



V.V Sangha's
RAO BAHADUR Y MAHABALESWARAPPA ENGINEERING COLLEGE
Cantonment, Ballari - 583104
Department of Civil Engineering



COURSE FILE

ACADEMIC YEAR: 2018-19 (ODD SEM)

NAME OF THE STAFF: SACHIN PATIL

SEMESTER: VII

SECTION: A

**NAME OF THE SUBJECT:
Design of RCC and Steel Structures**

**SUBJECT CODE:
15CV72**



COURSE FILE 2018-19

1. VISION AND MISSION OF INSTITUTE & DEPARTEMNT
2. TIME TABLE
3. COURSE DESIGN, DELIVERY AND ASSESMENT
4. COURSE OUTCOMES & CO-PO/PSO MAPPING
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6. INTERNAL ASSESSMENT TEST-I /II/ III
7. SCHEME OF EVALUATION OF INTERNAL ASSESSMENT TEST-I / II / III
8. IA PERFORMANCE ANALYSIS-I / II / III
9. COURSE ASSESSMENT AND EVALUATION
10. COURSE EXIT SURVEY
11. SELF ASSESSMENT REPORT OF STUDENT
12. TUTORIAL CLASSES
13. RESULT ANALYSIS
14. ATTAINMENT SHEETS (Excel Sheet)



VISION OF THE DEPARTMENT

- To produce technically, professionally excellent, knowledgeable, socially responsible and globally Competitive Civil Engineers, committed for the sustainable development of the society.

MISSION OF THE DEPARTMENT

- To provide quality education, globally competitive for a successful career in civil engineering.
- To develop the student to pursue higher education with the state of mind of continuous upgradation
- To provide service to society through consultancy, construction protection and preservation of environment and research in civil engineering field.
- To produce exemplary professional civil engineers with entrepreneurial skill

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

- PEO1 : Graduate would develop successful career in Civil engineering to attend the various issues with high moral and professional standards.
- PEO2 : Graduate would be able to work and meet the needs of sustainable development.
- PEO3 : Graduate would develop the ability to pursue higher education with continuous engage in lifelong learning.



PROGRAM OUTCOME (PO)

PO Number	Program Outcome Description	
PO 1	Engineering Knowledge	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO 2	Problem Analysis	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO 3	Design/ Development of Solutions	Design 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.
PO 4	Conduct investigations of complex problems	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO 5	Modern tool usage	Create, 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.
PO 6	The engineer and society	Apply 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.
PO 7	Environment and sustainability	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO 8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO 9	Individual and team work	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO 10	Communication	Communicate 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.
PO 11	Project management and finance	Demonstrate 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.
PO 12	Life-long learning	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.



PROGRAM SPECIFIC OUTCOMES (PSO'S)

- PSO1: Ability to develop the skills required for planning, analyzing, designing, estimating and supervise the civil engineering structures.
- PSO2: Ability to identify the soils of different nature through the geotechnical investigations and providing the suitable foundation to the structures.



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COURSE DESIGN, DELIVERY AND ASSESMENT

Staff Name: Sachin Patil	Semester:	VII	EVEN				Sec:	A	
Course Name: Design of RCC and Steel Structures	Course Code:	1	5	C	V	7	2		
Lab Course Name:	Lab Course Code:								
Verified By: <i>D.M.S. Shobhe</i>	Date of preparation: 03/06/2019								
Academic year	2018-2019								

Staff Name	Signature	Date
<i>Sachin Patil</i>	<i>Sachin Patil</i>	03/06/19
Course Coordinator	Signature	Date
<i>Shobhe D.M.S.</i>	<i>Shobhe</i>	4/6/2019



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COURSRE PLAN

Prerequisites contents:
DSS, RCC, SOM, ECE

SL NO	UNIT NAME	NO. OF HOURS REQUIRED
01	Design of RCC Structures	25
02	Design of Steel Structures	25

Course Objectives: During the course, students will learn:

C402.1 Acquire the basic knowledge in design of RCC and Steel Structures.

C402.2 Able to solve engineering problems in RC and Steel Structures

C402.3 Understand the Concept of RC Structures like Retaining wall, Footing, Water tanks, Portal Frames and Steel Structures like Roof Truss, Plate Girder and Gantry Girder.

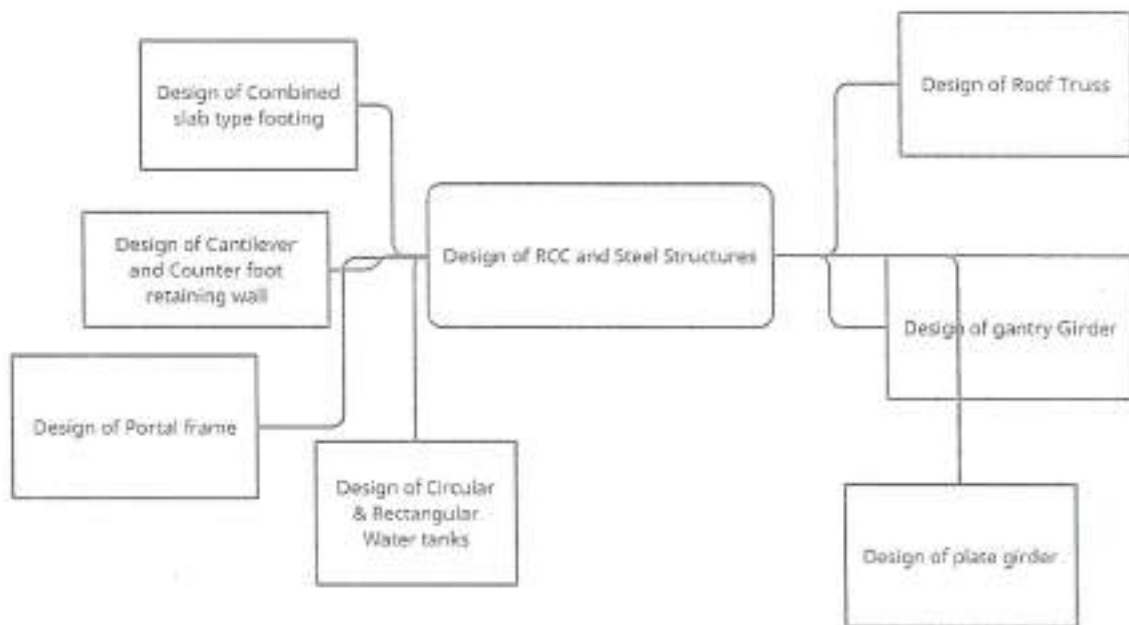
C402.4 Design RC and Steel members as per codal provision.

