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Practical Class (Day and Time)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Demonstrators\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*SLE132: Practical 1 - Animal diversity*

Answer all questions and complete all biological drawings on this worksheet; submit to the Practical 1 submission dropbox on moodle. All biological drawings should be in pencil; refer to the notes in the manual for correct technique in completing biological drawings.

**Total for practical, 35 marks**

**Question 1:** Construct a dichotomous key to separate the specimens of the phylum Echinodermata into their appropriate classes (Class Ophiuroidea, Class Asteroidea, Class Echinoidea and Class Holothuroidea). (3 marks)

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**Question 2:** Construct a dichotomous key to separate the specimens of the phylum Mollusca into their appropriate classes (Class Polyplacophora, Class Bivalvia, Class Gastropoda and Class Cephalopoda).(3 marks)

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**Question 3:** Use the keys in the manual and those you have constructed for questions 1 and 2 to correctly identify four specimens. (3 marks)

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| **Colour and letter of specimen** | **Steps taken through keys** | **Phylum (and class where possible)** |
| *Example: Unknown specimen X* | *1b, 2b, 3a, 4b, 16a, 17b* | *Phylum Echinodermata*  *Class Asteroidea* |
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**Question 4:** List three features of all insects that distinguish them from the Arachnida and the Myriapoda. You may want to consult your textbook. (3 marks)

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**Biological Drawings**

Draw three specimens (**but not a** **sponge or a chiton**) including everything you need for a biological drawing (**See Appendix 2** - Legend, ruled lines, scale, use pencil only and each drawing should be at least 10cm size). Make sure you include at least **5 labels** for each drawing.

**Biological drawing 1** (**6 marks**)

**Biological drawing 2** (**6 marks**)

**Biological drawing 3** (**6 marks**)