# St. Joseph's Degree College 

## Sunkesula Road

## Kurnool

## Department of Statistics

Add on course on the basis of "Sequencing theory"

Academic Year - (2019-2020)
B. Mallika m.sc , в.Ed

Head of Department
Department of Statistics

## Add-on Course - SEQUENCING THEORY

Department of Statistics conducted Add-on Course for II year students based on Sequencing Theory. It's have been done from 22/6/2019 to 26/10/2019. This course was conducted every Saturday last two hours of a week.

## Lecturers attended:

1) B. Mallika
2) I. Kalyani
3) K. Keerhi Madhuri
4) K. Raghavendra

Support to documents of the event as follows,

## Course objective

To enrich the knowledge of students with advanced techniques of linear programming problem along with real life applications.

## Request letter

## Request Letter

07-06-2019
Kurnool
To
The Chairman,
Internal Quality Assurance Cell, St.Joseph's Degree College, Kurnool.

Respected Sir/Madam,
Sub: Requisition to seek permission for conducting Add on course-Reg.

As per the discussion of the faculty members of statistics Department wants to conduct Add on course for the second year students based on "Sequencing Theory" to enhance academic knowledge regarding the subject on every Saturday last two hours. Hence we request you to kindly give us permission.

Thanking You,

Yours faithfully,
(B.Mallika)

Head of the Department
Department of Statistic

## Circular to the students

# St. Joseph's Degree College 

## Sunkesula Road

## Kurnool

## Circular

All the $\mathrm{II}^{\mathrm{nd}}$ year students of statistics are hereby informed that there will be an Add-on course based on "Sequencing Theory " on every Saturday for the last two hours.

## (B.Mallika)

Head of the
Department
Department of Statistics

## SYLLABUS

# St.Joseph's Degree College Sunkusela Road-Kurnool 

 Department of statisticsAdd-on course: Sequencing Theory
Hours:30

## Syllabus

- Sequencing problem: Introduction and assumptions of the sequencing problem.
- Sequencing of $n$ Jobs and one machine problem. Johnson's algorithm for n jobs and two machines problem- problems with n -jobs on two machines.
- Gantt chart algorithm for n jobs on three machines problemsproblems with n -jobs on three machines, algorithm for n jobs on m machines problem.
- Problems with m-machines.
- Graphical method for two jobs on m-machines.
- Network Scheduling: Basic components of a network, nodes and arcs, events and activity- rules of network construction- time calculation in networks- critical path method and PERT