Sl no	Text Books:
1	Structural Design & Drawing - N.Krishna Raju, Unversities Press, India.
2	Duggal S K " Limit State Design of Steel Structures" Tata McGraw Hill 2010
3	Gambir M L, "Fundamentals of structural Steel Design" McGraw Hill 2013
Specify assessment Tool :	
1	IA
2	FE

Signature of Staff



CONCEPT MAP



Anny
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COURSE OUTCOMES & MAPPING

CO-PO JUSTIFICATION (ODD SEM 2018-19)	
Subject:	Design of RCC and Steel Structures
Course Code:	15CV72
Faculty:	Sachin Patil
Table 1: Course Outcomes	
CO	COURSE OUTCOMES
CO402.1	Acquire the basic knowledge in design of RCC and Steel Structures
CO402.2	Solve engineering problems in RC and Steel Structures
CO402.3	Understand the Concept of of RC Structures like Retaining wall, Footing, Water tanks, Portal Frames and Steel Structures like Roof Truss, Plate Girder and Gantry Girder
CO402.4	Design RC and Steel members as per codal provision
-	-
Table 2: CO Analysis	
Co	CO Analysis
CO402.1	Acquire the basic knowledge in design of RCC and Steel Structures
	Action: Acquire
	Knowledge : RCC & Steel Structures
	Condition : Limit State Method, IS456:2000, IS800:2007
Criterion: none	
CO402.2	Solve engineering problems in RC and Steel Structures
	Action: Solve
	Knowledge : RCC & Steel Structures
	Condition : Limit State Method, IS456:2000, IS800:2007
Criterion: none	
CO402.3	Understand the Concept of of RC Structures like Retaining wall, Footing, Water tanks, Portal Frames and Steel Structures like Roof Truss, Plate Girder and Gantry Girder
	Action: Understand
	Knowledge : RCC & Steel Structures
	Condition : Limit State Method, IS456:2000, IS800:2007
Criterion: none	
CO402.4	Design RC and Steel members as per codal provision
	Action: Design
	Knowledge : RCC & Steel Structures
	Condition : Limit State Method, IS456:2000, IS800:2007
Criterion: none	

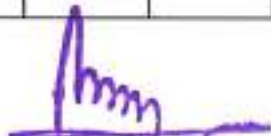


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Table 3: Session Report

Sl No	TLO	Sessions (Hours)	CO	PO
1	Design of rectangular slab type combined footing	6	1, 2, 3, 4	1, 2, 3, 4
2	Design of cantilever Retaining wall and counter foot retaining wall	6	1, 2, 3, 4	1, 2, 3, 4
3	Design of circular water tanks resting on ground (Rigid and Flexible base). Design of rectangular water tanks resting on ground	6	1, 2, 3, 4	1, 2, 3, 4
4	Design of portal frames with fixed and hinged based supports	6	1, 2, 3, 4	1, 2, 3, 4
5	Design of roof truss for different cases of load-ing, forces in members to given	5	1, 2, 3, 4	1, 2, 3, 4
6	Design of welded plate girder with intermediate stiffener, bearing stiffener and necessary checks	10	1, 2, 3, 4	1, 2, 3, 4
7	Design of gantry girder with all necessary checks	6	1, 2, 3, 4	1, 2, 3, 4


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Table 4: Total Number of Sessions

PO's Addressed by CO's

co	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	Total
CO402.1	45	43	45	43	0	0	0	0	0	0	0	0	176
CO402.2	45	43	45	43	0	0	0	0	0	0	0	0	176
CO402.3	45	43	45	43	0	0	0	0	0	0	0	0	176
CO402.4	45	43	45	43	0	0	0	0	0	0	0	0	176
-	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5: Percent Attainment of PO's

CO	Programme Outcomes												Specific Outcomes		
	1	2	3	4	5	6	7	8	9	10	11	12	S1	S2	S3
CO402.1	26%	24%	26%	24%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%
CO402.2	26%	24%	26%	24%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%
CO402.3	26%	24%	26%	24%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%
CO402.4	26%	24%	26%	24%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%
-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%

Table 6: Attainment Level of PO's

CO	Programme Outcomes												Specific Outcomes		
	1	2	3	4	5	6	7	8	9	10	11	12	S1	S2	S3
CO402.1	3	2	3	2	-	-	-	-	-	-	-	-	2		
CO402.2	3	2	3	2	-	-	-	-	-	-	-	-	2		
CO402.3	3	2	3	2	-	-	-	-	-	-	-	-	2		
CO402.4	3	2	3	2	-	-	-	-	-	-	-	-	2		
-	-	-	-	-	-	-	-	-	-	-	-	-			
402	3	2	3	2									2		

*Note: - 1.Slight (Low) 2.Moderate (Medium) 3.Substantial (High).

