## Indian Institute of Technology Patna

MA102: Mathematics II

1. Solve the following equations using Euler’s method  
   1.

2.

3.

1. Solve following differential equations:
2. ,
3. ,
4. ,
5. Solve the following equations using Method of variation of parameter:
6. ,
7. If is solution of and is solution of , then show that is a solution of Using this result solve following differential equation: