

Total No. of Questions : [03]

Total No. of Printed Pages: [03]

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| PAPER CODE |  |
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**May 2022 ENDSEMEXAM**  
**T.Y.B.TECH.(COMPUTER ENGINEERING) (SEMESTER - II)**  
**COURSE NAME: PROFESSIONAL ELECTIVE-II**  
**[ARTIFICIAL INTELLIGENCE]**  
**COURSE CODE: CSUA32181B**  
**(PATTERN 2018)**

Time: [1 Hr]

[Max. Marks: 30]

**Instructions to candidates:**

- 1) Figures to the right indicate full marks.
- 2) Use of scientific calculator is allowed
- 3) Use suitable data where ever required

| Question No. | Marking Scheme   | Marks          |
|--------------|--|----------------|
| Q.1          | a)Justification of "Hierarchical Task Network  | 4 M            |
|              | b) Goal Stack Planning operators   | 2M             |
|              | operations required to achieve the goal.   | 2M             |
|              | <b>OR</b>  |                |
|              | b) different classical planning algorithm. Backward search with suitable example reason for reducing branching factor. | 1M<br>4M<br>1M |
| Q.2          | a)Justification of importance of "Bias and variance is   | 4M             |
|              | b) CART algorithm  | 2M             |
|              | CART algorithm for given example   | 4M             |
|              | b) Naive Baye's classifier   | 2M             |
|              | Naive Baye's algorithm for given example   | 4M             |
| Q.3          | a) use of Artificial Intelligence in Robotics  | 4M             |
|              | b) Speech Recognition  | 2M             |
|              | Artificial Intelligence in Speech Recognition  | 4M             |
|              | <b>OR</b>  |                |
|              | b) algorithm for correcting the spelling of English Paragraph  | 6M             |