KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2025 & Previous Admissions
I Semester Final Examination – February 2026

AGE 1102 **Introduction to Agricultural Engineering (3+1)** **Marks: 50**
Time: 2 hours

I **Fill in the blanks** **(10x1=10)**

1. Central Institute of Agricultural Engineering is located at……..
2. Power source used in Spark Ignition Engine is……
3. Compression ratio of Diesel Engine is……..
4. Landside is a component of …….. tillage equipment.
5. Example for Fixed type biogas plant is…….
6. Contour bunds are used where annual rainfall is …….
7. Micro irrigation practices are……. and …….
8. ……is a process that removes water or moisture from a food product.
9. Stoke's law used to find out……
10. SI unit of acceleration due to gravity is……..

II **Write short notes on ANY FIVE of the following** **(5x2=10)**

1. Write short notes on Size reduction.
2. Explain Physical properties of Agricultural materials.
3. Write short notes on Tillage.
4. Write the Sources of Farm power.
5. Write the Purpose of lubrication in IC engines.
6. Write the Composition of Biogas.
7. Enlist the classification of Greenhouse.

III **Answer ANY FIVE of the following** **(5x4=20)**

1. Explain Engineering measures of gully control.
2. Write the classification of engines? Explain working principle of 4 stroke engine.
3. Explain the working of a centrifugal pump with neat sketch.
4. Explain the working of solar flat plate collector with neat sketch.
5. Mention the different seed metering mechanisms and explain fluted feed type metering mechanism.
6. Explain modern storage structures.
7. Write the importance and scope of food processing.

IV **Write an essay on ANY ONE of the following** **(1x10=10)**

1. Farm Mechanization? Constraints and benefits of mechanization
2. Briefly explain the forms of water erosion.

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