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**MATRIC NUMBER: 17/MHS03/012**

**DEPARTMENT: ANATOMY**

**COURSE CODE: ANA 314 (ANIMAL HANDLING & COMPARATIVE ANATOMY)**

**ASSIGNMENT**

1. What is comparative anatomy?

Comparative anatomy is the study of similarities and differences in the anatomy of different species.

1. Highlight the criteria necessary to caring for laboratory animals

* The animal house should be well ventilated.
* Temperatures of 65-75°F (~18-23°C) with 40-60% humidity are recommended.
* For practical considerations due to common work hours, researchers should be aware of the lighting schedules used in the rodent housing rooms. Ensure lights are not used and that researchers and technicians do not enter the mouse room during the dark cycle.
* Noise moderation
* Avoidance or minimization of discomfort, distress, and pain
* Access to species appropriate food and water

1. Highlight the similarities and differences in the digestive system anatomy of amphibians and man.

Similarities

-They both have the following organs; mouth, tongue, teeth, oesophagus, stomach, small intestine, large intestine, liver, gall bladder

Differences

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| Man | Amphibians |
| They have strong teeth which they use in chewing. | They do not have strong teeth. They use their teeth to hold. |
| Man has one set of teeth in their oral cavity | Amphibians have two sets of teeth; maxillary teeth and vomerine teeth |
| The tip of the tongue is straight. | The tip of the tongue is folded backwards. |
| Their tongue is not sticky. | Their tongue is sticky. |
| They have a long small intestine. It has three parts: duodenum, jejunum, and ileum | They have a shorter small intestine. The two parts of the small intestine are duodenum and ileum |
| Their large intestine terminates in the rectum. | Their large intestine terminates in the cloaca. |