Table 7: Range of Percentage for Identifying Level of Attainment

Level 1	5% to 15%
Level 2	16% to 25%
Level 3	26% and above

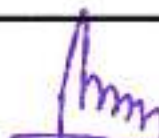
Table 8: Justification Method adopted to measure level of attainment

Sl No	Justification
1	Contribution of CO402.1 towards PO1,PO2,PO3 and PO4 are 45, 43, 45 and 43 hours each respectively. Total hours taught for mapped PO's are 178 hours/sessions, hence the contribution of mapped PO's are 26%, 24%, 26% and 24% each respectively. Attainment level percentage are between the range 16% to 25% and 26% respectively, hence level is 2 and 3 respectively
2	Same procedure is followed for other CO's of Table1 with reference to number of hours taught as detailed in Table 3 and Table 4.


 Faculty



Course CO-ordinator


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CO-PO/PSO INDICATOR MATRIX


CO	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011	P012	PS01	PS02
C402.1	IA& FE	IA& FE	IA& FE	IA& FE									IA& FE	
C402.2	IA& FE	IA& FE	IA& FE	IA& FE									IA& FE	
C402.3	IA& FE	IA& FE	IA& FE	IA& FE									IA& FE	
C402.4	IA& FE	IA& FE	IA& FE	IA& FE									IA& FE	

Indicators:

Final Exam: - FE

Internal Assessment Test: - IA

If any other Specify:-


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COURSE ASSESSMENT AND EVALUATION SCHEME

	What		To Whom	When/ Where (Frequency in the course)	Max Marks	Evidence Collected	Contribution to Course Outcomes
Direct Assessment Methods	IA	Internal Assessment Tests (2010 Scheme)	Students	Thrice (average:- best two will be computed)	25	Blue Books	1,2,3,4
	FE	Final Examination (2010 Scheme)		End semester exam	100	Result sheet	1,2,3,4
Indirect Assessment Methods	Students Feedback		Students	End of the course	-	Questionnaire	1,2,3,4
	Course Exit Survey						

Questions for IA and FE will be designed to evaluate the various educational components (Revised Bloom's Taxonomy)

Dr. Mallikarjun H. S.

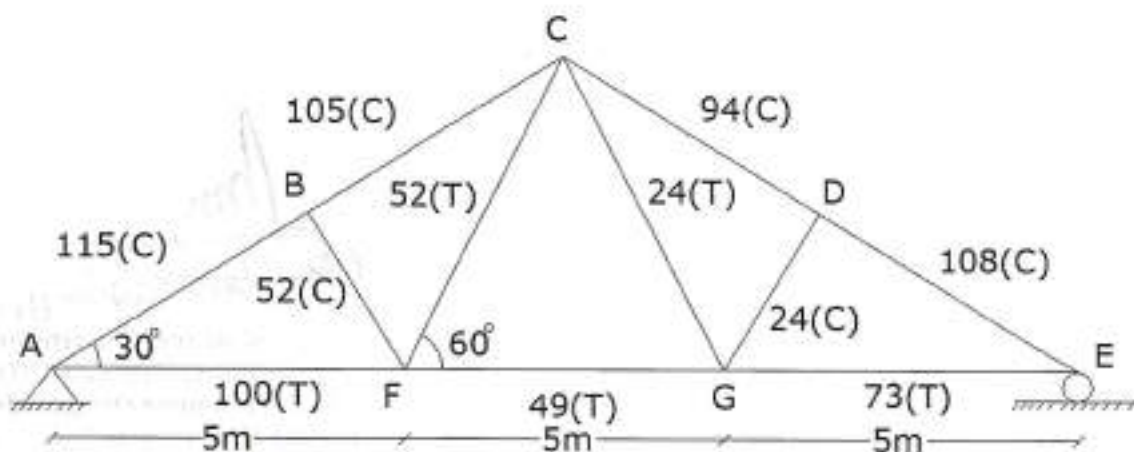
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INTERNAL ASSESSMENT TEST-I (18-19 Odd Sem)

Staff Name: Sachin Patil	Sem: VII	Sec: A	SET1
Course Name: Design of RCC and Steel Structures	Course Code: 15CV72	Total Contact Hours: 50	
Max marks: 30	Prerequisites: RCC, DSS, SOM		

Q No	QUESTIONS	Marks	BTL	CO	PO
Q1	Forces with its nature acting on the roof truss are shown in the figure. Design the following: 1.) Outer tension members. 2.) Inner compression members. 3.) Design the supports consisting of shoe angle. (Bearing plate) 4.) Anchor bolts if uplift force is of 15 kN. M20 concrete is used at supports and use 18mm dia bolts of property class 4.6. (All the forces are in kN)	30	L1, L2, L3	C402.1 C402.2 C402.3	1,2,3, 4



Signature of paper setter

Note: BTL (Blooms taxonomy)

CO (course outcome)

PO (program outcome)



INTERNAL ASSESSMENT TEST-II (18-19 Odd Sem)

Staff Name: Sachin Patil	Sem: VII	Sec: A	SET1
Course Name: Design of RCC and Steel Structures	Course Code: 15CV72	Total Contact Hours: 50	
Max marks: 30	Prerequisites: RCC, DSS, SOM		

Note: Answer any one full question

Q No	QUESTIONS	Marks	BTL	CO	PO
Q1	Design a simply supported gantry girder to carry an electrically operated travelling crane with the following data. Span of crane bridge = 25m Column spacing = 8m Wheel base = 3.5m Crane capacity = 200kN Weight of crane bridge = 150 kN Weight of Crab = 75 kN Minimum hook distance = 1m Weight of rail = 0.3 kN/m Height of rail = 105mm	30	L1, L2, L3	C402.1 C402.3 C402.4	1,2,3, 4
Q2	Design a Cantilever Retaining wall to retain earth embankment 3m high above ground level. The unit Weight of earth is 18kN/m^3 and angle of response is 30° . The embankment is horizontal at its top. The safe bearing capacity of soil may be taken as 100kN/m^2 and the coefficient of friction between soil and concrete is 0.5. Use M20 Concrete and Fe 415 bars.	30	L1, L2, L3	C402.1 C402.3 C402.4	1,2,3, 4

