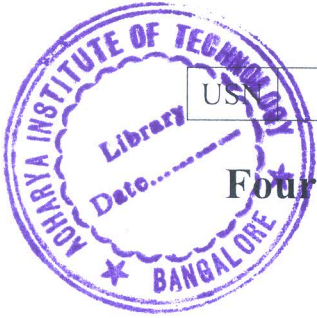


CBCS SCHEME



US										
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Fourth Semester B.E Degree Examination, July/August 2021

(AE/AS)

COMPUTER AIDED AIRCRAFT DRAWING

Time: 3 Hours

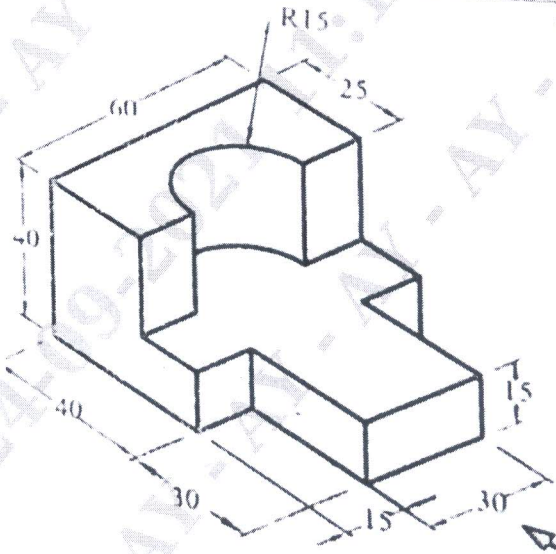
Max. Marks: 100

Note:

1. Answer any one question from each of parts A, B and C
2. Use First angle projection only
3. Missing data if any may suitable may assumed
4. All the calculation should be on answer sheet supplied
5. All the dimensions are in mm
6. Part C assembled view should be in 3D and other 2 views in 2D

Part – A

1. A rectangular prism of height 80mm and cross section 48×32 mm is resting on HP with its base. It is cut by a section plane in such a way that the true shape of section is a square of sides of maximum dimension. Draw the front view & determine the inclination of the section plane to the reference plane. Also draw the sectional top view & true shape of section. **20 Marks**
2. For the object shown below draw the front, top & right views. Show all the dimensions.



