GOVERNMENT DEGREE COLLEGE-NAIDUPET

SPSR NELLORE DIST, ANDHRA PRADESH-524126

Certificate Course

QUANTITATIVE TECHNIQUES FOR COMPETITIVE EXAMS

Department of Mathematics

2020-21

Date: 01/12/2020

From

The Department of Mathematics

Government Degree College

Naidupet

To

The Principal

Government Degree College

Naidupet

Sir

      Sub: Department of Mathematics – permission seeking to conduct an add on course on "Quantitative Techniques for Competitive Exams" –Regarding.

      I would like to submit that the Department of Mathematics has planned o organize an add on certificate course for III year students from the academic year 2020-21 onwards.

      At this juncture we request your honour to permit the department to organize the above requested Add on certificate course instantly

      This is for your favourable consent

      Thanking you sir

Yours sincerely

Smt S. Kiranmaiye

Department of Mathematics

Circular

Date: 01/12/2020

All the III year students are here by instructed that, the Department of Mathematics is going to start an "Certificate Course" for III year students in "Quantitative Techniques for Competitive Exams" from this academic year onwards.

So, interested students are directed to contact Smt S. Kiranmaiye, Lecturer in Mathematics and register for the course.

Principal

PRINCIPAL
Govt. Degree College
NAIDUPET, SPSR Nellore Dt

III BSC ---

III BA ---

III BCom ---

ADD-ON PROGRAMME
Quantitative techniques for competitive exams.

Syllabus

Unit-1

Averages numbers, problems on ages, missing numbers.

Unit-2

percentages, profit and loss, time and distance, odd man out.

Unit-3

Ratio and proportion, time and work, Simple and compound interest.

Unit-4

Statistics - Mean, median and mode, relation between mean, median and mode.

Course Outcomes:

After successful completion of this course, students will have the knowledge and skills to

1. Apply quantitative reasoning and mathematical analysis methodologies to understand and solve problems.
2. Comprehend, work with, and apply general mathematical techniques and models to different real-life situations, not just plug problem-specific data into a given formula.
3. Solve the problems easily by using shortcut methods with time management which will be helpful to them to clear the competitive exams for better job opportunities.
4. Analyse the Problems logically and approach the problems in a different manner

Add-on program for the year 2020-2021

Program Code : ADD-MAT-01

List of the candidates enrolled for the program

SI.NO	Name of the candidate	class & group	Remarks
1.	M.Divya	III MBC	
2.	P. Leelasai krishna	III MBC	
3.	T. Subramanyam	III MBC	
4.	Ch. pavitra	III MBC	
5.	G. Jhansi Lakshmi	III MBC	
6.	A. vandana	III B.com	
7.	B. pavan Kumar	III B.com	
8.	G. vasundara	III B.com	

9.	M. Munikumar	III B.com
10.	M. Yesuraju	III B.com
11.	S. Srinivasa Teja	III B.com
12.	T. Mahesh	III B.com
13.	T. Syam son	III B.com
14.	Y. Vandana	III B.com
15.	P. Sai	III B.com
16.	N. Sindhu	III B.com
17.	M. Poojitha	III B.com
18.	A. Muthyalaiah	III B.A
19.	B. Prem Kumar	III B.A
20.	G. Vamsi	III B.A
21.	N. Arya Kiran	III B.A
22.	P. Ashok	III B.A

Sl.No	Name of the candidate	Class & group	Remarks
23.	V. Viswanadham	III B.A	
24.	P. Pavankumar	III BA	
25.	M. Sireesha	III MPC	
26.	N. Ramulamma	III MPC	
27.	Sk. Basheer	III MPC	
28.	P. Sireesha	III MPC	
29.	Ch. Muni Lakshmi	III MPC	
30.	Ch. Hemanth Kumar	III MPC	
31.	G. Lalitha	III MPC	
32.	T. Sudheer	III MPC	
33.	T. Amrutha	III MPC	
34.	T. Balaji	III MPC	
35.	V. Lahari	III MPC	

Program title objective mathematics for competitive exams.

Duration : 36 hours

MODEL QUESTION PAPER

PART-A

Answer all the following multiple choice questions
Each question carries one mark.

(20×1=20)

1. Find the average of first 15 natural numbers?
   (a) 10   (b) 8   (c) 15   (d) 20

2.

3.

4.

- - -
- - -
- - -

20.

PART-B

Answer any six questions from the following ten
questions.
Each question carries five marks   (6×5=30)

1.

2.

3.

4.

- - -
- - -
- - -

10.

Question paper   Test - I

Answer any five from the following
Each question carries 5marks.
(5×5=25)

1. At what time between 1 o'clock and 2 o'clock will the hands of a clock be together?

2. If 5th January 1991 was Saturday, what day of the week was it on 4th March 1992?

3. 10g is what percent of 1kg?

