G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

INDEX OF COURSE FILE

Name of Course	Production Planning & Control	**Course Code**	MEC703
Class / Sem	BE / VII (CBCGS)	**Academic Year**	2020-2021 (SH2020)
Departmment	Mechanical Engineering	**Name of Couse Incharge**	Asst. Prof. S.M. Kamat

SR. NO.	DOCUMENT DESCRIPTION
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2	Vision, Mission Statement of Department
3	Program Educational Objectives, Program Outcomes, Program Specific Outcomes
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Course Incharge **HOD**

G.M. Vedak Institute of Technology Tala Raigad

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

VISION

To create the best environment for transforming the young generation in to Engineering professionals with good human values for betterment of society.

MISSION

- To be a student centric Institute with quality education.
- To advance professional development of the learner through Industry-Institute interaction.
- To make the student job ready and fulfill their career aspirations.
- To provide assistance for placement & entrepreneurship development.
- To enhance socio - economic development of the individuals.

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Vision

The vision of the Mechanical Department is to get the global recognition as an outstanding engineering institute, continuously striving in pursuit of excellence in teaching, learning, research and entrepreneurship and which will produce the quality engineers to meet the ever changing needs of the industry and the society.

Mission

- To provide a platform to the students to enrich the technical and social skills to make them ready for global competition.
- To encourage to the students to use the different modern tools and multidisciplinary approach for solving real life problems.
- To create the awareness about the social and environmental responsibilities.
- To support them to enhance analytical and logical skills for problem solving.
- To develop coalition with other leading institutes of learning and research, industry and alumni for excellence in teaching, research and entrepreneurship.

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Program Educational Objectives

PEO No.	Program Educational Objective (PEO)
PEO1	To prepare the student with a sound foundation in the mathematical, scientific and engineering fundamentals.
PEO2	To motivate the student in the art of self-learning and to use modern tools for solving real life problems.
PEO3	To inculcate a professional and ethical attitude, good leadership qualities and commitment to social responsibilities in the student's thought process.
PEO4	To prepare the student for a successful career in Indian and Multinational organizations.

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Program Outcomes

PO No.	Program Outcome (PO)
PO1	**Engineering Knowledge:** Engineering graduate will be able to apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	**Problem Analysis:** Engineering graduate will be able toidentify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/Development of Solutions:** Engineering graduate will be able todesign solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	**Conduct Investigations of Complex Problems:** Engineering graduate will be able touse research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	**Modern Tool Usage:** Engineering graduate will be able tocreate, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	**The Engineer and Society:** Engineering graduate will be able toapply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	**Environment and Sustainability:** Engineering graduate will be able tounderstand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics:** Engineering graduate will be able to apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	**Individual and Team Work:** Engineering graduate will be able tofunction effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	**Communication:** Engineering graduate will be able tocommunicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project Management and Finance:** Engineering graduate will be able todemonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	**Life-long Learning:** Engineering graduate will be able to recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Program Specific Outcomes

PSO No.	Program Specific Outcome (PSO)
PSO1	Engineering graduate will be able to solve complex problems in the field of **Design, Thermal and Manufacturing.**
PSO2	Engineering graduate will be able to analyze and stimulate **Mechanical Systems** by conducting experimental studies and using software to validate systems.
PSO3	Engineering graduate will be able to apply technical and management skills to manage different **Projects.**

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem –BE /VII

Subject/ Course -Production Planning and Control (MEC 703)

Course Outcomes

CO No.	Course Outcome (CO)
CO1	Student will be able to illustrate production planning functions and manage manufacturing functions in a better way.
CO2	Student will be able to forecast the demand of the product and prepare an aggregate plan.
CO3	Student will be able to develop the skills of Inventory Management and cost effectiveness.
CO4	Student will be able to understand process planning and create a logical approach to line balancing in various production systems.
CO5	Student will be able to develop competency in scheduling and sequencing of manufacturing operations.
CO6	Student will be able to understand modern techniques of production planning and control.

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem – BE / VII

Course – Production Planning and Control (MEC 703)

CO PO Mapping

Program Outcome (PO)	Course Outcome (CO)					
	CO1	CO2	CO3	CO4	CO5	CO6
PO1	✓	✓				
PO2			✓			
PO3				✓		
PO4						
PO5						✓
PO6						
PO7						
PO8						
PO9						
PO10						
PO11					✓	
PO12						

G.M. Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY

Approved by AICTE, Recognized by Govt. of Maharashtra & Affiliated to University of Mumbai. Institute code : EN 3447

DEPARTMENT OF MECHANICAL ENGINEERING

TIME TABLE ACADEMIC YEAR 2020-21 (ODD SEMESTER)

SECOND HALF 2020

Class Teacher:- Prof. A.A.Khot			Class:-B.E. Classroom:- Google Meet		W.E.F :-07/08/2020	
PERIOD	**TIME**	**MONDAY**	**TUESDAY**	**WEDNESDAY**	**THURSDAY**	**FRIDAY**
1	09:30 - 10:30	MD II	PPC	CCC	AE	MD II
2	11:00 - 12:00	AE	CCC	PLM	PPC	PLM

SR. NO	ABBR	SUBJECT	STAFF	VENUE FOR PRACTICAL
1	MD II	Machine Design II	Prof. A.R. Ghadge	
2	CCC	CAD/CAM/CAE	Prof. A.A. Khot	
3	PPC	Production Planning and Control	Prof. S.M. Kamat	
4	AE	Automobile Engineering	Prof. M.L. Surve	
5	PLM	Product Lifecycle Management	Prof. O.S.Patil / Prof. P.M.Autade	
6	Project I	Project I	Prof. O.S.Patil	

BATCH	ROLL NO.
B1	1 To 22
B2	23 To 44

TIME-TABLE CO-ORDINATOR H.O.D. DEAN ACAEDEMIC PRINCIPAL

G. M. Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF MECHANICAL ENGINEERING

TIME TABLE ACADEMIC YEAR 2020-21 (ODD SEMESTER)

SECOND HALF 2020

Class Teacher:- Prof. A.A.Khot | **Class:-B.E.** | **Classroom:- Google Meet** | **W.E.F :-07/09/2020**

PERIOD	TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1	09:30 - 10:30	MD II	PPC	AE	AE	MD II
2	11:00 - 12:00	PPC	CCC	CCC	PLM	PLM
3	2.00 - 3.00	PLM	MD II	PPC	PPC	CCC
4	3.30 - 4.30	AE	PROJECT WORK	MD II	CCC	AE

SR. NO	ABBR	SUBJECT	STAFF	VENUE FOR PRACTICAL
1	MD II	Machine Design II	Prof. A.R. Ghadge	
2	CCC	CAD/CAM/CAE	Prof. A.A. Khot	
3	PPC	Production Planning and Control	Prof. S.M. Kamat	
4	AE	Automobile Engineering	Prof. M.L. Surve	
5	PLM	Product Lifecycle Management	Prof. O.S.Patil / Prof. P.M.Autade	
6	Project I	Project I	Prof. O.S.Patil	

BATCH	ROLL NO.
B1	1 To 22
B2	23 To 44

TIME-TABLE CO-ORDINATOR

H.O.D.

PRINCIPAL

G.M.Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

THEORY ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Sem : VII | Course : Prod. Planning & control | Course code : MEC 703

Venue: | Name of Faculty : Asst Prof S.M. Kamat

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	12/8	13/8	18/8	19/8	20/8	20/8	20/8	21/8	30/8	31/8
		Time	1.00 PM	11 am	9.30 am	1 PM	11 am	1 PM	2.30 PM	1 PM	10 am	1 PM
1	AMBUKAR PRATIK RAMAN		P	P	P	P	P	P	A	P	P	P
2	BHOIR SUYOG SURESH		P	A	P	P	P	P	P	P	P	A
3	BHORAVKAR SANDESH GORAKH		P	P	P	P	P	P	P	P	P	P
4	CHAVAREKAR PRATIK SUDHAKAR		A	P	P	P	A	P	P	P	P	P
5	CHOGALE PRATHAMESH KESHAV		P	P	A	P	P	P	A	P	P	P
6	DEO AMAR RATNESHWARI		P	P	P	P	P	P	P	P	P	P
7	DHAVALE DAYANAND SHANKARRAO		A	P	P	P	P	P	P	P	P	P
8	DHUMAL ROHIT PRAVIN		P	P	P	P	P	P	A	P	P	A
9	GHARAT RAJ KRISHNA		A	P	P	P	P	A	P	P	P	P
10	GHAYTALE JAGDISH SURESH		P	P	A	P	P	P	P	P	A	P
11	JAGTAP PRASANNA NITIN		A	P	P	P	P	P	P	P	P	P
12	JOSHI NIKHIL VISHWANATH		P	P	P	P	A	P	P	A	P	P
13	KALYANKAR DIPESH DILIP		P	P	P	P	P	P	P	P	P	A
14	KAMBLE SHAILESH ASHOK		A	P	P	P	P	P	A	P	P	P
15	KARDAME ABDUL AHAD AZHAR		P	P	A	P	P	P	P	A	P	P
16	KATLE VIKRANT HEMANT		P	P	P	P	A	P	P	P	A	P
17	KAUCHALI MAAZ M.ISHAQUE		P	A	P	P	P	P	A	P	P	P
18	KHAN ARBAZ SAEED		P	P	P	A	P	P	P	P	A	P
19	KHAN SHAMSTABREZ ABDULRASHID		P	P	A	P	P	P	P	A	P	P
20	LOKHANDE SWATEJ RAVINDRA		A	P	P	P	A	P	P	P	P	P
21	MAHADE PAVAN RAVINDRA		P	P	A	P	P	P	P	P	P	P
22	MAHADIK KAUSTUBH GANESH		P	A	P	P	P	A	P	P	P	P
23	MHASKAR RAHUL SANJAY		P	P	A	A	P	P	P	P	P	A
24	MHATRE AKSHAY PRADIP		P	A	P	P	P	P	A	P	P	P
25	MHATRE CHAITANYA DILIP		A	P	P	A	P	P	P	P	P	P
26	MHATRE VAIBHAV PARSHURAM		P	P	P	P	P	A	P	P	A	P
27	MINDE AKASH MADHUKAR		A	P	P	P	P	P	A	P	P	P
28	NADKAR KALPESH KRUSHNA		P	P	A	A	P	P	P	P	P	P
29	NAIK PRAJWAL HIRACHANDRA		P	P	P	P	A	P	P	P	P	P
30	NARVEKAR PRATIK HARISHCHANDRA		P	P	P	P	P	P	A	P	P	P

G.M. Vedak Institute of Technology Tala Raigad

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	12/8	13/8	18/8	19/8	20/8	20/8	20/8	21/8	30/8	31/8
		Time	1pm	11am	9.30am	1PM	11 am	1PM	2.30pm	1PM	10am	1PM
31	PATIL KUNAL RAVIKANT		P	A	P	P	P	P	P	P	P	P
32	PATIL MAHESH DINKAR		A	A	A	A	P	P	P	P	P	P
33	PATIL SHWETA DIPAK		P	P	P	A	P	P	P	P	P	P
34	PATIL VINAY MADHUKAR		P	P	P	P	P	A	P	P	P	P
35	PENKAR SAHIL RAMESH		P	A	P	P	P	P	P	A	P	P
36	RAINJ PRASAD DEEPAK		P	P	P	A	P	A	P	P	P	P
37	RAWOOT YUNUS AMIR AHMED		P	A	P	P	P	P	P	P	P	P
38	SANAP SAMIR SANDIP		P	P	P	A	P	P	P	A	P	P
39	SHAFIUR REHMAN SAGEER		A	A	P	P	P	P	P	P	P	P
40	SHIGVAN RAHUL RAJENDRA		P	P	A	A	P	P	P	P	P	P
41	SHIVKAR SHRIKANT PRAKASH		P	P	P	P	A	A	P	P	P	P
42	SONAR ONKAR SUDARSHAN		P	A	P	P	P	P	P	P	A	P
43	SONAWANE BHUSHAN YASHWANT		P	P	A	P	P	P	A	P	P	P
44	TAWATE VIVEK VASANT		P	P	P	P	P	P	P	P	P	P
45	TELANGE AKASH AMIR		P	A	P	P	P	P	P	P	A	P
46	THAKUR CHETAN DHRUVA		A	P	P	A	P	P	P	P	P	P
47	TURE SUYOG MADHUSUDAN		P	P	P	P	A	P	P	A	P	P
48	VIRKUD SHUBHAM SUDHIR		A	P	P	P	P	A	P	P	P	P

SUBJECT IN CHARGE **CLASS COORDINATOR** **HOD**

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

THEORY ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Sem : VII | Course : Prod^n Planning & Control | Course code : MEC 703