## ATTENDENCE

| $\underset{\sim}{\stackrel{\circ}{\infty}}$ |  | NAMES |  | ${ }_{6}{ }_{6}^{3}$ |  |  |  |  |  |  |  |  |  | $\begin{array}{r} 13 \\ 9 \% / i o \end{array}$ | $\begin{aligned} & 14 \\ & 26 / 6 \end{aligned}$ | 15 | $1 €$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\times \times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | a | $\times$ |  | a | $a$ | - |  |  |
| 1 | 15349 | B. Shiva kumar Jagwant a | $a$ | $x$ | a | $a$ | $x$ | $a$ | a | a | $\times$ | $\times \mathrm{a}$ |  |  | a |  |  |  |
| 2 | 15541 | Bannela Kuruva Jaguant | $\times \quad a$ | $\times$ | $\times$ | $x$ | $x$ | a | a | $x$ | x | $x a$ $\times \quad a$ $\times \quad$ |  | a | a | $\times$ | , |  |
| 3 | 14415 | chakoli Ramegh Babu chakali siva | a | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | x | a $a$ |  | a | $a$ $\times$ $\times$ | - | , |  |
| 5 | 14430 15341 | chakali siva a <br> chenna Rakegh a | a $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | a | $x$ | $x$ | a $\times \times$ |  | $x$ | x |  | C |  |
| 5 | 15341 | chenna Rakegh chitella siva vamsi krishna $x$ | $x \quad x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $\times$ | $\times$ |  | a | a |  | - |  |
| 7 | 14414 1524 | Donthu sunil kumar $x$ | $x \quad a$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $\times$ | $x$ | a | $\times$ |  | a | a |  |  |  |
| 8 | 14826 | Ediga Aghok Teja $x$ | $x$ | $x$ | a | $x$ | $\times$ | $\lambda$ | a | $x$ | $\times$ | $\times$ |  | a | a |  |  |  |
| 9 | 15491 | Ediga Giri vardhan Goud a | a | $a$ | a | $x$ | $x$ | a | $\times$ | $a$ | $x$ | $x$ |  | a | a |  |  |  |
| 10 | 15520 | G.ind. Ateeruar Ratiman a | $a x$ | $\times$ | $\times$ | $\times$ | $\times$ | a | $\times$ | $x$ | $x$ | $\times$ |  | $x$ | $x$ |  |  |  |
| 11 | 14416 | K. Gowtham kumar $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ |  | $\times$ | $x$ |  |  |  |
| 12 | 14463 | kamlay kapil kumar $x$ | $x \quad x$ | $\times$ | a | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ |  | $a$ | $x$ |  |  |  |
| 13 | 14934 | Kethi sai vikas $x$ | $x$ | $x$ | a | $x$ | $x$ | $\lambda$ | $x$ | $x$ | $x$ | $x$ |  | $a$ | $a$ |  |  |  |
| 14 | 14475 | mangali suregh a | a | $x$ | $x$ | $x$ | $x$ | $\times$ | a | $x$ | $\times$ | $x$ | $\times$ | $a$ | $x$ |  |  |  |
| 15 | 14.296 | Maraka Bhargav Reddy x | $\times$ | $a$ | $x$ | $x$ | $x$ | a | $x$ | $a$ | $x$ | $x$ | a | a | $a$ |  |  |  |
| 16 | 14824 | Mitnala Purina chandu a | $a \quad x$ | $\times$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ |  | a | a |  |  |  |
| 17 | 14586 | rohammed saheel $x$ | $x \quad x$ | $x$ | $\times$ | $x$ | $\times$ | $x \times$ | $x$ | $x$ | $x$ | $\times$ | $\times$ | $x$ | $x$ |  |  |  |
| 18 | 15245 | Mulla mohammed Iliyas $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | a | $x$ | a |  |  |  |
| 19 | 14458 | Nandibattini Pavan surendra $x$ | $x \times$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $\times$ | $\times$ |  | a | a |  |  |  |
| 20 | 14823 | R.Prateash a | $\alpha$ | $\times$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $a$ | $x$ | $x$ |  | a | a |  |  |  |
| 21 | 15417 | S. Ameer Basha $x$ | $x \times$ | $\times$ | $x$ | $x$ | $x$ | a | $x$ | $x$ | $\times$ | $x$ | $\times$ | a | a |  |  |  |
| 22 | 14465 | S.Md. Jawad $x$ | $x$ | $\times$ | a | $x$ | a | a | $x$ | $x$ | $x$ | $x$ | a | $\times$ | a |  |  |  |
| 23 | 15492 | Seshi vardhan Goud. E $x$ | $x$ | a | a | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | a | a | a |  |  |  |
| 24 | 14822 | shaik Alimasum $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | a | $\times$ | $x$ |  |  |  |
| 25 | 15399 | shaik md.faizal 0 | $\alpha$ | $x$ | a | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $a$ | a |  |  |  |
| 26 | 15400 | shaik mohammed wasif $x$ | $x \quad x$ | $\times$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | a | a | a |  |  |  |
| 27 | 14422 | shaik sadiq Bagha $x$ | $x a$ | a | a | $x$ | $x$ | a | $x$ | $x$ | $x$ | $x$ | $x$ | $a$ | a |  |  |  |
| 28 | 15401 | shaik shabuldin $x$ | $x$ | $\times$ | a | $x$ | a | a | $x$ | $x$ | $x$ | $x$ | $\times$ | a | a |  |  |  |
| 29 | 14426 | syed mosin Pasha Khadri $x$ | $x$ | $\times$ | $\times$ | $a$ | $\lambda$ | a | $x$ | $x$ | $x$ | $\times$ | a | a | a |  |  |  |
| $\stackrel{\text { co }}{\infty}$ | $\stackrel{0}{2}$ | NAMES |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 14 \\ & 26 / 10 \end{aligned}$ |  | 16 |
| 1. | 15231 | A. Prameela | $a$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $a$ | $a$ |  |  |
| 2. | 15559 | A. Ruthika Reddy | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | a | $\times$ | a |  |  |
| 3. | 15414 | B. Meena Amrutba | $x$ | $x$ | $a$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ |  | a |  |  |
| 4 | 15413 | B. Swetha | a | $x$ | $x$ | $x$ | $x$ | $x$ | $a$ | $x$ | $x$ | $\times$ | $x$ |  | a | a |  |  |
| 5 | 14478 | B. Dirya Sai | - | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $\times$ | $\times$ | $x$ | $x$ | a | $\times$ | $x$ |  |  |
| 6 | 14383 | B. Mounika | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $a$ | $x$ | $x$ | $a$ | $x$ | a | a | $a$ |  |  |
| 7 | 15242 | B. Rohini | $\times$ | $x$ | $\times$ | $\times$ | $x$ | $a$ | $x$ | $x$ | $a$ | $x$ | $x$ | $a$ | a | $x$ |  |  |
| 8 | 15446 | B. Sravani | $a$ | $a$ | $x$ | a | $x$ | $x$ | $a$ | $x$ | $a$ | $a$ | $x$ | $x$ | a | $a$ |  |  |
| 9. | 15234 | B. Rachana | $\times$ | $\times$ | $x$ | $\times$ | $\times$ | $\times$ | $x$ | $\times$ | $x$ | $x \times$ | $x$ | a | $x$ | $\times$ |  |  |
| 10 | 14382 | Boya Sai Iyothi | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | X | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ |  |  |
| 11 | 14575 | Bugide Swathi | a | $a$ | $x$ | $x$ | $x$ | $x$ | $a$ | $x$ | $x$ | $x$ | $x$ | a | $x$ | $x$ |  |  |
| 12 | 14578 | Bugude Sravani | $\times$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ |  |  |
| 13 | 14396 | chakali Esuari | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $\times$ | $x$ | x | $\times$ |  |  |
| 14 | 14486 | chakali Jyetti | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ |  |  |
| 15 | 14576 | Chapparla vedavarshíni | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $\times$ | $\times$ | $a$ | $x$ | a |  |  |
| 16 | 15230 | D.V. Naga Madhuri | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ |  |  |
| 17 | 15448 | E. Nikitha | $\times$ | $x$ | $x$ | a | a | $a$ | $a$ | $\times$ | $x$ | $x$ | $x$ | $a$ | a | a |  |  |
| 18 | 15445 | Gaddam Neeraja | $x$ | $\times$ | $\times$ | $x$ | x | $x$ | a | $x$ | $x$ | $\times$ | $\times$ | $x$ | a | $a$ |  |  |
| 19 | 14487 | Gadipati Bhargavi | $\times$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $\times$ | $x$ | $x$ | $\times$ | a |  |  |
| 20 | 14485 | Gadipati Sai prasanna. | $x$ | $x$ | a | $x$ | $x$ | $x$ | $x$ | $\times$ | x | $\times$ | $x$ | $x$ | $\times$ | a |  |  |
| 21 | 14384 | Golla Naga Sravantbi | X | $x$ | a | $x$ | $x$ | $x$ | $x$ | $x$ | a | $\times$ | $x$ | $x$ | $x$ | x |  |  |
| 22 | 14483 | Gollaladoddi prathzueta. | a. $X$ | a | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | a |  |  |
| 23 | 14397 | Gujula Siva vaishnavi | $x$ | $x$ | $x$ | x | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $\times$ | $x$ | $x$. |  |  |
| 24 | 15240 | Gundam Karya Reddy | $x$ | $x$ | $x$ | $\times$ | $x$ | $\times$ | $x$ | $x$ | $\times$ | $x$ | $x$ | a | $x$ | $x$ |  |  |
| 25 | 14477 | Gundam pravallika. | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | a | $x$ | $x$ |  |  |
| 26 | 14,574 | Gunjapalle Ediga Ramy a | $x$ | $\times$ | $\times$ | $a$ | $x$ | x | $x$ | $x$ | $\times$ | X |  | $x$ | $x$ | x |  |  |
| 27 | 14583 | Itte Sritha | $x$ | - | $\times$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | X | $x$ | $x$ | $x$ | $x$ |  |  |
| 28 | 15443 | K. Divya | $x$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | $\times$ | $x$ | $x$ | $x$ | a | a |  |  |
| 29 | 15447 | K. Sumithra Devi | a | $\times$ | $x$ | a | $x$ | $\times$ | $a$ | $x$ | $\times$ | $x$ | $\times$ | $x$ | a | a |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Program photos


