

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Hons) Aircraft Maintenance (2018 Batch) (Sem.-3)

AIRCRAFT MATERIALS AND HARDWARE

Subject Code : BSCARM-302-18

M.Code : 76600

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Write briefly :**

- (a) Ferrous and Non-ferrous materials
- (b) Non-metallic materials
- (c) Characteristics of wood
- (d) Types of defects in fabric
- (e) Screw nomenclature
- (f) Self tapping screws
- (g) Dimpling
- (h) Blind rivets
- (i) Bolt specifications
- (j) Dowels

SECTION-B

2. Write a note on 'methods for inspection of fabrics'.
3. Define composites. Explain the techniques to detect defects in composites.
4. Explain various types of defects in wooden material and wooden structure.
5. Explain the various tools used for riveting and dimpling.
6. Explain various thread forms. Explain the dimensions and tolerances for standard threads used in aircraft.

SECTION-C

7. Write notes on the following :
 - (a) Locking devices (5)
 - (b) Types and heat treatment of solid rivets (5)
8. What are the common non-ferrous materials used in aircrafts? Explain characteristics, properties and identification of commonly used non-ferrous materials. (1,9)
9. Explain the methods of testing of ferrous materials for hardness, tensile strength, fatigue strength and impact strength. (10)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.