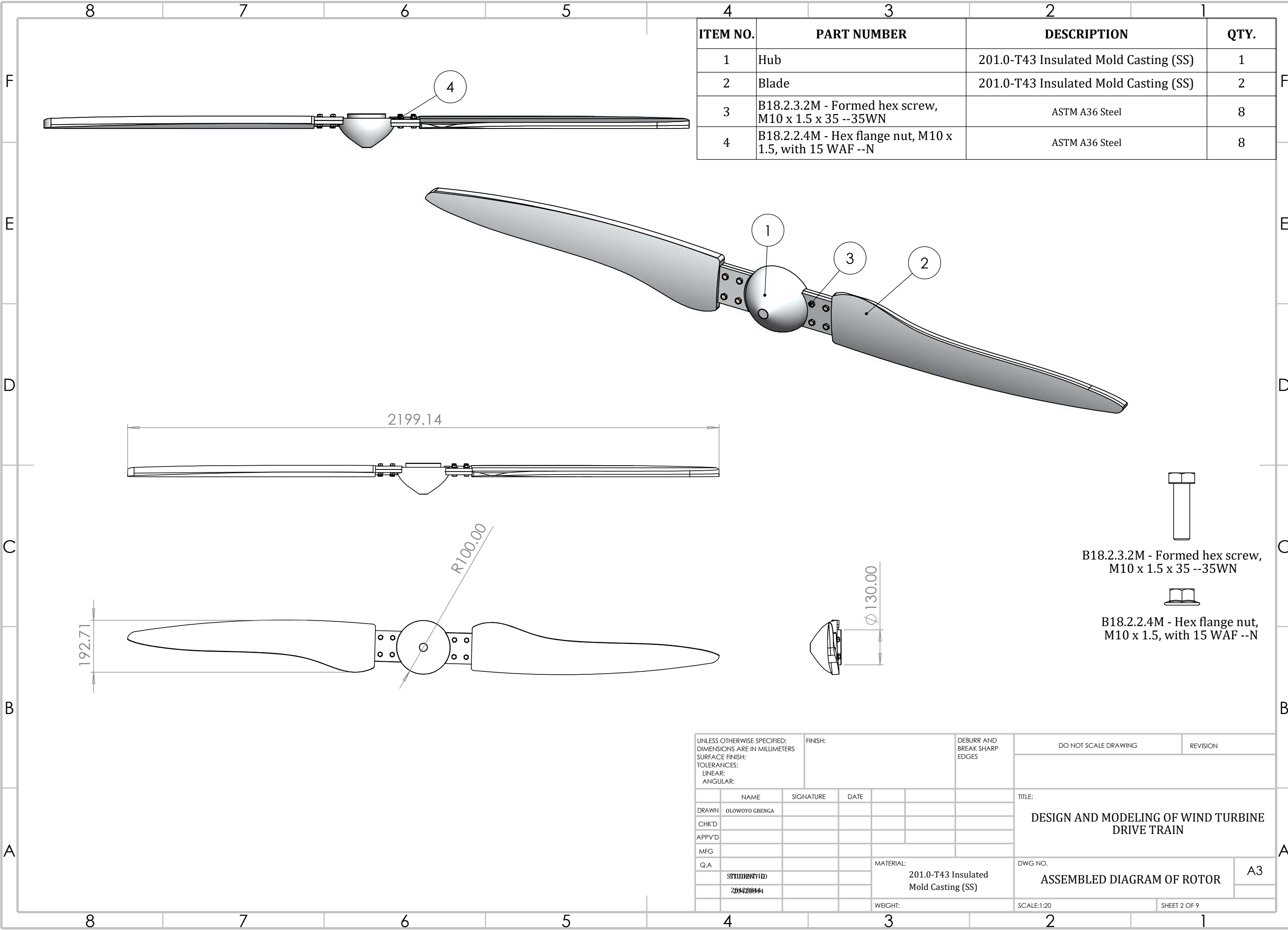


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Nacelle	2" angle iron and 5mm plate (Mild steel)	1
2	Hub	201.0-T43 Insulated Mold Casting (SS)	1
3	Low Speed Shaft	Mild steel rod	1
4	Blade	201.0-T43 Insulated Mold Casting (SS)	2
5	4 Bolt flange bearing-UCF206	30mm flange bearing	2
6	UCP204-20MM	20mm pillow bearing	6
7	Middle shaft	Mild steel rod	1
8	Pulley	Mild steel	2
9	Generator	DC 12V 24V 400W Permanent Magnet Generator	1
10	Base plate	5mm mild steel plate	1
11	Generator holder	3mm mild flat bar	1
12	Nacelle back plate cover	5mm mild steel plate	1
13	Nacelle side plate cover	5mm mild steel plate	2
14	Nacelle base holder	2" mild steel angle iron	1
15	Metric - Spur gear 5M 15T 20PA 30FW --- S15B40H60L20S1	Mild steel	2
16	Metric - Spur gear 5M 40T 20PA 30FW --- S40B50H60L20S1	Mild steel	2
17	Low speed shaft	Mild steel	1
18	Inverter	1.5KVA Inverter	1
19	Nacelle side plate cover 2	5mm mild steel plate	2
20	Belt	Type B belt	1
21	Nacelle front plate cover	5mm mild steel plate	1