Venue: | Name of Faculty : Asst Prof S.M. Kamal-

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	6/10	7/10	8/10	9/10	13/10	15/10	16/10	24/10	29/10	31/10
		Time	9.30am	2pm	2pm	11pm	8.30am	2pm	3pm	10am	2pm	3.30pm
1	AMBUKAR PRATIK RAMAN		P	P	P	P	P	A	P	P	P	P
2	BHOIR SUYOG SURESH		P	A	P	P	P	P	P	P	P	A
3	BHORAVKAR SANDESH GORAKH		P	P	P	P	A	P	P	P	P	P
4	CHAVAREKAR PRATIK SUDHAKAR		A	P	P	P	P	P	A	P	P	P
5	CHOGALE PRATHAMESH KESHAV		P	P	A	P	P	P	P	P	A	P
6	DEO AMAR RATNESHWARI		P	P	P	P	P	P	P	P	P	P
7	DHAVALE DAYANAND SHANKARRAO		P	P	P	P	A	P	A	A	P	P
8	DHUMAL ROHIT PRAVIN		A	A	P	P	P	P	P	P	P	P
9	GHARAT RAJ KRISHNA		P	P	P	A	P	P	P	P	P	A
10	GHAYTALE JAGDISH SURESH		A	P	P	P	P	P	A	P	P	P
11	JAGTAP PRASANNA NITIN		P	P	P	A	P	P	P	P	A	P
12	JOSHI NIKHIL VISHWANATH		P	A	P	P	P	P	A	P	P	P
13	KALYANKAR DIPESH DILIP		P	P	P	P	A	P	P	A	P	P
14	KAMBLE SHAILESH ASHOK		P	A	P	P	P	A	P	P	P	P
15	KARDAME ABDUL AHAD AZHAR		P	P	A	P	P	P	P	P	P	A
16	KATLE VIKRANT HEMANT		P	P	P	P	A	P	P	A	P	P
17	KAUCHALI MAAZ M.ISHAQUE		P	A	P	P	P	P	P	P	P	P
18	KHAN ARBAZ SAEED		P	A	P	P	A	P	P	P	A	P
19	KHAN SHAMSTABREZ ABDULRASHID		P	P	P	A	P	P	P	A	P	P
20	LOKHANDE SWATEJ RAVINDRA		A	P	P	P	P	A	P	P	P	P
21	MAHADE PAVAN RAVINDRA		P	P	A	P	P	P	P	A	P	P
22	MAHADIK KAUSTUBH GANESH		P	P	P	P	A	P	P	P	P	P
23	MHASKAR RAHUL SANJAY		P	A	P	P	P	P	P	A	P	P
24	MHATRE AKSHAY PRADIP		A	P	P	P	P	A	P	P	P	P
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26	MHATRE VAIBHAV PARSHURAM		P	P	P	A	P	P	P	P	A	P
27	MINDE AKASH MADHUKAR		P	A	P	P	P	P	A	P	P	P
28	NADKAR KALPESH KRUSHNA		P	P	P	A	A	P	P	P	P	P
29	NAIK PRAJWAL HIRACHANDRA		P	A	P	P	P	P	P	P	P	P
30	NARVEKAR PRATIK HARISHCHANDRA		P	P	P	P	P	P	P	A	P	P

G.M. Vedak Institute of Technology Tala Raigad

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	6/10	7/10	8/10	9/10	13/10	15/10	15/10	24/10	29/10	29/10
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31	PATIL KUNAL RAVIKANT		A	P	P	P	P	P	P	P	P	P
32	PATIL MAHESH DINKAR		P	P	A	P	P	P	P	P	P	P
33	PATIL SHWETA DIPAK		P	P	P	P	A	P	P	P	P	P
34	PATIL VINAY MADHUKAR		P	A	P	P	P	P	P	P	P	P
35	PENKAR SAHIL RAMESH		A	P	P	P	P	P	P	P	P	A
36	RAINJ PRASAD DEEPAK		P	A	P	P	P	P	A	P	P	P
37	RAWOOT YUNUS AMIR AHMED		P	P	P	A	P	P	P	P	P	P
38	SANAP SAMIR SANDIP		P	A	P	P	P	P	A	P	P	P
39	SHAFIUR REHMAN SAGEER		P	P	A	A	P	P	P	P	P	P
40	SHIGVAN RAHUL RAJENDRA		P	A	P	P	P	P	A	P	P	P
41	SHIVKAR SHRIKANT PRAKASH		P	P	P	A	P	P	P	P	A	P
42	SONAR ONKAR SUDARSHAN		A	P	P	P	A	P	P	P	P	P
43	SONAWANE BHUSHAN YASHWANT		P	P	A	P	P	P	A	P	P	P
44	TAWATE VIVEK VASANT		A	P	P	A	P	P	P	P	P	P
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46	THAKUR CHETAN DHRUVA		A	P	P	A	P	P	P	P	P	P
47	TURE SUYOG MADHUSUDAN		P	A	P	P	P	P	P	P	P	A
48	VIRKUD SHUBHAM SUDHIR		P	P	P	A	P	P	A	P	P	P

SUBJECT IN CHARGE CLASS COORDINATOR HOD

G.M. Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

THEORY ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Sem : VII | Course : Prod^{n} Planning & cou | Course code : MEC703

Venue: | Name of Faculty : Asst Prof S M. Kamat

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	30/10	30/10	5/11	5/11	7/11	14/12	14/12	15/12	15/12	16/12
		Time	10 am	11 am	2pm	3.30pm	10 am	11 am	2PM	9.30am	3.30PM	2pm
1	AMBUKAR PRATIK RAMAN		P	P	P	P	P	P	P	P	P	P
2	BHOIR SUYOG SURESH		P	A	P	P	P	A	P	P	P	P
3	BHORAVKAR SANDESH GORAKH		P	P	P	P	P	A	P	P	P	P
4	CHAVAREKAR PRATIK SUDHAKAR		P	P	A	P	P	P	P	P	P	P
5	CHOGALE PRATHAMESH KESHAV		A	P	P	P	P	P	A	P	P	A
6	DEO AMAR RATNESHWARI		P	P	P	A	P	P	P	P	P	P
7	DHAVALE DAYANAND SHANKARRAO		P	P	P	A	P	P	A	P	A	P
8	DHUMAL ROHIT PRAVIN		P	P	P	P	P	A	P	P	P	A
9	GHARAT RAJ KRISHNA		A	P	P	P	P	P	P	P	P	P
10	GHAYTALE JAGDISH SURESH		P	P	A	P	P	P	P	A	P	P
11	JAGTAP PRASANNA NITIN		P	P	P	P	A	P	P	P	P	A
12	JOSHI NIKHIL VISHWANATH		P	A	P	P	P	P	P	A	P	P
13	KALYANKAR DIPESH DILIP		P	P	A	P	P	P	P	P	P	P
14	KAMBLE SHAILESH ASHOK		P	P	P	P	A	P	P	A	P	P
15	KARDAME ABDUL AHAD AZHAR		P	A	P	P	P	A	P	P	P	P
16	KATLE VIKRANT HEMANT		P	P	P	A	P	P	P	A	P	P
17	KAUCHALI MAAZ M.ISHAQUE		P	P	P	P	A	P	P	P	A	P
18	KHAN ARBAZ SAEED		P	A	P	P	P	P	A	P	P	P
19	KHAN SHAMSTABREZ ABDULRASHID		A	P	A	P	P	P	P	P	P	P
20	LOKHANDE SWATEJ RAVINDRA		P	P	P	A	P	P	P	A	P	P
21	MAHADE PAVAN RAVINDRA		P	A	P	P	P	P	P	P	P	P
22	MAHADIK KAUSTUBH GANESH		P	P	P	A	P	P	A	P	P	P
23	MHASKAR RAHUL SANJAY		P	A	P	P	P	A	P	P	P	P
24	MHATRE AKSHAY PRADIP		A	P	P	P	P	P	P	A	P	P
25	MHATRE CHAITANYA DILIP		P	P	A	P	P	A	P	P	P	P
26	MHATRE VAIBHAV PARSHURAM		P	P	P	P	A	P	P	P	A	P
27	MINDE AKASH MADHUKAR		P	P	A	P	P	P	P	P	P	P
28	NADKAR KALPESH KRUSHNA		P	P	P	P	A	A	P	P	P	P
29	NAIK PRAJWAL HIRACHANDRA		P	A	P	P	P	P	A	P	P	P
30	NARVEKAR PRATIK HARISHCHANDRA		P	P	P	A	P	P	P	P	P	A

G.M. Vedak Institute of Technology Tala Raigad

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	30/10	30/10	5/11	5/11	7/11	14/12	14/12	15/12	15/12	16/12
		Time	10 am	11 am	2 PM	3:30 PM	10 am	11 AM	2 pm	9:30 am	3:30 PM	2 pm
31	PATIL KUNAL RAVIKANT		A	P	P	P	P	A	P	P	P	P
32	PATIL MAHESH DINKAR		P	P	A	P	P	P	P	A	P	P
33	PATIL SHWETA DIPAK		P	A	P	P	A	P	P	P	P	P
34	PATIL VINAY MADHUKAR		P	P	P	A	P	P	P	P	P	A
35	PENKAR SAHIL RAMESH		P	A	P	P	P	P	P	P	P	P
36	RAINJ PRASAD DEEPAK		P	P	P	P	P	A	P	P	P	P
37	RAWOOT YUNUS AMIR AHMED		P	P	P	P	P	P	P	P	P	P
38	SANAP SAMIR SANDIP		P	A	P	P	P	P	P	A	P	P
39	SHAFIUR REHMAN SAGEER		P	P	P	A	A	P	P	P	P	P
40	SHIGVAN RAHUL RAJENDRA		P	P	A	P	P	P	P	P	A	P
41	SHIVKAR SHRIKANT PRAKASH		P	P	P	P	A	P	A	P	P	P
42	SONAR ONKAR SUDARSHAN		A	P	P	P	P	A	P	P	P	P
43	SONAWANE BHUSHAN YASHWANT		P	P	A	P	P	P	P	A	P	P
44	TAWATE VIVEK VASANT		P	P	P	A	P	A	P	P	P	P
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46	THAKUR CHETAN DHRUVA		P	A	P	P	P	A	P	P	P	P
47	TURE SUYOG MADHUSUDAN		P	P	P	A	P	P	P	P	P	A
48	VIRKUD SHUBHAM SUDHIR		A	P	P	P	P	P	A	P	P	P

SUBJECT IN CHARGE **CLASS COORDINATOR** **HOD**

Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

THEORY ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Sem : VII | Course : Prod^{n} planning Control | Course code : MEe 703

Venue: | Name of Faculty : Asst Prof. S.M. Kamal.

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	21/12	21/12	22/12	22/12	24/12	24/12	25/12	26/12	26/12	28/12
		Time	11 am	2pm	9.30 am	2.30pm	2pm	2.30pm	10 am	10am	11 am	11 am
1	AMBUKAR PRATIK RAMAN		P	P	P	P	P	P	P	P	P	P
2	BHOIR SUYOG SURESH		A	P	P	P	A	P	P	P	P	A
3	BHORAVKAR SANDESH GORAKH		P	P	P	P	P	P	P	P	P	P
4	CHAVAREKAR PRATIK SUDHAKAR		P	P	A	P	P	P	P	P	A	P
5	CHOGALE PRATHAMESH KESHAV		P	P	P	P	A	P	A	P	P	P
6	DEO AMAR RATNESHWARI		P	A	P	P	P	P	P	P	P	P
7	DHAVALE DAYANAND SHANKARRAO		P	P	A	P	P	A	P	P	P	P
8	DHUMAL ROHIT PRAVIN		P	P	P	P	P	P	P	P	A	P
9	GHARAT RAJ KRISHNA		P	P	P	P	A	P	A	P	P	P
10	GHAYTALE JAGDISH SURESH		A	P	P	P	P	P	P	P	P	P
11	JAGTAP PRASANNA NITIN		P	P	P	A	P	P	P	P	A	P
12	JOSHI NIKHIL VISHWANATH		P	A	P	P	P	P	P	P	P	P
13	KALYANKAR DIPESH DILIP		P	P	P	P	A	P	A	P	P	P
14	KAMBLE SHAILESH ASHOK		P	A	P	P	P	P	P	P	P	P
15	KARDAME ABDUL AHAD AZHAR		P	P	P	A	P	P	P	P	P	P
16	KATLE VIKRANT HEMANT		P	A	P	P	P	P	P	P	P	P
17	KAUCHALI MAAZ M.ISHAQUE		P	P	P	P	P	A	P	P	P	P
18	KHAN ARBAZ SAEED		P	P	A	P	P	P	P	A	P	P
19	KHAN SHAMSTABREZ ABDULRASHID		P	A	P	P	P	P	P	P	P	P
20	LOKHANDE SWATEJ RAVINDRA		P	P	A	P	P	P	P	P	P	P
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22	MAHADIK KAUSTUBH GANESH		P	P	A	P	P	P	P	A	P	P
23	MHASKAR RAHUL SANJAY		P	A	P	P	P	A	P	P	P	P
24	MHATRE AKSHAY PRADIP		P	P	P	P	A	P	P	P	P	P
25	MHATRE CHAITANYA DILIP		A	P	P	P	P	P	P	P	P	P
26	MHATRE VAIBHAV PARSHURAM		P	P	P	P	P	P	P	P	P	A
27	MINDE AKASH MADHUKAR		P	P	A	P	P	P	P	P	P	P
28	NADKAR KALPESH KRUSHNA		P	P	P	P	A	A	A	P	P	P
29	NAIK PRAJWAL HIRACHANDRA		A	P	P	P	P	P	A	P	P	P
30	NARVEKAR PRATIK HARISHCHANDRA		P	A	P	A	P	P	P	P	P	P

G.M. Vedak Institute of Technology Tala Raigad

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	21/12	21/12	22/12	22/12	24/12	24/12	25/12	26/12	26/12	28/12
		Time	11 am	2 pm	9:30 am	2:30 pm	2 pm	3:30 pm	10 am	11 am	11 am	11 am
31	PATIL KUNAL RAVIKANT		A	P	P	A	P	P	P	P	P	P
32	PATIL MAHESH DINKAR		P	P	A	P	P	P	P	A	P	P
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35	PENKAR SAHIL RAMESH		P	P	P	P	P	A	P	P	P	P
36	RAINJ PRASAD DEEPAK		P	P	A	P	P	P	P	P	P	P
37	RAWOOT YUNUS AMIR AHMED		P	P	P	P	P	P	P	P	P	P
38	SANAP SAMIR SANDIP		P	A	P	P	P	A	P	P	P	A
39	SHAFIUR REHMAN SAGEER		P	P	P	A	P	P	P	P	P	P
40	SHIGVAN RAHUL RAJENDRA		A	P	P	P	P	P	P	P	P	P
41	SHIVKAR SHRIKANT PRAKASH		P	P	P	P	P	A	P	P	P	P
42	SONAR ONKAR SUDARSHAN		P	P	A	P	P	P	P	P	P	P
43	SONAWANE BHUSHAN YASHWANT		P	P	P	P	P	A	P	P	P	P
44	TAWATE VIVEK VASANT		P	P	A	P	P	P	P	P	P	P
45	TELANGE AKASH AMIR		P	P	P	P	P	P	P	P	P	A
46	THAKUR CHETAN DHRUVA		P	A	P	P	P	P	P	A	P	P
47	TURE SUYOG MADHUSUDAN		P	P	P	P	A	P	A	P	P	P
48	VIRKUD SHUBHAM SUDHIR		P	P	P	P	P	P	P	P	P.	A

SUBJECT IN CHARGE **CLASS COORDINATOR** **HOD**

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

THEORY ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Sem : VII | Course : Prod^n planning & control | Course code : MEC 703