Signature of paper setter

Note: BTL (Blooms taxonomy)

CO (course outcome)

PO (program outcome)



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INTERNAL ASSESSMENT TEST-III (18-19 Odd Sem)

Staff Name: Sachin Patil	Sem: VII	Sec: A	SET1
Course Name: Design of RCC and Steel Structures	Course Code: 15CV72	Total Contact Hours: 50	
Max marks: 30	Prerequisites: RCC, DSS, SOM		

Note: Answer any one full question

Q No	QUESTIONS	Marks	BTL	CO	PO
Q1	The roof of an 8m wide hall is supported on a portal frame spaced at 4m intervals. The height of the portal frame is 4m. The continuous slab is 120 mm thick. Live load on roof = 1.5 kN/m ² , SBC of soil = 150 kN/m ² . The columns are connected with a plinth beam and the base of the column may be assumed as fixed. Design the slab, column, beam members and suitable footing for the columns of the portal frame. Adopt M20 grade concrete and Fe 415 steel. Also prepare the detailed structural drawing.	30 Marks	L1, L2, L3	C402.1 C402.2 C402.3 C402.4	1,2,3
Q2	Design a Welded Plate Girder of span 24m carrying a super imposed load of 50kN/m and two concentrated loads of 150kN each at one third points of the span. Assume the girder as laterally Supported throughout with yield strength of 250MPa. Provide two curtailments along with end and intermediate bearing stiffeners.	30 Marks	L1, L2, L3	C402.1 C402.2 C402.3 C402.4	1,2,3


Signature of paper setter

Note: BTL (Blooms taxonomy)

CO (course outcome)

PO (program outcome)



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SCHEME OF EVALUATION INTERNAL ASSESSMENT TEST-I 2018-19 (ODD SEM)

STAFF NAME:- SACHIN PATIL	SEM:- VII	SEC:- A
COURSE NAME:- Design of RCC and Steel Structures	COURSE CODE:- 15CV72	
DATE:- 14/09/2018	TIME:- 12:15PM - 1:30PM	MAX MARKS:- 30

Q No	QUESTIONS	Marks	BTL	CO	PO
Q1	<p>Forces with its nature acting on the roof truss are shown in the figure.</p> <p>Design 1.) Outer tension members.</p> <p>2.) Inner compression members.</p> <p>3.) Design the supports consisting of shoe angle. (Bearing plate)</p> <p>4.) Anchor bolts if uplift force is of 15KN.</p> <p>1.) Outer tension members.</p> <p>Determining area angle and connections</p> <p>Checks</p> <p>1. Yield strength = 217.8 KN</p> <p>2. Rupture strength = 211.8 KN</p> <p>3. Block shear strength = 310.98 & 254.52 KN</p> <p>2.) Inner compression members.</p> <p>Determining area angle and connections</p> <p>Checks</p> <p>Design compressive strength = 110.6 KN</p> <p>3.) Design the supports consisting of shoe angle. (Bearing plate)</p> <p>4.) Anchor bolts if uplift force is of 15KN.</p>	<p>2m</p> <p>2m</p> <p>3m</p> <p>3m</p> <p>10M</p> <p>4m</p> <p>6m</p> <p>10M</p> <p>5M</p> <p>5M</p>	<p>1,2,3</p>	<p>1,2,3</p>	<p>1,2,3,4</p>

Blooms Taxonomy (BTL) Course Outcome (CO) Program Outcome (PO)



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SCHEME OF EVALUATION INTERNAL ASSESSMENT TEST-II 2018-19 (ODD SEM)

STAFF NAME:- SACHIN PATIL	SEM:- VII	SEC:- A
COURSE NAME:- Design of RCC and Steel Structures	COURSE CODE:- 15CV72	
DATE:- 15/10/2018	TIME:- 12:15PM - 1:30PM	MAX MARKS:- 30

Q No	QUESTIONS	Marks	BTL	CO	PO
Q1	<p>Design a simply supported gantry girder to carry an electrically operated travelling crane with the following data.</p> <p>Span of crane bridge = 25m Column spacing = 8m Wheel base = 4.5m Crane capacity = 250kN Weight of crane bridge = 150 kN Weight of Crab = 85 kN Minimum hook distance = 1.5m Weight of rail = 0.3 kN/m Height of rail = 105mm</p> <p>1. Load Calculation 2. Trial Section 3. Checks 4. Connection</p>	8m 8m 8m 6m	1,2,3	1,3,4	1,2,3,4
Q2	<p>Design a Cantilever Retaining wall to retain earth embankment 4m high above ground level. The unit Weight of earth is 16kN/m^3 and angle of repose is 30°. The embankment is horizontal at its top. The safe bearing capacity of soil may be taken as 180kN/m^2 and the coefficient of friction between soil and concrete is 0.5. Use M20 Concrete and Fe 415 bars.</p> <p>1. Size of Footing 2. BMD & SFD 3. Checks 4. Reinforcement</p>	8m 8m 8m 6m	1,2,3	1,3,4	1,2,3,4

Blooms Taxonomy (BTL) Course Outcome (CO) Program Outcome (PO)



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SCHEME OF EVALUATION INTERNAL ASSESSMENT TEST-III 2018-19 (ODD SEM)

STAFF NAME:- SACHIN PATIL	SEM:- VII	SEC:- A
COURSE NAME:- Design of RCC and Steel Structures	COURSE CODE:- 15CV72	
DATE:- 21/11/2018	TIME:- 12:15PM - 1:30PM	MAX MARKS:- 30