20 Marks

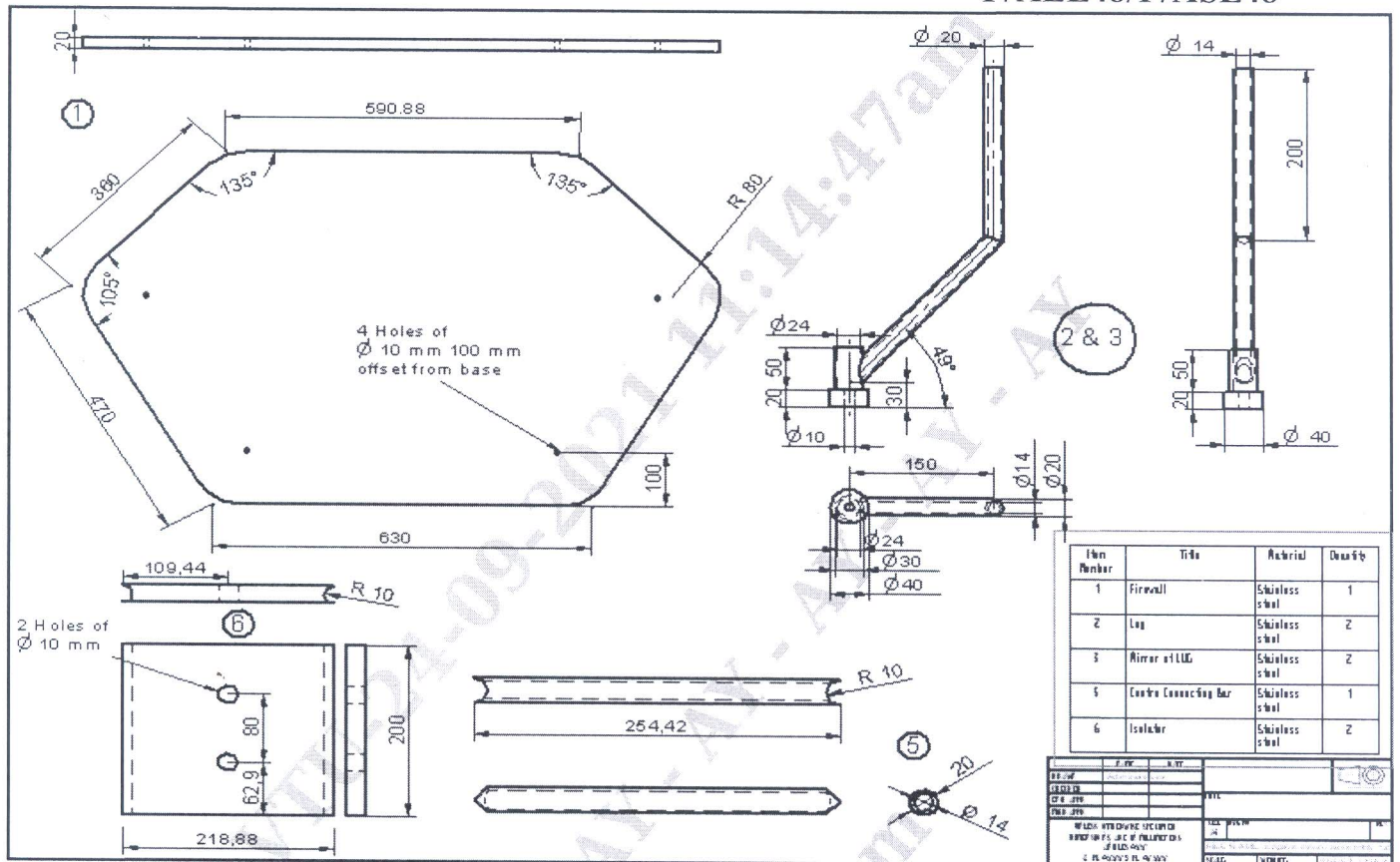
Part – B

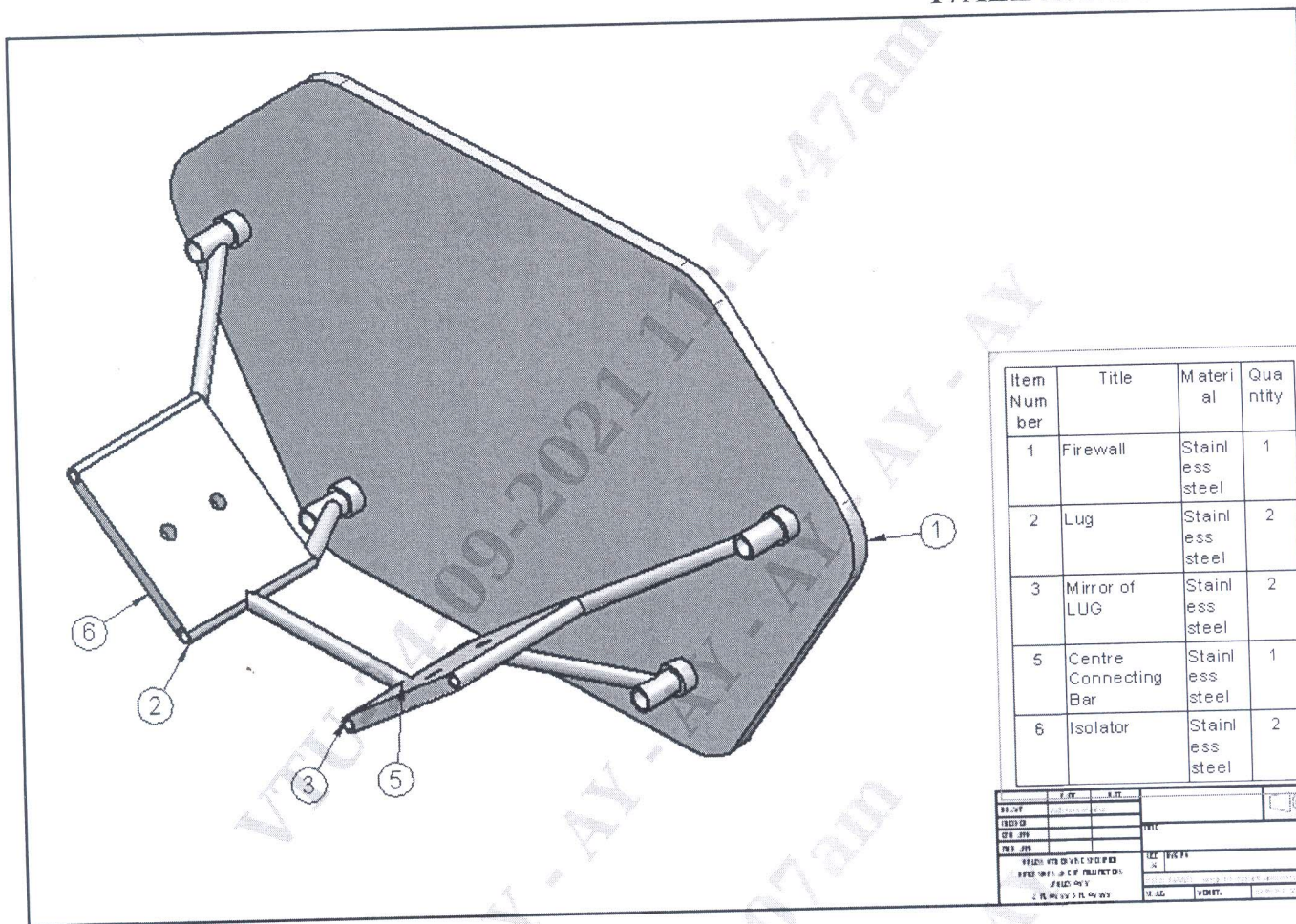
3. Draw a neat sketch of ISO thread profile of pitch 50mm. **20 Marks**
4. Draw Socket & Spigot Cotter Joint, used to join two rods of dia 20mm. Give following views,
i) Full sectional front view ii) Side view looking from Socket end **20 Marks**

