

Total No. of Questions : 4]

SEAT No. :

PD-372

[Total No. of Pages : 1

[6411]-164

B.E. (Robotics and Automation) (Insem.)
FIELD AND SERVICE ROBOTS
(2019 Pattern) (Semester - VIII) (411508)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) *Answer Q. 1 or Q. 2, Q. 3 or Q. 4*
- 2) *Neat diagrams must be drawn wherever necessary*
- 3) *Figures to the right indicate full marks*
- 4) *Use of Calculator is allowed.*
- 5) *Assume suitable data, if necessary*

Q1) a) Explain the concept of new research model in brief. [8]

b) What are Service RT Systems? What are their key aspects? [7]

OR

Q2) a) Explain the concept of 'From Robotics to RT Systems in detail. [8]

b) What is the difference between field robots and service robots? What are their application areas? [7]

Q3) a) Define the term 'Drone'. Elaborate some of its applications. [8]

b) What is a hexacopter? Highlight some of its advantages and disadvantages. [7]

OR

Q4) a) What are the various features commonly associated with drones? [8]

b) Elaborate on the concept of boundary setting and data collection using flight mapping. [7]