Venue: | Name of Faculty : S. M. Kamal-

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	28/12	29/12	29/12	30/12	30/12	30/12	31/12	31/12		
		Time	2pm	9:30am	3:30pm	11am	2pm	3:30pm	2pm	3:30pm		
1	AMBUKAR PRATIK RAMAN		P	P	P	P	P	P	P	P		
2	BHOIR SUYOG SURESH		A	P	P	P	A	P	P	P		
3	BHORAVKAR SANDESH GORAKH		P	P	P	P	P	P	P	P		
4	CHAVAREKAR PRATIK SUDHAKAR		P	P	A	P	P	P	P	P		
5	CHOGALE PRATHAMESH KESHAV		A	P	P	P	P	P	P	A		
6	DEO AMAR RATNESHWARI		P	P	P	P	P	P	P	P		
7	DHAVALE DAYANAND SHANKARRAO		P	A	P	P	A	P	P	P		
8	DHUMAL ROHIT PRAVIN		P	P	P	P	P	P	A	P		
9	GHARAT RAJ KRISHNA		P	A	P	P	P	P	P	P		
10	GHAYTALE JAGDISH SURESH		P	P	P	P	A	P	P	P		
11	JAGTAP PRASANNA NITIN		P	P	P	P	P	P	P	A		
12	JOSHI NIKHIL VISHWANATH		P	A	P	P	P	P	P	P		
13	KALYANKAR DIPESH DILIP		P	P	P	A	P	P	A	P		
14	KAMBLE SHAILESH ASHOK		A	P	P	P	P	P	P	P		
15	KARDAME ABDUL AHAD AZHAR		P	P	A	P	P	P	P	P		
16	KATLE VIKRANT HEMANT		P	P	P	P	P	A	P	P		
17	KAUCHALI MAAZ M.ISHAQUE		P	A	P	A	P	P	P	P		
18	KHAN ARBAZ SAEED		A	P	P	P	P	A	P	P		
19	KHAN SHAMSTABREZ ABDULRASHID		P	P	P	P	P	P	A	P		
20	LOKHANDE SWATEJ RAVINDRA		P	A	P	P	P	P	P	P		
21	MAHADE PAVAN RAVINDRA		P	P	A	P	P	P	A	P		
22	MAHADIK KAUSTUBH GANESH		P	P	P	P	A	P	P	P		
23	MHASKAR RAHUL SANJAY		P	A	P	P	P	A	P	P		
24	MHATRE AKSHAY PRADIP		A	P	P	P	P	P	P	P		
25	MHATRE CHAITANYA DILIP		P	P	P	A	P	P	P	P		
26	MHATRE VAIBHAV PARSHURAM		P	P	P	P	P	P	P	A		
27	MINDE AKASH MADHUKAR		P	A	P	P	A	P	P	P		
28	NADKAR KALPESH KRUSHNA		P	P	P	P	P	P	A	A		
29	NAIK PRAJWAL HIRACHANDRA		A	P	P	P	P	P	P	A		
30	NARVEKAR PRATIK HARISHCHANDRA		P	P	P	A	A	P	P	P		

Roll No.	Name of the Student	Lecture No	1	2	3	4	5	6	7	8	9	10
		Date	28/12	29/12	29/12	30/12	30/12	30/12	21/12	21/12		
		Time	2pm	9:30am	2:30 pm	11 am	2pm	3:30 pm	2pm	3:30pm		
31	PATIL KUNAL RAVIKANT		P	A	P	P	P	P	A	P		
32	PATIL MAHESH DINKAR		P	P	A	P	P	A	P	P		
33	PATIL SHWETA DIPAK		A	P	P	P	A	P	P	P		
34	PATIL VINAY MADHUKAR		P	P	P	A	P	P	P	A		
35	PENKAR SAHIL RAMESH		P	A	P	P	A	P	P	P		
36	RAINJ PRASAD DEEPAK		A	P	P	P	P	P	A	P		
37	RAWOOT YUNUS AMIR AHMED		P	P	P	P	P	P	P	P		
38	SANAP SAMIR SANDIP		P	P	A	P	P	A	P	P		
39	SHAFIUR REHMAN SAGEER		A	P	P	P	P	P	P	P		
40	SHIGVAN RAHUL RAJENDRA		P	A	P	P	P	P	P	P		
41	SHIVKAR SHRIKANT PRAKASH		P	P	A	P	P	P	P	P		
42	SONAR ONKAR SUDARSHAN		P	P	P	A	P	P	P	P		
43	SONAWANE BHUSHAN YASHWANT		P	A	P	P	P	P	P	P		
44	TAWATE VIVEK VASANT		P	P	P	P	P	P	P	A		
45	TELANGE AKASH AMIR		P	P	P	A	P	P	P	P		
46	THAKUR CHETAN DHRUVA		A	A	P	P	P	P	P	A		
47	TURE SUYOG MADHUSUDAN		P	P	A	A	P	A	P	P		
48	VIRKUD SHUBHAM SUDHIR		P	P	P	P	A	P	P	P		

SUBJECT IN CHARGE **CLASS COORDINATOR** **HOD**

C.M. Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

PRACTICAL ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Batch : B1 Sem : VII | Course : Prod. Planning & Control | Course code : MEL 703

Venue: | Name of Faculty : Asst. Prof. S. M. Kamat

Roll No.	Name of the Student	Practical No	1	2	3	4	5	6	7	8	9	10
		Date	24/11	29/12	24/12	29/12	31/12	31/12				
		Time										
1	AMBUKAR PRATIK RAMAN		P	P	A	P	P	P				
2	BHOIR SUYOG SURESH		P	P	P	P	P	P				
3	BHORAVKAR SANDESH GORAKH		A	P	P	P	P	P				
4	CHAVAREKAR PRATIK SUDHAKAR		P	P	P	P	P	A				
5	CHOGALE PRATHAMESH KESHAV		P	P	P	P	P	P				
6	DEO AMAR RATNESHWARI		P	A	P	P	P	P				
7	DHAVALE DAYANAND SHANKARRAO		P	P	P	P	P	P				
8	DHUMAL ROHIT PRAVIN		P	P	P	A	P	P				
9	GHARAT RAJ KRISHNA		P	P	P	P	A	P				
10	GHAYTALE JAGDISH SURESH		P	P	A	P	P	P				
11	JAGTAP PRASANNA NITIN		P	P	P	P	P	A				
12	JOSHI NIKHIL VISHWANATH		A	P	P	P	P	P				
13	KALYANKAR DIPESH DILIP		P	P	P	P	A	P				
14	KAMBLE SHAILESH ASHOK		P	P	A	P	P	P				
15	KARDAME ABDUL AHAD AZHAR		P	A	P	P	P	P				
16	KATLE VIKRANT HEMANT		P	P	A	P	P	P				
17	KAUCHALI MAAZ M.ISHAQUE		A	P	P	P	P	P				
18	KHAN ARBAZ SAEED		P	P	P	P	P	P				
19	KHAN SHAMSTABREZ ABDULRASHID		P	A	P	P	P	P				
20	LOKHANDE SWATEJ RAVINDRA		P	P	P	A	P	P				
21	MAHADE PAVAN RAVINDRA		A	P	P	P	P	P				
22	MAHADIK KAUSTUBH GANESH		P	P	P	P	P	A				
23	MHASKAR RAHUL SANJAY		P	P	P	P	P	P				
24	MHATRE AKSHAY PRADIP		P	A	P	P	P	P				

PRACTICAL INCHARGE CLASS COORDINATOR HOD

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

DEPARTMENT OF MECHANICAL ENGINEERING

PRACTICAL ATTENDANCE SHEET 2020-21 (Second Half 2020)

Class : BE Batch : B2 Sem : VII | Course : Prod^n Planning & control | Course code : MEL 703

Venue: | Name of Faculty : Asst Prof. S M. Kamat

Roll No.	Name of the Student	Practical No	1	2	3	4	5	6	7	8	9	10
		Date	24/11	22/12	24/12	29/12	31/12	31/12				
		Time										
25	MHATRE CHAITANYA DILIP		P	A	P	P	P	P				
26	MHATRE VAIBHAV PARSHURAM		P	P	P	P	A	P				
27	MINDE AKASH MADHUKAR		P	A	P	P	P	P				
28	NADKAR KALPESH KRUSHNA		P	P	P	P	A	P				
29	NAIK PRAJWAL HIRACHANDRA		A	P	P	P	P	P				
30	NARVEKAR PRATIK HARISHCHANDRA		P	P	P	A	P	P				
31	PATIL KUNAL RAVIKANT		P	A	P	P	P	P				
32	PATIL MAHESH DINKAR		P	P	P	P	A	P				
33	PATIL SHWETA DIPAK		A	P	P	P	P	P				
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35	PENKAR SAHIL RAMESH		P	A	P	P	P	P				
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46	THAKUR CHETAN DHRUVA		P	P	P	P	P	P				
47	TURE SUYOG MADHUSUDAN		P	P	P	P	P	P				
48	VIRKUD SHUBHAM SUDHIR		P	A	P	P	P	P				

PRACTICAL INCHARGE CLASS COORDINATOR HOD

G. M. Vedak Institute of Technology Tala Raigad

Assignment No.01

Date of Issue:03/11/2020 **Date of Submission**:06/11/2020

Course Outcome:

CO1- Student will be able to illustrate production planning functions and manage manufacturing functionsin a better way.

1. Define the term Production Planning and Control and list down its need. **May19 / May17 /May16**
2. What is the status of PPC department depending upon the company's manufacturing processes. **Dec18**
3. What are the functions of PPC? **May19 / May18 / Dec15**
4. What are the different types of production (manufacturing) methods? Give characteristics with one example of each. **Dec18 / May17 / May16 / Dec15**
5. Write short note on relationship of PPC department with other departments. **Dec18**
6. What are the components and types for a manufacturing system? **Dec17**
7. Write note on PPC as an integrated approach. **May16**
8. Discuss the prerequisites of PPC. Explain in the form of various types of data. **Dec19 / May 19 / May18 / Dec17 / May17 / Dec16**

Assignment No.02

Date of Issue:16/10/2020 **Date of Submission**:19/10/2020

Course Outcome:
CO2 - Student will be able to forecast the demand of the product and prepare an aggregate plan.

1. **May14/08m**
   Find the trend by least square method for the data as follows. Also find the demand for 2016.

Year	2007	2008	2009	2010	2011	2012	2013
Demand in 1000 units	85	75	80	72	65	60	55

2. **Dec13 / 10m**
   The sales of a company are given below. Fit a straight line to the data and find
   i) Forecast for the year 2013
   ii) Coefficient of correlation
   iii) Standard error of estimate
   iv) Limits of forecast

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sales	240	280	300	330	380	410	490	560	680	800

3. **May13/ 10m**
   A firm believes that its annual profit depends on its expenditures for research. The information for the preceding years is given below. Estimate the profit when expenditure is 6 units.

Year	Expenditure for Research (X)	Annual Profit (Y)
1989	2	20
1990	3	25
1991	5	34
1992	4	30
1993	11	40
1994	5	31
1995	6	-

4. **Dec 12 / 10m**
   The following data gives sales of the company for previous years. Fit the straight line and Forecast the sales for year 1998 and 1999.

Years	1989	1990	1991	1992	1993	1994	1995	1996	1997
Sales Rs (000)	13	20	20	28	30	32	33	38	43

5. **May12/ 10m**
   Estimate the sales forecast for the year 2000, using exponential smoothing forecaster. Take constant 0.5 and the forecast for the year 1995 as 160 x 10^5 units.Compare the forecast with least square method.

Year	1995	1996	1997	1998	1999
Sales (x 10^5)	180	168	159	170	188

Dec19 / 05m

6. What is aggregate planning? Explain different strategies of aggregate planning.

Assignment No.03

Date of Issue: 15/10/2020 **Date of Submission**:19/10/2020

Course Outcome:
CO3- Student will be able to develop the skills of Inventory Management and cost effectiveness.

1. **May14/10m**
   A textile mill buys its raw material from a vendor. The annual demand of the raw material is 9000 units. The ordering cost is Rs 100 per order and the carrying cost is 20% of the purchases price per month, where the purchase price per unit is Rs1.Find the following.
   a) Economic Order Quantity (EOQ)
   b) Total cost wrt EOQ
   c) Number of orders per year
   d) Time between consecutive two orders.

2. **Dec13/ 10m**
   The purchase manager currently follows EOQ policy of ordering for an item in the stores of his company. The annual demand of the item is 1600 units. Its carrying cost is 40% of the unit cost where the unit cost is Rs 400. The ordering cost is Rs 500 per order. Recently, the vendor supplying that item has given a discount of 10% in its unit cost if the order size is a minimum of 500 units.
   (i) Find EOQ and the corresponding total cost per year.
   (ii) Check whether the discount offer given by the vendor can be considered by the purchase manager.

3. **Dec12/ 08m**
   The annual demand for a machine component is 24,000 units. The carrying cost is Rs 0.40 unit/year, the ordering cost is Rs 20.00 per order and the shortage cost is Rs 1/unit/year. Find the values of the following:
   (i) Economic order quantity
   (ii) Maximum inventory
   (iii) Maximum shortage quantity
   (iv) Cycle time
   (v) Inventory period
   (vi) Shortage period

4. **May12/ 10m**
   A manufacturer has to supply his customers 3600 units of his product per year. Shortages are not permitted .Inventory carrying cost amounts Rs1.2 per annum. The setup cost per run is Rs 80. Find:
   (i) Economic order quantity
   (ii) Optimum numbers of orders per annum
   (iii) Average annual inventory cost (Minimum)
   (iv) Optimum period of supply per optimum order.

Assignment No.04

Date of Issue:24/12/2020 **Date of Submission**:28/12/2020

Course Outcome:

CO4- Student will be able to understand process planning and create a logical approach to line balancing in various production systems.