22	B18.2.3.2M - Formed hex screw, M10 x 1.5 x 35 -- 35WN	ASTM A36 Steel	12
23	B18.2.3.2M - Formed hex screw, M10 x 1.5 x 30 -- 30WN	ASTM A36 Steel	22
24	B18.2.2.4M - Hex flange nut, M10 x 1.5, with 15 WAF --N	ASTM A36 Steel	16
25	B18.2.3.2M - Formed hex screw, M6 x 1.0 x 25 -- 25WN	ASTM A36 Steel	2
26	Key slot	Mild steel bar	4
27	B18.2.2.4M - Hex flange nut, M6 x 1 --N	ASTM A36 Steel	2
28	7.2mah 12v battery	Rechargable 12v battery(dry cell)	1
29	Nacelle top plate cover	5mm mild steel plate	1
30	Anenometer	5v analog anenomter	1
31	Micro-controller	Arduino uno	1
32	Relay module	5v Relay module	1
33	PHT 5x10x9.2-type IA-D-N	ASTM A36 Steel	2

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:		FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
DRAWN		NAME		SIGNATURE		DATE		TITLE:	
CHK'D		OLOWOYO GBENGA						DESIGN AND MODELING OF WIND TURBINE DRIVE TRAIN	
APPV'D									
MFG									
Q.A								DWG NO.	
STUDENT-ID								EXPLODED DIAGRAM	
20420844								A3	
								SCALE:1:20	
								SHEET 1 OF 9	

