GOVERNMENT DEGREE & P.G. COLLEGE, SIDIPET.Dt. SIDDIPET. T.S.

Dr.K.Hussain   (**Autonomous**)Re-Acc. with **NAAC "A"** Grade.
Assistant .Professor
Controller of Examinations   Mobile. 9885077541,9059876463
SIDDIPET. 502103.   Email . coegdcsiddipet@gmail.com
Land No. 08457-222323.

Rc.N/264/26/COE/2021   **CONFIDENTIAL**   Date: 08/03/2021

 To, Ch Janaiah

  Asst Prof of Mathematics.GDC Malkajgiri,HYD

Dear Sir/madam,

　　　　I am directed to invite you to act Paper Setter for the Semester Examinations of March-**2021** and you are requested kindly to accept this invitation. Your appointment as Paper Setter should be kept **strictly confidential**

Subject   Mathematics   **Paper**   V & VI   **Semester**   V - Sem

Paper Code   **Medium**   English/Telugu

　　　　You are requested to **ONE SET** Only of the question paper on the above-mentioned subject (Preferably Typed/ Neatly hand written and figures if any to be neatly drawn with the help of Black Pen) and deliver them either by Registered Post/ Courier. You are requested to set **English and Telugu Versions**.

　　　　Kindly note that two inner envelops and one outer envelope are enclosed. You are requested to seal the question paper(s) first in the inner envelop sets separately (i.e., **Set-I English/Telugu Version in One Envelop**) and (**Set-II English/Telugu Version in One Envelop**) and put the inner envelop(s) in the outer envelope along with the remuneration bills/advance receipts which should again be sealed.

The remuneration for the work is detailed below:
1. Paper Setting   : Rs. 500/- per question paper
2. Translation:
       a) All subjects   : Rs. 175/-
       b) Paper related to Accounting in Commerce   : Rs. 200/- per question paper
3. Courier/ Postal Charges   : Rs. 40/-

The following papers are enclosed:
a) Forms for setting papers.
b) The Syllabus prescribed for the papers
c) A Model question paper
d) Remuneration Bill with Advance receipt for paper setting

The question papers must reach on or before: -10/03/2021.   **Yours faithfully**

Note: **Controller Of Examinations**

1. Please clearly mention the **Semester, Paper Code No, Max. marks and Marks** for each question
2. If any relative of the examiner is appearing in the Paper to be set by him/her, he/she is requested to communicate the fact to the Controller of Examinations.
3. **Paper should reach us on or before the above said date otherwise, remuneration will not be paid under any circumstances**.
4. Illegible handwriting will be summarily rejected.
5. Syllabus prescribed, pattern of model Paper should be followed for preparing question paper and should not be deviated. Otherwise, remuneration will not paid.
6. kindly return and send the Model Paper, Syllabus copies along with the prepared question paper in one cover and Remuneration bill / Receipt in Outer cover, finally enclose these two covers in one big cover and seal while signing it before sending to us.

Code No._____

Examination Branch
Nagarjuna Government College (Autonomous)
Nalgonda – 508001.
Telangana.

Rc.No. _____ /C2/C/Exams/2020   Date: 19-12-2020

From:
B.NAGARAJU,
        C O E
Phone: 08682-222453:
Cell: **9989897566**

To,
Ch. Janaiah
Asst. Prof. of Maths
chjohn1505@gmail.com.
maths -V paper -VI (A)

Dear Sir/Madam,

I am directed to invite you to act as Paper Setter in _Analytical Solid Geometry_ for the _____ examination of **Feb-2021** and you are requested to accept this invitation and same may be intimated to me. Your appointment as Paper Setter should be kept **STRICTLY CONFIDENTIAL.**

You are requested to set **TWO SETS** of question papers(**English version 2 sets and Telugu version 2 sets**) on the above mentioned subject (preferably typed and figures if any have to be neatly drawn with the help of black pen) and deliver them either in person or by registered and insured post to the Controller of Examinations, Nagarjuna Government College (Autonomous), Nalgonda, Telangana.

Kindly note that two inner envelops and one outer envelop are enclosed, you are requested to seal the question papers first in the inner envelops and put the inner envelops in the outer envelop which should again be sealed.
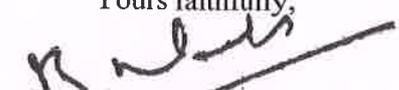
REMUNERATION

1.   Paper Setting   : Rs.500/- per question paper
2.   Translation in to Telugu Version   : Rs.225/- per question paper
3.   Courier/Postal Charges   : Rs.40/-

Enclosures:
(1) Paper Setting Forms
(2) Syllabus prescribed
(3) Model question paper
(4) Remuneration bill

You are requested to send the question papers so as to reach this office **on or before** _____ .