1. What is the importance of process sheet? What details does a process sheet contain?**May19 / 05m Dec18 / 05m May16 / 10m**
2. Explain Computer Aided Process Planning and its various types. **May18 / 05mDec17 / 05m Dec16 / 05m May16 / 05m**
3. Why process planning is needed? **Dec17 / 05m**
4. Discuss the importance of process planning. Also discuss in brief the types of process planning.**Dec17 / 10m**
5. Compare manual process planning with Computer Aided Process Planning. **May17 / 05m**
6. Write short note on assembly line balancing. **Dec16 / 05m**

Assignment No.05

Date of Issue: 07/11/2020 **Date of Submission**:10/11/2020

Course Outcome:
CO5- Student will be able to develop competency in scheduling and sequencing of manufacturing operations.

1. **Dec13/ 10m**
   Find the optimal sequence for processing nine jobs through the machines A, B and C in the order ABC.Processing times are given below in hours. Find the total elapsed time for the optimal sequence and idle time for each machine.

Job	1	2	3	4	5	6	7	8	9
Machine A	4	9	5	10	6	12	8	3	8
Machine B	6	4	8	9	4	6	2	6	4
Machine C	10	12	9	11	14	15	10	14	12

2. **May13/ 12m**
   Two machines and six jobs flow shop scheduling is shown below. Using Johnson's Algorithm obtain the optimal sequence which will minimize the makespan. Also determine the corresponding makespan.

Job, i	Machine 1	Machine 2
1	4	6
2	10	12
3	14	10
4	8	12
5	18	6
6	16	8

3. **Dec12/ 10m**
   Given the following data

Job	1	2	3	4	5	6
Machine A	12	10	9	14	7	9
Machine B	7	6	6	5	4	4
Machine C	6	5	6	4	2	4

   1) Order of processing job: ACB
   2) Sequence suggested: Jobs 5, 3, 6,2,1,4
      i) Determine the total elapsed time for the sequence suggested.
      ii) Is the given sequence optimal?
      iii) If your answer to i) is no, determine the optimal sequence and the total elapsed time associated with it.
      iv) Also determine idle time for each machine for the sequence obtained in iii.

4. **May12/ 10m**
   Five jobs 1, 2 ... .5 are to be processed on four machines A, B, C and D. Their processing times are given in the table.Determine the optimal sequence, minimum elapsed time & idle time for each machine.

	Processing times in hours			
Job	A	B	C	D
1	7	15	14	21
2	11	18	18	6
3	2	13	11	16
4	14	4	27	14
5	18	11	32	16

Assignment No.06

Date of Issue:17/12/2020 **Date of Submission**:21/12/2020

Course Outcome:
CO6- Student will be able to understand modern techniques of production planning and control.

1. Write short note on MRP I. **Dec18 / 05m May18 / 05m**
2. Write short note on MRP II. **May17 / 05m**
3. Write short note on ERP. Why ERP system is required. **May17 / 05m May16 / 05m May14 / 05m**
4. State the objectives and inputs of an MRP system. **Dec16 / 05m**
5. Explain evolution of ERP. **Dec15 / 05m Dec13 / 05m**
6. Discuss the implementation of ERP. **May15 / 10m Dec14 /10m**
7. Comments on modules in ERP. **Dec14 / 05m May14 / 10m Dec13 / 10m**

Laboratory Exercise No.01

Date of Issue:24/10/2020

Date of Submission:27/10/2020

Lab Outcome:

LO1- Student will be able to perform ABC analysis of a given problem.

Classify the following items into ABC and draw the ABC curve. **May19 / 10m**

Item No.	501	502	503	504	505	506	507	508	509	510
Annual Consumption	300	2800	30	1100	40	2200	150	800	600	80
Unit Price (Rs)	10	15	10	5	5	10	5	5	15	10

Laboratory Exercise No.02

Date of Issue:22/12/2020 **Date of Submission**:24/12/2020

Lab Outcome:

LO2- Student will be able to carry line balancing to reduce balance delay and improve the efficiency.

A company is setting an assembly line to produce 192 units per eight hour shift. The information regarding work elements in terms of times and immediate predecessors are given.

Work element	Time (sec)	Immediate Predecessors
A	40	None
B	80	A
C	30	D,E,F
D	25	B
E	20	B
F	15	B
G	120	A
H	145	G
I	130	H
J	115	C,I
Total	**720**	

i. What is the desired cycle time?

ii. What is the theoretical number of stations?

iii. Use largest work element time rule to work out a solution on precedence diagram.

iv. What are the efficiency and balance delay of the solution obtained?

Laboratory Exercise No.03

Date of Issue:29/12/2020 **Date of Submission**:31/12/2020

Lab Outcome:
LO3- Student will be able to prepare a Gantt chart.

Six jobs are to be processed on three machines. The processing time is as follows. Find the optimal schedule so that the total elapsed time is minimized. Represent it on Gantt chart.

Job / Machine	J1	J2	J3	J4	J5	J6
M1	10	3	5	4	2	1
M2	2	4	6	3	1	2
M3	8	6	7	9	7	7

Laboratory Exercise No.04

Date of Issue:31/12/2020 **Date of Submission**:02/01/2021

Lab Outcome:
LO4- Student will be able to perform network crashing of given example.

The utility data for a network is given below. Crash the network to minimum project duration and determine the project cost for that duration. Indirect costs are Rs 500 per day.

May18 / 10m

Activity	Normal		Crash	
	Duration (weeks)	Cost (Rs)	Duration (weeks)	Cost (Rs)
0-1	1	5000	1	5000
1-2	3	5000	2	12000
1-3	7	11000	4	17000
2-3	5	10000	3	12000
2-4	8	8500	6	12500
3-4	4	8500	2	16500
4-5	1	5000	1	5000

Laboratory Exercise No.05

Date of Issue:31/12/2020

Date of Submission:02/01/2021

Lab Outcome:
LO5- Student will be able to use Johnson's algorithm and find optimal sequence of job.

A machine operator has to perform three operations: turning, threading and knurling on a number of different jobs. The time required to perform these operations (in minutes) for each job is known. Determine the order in which the job should be processed in order to minimize the total time required to turn out all the jobs. Also find the idle times for the three operations.

Job	Time for turning (minutes)	Time for threading (minutes)	Time for knurling (minutes)
1	3	8	13
2	12	6	14
3	5	4	9
4	2	6	12
5	9	3	8
6	11	1	13

Laboratory Exercise No.06

Date of Issue:24/12/2020 **Date of Submission**:28/12/2020

Lab Outcome:
LO6- Student will be able to find planned order release for Material Requirement Planning.

Complete the MRP records for parts A, B and C. Part A is made of part C (1unit) and part B (2 unit). Part C is also required for making of part B.

Part A

		1	2	3	4	5	6
Projected requirements		**5**	**15**	**18**	**8**	**12**	**22**
Scheduled receipts							
Projected available balance	**21**						
Planned order release							

Q=20 ; LT=1 ; SS =0

Part B

		1	2	3	4	5	6
Projected requirements							
Scheduled receipts		**32**					
Projected available balance	**20**						
Planned order release							

Q=40; LT=2; SS =0

Part C

		1	2	3	4	5	6
Projected requirements							
Scheduled receipts							
Projected available balance	**50**						
Planned order release							

Q= lot for lot; LT=1; SS = 10

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

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DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (Second Half 2020)

Marksheet for Assignments

Year/Sem : BE/VII Course: Production Planning and Control Course Code : MEC703

Name Of Faculty : Mr S.M.Kamat

Roll No.	Name of Student	Marks for Each Assignment out of 10						Average Marks (10)
		1	2	3	4	5	6	
1	AMBUKAR PRATIK RAMAN	10	10	10	10	10	10	10
2	BHOIR SUYOG SURESH	10	8	9	8	5	8	8
3	BHORAVKAR SANDESH GORAKH	10	10	10	10	10	10	10
4	CHAVAREKAR PRATIK SUDHAKAR	10	8	9	9	8	10	9
5	CHOGALE PRATHAMESH KESHAV	10	10	10	10	10	10	10
6	DEO AMAR RATNESHWERI	10	10	10	10	10	10	10
7	DHAVALE DAYANAND SHANKARRAO	10	10	9	9	10	8	9
8	DHUMAL ROHIT PRAVIN	10	10	10	10	10	9	10
9	GHARAT RAJ KRISHNA	9	8	10	10	8	9	9
10	GHAYTALE JAGDISH SURESH	10	10	10	10	10	10	10
11	JAGTAP PRASANNA NITIN	10	10	10	10	10	10	10
12	JOSHI NIKHIL VISHWANATH	10	10	10	10	10	10	10
13	KALYANKAR DIPESH DILIP	10	10	10	10	10	10	10
14	KAMBLE SHAILESH ASHOK	10	10	10	10	10	10	10
15	KARDAME ABDUL AHAD AZHAR	10	10	10	10	10	10	10
16	KATLE VIKRANT HEMANT	10	8	8	10	9	8	9
17	KAUCHALI MAAZ M.ISHAQUE	9	9	8	10	10	8	9
18	KHAN SHAMSTABREZ ABDULRASHID	10	10	10	10	10	10	10
19	KHAN ARBAZ SAYEED	9	9	8	10	10	8	9
20	LOKHANDE SWATEJ RAVINDRA	8	9	9	8	10	10	9
21	MAHADE PAVAN RAVINDRA	10	10	8	9	9	8	9
22	MAHADIK KAUSTUBH GANESH	10	8	8	10	9	8	9
23	MHASKAR RAHUL SANJAY	10	9	10	10	10	10	10
24	MHATRE VAIBHAV PARSHURAM	10	10	9	9	10	8	9
25	MHATRE CHAITANYA DILIP	10	8	9	9	8	10	9
26	MHATRE AKSHAY PRADIP	10	10	9	9	10	8	9
27	MINDE AKASH MADHUKAR	9	9	8	10	10	8	9
28	NADKAR KALPESH KRUSHNA	10	10	9	10	10	10	10
29	NAIK PRAJWAL HIRACHANDRA	9	10	10	10	10	9	10
30	NARVEKAR PRATIK HARISHCHANDRA	9	8	10	7	6	8	8
31	PATIL KUNAL RAVIKANT	10	9	9	10	9	9	10

G.M. Vedak Institute of Technology Tala Raigad

32	PATIL SHWETA DIPAK	10	10	9	10	9	9	10
33	PATIL VINAY MADHUKAR	8	7	10	8	6	6	8
34	PENKAR SAHIL RAMESH	9	9	10	10	9	9	10
35	RAINJ PRASAD DEEPAK	8	9	8	8	10	8	9
36	RAWOOT YUNUS AMIR AHMED	9	10	10	10	9	9	10
37	SANAP SAMIR SANDIP	9	9	10	10	9	9	10
38	SHAFIUR REHMAN SAGEER	9	9	9	10	10	9	10
39	SHIGVAN RAHUL RAJENDRA	9	10	10	10	9	9	10
40	SHIVKAR SHRIKANT PRAKASH	8	7	10	8	6	6	8
41	SONAR ONKAR SUDARSHAN	6	8	10	8	7	6	8
42	SONAWANE BHUSHAN YASHWANT	8	10	8	8	9	9	9
43	TAWATE VIVEK VASANT	8	9	8	8	10	8	9
44	TELANGE AKASH AMIR	8	7	10	10	8	8	9
45	THAKUR CHETAN DHRUVA	9	10	10	9	9	10	10
46	TURE SUYOG MADHUSUDAN	9	9	10	10	8	10	10
47	VIRKUD SHUBHAM SUDHIR	10	7	8	6	8	6	8
48	PATIL MAHESH DINKAR	6	5	8	8	6	8	7

Date : 23/12/2020

Course Incharge **HOD**

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD

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DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (Second Half 2020)

Marksheet for Laboratory Exercises

Year : BE Sem : VII Lab : Production Planning and Control Lab Code : MEL703

Lab Incharge : Mr S.M.Kamat

Roll No.	Name of Student	Marks for Each Exercise out of 10						Average Marks (10)
		1	2	3	4	5	6	
1	AMBUKAR PRATIK RAMAN	8	10	8	8	9	9	9
2	BHOIR SUYOG SURESH	8	9	8	8	10	8	9
3	BHORAVKAR SANDESH GORAKH	8	7	10	10	8	8	9
4	CHAVAREKAR PRATIK SUDHAKAR	7	7	8	7	7	8	8
5	CHOGALE PRATHAMESH KESHAV	9	8	9	9	8	8	9
6	DEO AMAR RATNESHWERI	8	9	8	8	10	8	9
7	DHAVALE DAYANAND SHANKARRAO	9	9	8	8	8	9	9
8	DHUMAL ROHIT PRAVIN	9	8	8	9	9	9	9
9	GHARAT RAJ KRISHNA	8	8	10	8	9	9	9
10	GHAYTALE JAGDISH SURESH	7	8	8	7	8	7	8
11	JAGTAP PRASANNA NITIN	7	7	7	8	7	8	8
12	JOSHI NIKHIL VISHWANATH	8	8	8	8	7	7	8
13	KALYANKAR DIPESH DILIP	8	7	8	7	7	8	8
14	KAMBLE SHAILESH ASHOK	7	7	7	7	7	9	8
15	KARDAME ABDUL AHAD AZHAR	9	9	10	10	9	9	10
16	KATLE VIKRANT HEMANT	8	7	8	7	8	8	8
17	KAUCHALI MAAZ M.ISHAQUE	9	9	10	9	9	9	10
18	KHAN SHAMSTABREZ ABDULRASHID	9	8	8	8	8	9	9
19	KHAN ARBAZ SAYEED	10	10	10	10	9	10	10
20	LOKHANDE SWATEJ RAVINDRA	7	7	8	8	9	7	8
21	MAHADE PAVAN RAVINDRA	9	8	7	7	8	7	8
22	MAHADIK KAUSTUBH GANESH	8	7	10	10	8	8	9
23	MHASKAR RAHUL SANJAY	8	9	10	8	9	8	9
24	MHATRE VAIBHAV PARSHURAM	9	8	8	8	9	9	9
25	MHATRE CHAITANYA DILIP	8	8	9	10	8	9	9
26	MHATRE AKSHAY PRADIP	7	7	8	7	8	8	8
27	MINDE AKASH MADHUKAR	9	8	9	9	8	8	9
28	NADKAR KALPESH KRUSHNA	9	9	9	10	9	9	10
29	NAIK PRAJWAL HIRACHANDRA	7	7	8	8	8	7	8
30	NARVEKAR PRATIK HARISHCHANDRA	9	9	10	6	8	9	9
31	PATIL KUNAL RAVIKANT	6	5	8	7	8	7	7
32	PATIL SHWETA DIPAK	10	10	10	9	10	10	10

33	PATIL VINAY MADHUKAR	9	9	9	10	9	10	10
34	PENKAR SAHIL RAMESH	11	10	10	9	10	9	10
35	RAINJ PRASAD DEEPAK	8	8	8	8	9	9	9
36	RAWOOT YUNUS AMIR AHMED	9	9	8	9	8	8	9
37	SANAP SAMIR SANDIP	9	8	8	9	9	8	9
38	SHAFIUR REHMAN SAGEER	8	8	9	8	8	8	9
39	SHIGVAN RAHUL RAJENDRA	8	9	9	9	9	8	9
40	SHIVKAR SHRIKANT PRAKASH	7	9	8	8	7	8	8
41	SONAR ONKAR SUDARSHAN	7	7	8	8	9	8	8
42	SONAWANE BHUSHAN YASHWANT	9	9	8	8	8	8	9
43	TAWATE VIVEK VASANT	7	7	8	8	8	7	8
44	TELANGE AKASH AMIR	6	6	6	7	7	8	7
45	THAKUR CHETAN DHRUVA	8	9	9	8	8	8	9
46	TURE SUYOG MADHUSUDAN	8	8	9	9	9	8	9
47	VIRKUD SHUBHAM SUDHIR	7	7	7	7	8	8	8
48	PATIL MAHESH DINKAR	8	8	7	8	7	8	8

Date : 29/12/2020

Lab Incharge **HOD**

G.M. Vedak Institute of Technology Tala Raigad

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DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (Second Half 2020)

Marksheet for Attendance

Year / Sem : BE / VII Course : Production Planning and Control

Course Incharge : Mr.S.M.Kamat Course code : MEC703

Lab Incharge : Mr. S.M.Kamat Lab code : MEL703

Range of Attendance	75%-80%	81%-85%	86%-90%	91%-95%	96%-100 %
Marks	1	2	3	4	5

Roll No.	Name of Student	Total Lectures Attended (out of 48)	Theory Attendance %	Marks out of 05	Total Practicals Attended (out of 06)	Practical Attendance %	Marks out of 05	Average (05 Marks)
1	AMBUKAR PRATIK RAMAN	46	96%	5	5	84	2	4
2	BHOIR SUYOG SURESH	37	77	1	6	100	5	3
3	BHORAVKAR SANDESH GORAKH	46	96	5	5	84	2	4
4	CHAVAREKAR PRATIK SUDHAKAR	40	84	2	5	84	2	2
5	CHOGALE PRATHAMESH KESHAV	37	77	1	6	100	5	3
6	DEO AMAR RATNESHWERI	46	96	5	5	84	2	4
7	DHAVALE DAYANAND SHANKARRAO	37	77	1	6	100	5	3
8	DHUMAL ROHIT PRAVIN	40	84	2	5	84	2	2
9	GHARAT RAJ KRISHNA	40	84	2	5	84	2	2
10	GHAYTALE JAGDISH SURESH	40	84	2	5	84	2	2
11	JAGTAP PRASANNA NITIN	40	84	2	5	84	2	2
12	JOSHI NIKHIL VISHWANATH	40	84	2	5	84	2	2
13	KALYANKAR DIPESH DILIP	40	84	2	5	84	2	2
14	KAMBLE SHAILESH ASHOK	40	84	2	5	84	2	2
15	KARDAME ABDUL AHAD AZHAR	40	84	2	5	84	2	2
16	KATLE VIKRANT HEMANT	40	84	2	5	84	2	2
17	KAUCHALI MAAZ M.ISHAQUE	40	84	2	5	84	2	2
18	KHAN SHAMSTABREZ ABDULRASHID	40	84	2	5	84	2	2
19	KHAN ARBAZ SAYEED	37	77	1	6	100	5	3
20	LOKHANDE SWATEJ RAVINDRA	40	84	2	5	84	2	2
21	MAHADE PAVAN RAVINDRA	40	84	2	5	84	2	2
22	MAHADIK KAUSTUBH GANESH	40	84	2	5	84	2	2
23	MHASKAR RAHUL SANJAY	37	77	1	6	100	5	3

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24	MHATRE VAIBHAV PARSHURAM	40	84	2	5	84	2	2
25	MHATRE CHAITANYA DILIP	40	84	2	5	84	2	2
26	MHATRE AKSHAY PRADIP	40	84	2	5	84	2	2
27	MINDE AKASH MADHUKAR	40	84	2	5	84	2	2
28	NADKAR KALPESH KRUSHNA	37	77	1	6	100	5	3
29	NAIK PRAJWAL HIRACHANDRA	40	84	2	5	84	2	2
30	NARVEKAR PRATIK HARISHCHANDRA	40	84	2	5	84	2	2
31	PATIL KUNAL RAVIKANT	40	84	2	5	84	2	2
32	PATIL SHWETA DIPAK	40	84	2	5	84	2	2
33	PATIL VINAY MADHUKAR	40	84	2	5	84	2	2
34	PENKAR SAHIL RAMESH	40	84	2	5	84	2	2
35	RAINJ PRASAD DEEPAK	40	84	2	5	84	2	2
36	RAWOOT YUNUS AMIR AHMED	46	96	5	5	84	2	4
37	SANAP SAMIR SANDIP	37	77	1	6	100	5	3
38	SHAFIUR REHMAN SAGEER	40	84	2	5	84	2	2
39	SHIGVAN RAHUL RAJENDRA	40	84	2	5	84	2	2
40	SHIVKAR SHRIKANT PRAKASH	40	84	2	5	84	2	2
41	SONAR ONKAR SUDARSHAN	40	84	2	5	84	2	2
42	SONAWANE BHUSHAN YASHWANT	40	84	2	5	84	2	2
43	TAWATE VIVEK VASANT	40	84	2	5	84	2	2
44	TELANGE AKASH AMIR	40	84	2	5	84	2	2
45	THAKUR CHETAN DHRUVA	37	77	1	6	100	5	3
46	TURE SUYOG MADHUSUDAN	37	77	1	6	100	5	3
47	VIRKUD SHUBHAM SUDHIR	40	84	2	5	84	2	2
48	PATIL MAHESH DINKAR	37	77	1	6	100	5	3

Date : 11/01/2021

Course Incharge **Lab Incharge** **HOD**

G.M. Vedak Institute of Technology Tala Raigad

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

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DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (Second Half 2020)

Marksheet for Termwork

Year / Sem : BE / VII — Course : Production Planning and Control

Course Incharge : Mr.S.M.Kamat — Course code : MEC703

Lab Incharge : Mr. S.M.Kamat — Lab code : MEL703

Roll No.	Name of Student	Marks for Assignment (10)	Marks for Lab.Exercises (10)	Mark for Attendance (05)	Marks for Termwork (25)
1	AMBUKAR PRATIK RAMAN	10	9	4	23
2	BHOIR SUYOG SURESH	8	9	3	20
3	BHORAVKAR SANDESH GORAKH	10	9	4	23
4	CHAVAREKAR PRATIK SUDHAKAR	9	8	2	19
5	CHOGALE PRATHAMESH KESHAV	10	9	3	22
6	DEO AMAR RATNESHWERI	10	9	4	23
7	DHAVALE DAYANAND SHANKARRAO	9	9	3	21
8	DHUMAL ROHIT PRAVIN	10	9	2	21
9	GHARAT RAJ KRISHNA	9	9	2	20
10	GHAYTALE JAGDISH SURESH	10	8	2	20
11	JAGTAP PRASANNA NITIN	10	8	2	20
12	JOSHI NIKHIL VISHWANATH	10	8	2	20
13	KALYANKAR DIPESH DILIP	10	8	2	20
14	KAMBLE SHAILESH ASHOK	10	8	2	20
15	KARDAME ABDUL AHAD AZHAR	10	10	2	22
16	KATLE VIKRANT HEMANT	9	8	2	19
17	KAUCHALI MAAZ M.ISHAQUE	9	10	2	21
18	KHAN SHAMSTABREZ ABDULRASHID	10	9	2	21
19	KHAN ARBAZ SAYEED	9	10	3	22
20	LOKHANDE SWATEJ RAVINDRA	9	8	2	19
21	MAHADE PAVAN RAVINDRA	9	8	2	19
22	MAHADIK KAUSTUBH GANESH	9	9	2	20
23	MHASKAR RAHUL SANJAY	10	9	3	22
24	MHATRE VAIBHAV PARSHURAM	9	8	2	19
25	MHATRE CHAITANYA DILIP	9	8	2	19
26	MHATRE AKSHAY PRADIP	9	8	2	18
27	MINDE AKASH MADHUKAR	9	9	2	20

28	NADKAR KALPESH KRUSHNA	10	10	3	23
29	NAIK PRAJWAL HIRACHANDRA	10	8	2	20
30	NARVEKAR PRATIK HARISHCHANDRA	8	9	2	19
31	PATIL KUNAL RAVIKANT	10	7	2	19
32	PATIL SHWETA DIPAK	10	10	2	22
33	PATIL VINAY MADHUKAR	8	9	2	19
34	PENKAR SAHIL RAMESH	10	10	2	22
35	RAINJ PRASAD DEEPAK	9	9	2	20
36	RAWOOT YUNUS AMIR AHMED	10	9	4	23
37	SANAP SAMIR SANDIP	10	9	3	22
38	SHAFIUR REHMAN SAGEER	10	9	2	21
39	SHIGVAN RAHUL RAJENDRA	10	9	2	21
40	SHIVKAR SHRIKANT PRAKASH	8	8	2	18
41	SONAR ONKAR SUDARSHAN	8	8	2	18
42	SONAWANE BHUSHAN YASHWANT	9	9	2	20
43	TAWATE VIVEK VASANT	9	8	2	19
44	TELANGE AKASH AMIR	9	7	2	18
45	THAKUR CHETAN DHRUVA	10	9	3	22
46	TURE SUYOG MADHUSUDAN	10	9	3	22
47	VIRKUD SHUBHAM SUDHIR	8	8	2	18
48	PATIL MAHESH DINKAR	7	8	3	18

Date : 03/01/2021

Course Incharge **Lab Incharge** **HOD**

G.M. Vedak Institute of Technology Tala Raigad

G.M. Vedak Institute of Technology, Tala

Internal Assessment-I

Mumbai University

Branch- BE Mechanical Engineering

Course - Production Planning and Control Course Code: MEC703

Semester-VII (CBCGS)

Pattern- Revised 2016

Date- 10/11/2020

Exam Time- 10.00 AM TO 10.30 AM

Instructions-

1. Enter your details in correct manner (Seat Number and Name)(Capital & In English only)
2. Read All questions carefully.
3. Link will get deactivated at 10:30 AM, submit your response before 10:30 AM.
4. Once the form is submitted, answers can not be changed.
5. No negative marking.
6. All questions are compulsory.
7. Use of unfair means is prohibited
8. Avoid multiple logins.

COURSE OUTCOMES:

1) CO1- Student will be able to illustrate production planning functions and manage manufacturing functions in a better way.

2) CO2- Student will be able to forecast the demand of the product and prepare an aggregate plan.

3) CO3- Student will be able to develop the skills of Inventory Management and cost effectiveness.

G.M. Vedak Institute of Technology Tala Raigad

Q.1 Ship Building and Aircraft manufacturing is an example of _____ type of layout .

A. Combined
B. Matrix
C. Fixed
D. Group

Q2.In Mass production system,

A. Material handling system is flexible
B. Material handling system is semi automatic.
C. Material handling system is automatic
D. Material handling system does not exist

Q3.The task of off loading some of the jobs to the outside vendors thus hiring capacity to meet the requirements of the organization is known as

A. Subcontracting
B. Replenishing
C. Procuring
D. Ordering

Q4.The planned or engineered rate of output of goods or service under normal or full scale operating condition is known as

A. Licensed capacity
B. Design Capacity
C. System capacity
D. Installed capacity

Q5.Capacity planing is to be carried out keeping in mind _____growth and expansion plans, market trend, sales forecast,etc.

A. Current
B. future
C. partial
D. complete

Q6.The basic primary requirement at the very initial stage in capacity planning is

A. Demand forecast
B. Invenory requirement
C. Manpower requirement
D. Equipment requirement

Q7.Aggregate planning is done for a period of

A. 3 years
B. 1.5 to 2 years
C. maximum upto 1.5 years
D. 10 years

Q8.A-B-C analysis is not

A. Is a basic technique of materials management
B. Is meant for relative inventory control
C. Does not depend upon the unit cost of the item but on its annual consumption
D. a method for manufacturing the goods

Q9.Which of the following statements about the basic EOQ model is false?

A. If the setup cost were to decrease, the EOQ would fall.
B. If annual demand were to increase, the EOQ would increase.
C. If the ordering cost were to increase, the EOQ would rise.
D. If annual demand were to double, the EOQ would also double.

Q10.Which of the following is not an inventory?

A. Machines
B. Raw material
C. Finished products
D. Consumable tools

Q11.A _____ is something which is offered to customers to satisfy their needs or wants.

A. Process
B. Price
C. Promotion
D. Product

Q12.Which of the following is not a part of Five M's?

A. Material
B. Machine
C. Motion
D. Method

Q13.Given last period's forecast of 150, and last period's demand of 160, what is the simple exponential smoothing forecast with an alpha of 0.5 for the next period? (2 marks)

A. 152
B. 155
C. 157
D. 160

Q14.The demand of an item is 100 and 120 units for January and February respectively. Using 110 as forecast for January, Calculate the forecast for March using 0.4 as smoothing constant. (2 marks)

A. 112
B. 111
C. 106
D. 98

Q15.Refer the following data given below and Using 3 month moving average method find the forecasting for the month of December. July sales 50, August sales 52, September sales 54, October sales 48 and November sales 72. (2 marks)

A. 59
B. 57
C. 58
D. 60

Q16 An inventory decision rule states "when the inventory level goes down to 14 gearboxes, 100 gearboxes will be ordered." Which of the following statements is true?