Q No	QUESTIONS	Marks	BTL	CO	PO
Q1	<p>The roof of an 8m wide hall is supported on a portal frame spaced at 4m intervals. The height of the portal frame is 4m. The continuous slab is 120 mm thick. Live load on roof = 1.5 kN/m², SBC of soil = 150 kN/m². The columns are connected with a plinth beam and the base of the column may be assumed as fixed. Design the slab, column, beam members and suitable footing for the columns of the portal frame. Adopt M20 grade concrete and Fe 415 steel. Also prepare the detailed structural drawing.</p> <ol style="list-style-type: none">1. Design of slabs2. Preliminary design of beams and columns3. Analysis4. Design of beams5. Design of Columns6. Design of footings	5m 5m 5m 5m 5m 5m	1,2,3	1,2,3,4	1,2,3,4
Q2	<p>Design a Welded Plate Girder of span 24m carrying a super imposed load of 50kN/m and two concentrated loads of 150kN each at one third points of the span. Assume the girder as laterally Supported throughout with yield strength of 250MPa. Provide two curtailments along with end and intermediate bearing stiffeners.</p> <ol style="list-style-type: none">1. Loads and Moments on Girder2. Girder Dimensions3. Checks4. Connection of Web with Flange Plate5. Curtailment of Flange Plate6. Design of Intermediate Stiffeners7. Design of End Bearing Stiffeners8. Detailing	4m 4m 4m 4m 4m 4m 4m 4m	1,2,3	1,2,3,4	1,2,3,4

Blooms Taxonomy (BTL) Course Outcome (CO) Program Outcome (PO)



IA- Performance Analysis

Staff Name: Sachin Patil	Semester: VII	Sec: A
Course Name: Design of RCC and Steel Structures	Course Code:15CV72	
Max Marks: 30	Test : I	

Q. No.	CO Mapping	No. of Students Attempted	Set Target Level	Attainment percentage			
	CO						
1	CO 402.1	05	60%	100%			
2	CO 402.2	05	60%	100%			
3	CO 402.4	05	60%	100%			
4	CO 402.3	-	-	-			
		Q1	Q2	Q3	Q4		
Marks scored		88	-	-	-		
Total Marks		30	-	-	-		
no of students scored > 60% of marks/Question		03	-	-	-		
Average no of students >60		0.6	-	-	-		
Average marks scored		18	-	-	-		
Marks range		0 -10	11-15	16-20	21-30		
		0	2	1	2		

Signature of the Staff



IA- Performance Analysis

Staff Name: Sachin Patil	Semester: VII	Sec: A
Course Name: Design of RCC and Steel Structures	Course Code:15CV72	
Max Marks: 30	Test : II	

Q. No.	CO Mapping	No. of Students Attempted	Set Target Level	Attainment percentage			
	CO						
1	CO 402.1	46	60%	100%			
2	CO 402.2	46	60%	100%			
3	CO 402.4	46	60%	100%			
4	CO 402.3	46	60%	100%			
		Q1	Q2	Q3	Q4		
Marks scored		1306	-	-	-		
Total Marks		30	-	-	-		
no of students scored > 60% of marks/Question		46	-	-	-		
Average no of students >60		1	-	-	-		
Average marks scored		30	-	-	-		
Marks range		0 -10	11-15	16-20	21-30		
		0	0	0	46		


Signature of the Staff



IA- Performance Analysis

Staff Name: Sachin Patil	Semester: VII	Sec: A
Course Name: Design of RCC and Steel Structures	Course Code:15CV72	
Max Marks: 30	Test : III	

Q. No.	CO Mapping	No. of Students Attempted	Set Target Level	Attainment percentage			
	CO						
1	CO 402.1	43	60%	100%			
2	CO 402.2	43	60%	100%			
3	CO 402.4	43	60%	100%			
4	CO 402.3	43	60%	100%			
		Q1	Q2	Q3	Q4		
Marks scored		70	1134	-	-		
Total Marks		30	30	-	-		
no of students scored > 60% of marks/Question		03	40	-	-		
Average no of students >60		1	0.93	-	-		
Average marks scored		30	27.9	-	-		
Marks range		0 -10		11-15		16-20	
		1		2		0	
						21-30	
						40	

Signature of the Staff



COURSE ASSESSMENT AND EVALUATION: 2018-19

Questions for IA and FE will be designed to evaluate the various educational components (Bloom's taxonomy) such as:

IA and FE evaluation

Sl. No	Bloom's Category	BTL Level	IA 1 marks	IA1 % BTL	IA 2 marks	IA2 % BTL	IA3 marks	IA3 % BTL	AVGE IA % BTL
1	Remember	L1	5	10.64	46	97.87	46	48.94	52.48
2	Understand	L2	5	10.64	46	97.87	46	48.94	52.48
3	Apply	L3	5	10.64	46	97.87	46	48.94	52.48
4	Analyze	L4	0	0.00	0	0.00	0	0.00	0.00
5	Evaluate	L5	0	0.00	0	0.00	0	0.00	0.00
6	Create	L6	0	0.00	0	0.00	0	0.00	0.00

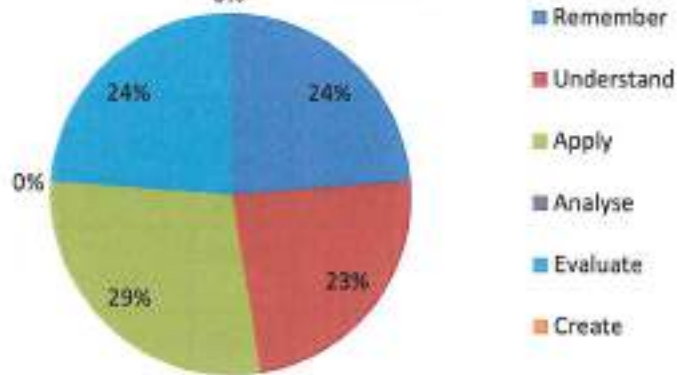
	Name	Signature with Date
Prepared by	<i>Sachin Patel</i>	<i>Sachin Patel</i> 3/8/19
Reviewed by		

(Dr. Mallikarjun H.)