Part –C

5. The details of a ENGINE MOUNT ASSEMBLY are shown in fig 1. Draw the following views of the assembly.
a) Front view b) Top view c) Left view **60 Marks**
6. The details of a WING ASSEMBLY are shown in fig 2. Draw the following views of the assembly.
a) Front view b) Top view c) Left view **60 Marks**

17AEL48/17ASL48

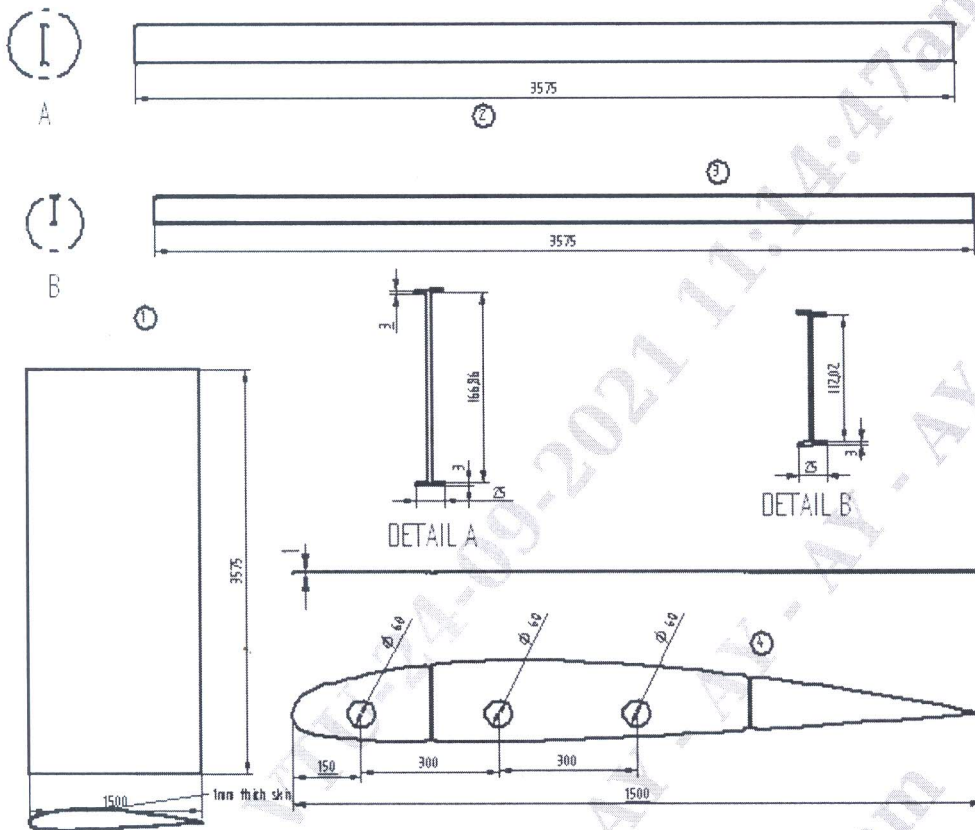




Item Number	Title	Material	Quantity
1	Firewall	Stainless steel	1
2	Lug	Stainless steel	2
3	Mirror of LUG	Stainless steel	2
5	Centre Connecting Bar	Stainless steel	1
6	Isolator	Stainless steel	2