Yours faithfully,

(Controller of Examinations)

Note:
1.   If any relative of the examiner is appearing in the paper to be set by him/her, is requested to communicate the fact to the **Controller of Examinations** so that alternative arrangements may be made.
2.   Please clearly mention the semester, paper code No., Max.Marks for each question paper.
3.   **Syllabus prescribed, pattern of model paper should be followed for preparing question paper and should not be deviated.** Otherwise remuneration will not be paid.
4.   Illegible handwriting will be summarily rejected.

E-Mail: coengcconfidential2007@gmail.com

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA
(Autonomous, Accredited by NAAC with "A" Grade)
SYLLABUS FOR MATHEMATICS (NEW CBCS)
B.Sc. III Year –IV Semester –MODULE VI (A) (Elective) (w.e.f. 2018-19)

ANALYTICAL SOLID GEOMETRY

Objective: Students learn to describe some of the surfaces by using analytical geometry.

Outcome: Students understand the beautiful interplay between algebra and geometry.

Unit I

Sphere: Definition-The Sphere Through Four Given Points-Equations of a CircleIntersection of a Sphere and a Line-Equation of a Tangent Plane-Angle of Intersection of Two Spheres-Radical Plane

Unit II

Cones and Cylinders: Definition-Condition that the General Equation of second degree Represents a Cone-Cone and a Plane through its Vertex –Intersection of a Line with a Cone- The Right Circular Cone-The Cylinder- The Right Circular Cylinder

Unit III

The Conicoid: The General Equation of the Second Degree-Intersection of Line with a Conicoid-Plane of contact-Enveloping Cone and Cylinder

Text : Shanti Narayan and P K Mittal , Analytical Solid Geometry (17e)

References: Khaleel Ahmed , Analytical Solid Geometry

S L Loney, Solid Geometry Smith and Minton, Calculus

Examination Branch
Nagarjuna Government College (Autonomous)
Nalgonda – 508001.
Telangana.

Rc.No. _____/C2/C/Exams/2021 Date: 16-08-2021

From:
B.NAGARAJU,
           C O E
Phone: 08682-222453:
Cell: **9989897566**

To,
Ch. Janaiah
Asst. Prof. of Mathmatics
ADC, Malkajgiri.

Dear Sir/Madam,

I am directed to invite you to act as Paper Setter in _Maths_ for the _IV-Semester_ examination of **Aug/Sep-2021** and you are requested to accept this invitation and same may be intimated to me. Your appointment as Paper Setter should be kept **STRICTLY CONFIDENTIAL.**

You are requested to set **ONE SET** of question papers(**English version 1 set and Telugu version 1 set**) on the above mentioned subject (preferably typed and figures if any have to be neatly drawn with the help of black pen) and deliver them either in person or by registered and insured post to the Controller of Examinations, Nagarjuna Government College (Autonomous), Nalgonda, Telangana.

Soft copy of Q.P (Word format) should send through mail: coengcconfidential2007@gmail.com
Original copy of Remuneration Bill must send through Post or hand over to COE NG College, NLG.
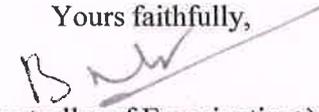
REMUNERATION

1.   Paper Setting   : Rs.500/- per question paper
2.   Translation in to Telugu Version   : Rs.225/- per question paper
3.   Courier/Postal Charges   : Rs.40/-

Enclosures:
(1) Paper Setting Forms
(2) Syllabus prescribed
(3) Model question paper
(4) Remuneration bill

You are requested to send the question papers so as to reach this office **on or before** _28/8/21._

Yours faithfully,

(Controller of Examinations)
Controller of Examinations
Nagarjuna Govt. College (Autonomous)
NALGONDA – 508 001

Note:
1.   If any relative of the examiner is appearing in the paper to be set by him/her, is requested to communicate the fact to the **Controller of Examinations** so that alternative arrangements may be made.
2.   Please clearly mention the semester, paper code No., Max.Marks for each question paper.
3.   **Syllabus prescribed, pattern of model paper should be followed for preparing question paper and should not be deviated.** Otherwise remuneration will not be paid.
4.   Illegible handwriting will be summarily rejected.

E-Mail: coengcconfidential2007@gmail.com

Code No._____

Examination Branch
Nagarjuna Government College (Autonomous)
Nalgonda – 508001.
Telangana.

