Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: TY B.Tech	**School of Technology**	**Department: Aeronautical Engineering**
Course Code: AET 305	**Course Title: Aircraft Materials**	**Semester :V**
Day : Monday **Date : 21.12.2020**	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Instructions: 1) All Questions are compulsory.
2) Assume suitable data wherever necessary.

		Marks	Bloom's Level	CO
Q.1	**Answer the following (any Two)**–			
a)	Choose different type of nickel and nickel chromium steels used in aircraft.	8	L_2	CO1
b)	List down the special steels and its applications in aircraft.	8	L_2	CO1
c)	Classify the heat treatment of aluminum alloys used in aircraft.	8	L_2	CO2
Q.2	**Answer the following (any two) –**			
a)	Identify the physical properties of titanium alloys and its uses in aircraft	8	L_3	CO3
b)	Select the magnesium alloys casting methods and identify aircraft applications.	8	L_3	CO3
c)	Classify the manufacturing process of plastics used in aviation industry and its applications.	8	L_3	CO4
Q.3	**Answer the following (any two) –**			
a)	Compare and classify the fiber used in aviation and its applications.	9	L_4	CO5
b)	Sketch and explain the filament winding method of composites fabrication and its application. Justify the reason for filament winding methods used in hollow shape.	9	L_4	CO5
c)	Assume you are production engineer and make one rectangular composite sheet without any machinary.Select the appropriate fabrication method and explain it.	9	L_4	CO5

*****