



Midterm Sample Questions (Fall 2013)

The following 15 questions are sample questions of the sort you can expect on the midterm. Keep in mind that these sample questions likely include content from the remaining lectures until the midterm.

1. The breast bands on a Killdeer are an example of:
 - a) distraction patterns
 - b) startle patterns
 - c) disruptive patterns
 - d) countershading
 - e) implant surgery
2. The Painful Beetle is defended by cardiac glycosides. It looks almost exactly like the Deathrow Bug, which is full of neurotoxins. This bug closely resembles the I-spit-toxins-in-your-face Spider, which is full of cantharidin. This is an example of:
 - a) aposematic colouration
 - b) Batesian Mimicry
 - c) Mullerian Mimicry
 - d) both (a) and (c)
 - e) none of the above
3. Which of these animals **does not** use camouflage as its first and main defence:
 - a) American Bittern
 - b) Inchworm caterpillar
 - c) Gray Tree Frog
 - d) Red Eft
 - e) Savannah Sparrow
4. Mobbing is a defensive behaviour employed by:
 - a) Blue Jays
 - b) Meadow Voles
 - c) Yellowjacket Wasps
 - d) Garter Snakes
 - e) angry soccer fans
5. Bullfrogs, adult Painted Turtles, and Northern Water Snakes share this feature:
 - a) supercooling
 - b) they play dead when attacked
 - c) they bear large eyespots to startle predators
 - d) they are freeze-tolerant animals
 - e) none of the above

6. The Tree Chewer, a harmless uncommon beetle, is yellow and black and looks just like the common stinging Yellowjacket Wasp. This is an example of:
 - a) Batesian Mimicry
 - b) cryptic camouflage
 - c) Mullerian Mimicry
 - d) honest advertising
 - e) none of the above

7. If hibernation involves both the heart rate and body temperature falling to near zero, which animal **is not** a true hibernator:
 - a) Big Brown Bat
 - b) Black Bear
 - c) Black-capped Chickadee
 - d) none of the above are true hibernators
 - e) all of the above are true hibernators

8. Together an animal's eyes can see 350 degrees of combined field of views with 15 degrees of overlap. This animal is likely a/an:
 - a) mouse
 - b) owl
 - c) hawk
 - d) fox
 - e) hockey player

9. Which of these measurements would be best for an animal living near the South Pole: SA = surface area; V = volume; TL = tail length (note: the actual units are not important).
 - a) SA = 120; V = 20; TL = 100
 - b) SA = 120; V = 90; TL = 100
 - c) SA = 240; V = 20; TL = 50
 - d) SA = 240; V = 220; TL = 50
 - e) SA = 360; V = 120; TL = 100

10. Bicolouration is a defence often found in animals that live:
 - a) on the floor of a forest
 - b) on the surface of ponds
 - c) in cattail marshes
 - d) on tree trunks
 - e) in San Francisco

11. An insect fails to moult and "stays forever young." This is because it:
 - a) had a meal of Balsam Fir
 - b) had a meal of St. John's Wort
 - c) had a meal of Buttercups
 - d) had a meal of Milkweeds
 - e) visited Cher's plastic surgeon

12. The common and very bad tasting Frog Lizard looks just like the very common poisonous Jumping Frog and this looks just like the orange and blue delicious and harmless Eat-Me-I-Am-Tasty Snake, which is really quite rare. This is an example of:
- Batesian Mimicry
 - Mullerian Mimicry
 - Aposematic Colouration
 - all of the above
 - none of the above
13. The rete mirabile is used by:
- ectotherms that overwinter as adults
 - frogs that are freeze-tolerant
 - American Bitterns to avoid detection
 - ducks to keep their feet from freezing
 - none of the above
14. If you ate Purple Asters, you would feel the effects of:
- cardiac glycosides
 - alkaloids
 - calcium oxalate crystals
 - HCN
 - Prince
15. Which of these is an example of masquerade:
- an American Bittern pointing its bill in the air and freezing
 - a Chipping Sparrow showing only its head with an eyestripe above its nest
 - a Sphinx moth opening its wings and showing a set of fake eyes
 - a Giant Swallowtail caterpillar looking like bird poop
 - a Gray Tree Frog changing its colour

Good luck with the studying and always respect all living things.
And do try pishing!

Michael Runtz

Solutions:

15 - d)	10 - b)	5 - e)
14 - b)	9 - d)	4 - a)
13 - d)	8 - a)	3 - d)
12 - d)	7 - d)	2 - c)
11 - a)	6 - a)	1 - c)