Rc.No._____ /C2/C/Exams/2021   Date: 16-08-2021

From:
B.NAGARAJU,
      C O E
Phone: 08682-222453:
Cell: **9989897566**

To,
Ch. Jamaiah
Asst. Professor of Mathematics
GDC, Malkajgiri.

Dear Sir/Madam,

      I am directed to invite you to act as Paper Setter in _Maths_ for the _II Semester_ examination of **Aug/Sep-2021** and you are requested to accept this invitation and same may be intimated to me. Your appointment as Paper Setter should be kept **STRICTLY CONFIDENTIAL.**

      You are requested to set **ONE SET** of question papers(**English version 1 set and Telugu version 1 set**) on the above mentioned subject (preferably typed and figures if any have to be neatly drawn with the help of black pen) and deliver them either in person or by registered and insured post to the Controller of Examinations, Nagarjuna Government College (Autonomous), Nalgonda, Telangana.

**Soft copy of Q.P (Word format) should send through mail:** coengcconfidential2007@gmail.com
Original copy of Remuneration Bill must send through Post or hand over to COE NG College, NLG.

REMUNERATION

1.	Paper Setting	: Rs.500/- per question paper
2.	Translation in to Telugu Version	: Rs.225/- per question paper
3.	Courier/Postal Charges	: Rs.40/-

Enclosures:
(1) Paper Setting Forms
(2) Syllabus prescribed
(3) Model question paper
(4) Remuneration bill

      You are requested to send the question papers so as to reach this office **on or before** _28|8|21_ .

Yours faithfully,

(Controller of Examinations)
Controller of Examinations
Nagarjuna Govt. College (Autonomous)
NALGONDA – 508 001

Note:
1.   If any relative of the examiner is appearing in the paper to be set by him/her, requested to communicate the fact to the **Controller of Examinations** so that alternative arrangements may be made.
2.   Please clearly mention the semester, paper code No., Max.Marks for each question paper.
3.   **Syllabus prescribed, pattern of model paper should be followed for preparing question paper and should not be deviated.** Otherwise remuneration will not be paid.
4.   Illegible handwriting will be summarily rejected.

E-Mail: coengcconfidential2007@gmail.com

Code No. **2215/A20/NC/B.L**

Examination Branch
Nagarjuna Government College (Autonomous)
Nalgonda – 508001.
Telangana.

Rc.No. _____ /C2/C/Exams/2019   Date: 27-09-2019

From:
P.RAVI KUMAR,
     C O E
Phone: 08682-222453:
Cell: **9440208972**

To,
_____
_____

Dear Sir/Madam,

     I am directed to invite you to act as Paper Setter in **Maths-II (NCBCS)** for the _____ examination of ~~October/November 2019~~ and you are requested to accept this invitation and same may be intimated to me. Your appointment as Paper Setter should be kept **STRICTLY CONFIDENTIAL.** April -2020

     You are requested to set **TWO SETS** of question papers(**English version 2 sets and Telugu version 2 sets**) on the above mentioned subject (preferably typed and figures if any have to be neatly drawn with the help of black pen) and deliver them either in person or by registered and insured post to the Controller of Examinations, Nagarjuna Government College (Autonomous), Nalgonda, Telangana.

     Kindly note that two inner envelops and one outer envelop are enclosed, you are requested to seal the question papers first in the inner envelops and put the inner envelops in the outer envelop which should again be sealed.
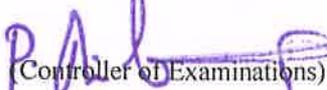
<div align="center">REMUNERATION</div>

1.	Paper Setting	: Rs.450/- per question paper
2.	Translation in to Telugu Version	: Rs.250/- per question paper
3.	Courier/Postal Charges	: Rs.40/-

Enclosures:
(1) Paper Setting Forms
(2) Syllabus prescribed
(3) Model question paper
(4) Remuneration bill

     You are requested to send the question papers so as to reach this office **on or before 21/3/2020.**

Yours faithfully,

(Controller of Examinations)

Note:
1. If any relative of the examiner is appearing in the paper to be set by him/her, is requested to communicate the fact to the **Controller of Examinations** so that alternative arrangements may be made.
2. Please clearly mention the semester, paper code No., Max.Marks for each question paper.
3. **Syllabus prescribed, pattern of model paper should be followed for preparing question paper and should not be deviated.** Otherwise remuneration will not be paid.
4. Illegible handwriting will be summarily rejected.

E-Mail: coengcollege1956@gmail.com

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA

(Autonomous, Accredited by NAAC with "A" Grade)
SYLLABUS FOR MATHEMATICS (NEW CBCS)
B.Sc. I Year - II Semester –MODULE II (w.e.f. 2017-18)

DIFFERENTIAL EQUATIONS

Objective: The main aim of this course is to introduce the students to the techniques of solving differential equations and to train to apply their skills in solving some of the problems of engineering and science.