A. 100 is the reorder point, and 14 is the order quantity.
B. 14 is the reorder point, and 100 is the order quantity.
C. The number 100 is a function of demand during lead time.
D. 14 is the safety stock, and 100 is the reorder point.

Q17.'Buffer stock' is the level of stock

A. Half of the actual stock
B. At which the ordering process should start
C. Minimum stock level below which actual stock should not fall
D. Maximum stock in inventory

G.M. Vedak Institute of Technology, Tala

Internal Assessment-I Program- Mechanical Engineering

Course - Production Planning and Control Course Code: MEC703

Year / Semester- BE / VII (CBCGS) Pattern- Revised 2016

Date- 10/11/2020 Exam Time - 10.00 AM TO 10.30 AM

Max.Marks: 20

Answer Key:

Question Number	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')	Marks
Q1.	C	1
Q2.	C	1
Q3.	A	1
Q4	B	1
Q5	B	1
Q6	A	1
Q7	C	1
Q8.	D	1
Q9.	D	1
Q10.	A	1
Q11.	D	1
Q12.	C	1
Q13.	B	2
Q14.	A	2
Q15.	C	2
Q16.	B	1
Q17.	C	1

G.M. Vedak Institute of Technology, Tala

Internal Assessment-I I

Mumbai University

Branch- BE Mechanical Engineering

Course - Production Planning and Control Course Code: MEC703

Semester-VII (CBCGS)

Pattern- Revised 2016

Date- 18/12/2020

Exam Time- 10.00 AM TO 10.30 AM

Instructions-

1. Enter your details in correct manner (Seat Number and Name)(Capital & In English only)
2. Read All questions carefully.
3. Link will get deactivated at 10:30 AM, submit your response before 10:30 AM.
4. Once the form is submitted, answers can not be changed.
5. No negative marking.
6. All questions are compulsory.
7. Use of unfair means is prohibited
8. Avoid multiple logins.

COURSE OUTCOMES:

1) CO4- Student will be able to understand process planning and create a logical approach to linebalancing in various production systems.

2) CO5- Student will be able to develop competency in scheduling and sequencing of manufacturing operations.

3) CO6- Student will be able to understand modern techniques of production planning and control.

Q.1 A line balancing problem is solved in the context of

A. process layout
B. fixed position layout
C. product layout
D. production schedule

Q2. Which of the following statements related to characteristics of line balancing are correct ?

A. shareout of sequential work activities into work stations
B. High utilization of equipment
C. Minimization of idle time
D. All of the above

Q3.Which of the following are benefits of line balancing?

1.It minimizes the in-process inventory
2. It reduces the work content
3. It smoothens the production flow
4. It maintains the required rate of output

A. 1,2 and 3
B. 2,3 and 4
C. 1,3 and 4
D. 1,2and 4

Q4. In an assembly line, what is balance delay?

A. Line Efficiency X 100
B. 100-Line Efficiency(in %)
C. Line Efficiency/100
D. None of the above

Q5. In manufacturing management, the term 'Dispatching' is used to describe

A. Dispatch of sales order
B. Dispatch of factory mail
C. Dispatch of finished product of the user
D. Dispatch of work orders through shop floor

Q6. Sequencing perform following

A. Assigns dates to specific jobs or operation steps
B. Assigns jobs to work center
C. Specifies order in which jobs should be done at each center
D. Assigns workers to job

Q7. The _____ is the input to Materials Requirements Planning which lists the assemblies, subassemblies, parts and raw materials needed to produce one unit of finished product

A. Assembly time chart
B. Bill of materials
C. Inventory records
D. Net requirements chart

Q8. A master production schedule specifies

A. What product is to be made, and when
B. The financial resources required for production
C. The labor hours required for production
D. What component is to be made, and when

Q9. A material requirements plan contains information with regard to all of the following except

A. Quantities and required delivery dates of final products
B. Quantities and required delivery dates of all sub-assemblies
C. Inventory on hand for each final product
D. The capacity needed to provide the projected output rate

Q10. Demand for a given item is said to be dependent if

A. The item has several children
B. There is a clearly identifiable parent
C. There is a deep bill of materials
D. There is not any parent in given structure.

Q11. The extension of MRP which extends to resources such as labor hours and machine hours, as well as to order entry, purchasing, and direct interface with customers and suppliers is Process

A. The master production schedule
B. MRP II
C. Enterprise Resource Planning
D. Closed-loop MRP

Q12. Material requirements plan specify

A. The costs associated with alternative plans
B. The capacity needed to provide the projected output rate
C. The quantities of the product families that need to be produced
D. The quantity and timing of planned order releases

Q13. A bill of materials lists the

A. Components, ingredients, and materials required to produce an item
B. Times needed to perform all phases of production
C. Operations required to produce an item
D. Production schedules for all products

Q14. Enterprise Resource Planning (ERP) has been criticized on a number of grounds. Which of the following is not a common criticism of ERP?

A. It can have a disruptive effect on the organization's operations
B. Implementation is expensive
C. It does not allow decisions and databases from all parts of the organization to be integrated
D. The effect it has on businesses is disappointing

Q15. MRP II is accurately described as

A. MRP augmented by other resource variables
B. MRP software designed for services
C. usually employed to isolate manufacturing operations from other aspects of an organization
D. MRP with a new set of computer programs that execute on micro-computers

Q16 ERP system is built on a _____ utilising a common computing platform

A. Individual databases
B. Centralised database
C. Modular databases
D. Centralised layout

Q17 What is the key to MRP?

A. Capacity of requirements for components are based upon the structure of the Bill of Material.
B. Quantity of requirements for components are based upon the structure of the Bill of Material.
C. Production of requirements for components are based upon the structure of the Bill of Material.
D. Time-phasing of requirements for components are based upon the structure of the Bill of Material.

Q18. MRP-II systems provide...

A. Information that is useful to all functional areas and encourage cross-functional interaction.
B. Accurate inventory information.
C. Information with cost data.
D. Information that can be used for other company functions.

Q19. In an MRP system, component demand is

A. Foreasted
B. Established by the master production schedule
C. Calculated by MRP system from the master production schedule
D. Ignored

Q20. Material requirements planning does not include

A. Material price
B. Bill of material
C. Inventory level
D. Production schedule

G.M. Vedak Institute of Technology, Tala

Internal Assessment-II Program- Mechanical Engineering

Course - Production Planning and Control Course Code: MEC703

Year / Semester- BE / VII (CBCGS) Pattern- Revised 2016

Date- 18/12/2020 Exam Time - 10.00 AM TO 10.30 AM

Max.Marks: 20

Answer Key:

Question Number	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')	Marks
Q1.	C	1
Q2.	D	1
Q3.	C	1
Q4	B	1
Q5	D	1
Q6	C	1
Q7	B	1
Q8.	A	1
Q9.	D	1
Q10.	B	1
Q11.	C	1
Q12.	D	1
Q13.	A	1
Q14.	C	1
Q15.	A	1
Q16.	B	1
Q17.	D	1
Q18.	C	1
Q19.	C	1
Q20.	A	1

G. M. VEDAK INSTITUTE OF TECHNOLOGY,TALA

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESMENT MARKSHEET

CLASS/Sem:B.E./VII A.Y.2020-21 (S.H.2020) Course : PPC

SR. NO	Seat No	NAME OF THE STUDENT	IA-I	IA-II	IA - Avg
			20 MARKS	20 MARKS	20 MARKS
1	14274945	CHOGALE PRATHAMESH KESHAV KAVITA	12	12	12
2	14274946	SONAWANE BHUSHAN YASHWANT SAVITA	18	18	18
3	14274947	JAGTAP PRASANNA NITIN MINAKSHI	15	18	17
4	14274948	MAHADIK KAUSTUBH GANESH PRERANA	14	16	15
5	14274949	SONAR ONKAR SUDARSHAN SUJATA	16	11	14
6	14274950	KAMBLE SHAILESH ASHOK REKHA	13	11	12
7	14274951	NADKAR KALPESH KRUSHNA SHALINE	17	16	17
8	14274952	NAIK PRAJWAL HIRACHANDRA HARSHALA	18	18	18
9	14274953	CHAVAREKAR PRATIK SUDHAKAR SADHNA	16	17	17
10	14274954	SHAFIUR REHMAN SAGEER MAHJABI	15	8	12
11	14274955	TELANGE AKASH AMIR AMITA	16	13	15
12	14274956	DEO AMAR RATNESHWARI PREMLATA	18	18	18
13	14274957	THAKUR CHETAN DHRUVA NAMI	17	18	18
14	14274958	PENKAR SAHIL RAMESH RASIKA	18	18	18
15	14274959	TURE SUYOG MADHUSUDAN MINAKSHI	17	18	18
16	14274960	SHIVKAR SHRIKANT PRAKASH SHAKUNATALA	16	16	16
17	14274961	KARDAME ABDUL AHAD AZHAR NASREEN	14	17	16
18	14274962	SANAP SAMIR SANDIP SAPANA	15	11	13
19	14274963	MHASKAR RAHUL SANJAY SANGITA	15	12	14
20	14274964	MINDE AKASH MADHUKAR SADHANA	17	13	15
21	14274965	MHATRE VAIBHAV PARSHURAM JAYASHRI	15	13	14
22	14274966	DHAVALE DAYANAND SHANKARRAO SAVITA	15	18	17
23	14274967	AMBUKAR PRATIK RAMAN RASIKA	16	18	17
24	14274968	SHIGVAN RAHUL RAJENDRA ROSHANI	14	18	16
25	14274969	BHORAVKAR SANDESH GORAKH NIRMALA	18	18	18
26	14274970	PATIL SHWETA DIPAK VANDNA	15	17	16
27	14274971	PATIL VINAY MADHUKAR MANISHA	18	18	18
28	14274972	RAINJ PRASAD DEEPAK UJWALA	15	13	14
29	14274973	KATLE VIKRANT HEMANT UJJWALA	14	17	16
30	14274974	KAUCHALI MAAZ M.ISHAQUE MUMTAZ	17	14	16
31	14274975	KHAN ARBAZ SAEED SHERBANU	15	12	14
32	14274976	KHAN SHAMSTABREZ ABDULRASHID SHAHANOOR	15	11	13
33	14274977	RAWOOT YUNUS AMIR AHMED RASHIDA	18	18	18
34	14274978	NARVEKAR PRATIK HARISHCHANDRA HARSHALI	14	14	14
35	14274979	DHUMAL ROHIT PRAVIN KARUNA	15	12	14
36	14274980	PATIL KUNAL RAVIKANT JAYASHRI	17	17	17
37	14274981	BHOIR SUYOG SURESH WATSALA	17	14	16
38	14274982	VIRKUD SHUBHAM SUDHIR SNEHA	18	18	18
39	14274983	GHAYTALE JAGDISH SURESH SUJATA	13	10	12
40	14274984	MHATRE CHAITANYA DILIP ANJANI	AB	15	8
41	14274985	JOSHI NIKHIL VISHWANATH MANISHA	15	12	14
42	14274986	MAHADE PAVAN RAVINDRA RINA	18	18	18
43	14274987	LOKHANDE SWATEJ RAVINDRA RATNA	18	17	18
44	14274988	KALYANKAR DIPESH DILIP DIPALI	8	10	9
45	14274989	GHARAT RAJ KRISHNA REKHA	15	18	17
46	14274990	PATIL MAHESH DINKAR SANDHYA	8	9	9
47	14274991	MHATRE AKSHAY PRADIP PRATIKSHA	13	11	12
48	14274992	TAWATE VIVEK VASANT VAISHALI	14	16	15

Date:

Course Incharge Exam Coordinator HOD

G. M. Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY,TALA

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESMENT- I MARKSHEET

A.Y.2020-21 (S.H.2020)

CLASS/Sem:B.E./VII Course : PPC Max.Marks :20

SR. NO.	NAME OF THE STUDENT	Marks in Figure	Marks in Words
1	CHOGALE PRATHAMESH KESHAV KAVITA	12	ONE TWO
2	SONAWANE BHUSHAN YASHWANT SAVITA	18	ONE EIGHT
3	JAGTAP PRASANNA NITIN MINAKSHI	15	ONE FIVE
4	MAHADIK KAUSTUBH GANESH PRERANA	14	ONE FOUR
5	SONAR ONKAR SUDARSHAN SUJATA	16	ONE SIX
6	KAMBLE SHAILESH ASHOK REKHA	13	ONE THREE
7	NADKAR KALPESH KRUSHNA SHALINE	17	ONE SEVEN
8	NAIK PRAJWAL HIRACHANDRA HARSHALA	18	ONE EIGHT
9	CHAVAREKAR PRATIK SUDHAKAR SADHNA	16	ONE SIX
10	SHAFIUR REHMAN SAGEER MAHJABI	15	ONE FIVE
11	TELANGE AKASH AMIR AMITA	16	ONE SIX
12	DEO AMAR RATNESHWARI PREMLATA	18	ONE EIGHT
13	THAKUR CHETAN DHRUVA NAMI	17	ONE SEVEN
14	PENKAR SAHIL RAMESH RASIKA	18	ONE EIGHT
15	TURE SUYOG MADHUSUDAN MINAKSHI	17	ONE SEVEN
16	SHIVKAR SHRIKANT PRAKASH SHAKUNATALA	16	ONE SIX
17	KARDAME ABDUL AHAD AZHAR NASREEN	14	ONE FOUR
18	SANAP SAMIR SANDIP SAPANA	15	ONE FIVE
19	MHASKAR RAHUL SANJAY SANGITA	15	ONE FIVE
20	MINDE AKASH MADHUKAR SADHANA	17	ONE SEVEN
21	MHATRE VAIBHAV PARSHURAM JAYASHRI	15	ONE FIVE
22	DHAVALE DAYANAND SHANKARRAO SAVITA	15	ONE FIVE
23	AMBUKAR PRATIK RAMAN RASIKA	16	ONE SIX
24	SHIGVAN RAHUL RAJENDRA ROSHANI	14	ONE FOUR
25	BHORAVKAR SANDESH GORAKH NIRMALA	18	ONE EIGHT
26	PATIL SHWETA DIPAK VANDNA	15	ONE FIVE
27	PATIL VINAY MADHUKAR MANISHA	18	ONE EIGHT
28	RAINJ PRASAD DEEPAK UJWALA	15	ONE FIVE
29	KATLE VIKRANT HEMANT UJJWALA	14	ONE FOUR
30	KAUCHALI MAAZ M.ISHAQUE MUMTAZ	17	ONE SEVEN
31	KHAN ARBAZ SAEED SHERBANU	15	ONE FIVE
32	KHAN SHAMSTABREZ ABDULRASHID SHAHANOOR	15	ONE FIVE
33	RAWOOT YUNUS AMIR AHMED RASHIDA	18	ONE EIGHT
34	NARVEKAR PRATIK HARISHCHANDRA HARSHALI	14	ONE FOUR
35	DHUMAL ROHIT PRAVIN KARUNA	15	ONE FIVE
36	PATIL KUNAL RAVIKANT JAYASHRI	17	ONE SEVEN
37	BHOIR SUYOG SURESH WATSALA	17	ONE SEVEN
38	VIRKUD SHUBHAM SUDHIR SNEHA	18	ONE EIGHT
39	GHAYTALE JAGDISH SURESH SUJATA	13	ONE THREE
40	MHATRE CHAITANYA DILIP ANJANI	AB	ABSENT
41	JOSHI NIKHIL VISHWANATH MANISHA	15	ONE FIVE
42	MAHADE PAVAN RAVINDRA RINA	18	ONE EIGHT
43	LOKHANDE SWATEJ RAVINDRA RATNA	18	ONE EIGHT
44	KALYANKAR DIPESH DILIP DIPALI	8	ZERO EIGHT
45	GHARAT RAJ KRISHNA REKHA	15	ONE FIVE
46	PATIL MAHESH DINKAR SANDHYA	8	ZERO EIGHT
47	MHATRE AKSHAY PRADIP PRATIKSHA	13	ONE THREE
48	TAWATE VIVEK VASANT VAISHALI	14	ONE FOUR

