## 2023

## **Engineering Workshop**

Full Marks: 100

Time: Three hours

## The figures in the margin indicate full marks for the questions.

Answer any five questions.

1.	a)	What do you mean by "grains in wood"? What are the advantages of timber?	10
	b)	What do you understand by artificial seasoning of timber? Describe the different steps involved in artificial seasoning.	10
2.	a)	Why are files used in fitting operations? What are the different types of files based on shape or cross section?? Sketch and describe any four.	10
	b)	What are the various measuring tools used in fitting shop? Sketch and describe any three of them.	10
3.	a)	What is the working principle of a drilling machine? What are the various operations performed on drilling machine?	10
	b)	What are various operations performed on a lathe machine? Sketch and describe any four.	10
4.	a)	Write short notes on the following:	10
		i) Gas welding	
		ii) MIG welding	
	b)	What do you understand by welded joints? Write down the advantages and disadvantages of welded joints.	10
5.	a)	What do you understand by up milling and down milling in a milling machine? What are the operations which can be done on milling machine?	10
	b)	Describe with neat sketches of the following (Any four): i) Tenon saw	10
		ii) Panel saw	
		iii) Compass saw	

- iv) Firmer chisel
- v) Jack plane
- 6. a) Describe the following with sketch (Any one):

10

10

- i) Woodworking lathe
- ii) Band saw
- b) What are the various methods of filing using a hand-flat file in fitting shop? Describe them.

Central Institute Of Technology Kokrajhar :: Bodoland ESTD. : 2006 असतो मा सत गमय तमसो मा ज्योतिर्गमय