Outcome: After learning the course the students will be equipped with the various tools to solve few types differential equations that arise in several branches of science

UNIT – I

Differential Equations of first order and first degree:
Exact differential equations – Integrating Factors – Change in variables – Total Differential Equations – Simultaneous Total Differential Equations – Equations of the form $dx/P=dy/Q=dz/R$.
Differential equations first order but not of first degree: Equations Solvable for y- Equations Solvable for x – Equations that do not contain x (or y) – Clairaut's equation.

UNIT - II

Higher order linear differential equations: Solution of homogeneous linear differential equations with constant coefficients-Solution of non- homogeneous differential equations $P(D)y=Q(x)$ with constant coefficients by means of polynomial operators when $Q(x) = bx^k$, be^{ax}, $e^{ax}V$, $b \cos(ax)$, $b \sin(ax)$

UNIT - III

Method of undetermined coefficients – Method of variation of parameters – Linear differential equations with non constant coefficients – The Cauchy – Euler Equation.

UNIT - IV

Partial Differential equations – Formation and solution – Equations easily integrable – Linear equations of first order – Non linear equations of first order Chairpit's method – Non homogeneous linear partial differential equations – Separation of variables.

Textg: Zafar Ahsan, Differential Equations and Their Applications
References: Frank Ayres Jr, Theory and Problems of Differential Equations
Ford, L.R, Differential Equations
Daniel Muray, Differential Equations
S.Balachandra Rao, Differential Equations with Applications and Programs
Stuart P Hastings, J Bryce McLead; Classical Methods in Ordinary Differential Equations.

Faculty of Science
B.Sc I/II/III/IV Semester Examination
MATHEMATICS MODEL PAPER (CBCS)

Time: 2 ½ Hrs   Max.Marks: 70

SECTION – A   (5 X 2 = 10)

Answer the following questions :(At least one question from each section)
1.
2.
3.
4.
5.

SECTION – B   (4 X 5 =20)

Answer any **FOUR** of the following questions :(At least one question from each section)
6.
7.
8.
9.
10.
11.

SECTION – C   (4 X 10 = 40)

Answer the following questions

12   (a)   Unit – I

                                (OR)

        (b)   Unit – I

13   (a)   Unit – II.

                                (OR)

        (b)   Unit – II

14   (a)   Unit – III

                                (OR)

        (b)   Unit – III

15   (a)   Unit – IV

                                (OR)

        (b)   Unit – IV

PAPER-SETTING BILL –OCT/NOV 2019
NAGARJUNA GOVERNMENT COLLEGE: NALGONDA
(Autonomous, Re-Accredited by NAAC with "A" Grade)
Affiliated to Mahatma Gandhi University

CODE NO._____

Name of the Examiner with   : _____

Designation and address   _____

with Phone Numbers   _____

_____

Bank A/c.No._____**Bank**_____**Branch**_____

IFSC Code_____

Name of the Examination   B.A./B.Com./B.Sc._____Semester_____

Subject	Paper	Paper Setting			Translation			Total Col. (5+8)	Remarks
		No.of Sets	Rate	Amount	No.of Sets	Rate	Amount		
1	2	3	4	5	6	7	8	9	10

Received Rs._____

(in words _____)

Certified that Sri._____

_____may be paid Rs._____

Controller of Examinations

Pay

Signature of the Examiner

Principal

Code No. 82 4415/A20/NC

Examination Branch
Nagarjuna Government College (Autonomous)
Nalgonda – 508001.
Telangana.

Rc.No. /C2/C/Exams/2019 Date: 27-09-2019

From:
P.RAVI KUMAR,
C O E
Phone: 08682-222453:
Cell: **9440208972**

To,
_____
_____

Dear Sir/Madam,

I am directed to invite you to act as Paper Setter in _Maths–IV (NCBCS)_ for the
_____ examination of ~~October/November 2019~~ and you are requested to accept this
invitation and same may be intimated to me. Your appointment as Paper Setter should be kept **STRICTLY
CONFIDENTIAL.** —April—2020

You are requested to set **TWO SETS** of question papers(**English version 2 sets and Telugu
version 2 sets**) on the above mentioned subject (preferably typed and figures if any have to be neatly drawn
with the help of black pen) and deliver them either in person or by registered and insured post to the Controller
of Examinations, Nagarjuna Government College (Autonomous), Nalgonda, Telangana.

Kindly note that two inner envelops and one outer envelop are enclosed, you are requested to seal the
question papers first in the inner envelops and put the inner envelops in the outer envelop which should again be
sealed.

