

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2021-COURSE)
B. Tech. Sem - II MECHANICAL :SUMMER- 2022
SUBJECT : MECHANICAL ENGINEERING SYSTEMS

Day : Monday
Date : 1/8/2022

S-24066-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data if necessary.

Q.1 Compare two stroke and four stroke engines. Classify Internal combustion [10]
engines.

OR

Q.1 Explain vapor compression cycle. Explain the components of household [10]
refrigerator.

Q.2 Enlist renewable energy systems. Explain construction & working of flat plate [10]
collector with neat sketch.

OR

Q.2 Write short note on Thermal power plant. [10]

Q.3 Define 'Kinematic pair'. Explain different types of constrained motions. [10]

OR

Q.3 Define 'Mechanism'. Explain any one inversion of four bar chain. [10]

Q.4 Write short note on belt drives. What are the materials preferred for belt? [10]

OR

Q.4 Classify gears. Explain the terminology of spur gear with neat sketch. [10]

Q.5 Explain any four operations to be performed on lathe machine. [10]

OR

Q.5 Explain any four operations to be performed on drilling machine. [10]

Q.6 Define 'Robot'. Explain laws of robotics. [10]

OR

Q.6 Write short note on 'Robot Anatomy'. [10]

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