Date: 13/11/2020

Course Incharge Exam Coordinator HOD

G.M. Vedak Institute of Technology Tala Raigad

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem – BE / VII

Course – Production Planning and Control (**MEC703**)

List of slow learners and advanced learners

(Evaluation Cycle 01)

Reference used: Result of **Internal Assessment I** dated 10.11.2020 at 10am to 10.30am
Criterion for slow learner: **Below 15 marks**

SR.NO	SLOW LEARNER NAME	ADVANCED LEARNER NAME
1	Chogale Prathamesh Keshav	Ambukar Pratik Raman
2	Ghaytale Jagdish Suresh	Bhoir Suyog Suresh
3	Kalyankar Dipesh Dilip	Bhoravkar Sandesh Gorakh
4	Kamble Shailesh Ashok	Chavarekar Pratik Sudhakar
5	Kardame Abdul Ahad Azhar	Deo Amar Ratneshwari
6	Katle Vikrant Hemant	Dhavale Dayanand Shankarrao
7	Mahadik Kaustubh Ganesh	Dhumal Rohit Pravin
8	Mhatre Chaitanya Dilip	Gharat Raj Krishna
9	Mhatre Akshay Pradip	Jagtap Prasanna Nitin
10	Narvekar Pratik Harishchandra	Joshi Nikhil Vishwanath
11	Shigvan Rahul Rajendra	Kauchali Maaz M.Ishaque
12	Tawate Vivek Vasant	Khan Shamstabrez Abdulrashid
13	Patil Mahesh Dinkar	Khan Arbaz Sayeed
14		Lokhande Swatej Ravindra
15		Mahade Pavan Ravindra
16		Mhaskar Rahul Sanjay
17		Mhatre Vaibhav Parshuram
18		Minde Akash Madhukar

19		Nadkar Kalpesh Krushna
20		Naik Prajwal Hirachandra
21		Patil Kunal Ravikant
22		Patil Shweta Dipak
23		Patil Vinay Madhukar
24		Penkar Sahil Ramesh
25		Rainj Prasad Deepak
26		Rawoot Yunus Amir Ahmed
27		Sanap Samir Sandip
28		Shafiur Rehman Sageer
29		Shivkar Shrikant Prakash
30		Sonar Onkar Sudarshan
31		Sonawane Bhushan Yashwant
32		Telange Akash Amir
33		Thakur Chetan Dhruva
34		Ture Suyog Madhusudan
35		Virkud Shubham Sudhir

Analysis

Total Number of students in class = 48

Total number of slow learners = 13 Percentage of slow learners = (13/48) * 100 = 27%

Total number of advanced learners = 35 Percentage of advanced learners = (35/48) *100 = 73%

Course Incharge

HOD

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA
Department of Mechanical Engineering
Academic Year 2020-21 (Second Half 2020)

Year / Sem – BE / VII

Subject/ Course – Production Planning and Control (MEC 703)

Assignment for Advanced Learners

Assignment No.01

Date of Issue: 06/12/2020 **Date of Submission**: 11 /12/2020

How can you apply the knowledge of Production planning and Control to manufacturing industries? Explain in detail.

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA
Department of Mechanical Engineering
Academic Year 2020-21 (Second Half 2020)

Year / Sem – BE / VII

Course – Production Planning and Control (MEC 703)

Assignments for Slow Learners

Assignment No.01

Date of Issue: 06/12/2020 **Date of Submission**: 11 /12/2020

Q1.Explain different functions of PPC.
Q2.Explain importance of forecasting in PPC.

Assignment No.02

Date of Issue: 06/12/2020 **Date of Submission**: 11 /12/2020

Q1.Explain importance of inventory control in PPC.

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (Second Half 2020)

Attendance Sheet of Lectures for Slow Learners

Class : BE **Sem :**VII	**Subject / Course :** Production planning & Control (MEC 703)
Venue:	**Name of Faculty :** Mr.S.M.Kamat

Sr. No.	Name of the Student	Lecture No.	1	2	3
		Date	23/11/2020	24/11/2020	25/11/2020
		Time	10 am	11 am	10 am
1	Chogale Prathamesh Keshav		P	P	A
2	Ghaytale Jagdish Suresh		P	A	P
3	Kalyankar Dipesh Dilip		A	A	P
4	Kamble Shailesh Ashok		P	P	A
5	Kardame Abdul Ahad Azhar		P	P	P
6	Katle Vikrant Hemant		A	P	P
7	Mahadik Kaustubh Ganesh		P	P	P
8	Mhatre Chaitanya Dilip		A	P	P
9	Mhatre Akshay Pradip		A	A	P
10	Narvekar Pratik Harishchandra		P	P	A
11	Shigvan Rahul Rajendra		A	P	P
12	Tawate Vivek Vasant		P	P	P
13	Patil Mahesh Dinkar		A	A	P

Subject Incharge

HOD

G.M. Vedak Institute of Technology Tala Raigad

G.M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

DEPARTMENT OF MECHANICAL ENGINEERING

Academic Year 2020-21 (Second Half 2020)

Attendance Sheet of Lectures for Advanced Learners

Class : BE **Sem :**VII	**Course :** Production planning & Control (MEC 703)
Venue:	**Name of Faculty :** Mr.S.M.Kamat

Sr. No.	Name of the Student	Lecture No.	1	2	3
		Date	26/11/2020	27/11/2020	
		Time	1.30 PM	11 am	
1	Ambukar Pratik Raman		P	P	
2	Bhoir Suyog Suresh		P	P	
3	Bhoravkar Sandesh Gorakh		P	P	
4	Chavarekar Pratik Sudhakar		A	P	
5	Deo Amar Ratneshwari		P	P	
6	Dhavale Dayanand Shankarrao		P	P	
7	Dhumal Rohit Pravin		P	A	
8	Gharat Raj Krishna		P	P	
9	Jagtap Prasanna Nitin		P	P	
10	Joshi Nikhil Vishwanath		A	A	
11	Kauchali Maaz M.Ishaque		P	P	
12	Khan Shamstabrez Abdulrashid		A	P	
13	Khan Arbaz Sayeed		P	P	
14	Lokhande Swatej Ravindra		P	P	
15	Mahade Pavan Ravindra		P	A	
16	Mhaskar Rahul Sanjay		P	P	
17	Mhatre Vaibhav Parshuram		A	P	
18	Minde Akash Madhukar		P	P	
19	Nadkar Kalpesh Krushna		P	P	
20	Naik Prajwal Hirachandra		A	P	
21	Patil Kunal Ravikant		P	P	
22	Patil Shweta Dipak		P	P	
23	Patil Vinay Madhukar		P	A	
24	Penkar Sahil Ramesh		P	P	
25	Rainj Prasad Deepak		P	A	

G.M. Vedak Institute of Technology Tala Raigad

26	Rawoot Yunus Amir Ahmed		P	P	
27	Sanap Samir Sandip		A	P	
28	Shafiur Rehman Sageer		P	P	
29	Shivkar Shrikant Prakash		P	P	
30	Sonar Onkar Sudarshan		P	A	
31	Sonawane Bhushan Yashwant		A	P	
32	Telange Akash Amir		A	P	
33	Thakur Chetan Dhruva		P	P	
34	Ture Suyog Madhusudan		P	P	
35	Virkud Shubham Sudhir		P	A	

Subject Incharge

HOD

G.M. Vedak Institute of Technology Tala Raigad

G. M. VEDAK INSTITUTE OF TECHNOLOGY,TALA

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESMENT- II MARKSHEET

A.Y.2020-21 (S.H.2020)

CLASS/Sem:B.E./VII Course : PPC Max.Marks :20

SR. NO.	NAME OF THE STUDENT	Marks in Figure	Marks in Words
1	CHOGALE PRATHAMESH KESHAV KAVITA	12	ONE TWO
2	SONAWANE BHUSHAN YASHWANT SAVITA	18	ONE EIGHT
3	JAGTAP PRASANNA NITIN MINAKSHI	18	ONE EIGHT
4	MAHADIK KAUSTUBH GANESH PRERANA	16	ONE SIX
5	SONAR ONKAR SUDARSHAN SUJATA	11	ONE ONE
6	KAMBLE SHAILESH ASHOK REKHA	11	ONE ONE
7	NADKAR KALPESH KRUSHNA SHALINE	16	ONE SIX
8	NAIK PRAJWAL HIRACHANDRA HARSHALA	18	ONE EIGHT
9	CHAVAREKAR PRATIK SUDHAKAR SADHNA	17	ONE SEVEN
10	SHAFIUR REHMAN SAGEER MAHJABI	8	ZERO EIGHT
11	TELANGE AKASH AMIR AMITA	13	ONE THREE
12	DEO AMAR RATNESHWARI PREMLATA	18	ONE EIGHT
13	THAKUR CHETAN DHRUVA NAMI	18	ONE EIGHT
14	PENKAR SAHIL RAMESH RASIKA	18	ONE EIGHT
15	TURE SUYOG MADHUSUDAN MINAKSHI	18	ONE EIGHT
16	SHIVKAR SHRIKANT PRAKASH SHAKUNATALA	16	ONE SIX
17	KARDAME ABDUL AHAD AZHAR NASREEN	17	ONE SEVEN
18	SANAP SAMIR SANDIP SAPANA	11	ONE ONE
19	MHASKAR RAHUL SANJAY SANGITA	12	ONE TWO
20	MINDE AKASH MADHUKAR SADHANA	13	ONE THREE
21	MHATRE VAIBHAV PARSHURAM JAYASHRI	13	ONE THREE
22	DHAVALE DAYANAND SHANKARRAO SAVITA	18	ONE EIGHT
23	AMBUKAR PRATIK RAMAN RASIKA	18	ONE EIGHT
24	SHIGVAN RAHUL RAJENDRA ROSHANI	18	ONE EIGHT
25	BHORAVKAR SANDESH GORAKH NIRMALA	18	ONE EIGHT
26	PATIL SHWETA DIPAK VANDNA	17	ONE SEVEN
27	PATIL VINAY MADHUKAR MANISHA	18	ONE EIGHT
28	RAINJ PRASAD DEEPAK UJWALA	13	ONE THREE
29	KATLE VIKRANT HEMANT UJJWALA	17	ONE SEVEN
30	KAUCHALI MAAZ M.ISHAQUE MUMTAZ	14	ONE FOUR
31	KHAN ARBAZ SAEED SHERBANU	12	ONE TWO
32	KHAN SHAMSTABREZ ABDULRASHID SHAHANOOR	11	ONE ONE
33	RAWOOT YUNUS AMIR AHMED RASHIDA	18	ONE EIGHT
34	NARVEKAR PRATIK HARISHCHANDRA HARSHALI	14	ONE FOUR
35	DHUMAL ROHIT PRAVIN KARUNA	12	ONE TWO
36	PATIL KUNAL RAVIKANT JAYASHRI	17	ONE SEVEN
37	BHOIR SUYOG SURESH WATSALA	14	ONE FOUR
38	VIRKUD SHUBHAM SUDHIR SNEHA	18	ONE EIGHT
39	GHAYTALE JAGDISH SURESH SUJATA	10	ONE ZERO
40	MHATRE CHAITANYA DILIP ANJANI	15	ONE FIVE
41	JOSHI NIKHIL VISHWANATH MANISHA	12	ONE TWO
42	MAHADE PAVAN RAVINDRA RINA	18	ONE EIGHT
43	LOKHANDE SWATEJ RAVINDRA RATNA	17	ONE SEVEN
44	KALYANKAR DIPESH DILIP DIPALI	10	ONE ZERO
45	GHARAT RAJ KRISHNA REKHA	18	ONE EIGHT
46	PATIL MAHESH DINKAR SANDHYA	9	ZERO NINE
47	MHATRE AKSHAY PRADIP PRATIKSHA	11	ONE ONE
48	TAWATE VIVEK VASANT VAISHALI	16	ONE SIX

Date: 20/12/2020

Course Incharge Exam Coordinator HOD

G.M. Vedak Institute of Technology Tala Raigad

Shri. Gopinath Mahadeo Vedak Pratishthan's

G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA

Department of Mechanical Engineering

Academic Year 2020-21 (Second Half 2020)

Year / Sem – BE / VII

Course – Production Planning and Control (**MEC703**)

List of slow learners and advanced learners

(Evaluation Cycle 02)

Reference used: Result of **Internal Assessment II** dated 18.12.2020 at 10am to 10.30am
Criterion for slow learner: **Below 12 marks**

