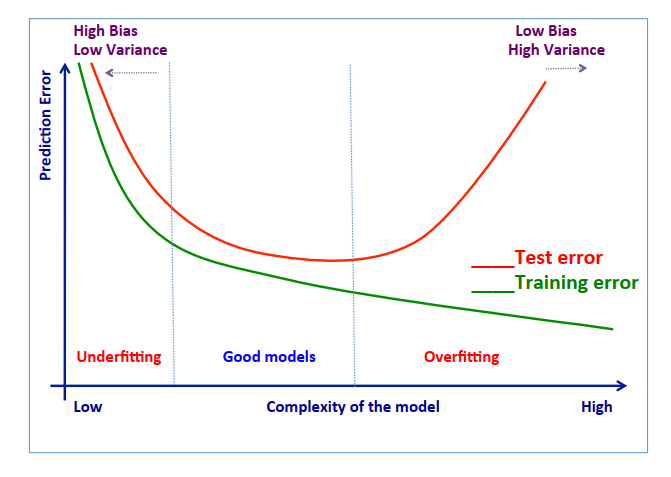
**AI Final Exam**

**Exam Date: 25-Feb-2024 9:00am**

**Submitted Date: 25-Feb-2024 12:00pm**

Theory (10pts)

1. Explain in detail what is Training Set, Validation Set, and Testing Set?
2. Regarding the figure below, what is Underfitting, Good Models, Overfitting?
3. In case of Overfitting existing, how to fix it and please explain in details?
4. Below Confusion Matrix, please calculate the value of these term and explain:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Actual | |
|  |  | Orange | Banana |
| Prediction | Orange | 45 | 5 |
| Banana | 20 | 60 |

* 1. Accuracy
  2. Precision
  3. Recall
  4. specificity
  5. FI measure