4. If 6 men or 8 women can reap a field in 86 days, how along will 14 men and 10 women take to reap it!

5. A and B together on do a piece of work in 12days and A alone can do it in 18 days. In how many days can B alone do it?

6. Find the Compound interest on ₹8000 at 4% per annum for 2 yr, compound annually.

7. what is the class mark of the interval 12.5-17.5?

8. Find the median of the observations 5,15,25,35,65,75?

Answer any five from the following
Each question carries 5 Marks

$$(5 \times 5 = 25)$$

1. The minute hand of a clock overtakes the hour hand at intervals of 63 min of the correct time. How much does a clock gain or loss in a day?

2. Mahatma Gandhi was born on 20 October 1869, what was the day of the week?

3. A vendor sells apples at for ₹1, gaining 40%. How many apples did he buy for ₹1?

4. A bike crosses a bridge with a speed of 108 km/h. What will be the length of the bridge, if the bike takes 8hr to crosses the bridge?

5. A sum at simple interest of 4% per annum amounts to ₹3120 in 5yr. Find the sum.

6. Find the compound interest on ₹2000 at 15% per annum for 2yr 4 months, Compounded annually.

7. For a given data mean is 40 and mode is 25, then find the median.

8. Find the mean of 68,78,74,89 and 75.

PART-A

Answer all the following multiple choice questions.
Each question carries one mark.   (20x1 = 20)

1. what will be the angle between the hands of a clock when the time is at 4:40 pm ?

   (a)120°   (b)100°   (c)110°   (d)130°

2. By which of the following a leap year must be divisible ?

   (a)9   (b)6   (c)5   (d)4

3. what was the day of the week on 17th August, 2010 ?

   (a)Sunday   (b) wednesday   (c) Tuesday   (d) Friday

4. The ratio of Smita's age to her mother is 3:7 respectively and the difference in their ages is 32 yr. what will be the ratio of their ages 4yr hence?

   (a) 4:19   (b) 5:14   (c) 3:20   (d) 7:15

5. Before 7 yr, the ratio of ages of A and B was 3:4, After 9 yr, ratio of their ages will be 7:8. The present age of B will be

   (a) 16 yr   (b) 19 yr   (c) 28 yr   (d) 23 yr

6. 25% of what amount of money is equal to 12.1/2% of ₹180?

   (a) ₹120   (b) ₹75   (c) ₹80   (d) ₹90

7. 27 is 5.6% of ?

   (a) 750   (b) 75   (c) 1500   (d) 1875

8. A salesman expects a gain of 13% on his Cost Price. &f in a month his sale was ₹791000, then what was his profit!

   (a) ₹91000   (b) ₹97786   (c) ₹85659   (d) ₹88300

9. If speed of $31/3$ m/s is converted to km/h, then it would be

(a) 8 km/h   (b) 9 km/h   (c) 10 km/h   (d) 12 km/h

10. The speed of a bus is 72 km/h. The distance covered by the time in 5s is

(a) 50 m   (b) 44·5 m   (c) 100 m   (d) 60 m

11. Find the sub-duplicate ratio of $81:64$.

(a) $8:9$ (b) $4:9$ (c) $9:8$ (d) $7:8$

12. Find the mean proportional between 9 and 64.

(a) 25   (b) 24   (c) 27   (d) 35

13. 15 men complete a work in 16 days. If 24 men are employed, then the time required to complete that work will be

(a) 7 days   (b) 8 days   (c) 10 days   (d) 12 days

14. 12 men can do a piece of work in 84 days. How many days are needed to complete the work, if 8 men do this work!

(a) 28   (b) 36   (c) 48   (d) 52

15. How long will a sum of money invested at 5% per annum $₹8$ take to increase its value by 50%?

16. At what percent annual compound interest rate a certain sum amounts to its 27 times in 3yr?

17. Find the median of the observation $6, 42, 14, 16, 16, 48, 26, 32, 28$.

(a) 26   (b) 28   (c) 30   (d) 32

18. For a given data mean is 40 and mode is 25, then find median

(a) 35   (b) 30   (c) 25   (d) 20

19. In the following distribution, mean is

x	3	4	5	6	7	8	9	10
f	2	4	2	3	5	4	3	7

(a) 10   (b) 7   (c) 7·1   (d) 6·5

20. Find the mode of the given data $5, 7, 9, 3, 7, 3, 7, 5, 7$

(a) 1   (b) 3   (c) 7   (d) 9

PART-B

Answer any six questions from the following ten questions

Each question carries five marks.

