Total No. of Questions : 4]

P5020

SEAT No. :

[Total No. of Pages : 1

[6187]-420

## T.E. (Civil Engineering) (Insem) RESEARCH METHODOLOGY AND IPR (2019 Pattern) (Semester - I) (Elective - I) (301005(B))

Time : 1 Hour] Instructions to the candidates:

b)

[Max. Marks : 30

- 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) Assume suitable data if necessary.

*Q1*) a) What do you mean by research? Explain its significance in modern times. [7]

- b) Write a short note on component of research problem. [8]
- (*Q2*) a) Describe fully the techniques of defining a research problem. [7]
  - b) Indicate the main characteristics of a good hypothesis and uses of a hypothesis in various types of research studies.

Q3) a) Examine the merits and limitations of the observation method in collecting material. Illustrate your answer with suitable examples. [7]

Write a short note on use of library in literature survey also state the precautions of library use in literature. [8]

## OR

- Q4) a) Enumerate the types of data and describe these types in detail with reference to tools, types of research and statistical techniques. [7]
  - b) Explain the need and functions of review of fiterature. [8]

