



Daffodil International University
Department of Agricultural Science
Faculty of Health & Life Sciences
Mid-term Examination, Fall 2025

Course Code: 0851-1103

Course Title: Farm Power and Machinery

Section: A, B, C

Level-Term: L1, T2

Teacher's Initial: MAR+ DAW

Full Marks: 25

Time: 1 Hour 30 Minutes

"Split answering is strictly prohibited"

Answer all the questions

1. Define Mechanization. Briefly explain the status of mechanization for rice farming in Bangladesh. 5
2. Define an engine. Briefly classify the internal combustion engine. Compare diesel engine and petrol engine. 5
3. What are the prospects and constraints of agricultural mechanization in Bangladesh? Briefly state the sources of farm power in Bangladesh's agriculture. 5
4. Describe shortly the working principles of power tiller engine with convenient diagrams. 5
5. A 4-stroke 4-cylinder tractor engine operates a rotary tiller for rice cultivation. The tractor cylinder diameter is 15 cm, stroke bore ratio is 1.2:1, crankshaft speed is 1200 rpm and clearance volume is 200 cc. Calculate engine displacement volume, compression ratio, and firing interval. What sort of engine is it? 5