(6 × 5 = 30)

1. What will be angle between the two hands of a clock at 9:50?

2. At what time between 7 o'clock and 8 o'clock in the morning will the both hands of a clock be at right angle?

3. How many days are there in x weeks z days?

4. Find out the average of 308, 125, 45, 180 and 102.

5. If 30% of a = 60, the find the value of a.

6. A person buys a toy for ₹50 and sells it for ₹75. What will be his gain percent?

7. Find the greater ratio between 2:3 and 4:5.

8. A and B together can do a piece of work in 12 days and A alone can do it in 18 days. In how many days can B alone do it?

9. Find the mean of 68, 78, 74, 89 and 75.

10. For a given data mean is 40 and mode is 25, then find the median.

Attendance Register

Name of the certificate course: Quantitative Techniques for Competitive Exams
Academic Year: 2020-21
Students of which class: III B.SC (MPC), III BSC (MBC), III B.A, III BCom
Duration: 30 hours
Resource Person: Smt S. Kiranmaiye

SN	Name of the Student	7	8	9	10	11	14	15	16	21	22	23	28	29	30	31	4	5	6	7	8	20	21	22	23	27	28	1	2	3	4	Student Signature
		Dec- 2020															Jan-2021											Feb-2022				
1	M DIVYA	P	A	A	A	A	A	A	A	A	A	A	A	P	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	M. Divya
2	P LEELASAIKRISHNA	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	
3	T SUBRAMANYAM	P	P	A	P	P	A	P	A	A	P	A	P	P	P	A	P	A	P	A	P	P	P	A	P	A	P	A	P	P	P	T. Subramanyam
4	CH PAVITHRA	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	Ch. Pavithra
5	G JHANSI LAKSHMI	P	A	P	P	P	P	A	P	P	P	P	A	P	P	P	A	P	P	P	A	P	P	P	A	P	P	P	A	P	P	G. Jhansi Lakshmi
6	A VANDANA	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	A	A	P	P	P	P	P	P	P	P	A. Vandana
7	B PAVAN KAUMAR	A	A	A	A	A	A	A	A	A	A	A	A	P	P	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B Pavan Kumar
8	G VASUNDARA	A	P	P	A	A	P	P	P	P	A	P	P	A	A	P	P	P	A	P	P	A	A	P	P	P	A	P	P	A	A	Vasundara
9	M MUNIKUMAR	A	A	P	A	A	A	A	A	A	A	P	A	A	A	A	A	A	A	P	A	A	A	A	A	A	A	A	A	P	P	M. Munikumar
10	M YESURAJU	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	Yesuraju
11	S SRINIVASATEJA	P	A	A	P	P	P	P	P	P	P	P	P	P	A	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Srinivase
12	T MAHESH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	Mahesh
13	T SYAMSON	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	P	P	P	P	P	P	P	A	A	A	A	A	A	A	Syamson
14	Y VANDANA	P	A	P	A	P	P	A	P	P	P	P	A	A	P	P	A	P	P	P	A	A	P	P	A	P	P	P	A	A	A	Y Vandana
15	P SAI	P	P	A	P	P	A	P	A	A	P	A	P	P	P	A	P	A	P	A	P	P	P	A	P	A	P	A	P	P	P	P Sai

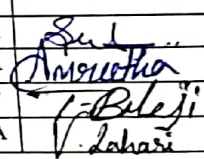| SN	Name of the Student	Nov- 2021															Dec-2021											Jan-2022				Student Signature
		5	6	8	9	10	12	15	16	18	20	22	24	26	27	29	2	3	4	6	7	13	14	15	29	30	31	1	2	3	4	
16	N SINDHU	P	A	A	A	A	A	A	A	A	A	A	A	P	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Sindhu
17	M POOJITHA	P	P	P	A	P	P	P	P	P	P	P	A	P	P	A	P	P	P	P	P	P	A	P	P	P	P	P	A	A		M. Poojitha
18	A MUTHYALAIAH	P	P	A	P	P	A	P	A	A	P	A	P	P	A	P	A	P	A	P	P	P	A	P	A	P	A	P	A	P	P	A. Muthyalaiah
19	B PREM KUMAR	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	B. prem kumar
20	G VAMSI	P	A	P	P	P	P	A	P	P	P	P	A	P	P	P	A	P	A	P	P	A	P	P	P	A	P	P	P	A	P	Vamsi
21	N SURYA KIRAN	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	A	P	P	A	A	P	P	P	P	P	P	P	P	P	N. Suryakiran
22	P ASHOK	A	A	A	A	A	A	A	A	A	A	A	A	P	P	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P. Ashok
23	V VISWANADHAM	A	P	P	A	A	P	P	P	P	A	P	P	A	A	P	P	A	P	P	A	A	P	P	P	A	P	P	P	A	A	V. Viswanadham
24	P PAVAN KUMAR	A	A	A	P	A	A	A	A	A	A	A	P	A	A	A	A	A	A	A	A	P	A	A	A	A	A	A	A	P	P	P Pavankumar
25	M SIREESHA	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	A	A	M. Sireesha
26	N RAMULAMMA	P	A	A	P	P	P	P	P	P	P	P	P	P	A	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N. Ramulamma
27	SK BHASHEER	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	SK. Basheer
28	P SIREESHA	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P. Sireesha
29	CH MUNI LAKSHMI	P	A	P	A	P	P	A	P	P	P	P	A	A	P	A	P	A	P	P	P	A	A	P	P	A	P	P	P	A	A	CH. Munilakshmi
30	CH HEMANTH KUMAR	P	P	A	P	P	A	P	A	A	P	P	P	A	P	A	P	A	P	P	P	P	A	P	A	P	A	P	A	P	P	Hemanth kumar
31	G LALITHA	P	P	A	P	P	A	P	A	A	P	A	P	P	A	P	A	P	A	P	P	P	A	P	A	P	A	P	A	P	P	G. Lalitha