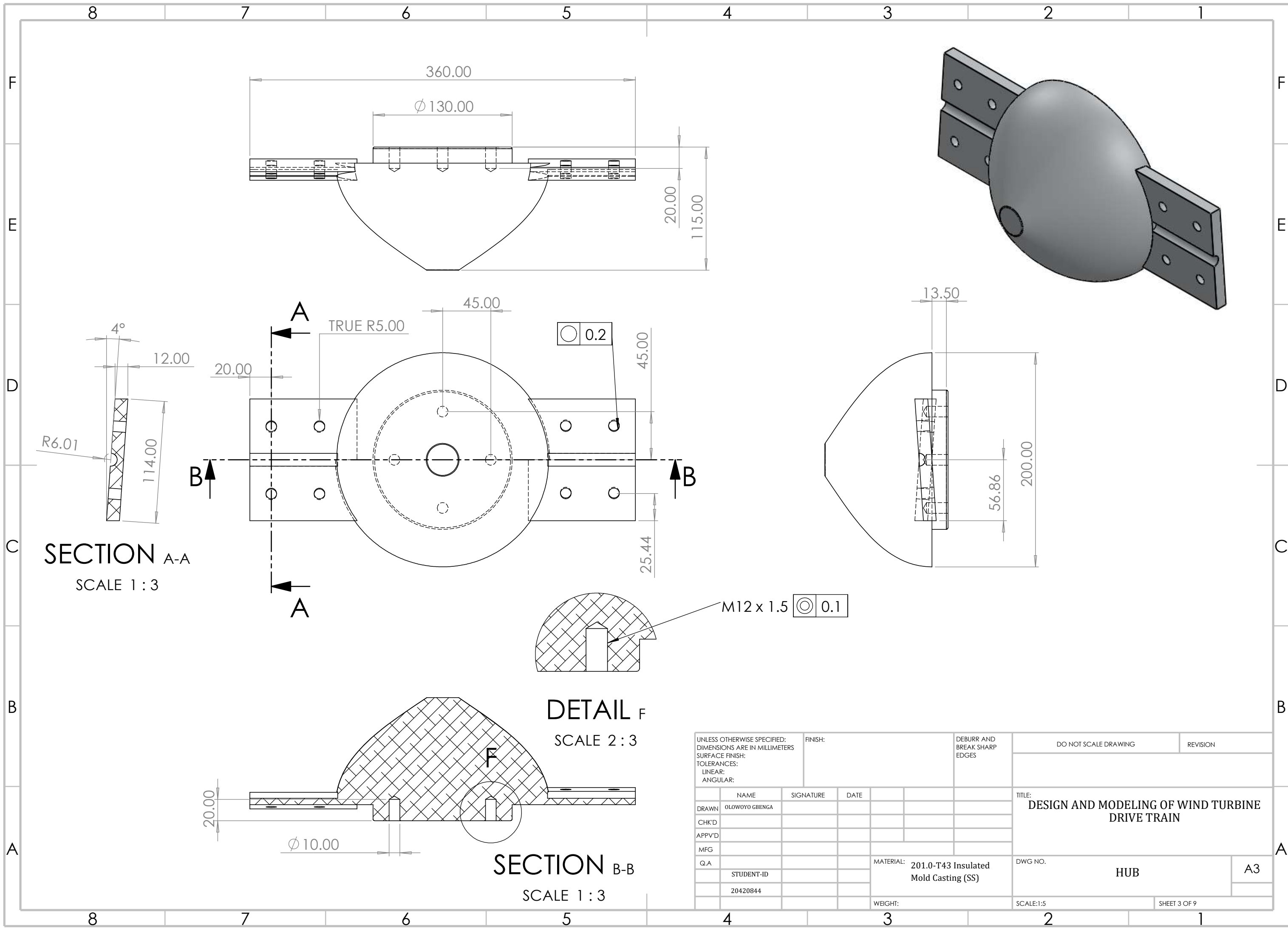


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Hub	201.0-T43 Insulated Mold Casting (SS)	1
2	Blade	201.0-T43 Insulated Mold Casting (SS)	2
3	B18.2.3.2M - Formed hex screw, M10 x 1.5 x 35 --35WN	ASTM A36 Steel	8
4	B18.2.2.4M - Hex flange nut, M10 x 1.5, with 15 WAF --N	ASTM A36 Steel	8

B18.2.3.2M - Formed hex screw,  
M10 x 1.5 x 35 --35WN

B18.2.2.4M - Hex flange nut,  
M10 x 1.5, with 15 WAF --N

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:				FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION		
	NAME		SIGNATURE		DATE				TITLE:  <b>DESIGN AND MODELING OF WIND TURBINE DRIVE TRAIN</b>			
DRAWN	OLOWOYO GBENGA											
CHK'D												
APPV'D												
MFG												
Q.A									DWG NO.  <b>ASSEMBLED DIAGRAM OF ROTOR</b>  A3			
STUDENT ID				MATERIAL:  201.0-T43 Insulated Mold Casting (SS)								
20420844												
							WEIGHT:		SCALE:1:20		SHEET 2 OF 9	

