# Exam 2 Solutions

## Multiple Choice Key

1. e

2. c

3. b

4. c

5. d

6. a

7. d

8. e

9. e

10. d

## Worked Problems

1. If you choose the current directions as below,

```
----------------------------------------> I1




    I2 <------------------------------------
```

then according to the right hand rule, the field from both will point
into the page. The magnitude of each can just be calculated using

$$B = \frac{\mu_0 I}{2\pi r}.$$

For part (c), just add the two together (since they are in the same direction.)

2. Isolate purely parallel or series blocks, and reduce. Repeat as necessary. Answer: $7.38\mu F$.