Head of the Department
CIVIL ENGINEERING
R. Y. M. Engineering College,
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BELLARY-583 104.



Statistics of Blooms taxonomy followed in IA Evaluation



Tutorial Classes

- Conduct one tutorial class per week.
- Mark tutorial in attendance register and take signature in given format.
- Maintain topics covered / discussed under tutorial.
- To assess them conduct (Written test, Oral, Questions observe their hand book work out etc).
- Maintain observations of their performance by grading them with Good, Moderate, Average, Poor.
- One section split into 2 and handled by 2 staff members (30 students max for each staff)

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Tutorial Conducted

Staff Name: Sachin Patil

Semester: VII

Sec: A

Course Name: DRCS

Course Code: 15CV72 Academic Year: 2018-19

Tutorial Objectives:

1. Quiz

<https://goo.gl/forms/H681DS2BvzsfFBk72>

2. Solving extra problems

Done in class

3. Question paper solutions

<https://drive.google.com/drive/folders/1KCVEXmJ1upmcJd58RVnVG5wyOIQ2ZZYC>

4. Notes

<https://drive.google.com/drive/folders/1KCVEXmJ1upmcJd58RVnVG5wyOIQ2ZZYC>

Tutorial No	Topics Covered	BTL	CO	PO
1	Bolted and welded plate girder	2,3,4,6	1	1,2,3,6,8,10
2	Roof Truss	2,3,4,6	1	1,2,3,6,8,10
3	Gantry girder	2,3,4,6	3	1,2,3,6,8,10
4	Slab base & Gusseted base	2,3,4,6	4	1,2,3,6,8,10


Signature of Staff



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Department of Civil Engineering



Tutorial Classes Assessment Grade Sheet

Sl.No	Student Name	USN	Performance Grade			
			1	2	3	4
1	KRISHNA S LAXANI	3VC14CV047				✓
2	NIHAL ANSAR M	3VC14CV065				✓
3	PRUTHVI RAJ K N	3VC14CV072			✓	
4	SANNAPPAGOUDA R HOGESOPPIN	3VC14CV088			✓	
5	VIDYASAGAR DANI	3VC14CV115				
6	K VINAY KUMAR	3VC14CV125			✓	
7	AJITH YADAV G H	3VC15CV003				✓
8	AMARNATH B V	3VC15CV004				
9	ASIF MOHAMMED M	3VC15CV007			✓	
10	BHASKAR K	3VC15CV010				
11	BHASKAR REDDY P	3VC15CV011				✓
12	BHEEMESHA G	3VC15CV012				
13	CHANNABASAYYA	3VC15CV013		✓		
14	DADA KHALANDARA M Y	3VC15CV014			✓	
15	DANNIRALA ANJINAPPA	3VC15CV015				
16	DEVISETTY PRIYANKA	3VC15CV017		✓		
17	DHANUSHRI S	3VC15CV018				✓
18	DIVI TEJA K	3VC15CV019			✓	
19	DIWAKAR REDDY U	3VC15CV020		✓		

Performance Grade-1) Good 2) Moderate 3) Average 4) Poor



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COURSE EXIT SURVEY 2018-19 7th SEM

Faculty Name: Sachin Patil

COURSE NAME:

DRCS

C402.1	Acquire the basic knowledge in design of RCC and Steel Structures
C402.2	Able to solve engineering problems in RC and Steel Structures
C402.3	Understand the Concept of of RC Structures like Retaining wall, Footing, Water tanks, Portal Frames
C402.4	Have the ability to follow design procedures as per codal provisions and skills to arrive at

