Department

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
**VISAKHAPATNAM-29**



**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT.DEGREE COLLEGE(W)**  
**VISAKHAPATNAM**  
**BONAFIDE CERTIFICATE**

Certified that this project report "RING THEORY" is the bonafide work of "SIKALA SWARNA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge, that this project has not been carried out earlier in this institute and the university.

*P. Mangamma*  
SIGNATURE 24/5/18

(P.MANGAMMA)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms of the and statutes of the university.

*P. Mangamma*  
SIGNATURE 24/5/18

Lecturer in Mathematics  
Visakha Govt. Degree College  
(for Women)  
Jail Road

HEAD OF THE DEPARTMENT

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "DIFFERENTIAL EQUATIONS" is the bonafide work of "RALLAPALLI LATHA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

*P. Mangamma 2/5/19*  
SIGNATURE

(P. Mangamma)  
Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

*M. Mangamma*  
*6/3/19*

*P. Mangamma 2/5/19*  
SIGNATURE

(P. Mangamma)  
HEAD OF THE DEPARTMENT  
Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**

**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "GROUP THEORY" is the bonafide work of "CHILLA USHA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

*P. Mangamma*  
SIGNATURE

(P.Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

*P. Mangamma*  
SIGNATURE

(P.Mangamma)

HEAD OF THE DEPARTMENT

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road

VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "SEQUENCE" is the bonafide work of "JAMMALA INDRAJA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature | 2/3/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*M. S. S. S.*  
6/3/19

*P. Mangamma*  
Signature | 2/3/19

(P. Mangamma)

Head of the Department

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "Numerical Solutions of Ordinary Differential Equations using C Language" is the bonafide work of "Appikonda Revathi" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*P. Mangamma*  
6/3/19

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Head of the Department

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

DEPARTMENT OF MATHEMATICS  
VISAKHA GOVT. DEGREE COLLEGE (W)  
VISAKHAPATNAM

BONAFIDE CERTIFICATE

Certified that this project work "RING THEORY" is the bonafide work of "NAGALLA SURYA CHAKRA KUMARI" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in the institute and university.

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and status of the university.

*N. S. Chakra Kumari*  
2/3/19

*P. Mangamma*  
Signature 2/3/19

(P. Mangamma)

Head of the Department

Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road  
VISAKHAPATNAM-20

**DEPARTMENT OF MATHEMATICS**  
**VISAKHA GOVT. DEGREE COLLEGE (W)**  
**VISAKHAPATNAM**  
**BONAFIDE CERTIFICATE**

Certified that this project work "MEDICINE AND CANCER TREATMENT USING MATHEMATICS" is the bonafide work of "A.V.S.S. PRIYANKA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

*P. Mangamma*  
SIGNATURE 24/5/18

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

*P. Mangamma*  
SIGNATURE 24/5/18

(P. Mangamma)

HEAD OF THE DEPARTMENT

Lecturer in Mathematics

**Lecturer in Mathematics**  
**Visakha Govt. Degree College**  
**for Women**  
**Jail Road**  
**VISAKHAPATNAM-20**

**DEPARTMENT OF MATHEMATICS**

**VISAKHA GOVT. DEGREE COLLEGE (W)**

**VISAKHAPATNAM**

**BONAFIDE CERTIFICATE**

Certified that this project work "APPLICATIONS OF DIFFERENTIAL EQUATIONS IN PHYSICS AND CHEMISTRY" is the bonafide work of "THEMBURI HEMA PRIYA" who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and university.

*P. Mangamma*  
SIGNATURE

(P. Mangamma)

Lecturer in Mathematics

Certified that the above mentioned project has been duly carried out as per the norms and statutes of the university.

*P. Mangamma*  
SIGNATURE

(P. Mangamma)

HEAD OF THE DEPARTMENT  
Lecturer in Mathematics

Lecturer in Mathematics  
Visakha Govt. Degree College  
for Women  
Jail Road

VISAKHAPATNAM-20