REV. NO.			
REV. DATE			
REV. BY			
REV. FOR			
APPROVED BY			
CHECKED BY			
DRAWN BY			
CHECKED BY			
SCALE			
DATE			

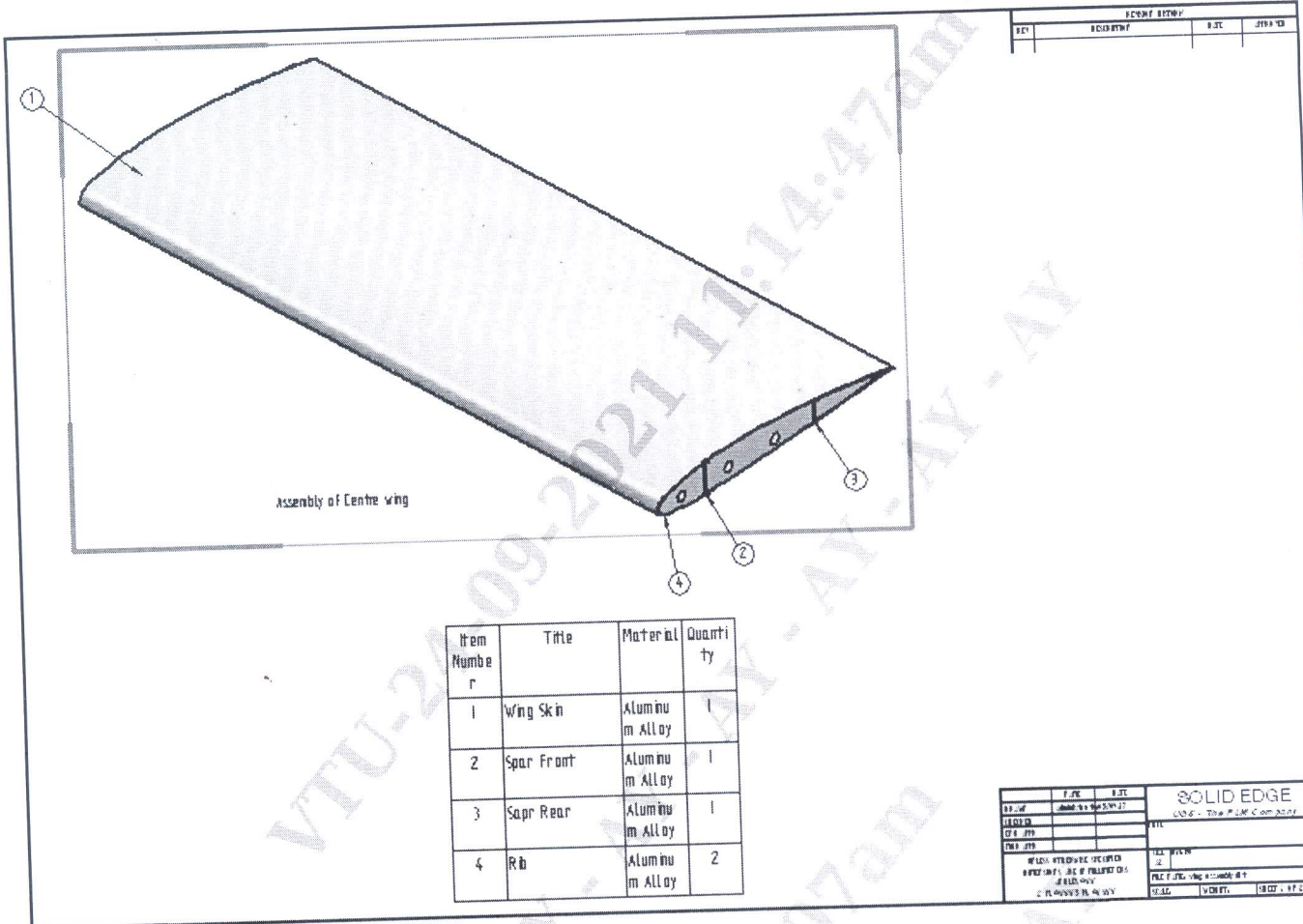
Fig 1



Airfoil Co-ordinate Details-2412

X	Y	Z
1	0	0.0013
0.95	0	0.0114
0.8	0	0.0375
0.6	0	0.0636
0.4	0	0.078
0.25	0	0.0767
0.15	0	0.0661
0.075	0	0.0496
0.025	0	0.0299
0	0	0
0.025	0	-0.0227
0.075	0	-0.0346
0.15	0	-0.041
0.25	0	-0.0422
0.4	0	-0.038
0.6	0	-0.0276
0.8	0	-0.015
0.95	0	-0.0048
1	0	-0.0013

Item Number	Title	Material	Quantity
1	Wing Skin	Aluminum Alloy	1
2	Spar Front	Aluminum Alloy	1
3	Spar Rear	Aluminum Alloy	1
4	Rib	Aluminum Alloy	2



Item Number	Title	Material	Quantity
1	Wing Skin	Aluminum Alloy	1
2	Spar Front	Aluminum Alloy	1
3	Spar Rear	Aluminum Alloy	1
4	Rib	Aluminum Alloy	2

SCHEMATIC			
REV	DESCRIPTION	DATE	BY

REV	DESCRIPTION	DATE	BY

SOLID EDGE
 USER: The P.M. Company
 FILE: F:\JULY 2021\17AEL48\17ASL48.dwg
 DATE: 24-09-2021 11:19:07am
 USER: The P.M. Company

Fig 2