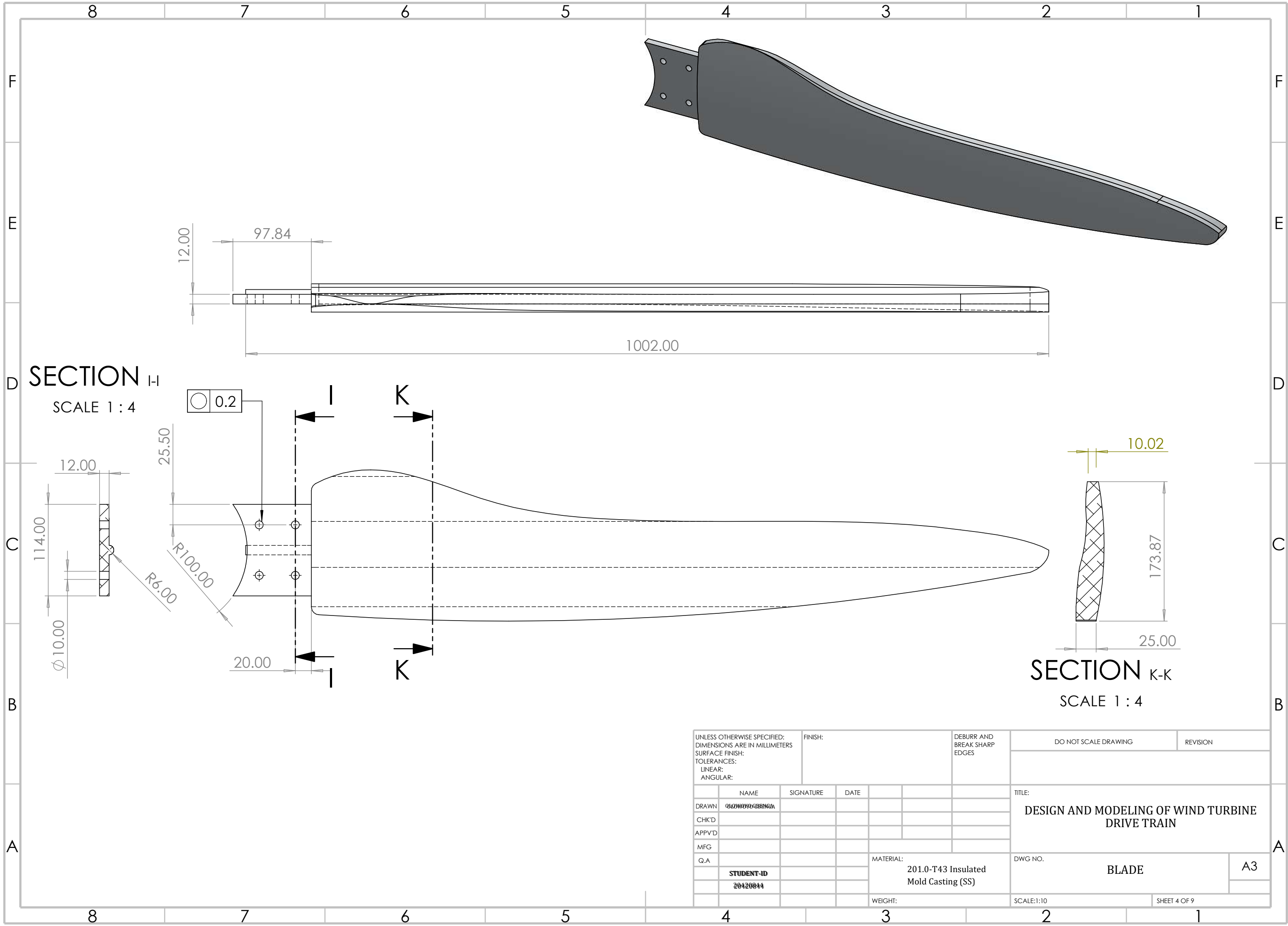


SECTION A-A  
SCALE 1 : 3

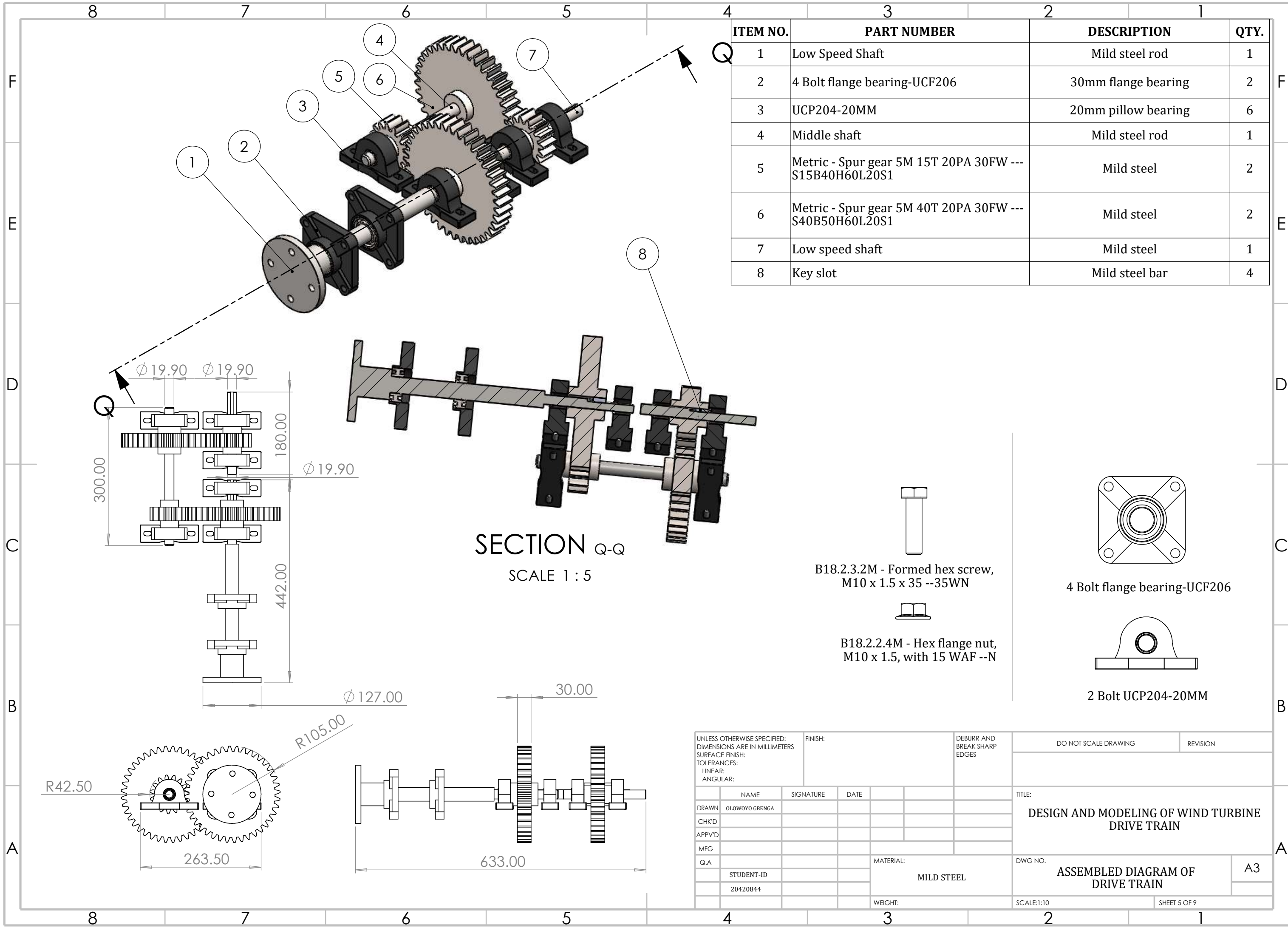
DETAIL F  
SCALE 2 : 3

SECTION B-B  
SCALE 1 : 3

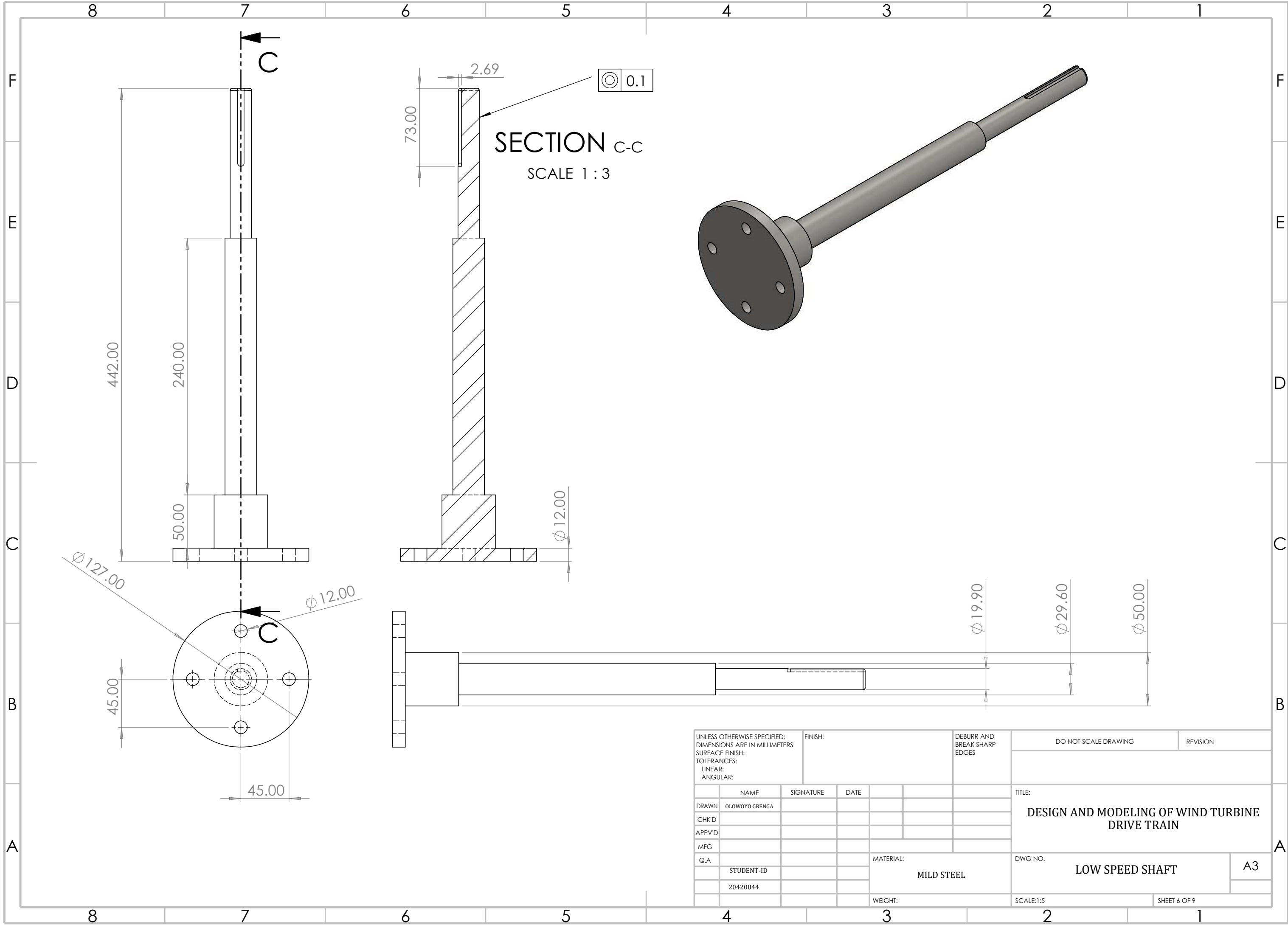
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DRAWN	NAME	SIGNATURE	DATE				TITLE: DESIGN AND MODELING OF WIND TURBINE DRIVE TRAIN		
CHK'D	OLOWOYO GBENGA								
APPV'D									
MFG									
Q.A									
	STUDENT-ID					MATERIAL: 201.0-T43 Insulated Mold Casting (SS)	DWG NO.		A3
	20420844						HUB		
						WEIGHT:	SCALE:1:5		SHEET 3 OF 9



