First

Name of Research Scholar	Mohanan T
Name of the Faculty	Department of Mathematics
Topic of Ph. D. Work	"Graph theory and its Algebraic characteristics"
Session of the Registration	July-19
Research Guide/Supervisor's Name	Dr. Arun Kumar Garg (Professor)

I.Progress against Planned Work

SL	Duration		Planned work	Actual work	
	From	To			
	17/July/2020	19/Jan/2021	CHAPTER 1: INTRODUCTION	Chapter -1 Work was going on	

		• GROUP ACTIONS	
		ACTION OF GROUPS ON GRAPHS	•
		PALEY GRAPHS	
		• GRAPH COVERS	
	*	• OUTERPLANARITY	
		SCOPE OF THE STUDY	
-		• STATEMENT OF PROBLEM	
		AIM & OBJECTIVES	
		SIGNIFICANCE AND NEED OF STUDY	
		Chapter 2 Literature Review	Chapter -2 Work was going on
		RESEARCH SUMMARY	
		RESEARCH GAP	

# II.Details of Publication

SL	Title of the Paper	Journal/ Conferences	Volume & No. /Page No. Venue & Dates	
				9

### HI.SEMINAR

Date: Signature of the Research Scholar

## IV. Recommendation of Research Guide

Certified that the performance of the Research Scholar is: Satisfactory/ not Satisfactory Comments:

Name & Signature of Research Guide

Second

Name of Research Scholar	Mohanan T
Name of the Faculty	Department of Mathematics
Topic of Ph. D. Work	"Graph theory and its Algebraic characteristics"
Session of the Registration	July- 19
esearch Guide/Supervisor's Name	Dr. Arun Kumar Garg (Professor)

I. Progress against Planned Work

SŁ	Dura	ation	Planned work	Act	ual	work	
	From	То					
			CHAPTER 3:	Chapter going on	-3	Work	was
			CIRCULANTS				
			<ul> <li>QUASI M-CAYLEY GRAPHS</li> </ul>				
	21/Jan/2021	26/July/2021	STRONGLY QUASI M- CAYLEY CIRCULANTS				
			QUASI 3-CAYLEY AND 4-CAYLEY GRAPHS				
	2 00	4	BICIRCULANTS				
		4	GENERALIZED CAYLEY GRAPHS				

# H.Details of Publication

SL	Title of the Paper	Journal/ Conferences	Volume & No. /Page No. Venue & Dates
	F.		

### HI.SEMINAR

Date: Signature of the Research Scholar

## IV.Recommendation of Research Guide

Certified that the performance of the Research Scholar is: Satisfactory/ not Satisfactory
Comments:

Name & Signature of Research Guide

THIRD

Name of Research Scholar	Mohanan T
Name of the Faculty	Department of Mathematics
Topic of Ph. D. Work	"Graph theory and its Algebraic characteristics"
Session of the Registration	July- 19
Research Guide/Supervisor's Name	Dr. Arun Kumar Garg (Professor)

I. Progress against Planned Work

SL	Duration		Planned work	Actual work			
	From	То					
		24/Jan/2022	CHAPTER 4: HALF-ARC- TRANSITIVE GRAPHS  • ALTERNETS CASE STUDIES  • TWO AND THREE ALTERNETS • FOUR OR MORE	Chapter going on	-4	Work	was
			ALTERNETS				

### **II. Details of Publication**

Title of the Paper	Journal/ Conferences	Volume & No. /Page No. Venue & Dates	
1			
	Title of the Paper		

### HI.SEMINAR

Date: Signature of the Research Scholar

## IV.Recommendation of Research Guide

Certified that the performance of the Research Scholar is: Satisfactory/ not Satisfactory
Comments:

Name & Signature of Research Guide

Fourth

Name of Research Scholar	Mohanan T
Name of the Faculty	Department of Mathematics
Topic of Ph. D. Work	"Graph theory and its Algebraic characteristics"
Session of the Registration	July- 19
Research Guide/Supervisor's Name	Dr. Arun Kumar Garg (Professor)

I.Progress against Planned Work

SL	Duration		Planned work	Actual work	
	From	То			
	28/Jan/2022	29/July/2022	CHAPTER 5:  CONCLUSION AND FUTURE RECOMMENDATIONS	Chapter -5 Work was going on	
			CONCLUSION		

II.Details of Publication

SL	Title of the Paper	Journal/ Conferences	Volume & No. /Page No. Venue & Dates

1 1		1
1		
		1

## III.SEMINAR

Date: Signature of the Research Scholar

# IV.Recommendation of Research Guide

Certified that the performance of the Research Scholar is: Satisfactory/ not Comments:

Name & Signature of Research Guide