SR.NO	SLOW LEARNER NAME	ADVANCED LEARNER NAME
1	Sonar Onkar Sudarshan	Chogale Prathamesh Keshav
2	Kamble Shailesh Ashok	Ambukar Pratik Raman
3	Shafiur Rehman Sageer	Kardame Abdul Ahad Azhar
4	Sanap Samir Sandip	Bhoir Suyog Suresh
5	Khan Shamstabrez Abdulrashid	Minde Akash Madhukar
6	Ghaytale Jagdish Suresh	Mhatre Vaibhav Parshuram
7	Patil Mahesh Dinkar	Rainj Prasad Deepak
8	Kalyankar Dipesh Dilip	Bhoravkar Sandesh Gorakh
9	Mhatre Akshay Pradip	Chavarekar Pratik Sudhakar
10		Deo Amar Ratneshwari
11		Dhavale Dayanand Shankarrao
12		Dhumal Rohit Pravin
13		Gharat Raj Krishna
14		Jagtap Prasanna Nitin
15		Joshi Nikhil Vishwanath
16		Kauchali Maaz M.Ishaque
17		Katle Vikrant Hemant
18		Khan Arbaz Sayeed

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20		Mahade Pavan Ravindra
21		Mhaskar Rahul Sanjay
22		Mahadik Kaustubh Ganesh
23		Mhatre Chaitanya Dilip
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25		Naik Prajwal Hirachandra
26		Patil Kunal Ravikant
27		Patil Shweta Dipak
28		Patil Vinay Madhukar
29		Penkar Sahil Ramesh
30		Rawoot Yunus Amir Ahmed
31		Narvekar Pratik Harishchandra
32		Shigvan Rahul Rajendra
33		Tawate Vivek Vasant
34		Shivkar Shrikant Prakash
35		Sonawane Bhushan Yashwant
36		Telange Akash Amir
37		Thakur Chetan Dhruva
38		Ture Suyog Madhusudan
39		Virkud Shubham Sudhir

Analysis

Total Number of students in class = 48

Total number of slow learners = 9 Percentage of slow learners = (9/48) * 100 = 19%

Total number of advanced learners = 39 Percentage of advanced learners = (39/48) *100 = 81%

Course Incharge

G.M. Vedak Institute of Technology Tala Raigad

HOD

University of Mumbai

Examination 2020 under cluster 9 (FAMT, Ratnagiri)

Examinations Commencing from 7th January 2021 to 20th January 2021

Program: Mechanical Engineering

Curriculum Scheme: Rev 2016

Examination: BE Semester VII

Course Code: MEC703 and Course Name: Production Planning and Control

Time: 2 hour Max. Marks: 80

Q1.	**Choose the correct option for following questions. All the Questions are compulsory and carry equal marks**
1.	The routing function in a production system design is concerned with
Option A:	Manpower utilization
Option B:	Quality assurance of the product
Option C:	Machine utilization
Option D:	Optimizing material flow through the plant
2.	Material Requirement Planning typically determine
Option A:	How to order
Option B:	What to order
Option C:	Where to order
Option D:	When to order
3.	There are 3 workstations in the assembly flow line and their time consumption is 4min, 5min, 3min respectively. What is the efficiency of the assembly line?
Option A:	100%
Option B:	80%
Option C:	75%
Option D:	70%
4.	Given the data 92, 93, 92, 91, 93, 94, 92 find the forecast range for the eighth period using Simple average
Option A:	92.00 - 93.00
Option B:	94.00 - 95.00
Option C:	91.00 - 92.00
Option D:	93.00 - 94.00
5.	A work shift is for 8 hours duration; 30 minutes lunch break and two 15 minutes (each) tea breaks are allowed per shift. If products are to go out after assembly at the rate of 60 per shift, and total assembly time content for a product is 42 minutes, then minimum number of work stations needed is:
Option A:	8
Option B:	12

Option C:	6
Option D:	5
6.	A manufacturer has to supply his customers 3000 units of his product per year. Inventory carrying cost is Re. 1 per annum and the set up cost per run is Rs. 100. What is the EOQ in units?
Option A:	775
Option B:	675
Option C:	575
Option D:	625
7.	Which one of the following is not an input to the manufacturing system?
Option A:	Man
Option B:	Information
Option C:	Energy
Option D:	R & D
8.	Following is NOT the selective control of inventory
Option A:	ABC analysis
Option B:	HML analysis
Option C:	PQR analysis
Option D:	SOS analysis
9.	In an assembly line for assembling toys, five workers are assigned each task, which take times of 10, 8, 6, 9 and 10 minutes respectively. The balance delay for assembly the line is
Option A:	43.5%
Option B:	14.8%
Option C:	14%
Option D:	16.3%
10.	Which one of the following does not fall under qualitative methods of forecasting?
Option A:	Judgmental methods
Option B:	Moving average methods
Option C:	Market research
Option D:	Delphi method
11.	The length of time between placing an order and receipt of items is
Option A:	Demand
Option B:	Order cycle
Option C:	Re-order level
Option D:	Lead time

12.	The critical path
Option A:	is a path that operates from the starting node to the end node
Option B:	is a average of all paths
Option C:	is the longest path
Option D:	is the shortest path
13.	Which one of the following is the manufacturing strategy adopted for Umbrella manufacturing?
Option A:	Make to Order
Option B:	Make to Stock
Option C:	Assemble to order
Option D:	Engineer to order
14.	In PERT, if the pessimistic time were 14 weeks, the optimistic time were 8 weeks, and the most likely time were 11 weeks,
Option A:	the variance would be 1 week.
Option B:	the variance would be 11 weeks.
Option C:	the expected time would be 5.5 weeks.
Option D:	there is not enough information.
15.	Which of the following is most appropriate statement for forecasting?
Option A:	Qualitative forecasting is the most accurate.
Option B:	Quantitative forecasting is most accurate.
Option C:	Forecasting always has some errors.
Option D:	Prediction
16.	Following is one of the replenishment system in inventory control
Option A:	P system
Option B:	R system
Option C:	L system
Option D:	T system
17.	In PERT, slack time equals
Option A:	EST + t
Option B:	LST - EST
Option C:	zero
Option D:	EFT - EST.
18.	Decisions relating to production scheduling involve:
Option A:	Short-term forecasts
Option B:	Medium-term forecasts
Option C:	Long-term forecasts
Option D:	Short-term, medium-term and long-term forecasts
19.	Sequencing
Option A:	assigns dates to specific jobs
Option B:	assigns jobs to work centres

Option C:	specifies the order in which jobs should be done at each centre
Option D:	assigns workers to jobs
20.	The heart of any ERP system is
Option A:	Information
Option B:	Database
Option C:	Customers
Option D:	Employees

Q2 (20 Marks)	Solve any Four out of Six (5 marks each)
A	What are the information required to develop process planning?
B	A washing machine manufacturing company establishes a fact that there is a relationship between the sale of washing machines and the population of the city. The market research carried out reveals the following information. Fit linear equation and estimate the demand for 45 million population.

Population (million)	5	7	15	22	27	36
Washing machine demand ('000)	28	40	65	80	96	130

45
155

C	Explain the different stages in the evolution of ERP system.
D	Describe the Functions of Production Planning and Control.
E	A project has the following characteristics

Activity	Optimistic time	Pessimistic time	Most likely time
1-2	1	5	1.5
2-3	1	3	2
2-4	1	5	3
3-5	3	5	4
4-5	2	4	3
4-6	3	7	5
5-7	4	6	5
6-7	6	8	7
7-8	2	6	4
7-9	5	8	6
8-10	1	3	2
9-10	3	7	5

Construct network diagram. Find critical path and variance of each event.
1-2-4-6-7-9-10 (28 days)

F	Derive the equation of EOQ for basic inventory model.

<table>
<tr><td>Q3
(20 Marks)</td><td>Solve any Four out of Six (5 marks each)</td></tr>
<tr><td>A</td><td>Classify the following items into ABC and draw the ABC curve.
<table>
<tr><td>Item No.</td><td>501</td><td>502</td><td>503</td><td>504</td><td>505</td><td>506</td><td>507</td><td>508</td><td>509</td><td>510</td></tr>
<tr><td>Annual Consumption</td><td>300</td><td>2800</td><td>30</td><td>1100</td><td>40</td><td>2200</td><td>150</td><td>800</td><td>600</td><td>80</td></tr>
<tr><td>Unit price (Rs)</td><td>10</td><td>15</td><td>10</td><td>5</td><td>5</td><td>10</td><td>5</td><td>5</td><td>15</td><td>10</td></tr>
</table></td></tr>
<tr><td>B</td><td>Differentiate between PERT and CPM</td></tr>
<tr><td>C</td><td>Explain manufacturing methods with suitable examples.</td></tr>
<tr><td>D</td><td>It is required to make 144 units of products in 4hrs shift. Each tasks, their time and predecessor are shown below.
<table>
<tr><th>Task</th><th>Task time (s)</th><th>Immediate predecessor</th></tr>
<tr><td>A</td><td>90</td><td>-</td></tr>
<tr><td>B</td><td>30</td><td>-</td></tr>
<tr><td>C</td><td>70</td><td>A</td></tr>
<tr><td>D</td><td>10</td><td>A,B</td></tr>
<tr><td>E</td><td>30</td><td>D</td></tr>
<tr><td>F</td><td>60</td><td>C</td></tr>
<tr><td>G</td><td>50</td><td>C</td></tr>
<tr><td>H</td><td>50</td><td>E,F,G</td></tr>
</table>
Construct precedence diagram. Determine minimum number of work-stations, allocate the tasks in the stations according to Largest candidate rule.</td></tr>
<tr><td>E</td><td>What are the objectives of MRP system?</td></tr>
<tr><td>F</td><td>Describe three qualitative forecasting methods with suitable examples</td></tr>
</table>

University of Mumbai

Examination 2020 under cluster 9 (FAMT, Ratnagiri)

Examinations Commencing from 7th January 2021 to 20th January 2021

Program: Mechanical Engineering

Curriculum Scheme: 2016

Examination: BE Semester VII

Course Code: MEC703 and Course Name: Production Planning and Control

Time: 2 hour Max. Marks: 80

Question Number	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	C
Q2.	D
Q3.	B
Q4	A
Q5	C
Q6	A
Q7	D
Q8.	C
Q9.	C
Q10.	B
Q11.	D
Q12.	C
Q13.	B
Q14.	A
Q15.	C
Q16.	A
Q17.	B
Q18.	A
Q19.	C
Q20.	B

Q 2 D Functions of PPC

1. Preplanning Functions (Macro level)
   - Product design
   - Process design
   - Flow design (Layout)
   - Forecasting
2. Planning Functions (Micro level)
   - Estimating (Planning Routes & M's)
   - process planning (Routing)
   - scheduling
   - ~~Estimating~~ Loading
3. Control Functions
   - Dispatching
   - Expediting (Follow up)
   - Inspection
   - Evaluation

Q 2 C Evolution of ERP

Timeline	system
2000	Extended ERP
1990	ERP
1980	MRP II
1970	MRP
1960	Inventory control packages

Q 2 A Information Req. to develop Process planning

1) Production quantity
2) characteristics of products to be manufactured.
3) Availability of equipment, type of equipment to be purchased, investment for same.
4) kind of labour
5) level of automation
6) Decision of make or buy the required components

Equation of EOQ for basic inventory Model.

Annual ordering cost $= \frac{D}{\phi} \times C_o$

Annual carrying cost $= \frac{\phi C_h}{2}$

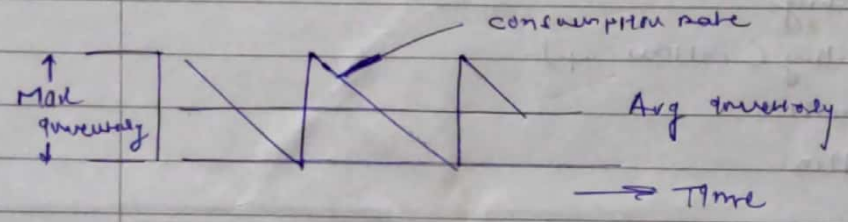
Annual Total cost $= \frac{D C_o}{\phi} + \frac{\phi C_h}{2}$

diff wrt ϕ & equating to zero

$$\frac{dTc}{d\phi} = 0$$

$$\frac{-D \cdot C_o}{\phi^2} + \frac{C_h}{2} = 0$$

$$\phi^* = \sqrt{\frac{2DC_o}{C_h}}$$



$$T_{min} = \sqrt{2bc_o c_h}.$$

Q 3. B Difference between CPM and PERT

	CPM	PERT
1)	CPM is activity oriented.	PERT is event oriented.
2)	CPM is used when activity times are deterministic.	PERT uses probabilistic times
3)	One time estimates	Three time estimates
4)	CPM directly introduce cost concept analysis.	PERT indirectly accounts for cost.
5)	CPM is planning device	PERT is control device

3 c Manufacturing Methods

1 Job or unit production

2. Continuous production a) Flow b) Mass

3. Batch production

1. Job or unit —

only one article is produced.

e.g. ship building

2 Continuous production : equipment is fully engaged associated with large quantities & large rate of demand.

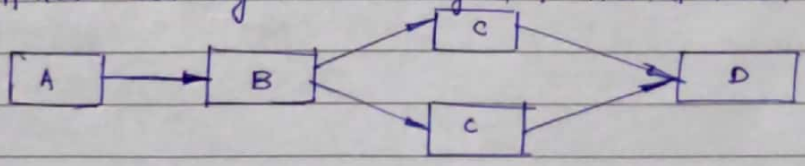
a) Mass production

large number of identical articles are produced but without use of advanced machineries and tooling.

eg Automatic shops

b) Flow prodⁿ

Equipments and layouts are designed to manufacture the product-



3. Batch prodⁿ

adopted when some sequence of operations on all the products produced in manufacturing system is not required production on small or large scale can be performed.

E Objective of MRP system

1) Inventory reduction
2) Reduction in manufacturing & delivery lead times
3) Realistic delivery commitments
4) Increased efficiency of prod^n system

F Qualitative Forecasting Methods

1) Opinion survey Methods
2) Executive opinion Method
3) Customer and distributor survey
4) Marketing trials
5) Market research
6) Delphi Technique