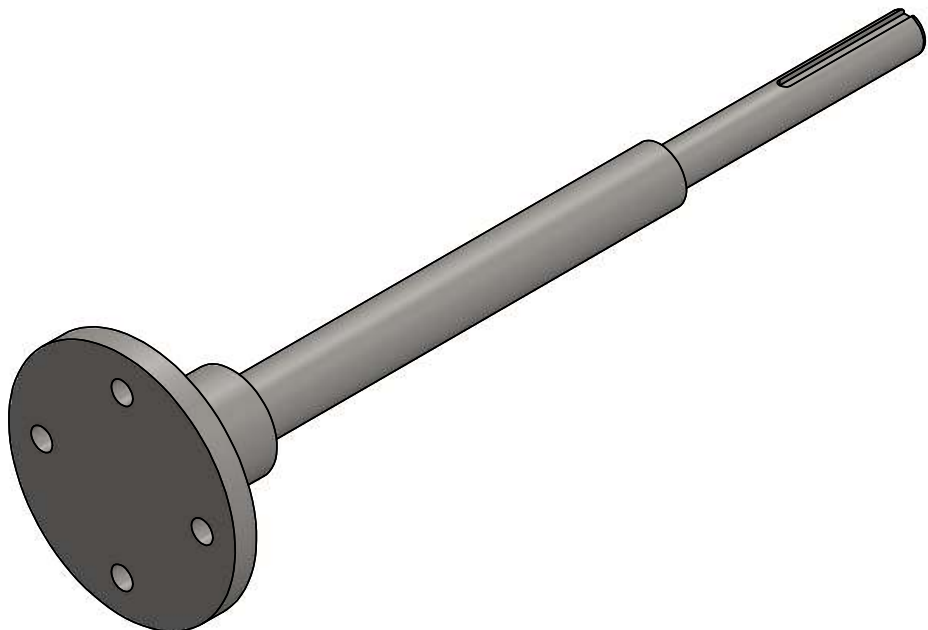
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	NAME		SIGNATURE		DATE					
DRAWN	<del>01020044</del>								TITLE:  DESIGN AND MODELING OF WIND TURBINE DRIVE TRAIN	
CHK'D										
APPV'D										
MFG										
Q.A										
	STUDENT-ID				MATERIAL:  201.0-T43 Insulated Mold Casting (SS)		DWG NO.  BLADE		A3	
	20420044									
					WEIGHT:		SCALE:1:10		SHEET 4 OF 9	



