

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -3 EXAMINATION- December 2017
M.Tech.-I Semester

COURSE CODE: 10M1WCI131

MAX. MARKS: 35

COURSE NAME: SYSTEM AND NETWORK SECURITY TECHNIQUES

COURSE CREDITS: 03

MAX. TIME: 2Hr.

Note: All questions are compulsory. Carrying of mobile phone during examination will be treated as case of unfair means.

1. [4 Marks] What is IDS? Give it's pictorial representation. What are the limitations of IDS?
2. [5 Marks] What are different steps to implement Genetic Algorithm? Explain in detail.
3. [5 Marks] What is LEAP process? What are its limitations? Explain.
4. [5 Marks] Explain distributed intrusion detection system. Provide it's architecture. Also give it's step by step working in detail.
5. [8 Marks] Consider the following code and generate its PDG after considering control dependencies, loop-independent flow dependence, loop-carried flow dependence, def-order dependence.

Program Main

```
sum:=0;
```

```
i=1;
```

```
while I<11 do
```

```
    sum:=sum+1;
```

```
od
```

```
end(sum, i)
```

6. [8 Marks] How Dempster-Shafer theory is used to detect intrusions in cognitive radio networks? Provide an explanatory example.