## TEST- QUESTION PAPER

> St.Joseph's Degree College Sunkesula Road, Kurnool Add-on course Time:1 Hour Max.Marks:30

Sub: Sequencing and theory
I. Answer the following Two questions
$2 \times 5=10$

1. What are the assumptions for job sequencing?
2. What are the types of job sequencing problems?
II. Answer the following any Two Questions
$2 \times 10=20$
3. Consider the below table for jobs given with profit and deadline:

| Job | J1 | J2 | J3 | J4 | J5 | J6 | J7 | J8 | J9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Profit | 15 | 20 | 30 | 18 | 10 | 23 | 16 | 25 | 17 |
| Deadline | 7 | 2 | 5 | 3 | 4 | 5 | 2 | 7 | 3 |

Find the Maximum profit earned?
4. If Jobs $\mathrm{J}=(\mathrm{J} 1, \mathrm{~J} 2, \mathrm{~J} 3, \mathrm{~J} 4)$ are given their processing time $\mathrm{Ti}=(1,1,2,3)$ and deadlines are $\mathrm{Di}=(3,4,2,3)$ Maximum how many jobs can be done?
5. Explain the n -jobs and K -Machines Algorithm procedure.

## FEEDBACK

Link : https://forms.gle/rm6UfWdHmLr583zP6

Questions Responses 42 Settings
How satisfied are you with this course overall?

41 responses


Very Good

- Excellent

Do you find this course really useful for you
41 responses


Yes

- No

How do you rate the overall learning experience of this course Copy

41 responses


File Edit View Insert Format Data Tools Extensions Help Last edit was seconds ago


## E-certificate




## OUTCOMES:-

1. It helps in better learning and application.
2. This technique allows students not only to practice the problems but also evaluate their own performances, self-assessment included.
3. To minimize the total elapsed time in an industry by efficient allocation of jobs to the suitable persons.