SK

Organizing secretary
LECTURER IN MATHEMATICS
Govt. Degree College
Naidupet, SPS Nellore(Dist)

Principal
PRINCIPAL
Govt. Degree College
NAIDUPET, SPSR Nellore Dist

SN	Name of the Student	\multicolumn{15}{c}{Nov- 2021}														\multicolumn{11}{c}{Dec-2021}											\multicolumn{4}{c}{Jan-2022}				Student Signature
		5	6	8	9	10	12	15	16	18	20	22	24	26	27	29	2	3	4	6	7	13	14	15	29	30	31	1	2	3	4	
32	T SUDHEER	P	A	A	A	A	A	A	A	A	A	A	A	P	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
33	T AMRUTHA	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	Amrutha
34	T BALAJI	P	P	A	P	P	A	P	A	A	P	A	P	P	P	A	P	A	P	A	P	P	P	P	A	P	A	P	A	P	P	P	T-Balaji
35	V LAHARI	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	A	V Lahari

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GOVERNMENT DEGREE COLLEGE-NAIDUPET

SPSR NELLORE DIST, ANDHRA PRADESH-524126

Evaluation

The Course syllabus and evaluation pattern are decided by the department and approved by the principal. The evaluation is done by the department itself. Examinations are conducted and the final grades are awarded. Each qualified student is awarded with a certificate. The awarding of grades is in the following pattern,

Grade A-more than 75%

Grade B- from 60% to 75%

Grade C- from 50% to 60%

Grade D-not qualified

Evaluation

SNo	Name Of the student	Grade	Result(P/F)
1	M DIVYA	B	P
2	P LEELASAIKRISHNA	B	P
3	T SUBRAMANYAM	A	P
4	CH PAVITHRA	B	P
5	G JHANSI LAKSHMI	A	P
6	A VANDANA	A	P
7	B PAVAN KAUMAR	C	P
8	G VASUNDARA	B	P
9	M MUNIKUMAR	D	F
10	M YESURAJU	B	P
11	S SRINIVASATEJA	B	P
12	T MAHESH	C	P
13	T SYAMSON	D	F
14	Y VANDANA	B	P
15	P SAI	B	P

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Govt. Degree Colleg
NAIDUPET, SPSR Nellore L.

SNo	Name Of the student	Grade	Result(P/F)
16	N SINDHU	B	P
17	M POOJITHA	B	P
18	A MUTHYALAIAH	A	P
19	B PREM KUMAR	B	P
20	G VAMSI	A	P
21	N SURYA KIRAN	A	P
22	P ASHOK	C	P
23	V VISWANADHAM	B	P
24	P PAVAN KUMAR	D	F
25	M SIREESHA	B	P
26	N RAMULAMMA	B	P
27	SK BHASHEER	C	P
28	P SIREESHA	D	F
29	CH MUNI LAKSHMI	B	P
30	CH HEMANTH KUMAR	B	P

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SNo	Name Of the student	Grade	Result(P/F)
31	G LALITHA		
32	T SUDHEER	B	P
33	T AMRUTHA	B	P
34	T BALAJI	A	P
35	V LAHARI	B	P
		A	P

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GOVT. DEGREE COLLEGE, NAIDUPET

(Re accredited with 'B' Grade by NAAC)

SPSR Nellore Dist., A.P.

CERTIFICATE

This is to Certify that Mr/Kum.............. G. Vamsi ....

of................. III. B.A ....has attended the Add on programme on

Quantitative Techniques for Competitive Exams Conducted by the Dept. of .....Mathematics..............

during the academic year 2020 - 2021 and Qualified with Grade........A.............

Convener
LECTURER IN MATHEMATICS
Govt. Degree College
Naidupet, SPS Nellore(Dist)

Principal
PRINCIPAL
Govt. Degree College
NAIDUPET, SPSR Nellore Dt.