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**Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET University)**



B. Sc. (Ag.) (Fourth Semester - Regular) Examinations, April – 2026

AEG-221– Farm Machinery and Power

Time: 2 hrs

Maximum: 40 Marks

**Answer ALL questions
(The figures in the right hand margin indicate marks)**

PART – A

(2 x 5 = 10 Marks)

Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. Define Indicated Horse Power and Brake Horse Power	CO1	K1
b. Define disc angle and tilt angle of disc plough.	CO2	K2
c. Why fins are provided at the cylinder head of air cooled engine?	CO3	K2
d. Enlist the different components of seed cum fertilizer drill. Write the function of Seed metering mechanism of seed cum fertilizer drill.	CO3	K3
e. What is Reaper and Mower?	CO4	K4

PART – B

(6 x 5 = 30 Marks)

Answer **ALL** the questions

	Marks	CO #	Blooms Level
2. Explain working principle of four stroke diesel engine with help of schematic diagram.	5	CO1	K1
3. Calculate the BHP of a 4 stroke, 4 cylinders I.C. Engine which has cylinder bore of 14 cm, stroke length of 16 cm, crankshaft speed of 1100 rpm, frictional horse power of 30, and mean effective pressure is 8 kg/cm ² .	5	CO2	K2
4. Explain Valve timing diagram with help of schematic diagram.	5	CO3	K2
5. Explain splash type lubrication system with help of schematic diagram.	5	CO3	K3
6. Explain thermosiphon type water cooling system with help of schematic diagram.	5	CO4	K4
7. Explain different components of Mould Board Plough with help of schematic diagram.	5	CO5	K4

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