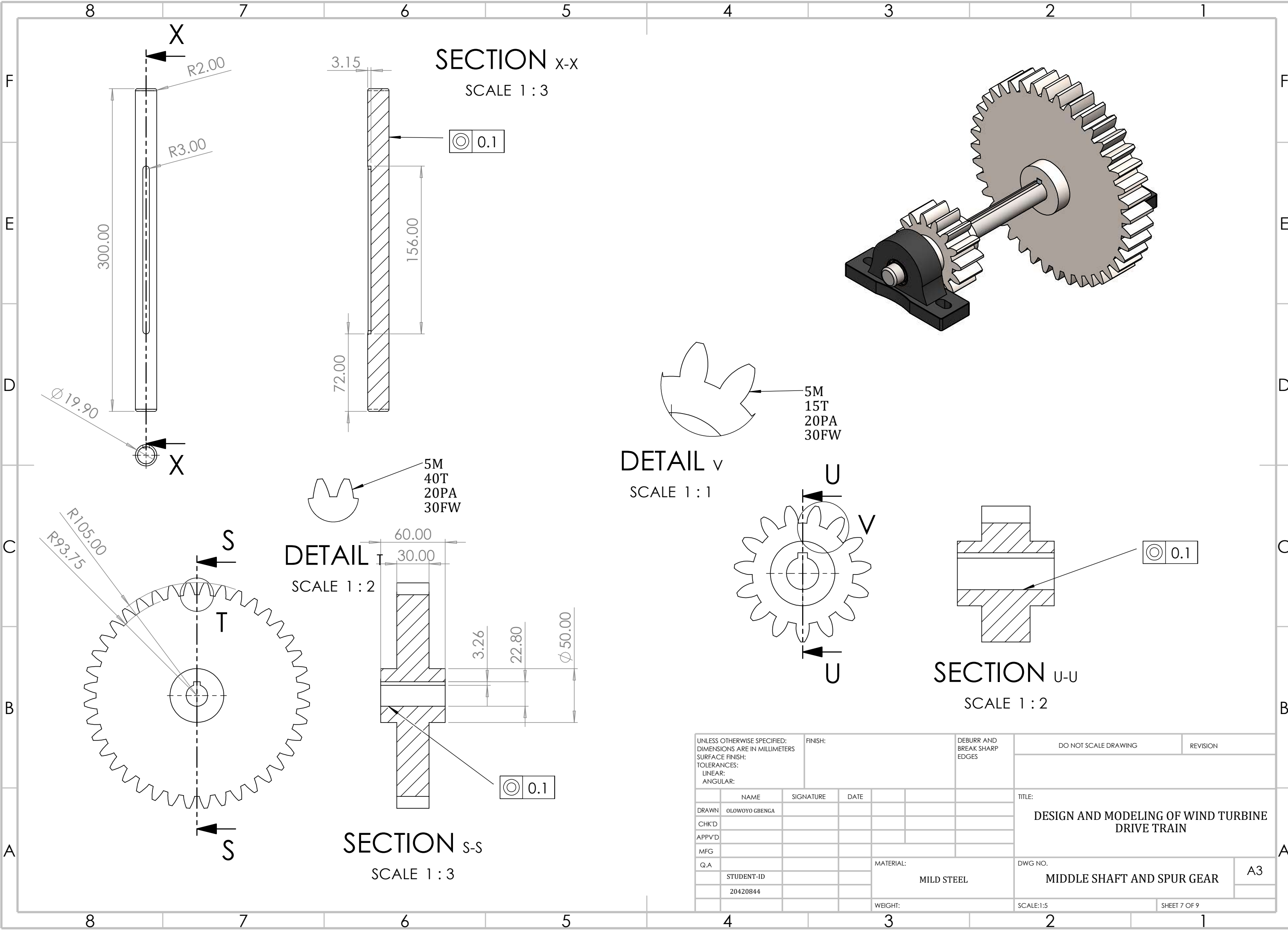




SECTION C-C  
SCALE 1 : 3



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:				FINISH:		DEBURR AND BREAK SHARP EDGES	DO NOT SCALE DRAWING		REVISION
DRAWN	NAME	SIGNATURE	DATE				TITLE:		
CHK'D	OLOWOYO GBENGA						DESIGN AND MODELING OF WIND TURBINE DRIVE TRAIN		
APPV'D									
MFG									
Q.A									
	STUDENT-ID					MILD STEEL	DWG NO.		A3
	20420844						LOW SPEED SHAFT		
						WEIGHT:	SCALE:1:5		SHEET 6 OF 9



SECTION X-X  
SCALE 1 : 3

0.1

DETAIL V  
SCALE 1 : 1

5M  
40T  
20PA  
30FW

SECTION S-S  
SCALE 1 : 3

0.1

DETAIL V  
SCALE 1 : 1

5M  
15T  
20PA  
30FW

SECTION U-U  
SCALE 1 : 2

0.1

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:				FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
	NAME		SIGNATURE	DATE				TITLE:  DESIGN AND MODELING OF WIND TURBINE DRIVE TRAIN			
DRAWN	OLOWOYO GBENGA										
CHK'D											
APPV'D											
MFG											
Q.A				MATERIAL:  MILD STEEL			DWG NO.  MIDDLE SHAFT AND SPUR GEAR			A3	
	STUDENT-ID										
	20420844										
				WEIGHT:			SCALE:1:5			SHEET 7 OF 9	