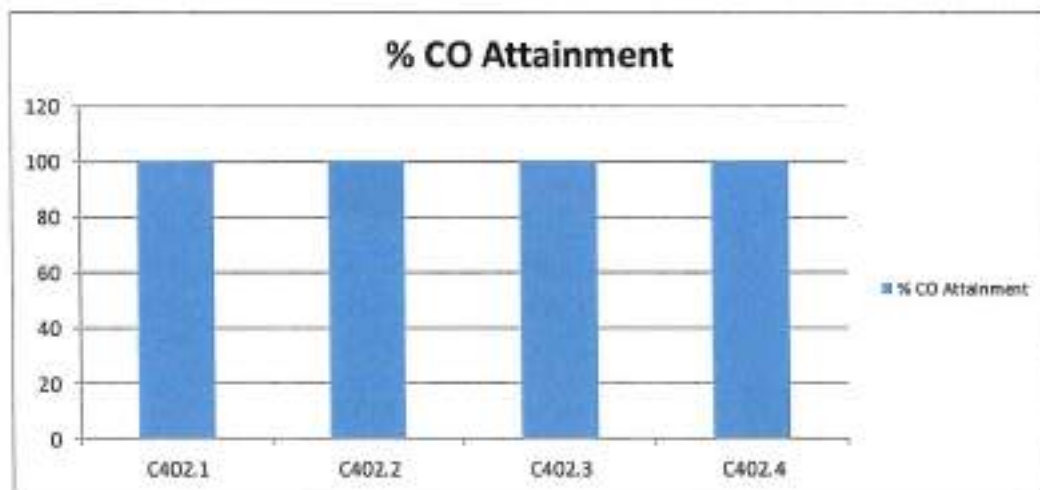
R NO.	USN	Student name	C402.1	C402.2	C402.3	C402.4
A-01	3VC14CV047	KRISHNA S LAXANI	5	5	5	5
A-02	3VC14CV065	NIHAL ANSAR M	5	5	5	5
A-03	3VC14CV072	PRUTHVI RAJ K N	5	5	5	5
A-04	3VC14CV088	SANNAPPAGOUDA R HOGESOPPIN	5	5	5	5
A-05	3VC14CV115	VIDYASAGAR DANI	5	5	5	5
A-06	3VC14CV125	K VINAY KUMAR	5	5	5	5
A-07	3VC15CV003	AJITH YADAV G H	5	5	5	5
A-08	3VC15CV004	AMARNATH B V	5	5	5	5
A-09	3VC15CV007	ASIF MOHAMMED M	5	5	5	5
A-10	3VC15CV010	BHASKAR K	5	5	5	5
A-11	3VC15CV011	BHASKAR REDDY P	5	5	5	5
A-12	3VC15CV012	BHEEMESHA G	5	5	5	5
A-13	3VC15CV013	CHANNABASAYYA	5	5	5	5
A-14	3VC15CV014	DADA KHALANDARA M Y	5	5	5	5
A-15	3VC15CV015	DANNIRALA ANJINAPPA	5	5	5	5
A-16	3VC15CV017	DEVISETTY PRIYANKA	5	5	5	5
A-17	3VC15CV018	DHANUSHRI S	5	5	5	5
A-18	3VC15CV019	DIVI TEJA K	5	5	5	5
A-19	3VC15CV020	DIWAKAR REDDY U	5	5	5	5
A-20	3VC15CV021	DODDA BASAVANA GOUDA K	5	5	5	5
A-21	3VC15CV023	G NARASIMHA TEJA	5	5	5	5
A-22	3VC15CV025	GAVISIDDAPPA G	5	5	5	5
A-23	3VC15CV026	GAVISIDDESHWARA G M	5	5	5	5
A-24	3VC15CV031	H M AMOGHA VARSHA	5	5	5	5
A-25	3VC15CV032	H M NIRANJAN	5	5	5	5
A-26	3VC15CV034	H THIRUVENI	5	5	5	5
A-27	3VC15CV037	HEMALATHA P	5	5	5	5
A-28	3VC15CV038	HRISHIKESH PATNAIK	5	5	5	5
A-29	3VC15CV039	J R SANDHYASHREE	5	5	5	5
A-30	3VC15CV040	J VAGEESHA THEERTHA	5	5	5	5
A-31	3VC15CV041	JADKA MOMHAMMED LATEEF	5	5	5	5
A-32	3VC15CV043	JAYAPRAKASH	5	5	5	5
A-33	3VC15CV044	K M MOUNA	5	5	5	5
A-34	3VC15CV045	K SAIKEERTHI VARMA RAJU	5	5	5	5
A-35	3VC15CV051	KOYYALAMUDI DEVIKA	5	5	5	5
A-36	3VC15CV053	MADHURI REDDY G	5	5	5	5
A-37	3VC15CV054	MAHESH M	5	5	5	5
A-38	3VC15CV056	MALLIKARJUN	5	5	5	5
A-39	3VC15CV057	MANASA PATIL	5	5	5	5
A-40	3VC15CV123	PRATIKSHA JAIN	5	5	5	5



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A-41	3VC15CV124	RSUCHITRA	5	5	5	5
A-42	3VC15CV125	SHIVANI M	5	5	5	5
A-43	3VC16CV402	AKSHAY TANIKOND NAGENDRA PRASAD	5	5	5	5
A-44	3VC16CV411	JADESH G T	5	5	5	5
A-45	3VC16CV413	KARHIK	5	5	5	5
A-46	3VC16CV436	SIDDARAMESH	5	5	5	5
A-47	3VC16CV443	VINOD KUMAR H	5	5	5	5
		AVERAGE	5	5	5	5
			1	1	1	1
		% CO Attainment	100	100	100	100



(Signature)
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RESULT ANALYSIS 2018-19

Result analysis has been done w.r.t IA and FINAL EXAM for the academic year 2018-19.

Statistics of Internal Assessment Tests

IA		No. of Students
Marks Range	0 - 5	0
	6 - 10	0
	11 - 20	47
	21 - 30	0
	Total	47

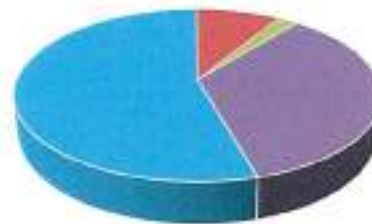
IA STATISTICS



- Marks Range 0 TO 5
- Marks Range 6 TO 10
- Marks Range 11 TO 20
- Marks Range 21 TO 30

FE		No. of Students
Marks Range	0 - 25	0
	26 - 35	4
	36 - 45	1
	46 - 65	16
	66 - 90	25
	Total	46

FE STATISTICS



- Marks Range 0 - 25
- Marks Range 26 - 35
- Marks Range 36 - 45
- Marks Range 46 - 65
- Marks Range 66 - 90

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Dr. Mallikarjuna
Head of the Department
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BELLARY-583 104.



