

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2, MAKEUP EXAMINATION – 2016

B. TECH. BIOINFORMATICS (IV SEM)

COURSE CODE: 15B11BI421

MAX TIME: 1.5 hours

COURSE: PROGRAMMING LANGUAGES IN BIOINFORMATICS MAX MARKS: 25 marks

---

 Note: Use of mobile phones is not allowed. Attempt ALL questions. Each question carries 5 marks.
 

---

1. Explain what the following mean and what difference, if any, there will be in the contents of the array after each assignment, and the number of elements?

```
@a=qw(11 12 13);
@a=(11, 12, 13);
@a=(11..13);
@a=qw(11..13);
@a=qq(11..13);
@a=qw(011 012 013);
@a=(011, 012, 013);
```

2. Getting the reverse of the string 0123456 is easy with an assignment:

```
$var='0123456';
$rav=reverse $var;
```

But the following does not work:

```
print "The reverse of $var is
", reverse($var), "\n";
```

Why? And how can you fix it?

3. Sort the list of names below in case insensitive mode, and print the result:

```
Jai manish caran Naren bulb Don
anna Julie Ram Tom
```

4. Given the following subroutine and code, predict the output.

```
sub new_scalar_ref
{
  my $a=1;
  return \$$a;
}
$one=new_scalar_ref();
$two=new_scalar_ref();
$three=$one; $four=$two;
$five=$$one; $six=$$two;
```

```
$$one++; $$one++; $$two++;
$$three++; $$four++; $five++;
$$six++;
```

```
print "$$one; $$two; $$three;
$$four; $five; $six\n";
```

5. Predict what the following program will do

```
#!/usr/bin/perl -w
@a=(1, 2, 5, 'b');
$a[1] += 2;
$a[3] .= 'a';
print "Result: $a[0]; $a[1];
$a[2]; $a[3] \n";
```