<div align="center">REMUNERATION</div>

1.	Paper Setting	: Rs.450/- per question paper
2.	Translation in to Telugu Version	: Rs.250/- per question paper
3.	Courier/Postal Charges	: Rs.40/-

Enclosures:
(1) Paper Setting Forms
(2) Syllabus prescribed
(3) Model question paper
(4) Remuneration bill

You are requested to send the question papers so as to reach this office **on or before** 21/3/2020

Yours faithfully,

(Controller of Examinations)

Note:
1. If any relative of the examiner is appearing in the paper to be set by him/her, is requested to communicate the fact
   to the **Controller of Examinations** so that alternative arrangements may be made.
2. Please clearly mention the semester, paper code No., Max.Marks for each question paper.
3. **Syllabus prescribed, pattern of model paper should be followed for preparing question paper and should
   not be deviated.** Otherwise remuneration will not be paid.
4. Illegible handwriting will be summarily rejected.

E-Mail: coengcollege1956@gmail.com

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA

Algebra

Objective: The course is aimed at exposing the students to learn some basic algebraic structures like groups, rings etc.

Outcome: On successful completion of the course students will be able to recognize algebraic structures that arise in matrix algebra, linear algebra and will be able to apply the skills learnt in understanding various such subjects.

UNIT – I

Groups: - Definition and Examples of Groups – Elementary Properties of Groups-Finite Groups Subgroups – Terminology and Notation – Subgroups Tests – Examples of Subgroups Cyclic Groups Properties of Cycli Groups – Classification of Subgroups Cyclic Groups – Permutation Groups: Definition and Notation – Cycle Notation – Properties of Permutations – A Cheek Digit Scheme Based on D_5.

UNIT - II

Isomorphisms: Motivation – Definition and Examples – Cayley's Theorem properties of Isomorphisms – Automorphisms – Cosets and Lagrange's Theorem Properties of Cosets 138 – Lagrange's Theorem and Consequences – An Application of Cosets to Permutation Groups – The Rotation Group of a Cube and a Soccer Ball – Normal Subgroups and Factor Groups ; Normal subgroups – factor groups applications of factor Groups – Groups Homeomorphisms-Definition and Examples – Properties of Homomorphism's – The First Isomorphism Theorem.

UNIT - III

Introduction to rings: motivation and Difinition – Examples of Rings – Properties of Rings – Subrings – Integral Domains; Definition and Examples – Characteristics of a Ring – Ideals and Factor Rings: ideals-Factor Rings – Prime Ideals and Maximal Ideals.

UNIT – IV

Ring Homomorphism's: Definition and Examples – Properties of Ring-Homomorphism's-The Field of Quotients Polynomial Rings: Notation and Terminology.

Text: Joseph A Gallian, Contemporary Abstract algebra (9th edition)

Faculty of Science
B.Sc I/II/III/IV Semester Examination
MATHEMATICS MODEL PAPER (CBCS)

<u>Time: 2 ½ Hrs</u>   Max.Marks: 70

SECTION – A   (5 X 2 = 10)

Answer the following questions :(At least one question from each section)
1.
2.
3.
4.
5.

SECTION – B   (4 X 5 =20)

Answer any **FOUR** of the following questions :(At least one question from each section)
6.
7.
8.
9.
10.
11.

SECTION – C   (4 X 10 = 40)

Answer the following questions

12   (a)   Unit – I

                        (OR)

      (b)   Unit – I

13   (a)   Unit – II

                        (OR)

      (b)   Unit – II

14   (a)   Unit – III

                        (OR)

      (b)   Unit – III

15   (a)   Unit – IV

                        (OR)

      (b)   Unit – IV

PAPER-SETTING BILL –OCT/NOV 2019
NAGARJUNA GOVERNMENT COLLEGE: NALGONDA
(Autonomous, Re-Accredited by NAAC with "A" Grade)
Affiliated to Mahatma Gandhi University

CODE NO._____

Name of the Examiner with   : _____

Designation and address   _____

with Phone Numbers   _____

                                   _____

Bank A/c.No._____**Bank**_____**Branch**_____

IFSC Code_____

Name of the Examination   B.A./B.Com./B.Sc._____Semester_____

Subject	Paper	Paper Setting			Translation			Total Col. (5+8)	Remarks
		No.of Sets	Rate	Amount	No.of Sets	Rate	Amount		
1	2	3	4	5	6	7	8	9	10

Received Rs._____

(in words _____)

Certified that Sri._____

_____may be paid Rs._____

Controller of Examinations

Pay

Signature of the Examiner

Principal