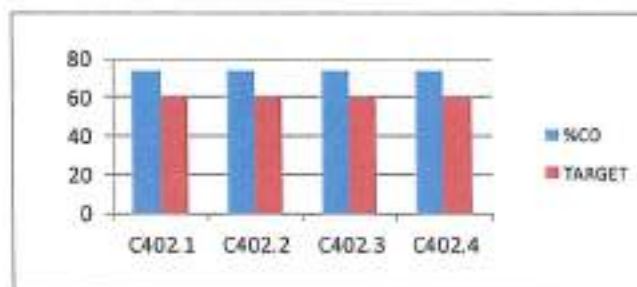
DIRECT ATTAINMENT 2018-19

SUBJECT: DESIGN OF RCC & STEEL STRUCTURES CODE: 15CV72
 STAFF: SACHIN PATIL
 SEMESTER VII

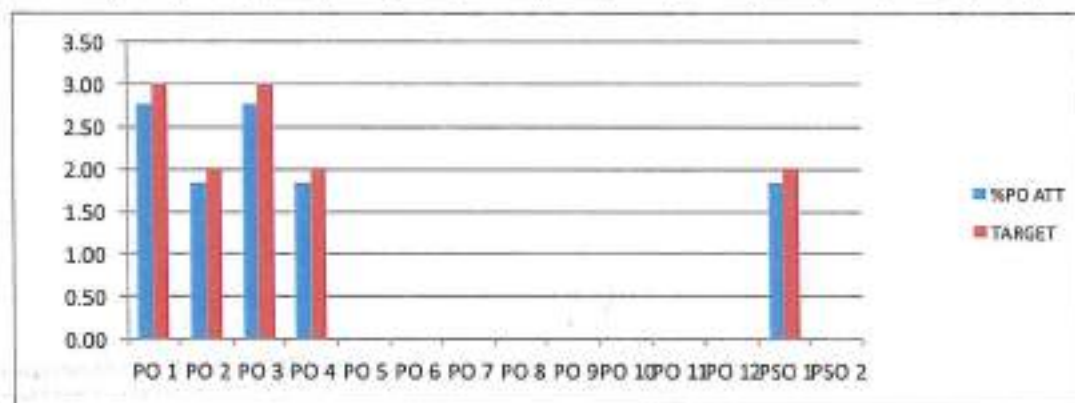
COURSE OUTCOME STATEMENT	
C402.1	Acquire the basic knowledge in design of RCC and Steel Structures
C402.2	Able to solve engineering problems in RC and Steel Structures
C402.3	Understand the Concept of of RC Structures like Retaining wall, Footing, Water tanks,
C402.4	Have the ability to follow design procedures as per codal provisions and skills to arrive at structurally safe RC and Steel members.

CO-PO/PSO Mapping														
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
C402.1	3	2	3	2	0	0	0	0	0	0	0	0	2	0
C402.2	3	2	3	2	0	0	0	0	0	0	0	0	2	0
C402.3	3	2	3	2	0	0	0	0	0	0	0	0	2	0
C402.4	3	2	3	2	0	0	0	0	0	0	0	0	2	0

	%CO	TARGET
C402.1	73.56	60
C402.2	73.7	60
C402.3	73.56	60
C402.4	73.36	60



	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
%PO ATT	2.76	1.84	2.76	1.84									1.84	
TARGET	3	2	3	2									2	



Sachin Patil



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Direct & Indirect Attainment 2018-2019

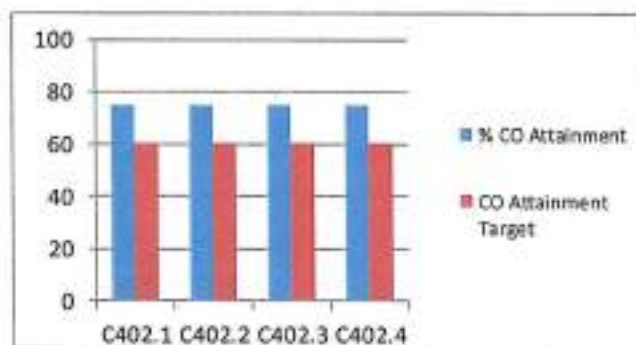
COURSE OUTCOME STATEMENT

C402.1	Acquire the basic knowledge in design of RCC and Steel Structures
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C402.4	structurally safe RC and Steel members.

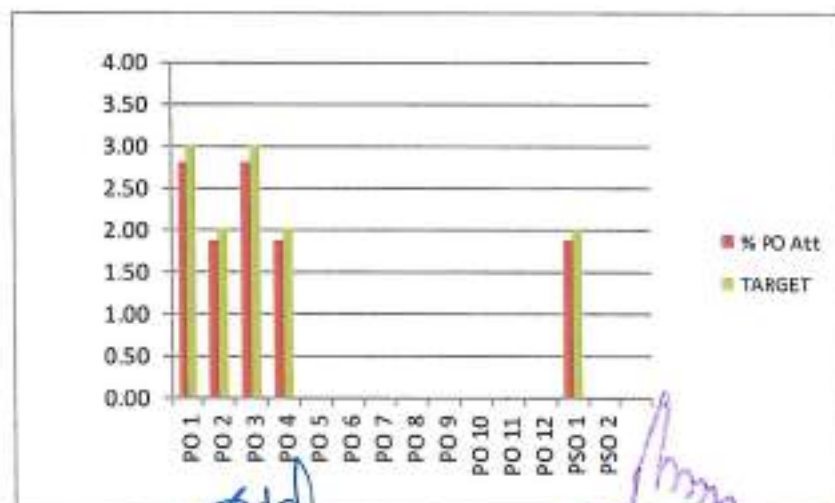
CO-PO/PSO Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
C402.1	3	2	3	2	0	0	0	0	0	0	0	0	2	0
C402.2	3	2	3	2	0	0	0	0	0	0	0	0	2	0
C402.3	3	2	3	2	0	0	0	0	0	0	0	0	2	0
C402.4	3	2	3	2	0	0	0	0	0	0	0	0	2	0

	% CO Attainment	CO Attainment Target
C402.1	74.85	60
C402.2	74.96	60
C402.3	74.85	60
C402.4	74.69	60



PO's	% PO Att	TARGET
PO 1	2.81	3
PO 2	1.87	2
PO 3	2.81	3
PO 4	1.87	2
PO 5		
PO 6		
PO 7		
PO 8		
PO 9		
PO 10		
PO 11		
PO 12		
PSO 1	1.87	2
PSO 2		



(Signature)
 Head of the Department,
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 BELLARY-583 104.