FISH AND FISHERIES BIOLOGY
ZOU 3162 / ZOE 5162
O.B.T 1 - 2006 / 2007

REGISTRATION NO: _____

PART B

Answers should be written within the space provided.

2.

2.1 Name the most diverse group of fish that live today.

_____

2.2 List three major characteristic features that contribute to the success of this group of fish (Refer 2.1).

1) _____

2) _____

3) _____

2.3 State the main feeding habits that could be seen among the members of these fish you mentioned in question 2.1 above.

_____   _____

_____   _____

_____   _____

2.4 Give one example for each category you listed in question 2.3.

_____   _____

_____   _____

_____   _____

2.5 " The length of the gut of a fish shows its mode of feeding".
Comment on this statement.

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_____

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2.6 What is meant by the fecundity of a fish species ?

_____

2.7 Briefly state the principle you use to distinguish between serial and single spawners ?

_____

_____

2.8 " A sample of Herring population collected during the month of June in year 2005 has shown a high Gonado-Somatic Index (G.S.I)".

What can you predict about this fish population based on this statement.

_____

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2.9 State the most likely developmental stage of gonads when they attain a high Gonado-Somatic Index.

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2.10 Explain the importance of knowing Gonado-Somatic Index of fish species in fishery management practices.

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REGISTRATION NO:------------------------------

PART B

Answers should be written within the space provided.
2.

2.1 Name two natural inputs that are needed for the growth of biotic component of a fishery.

2.2 State two biotic parameters that would be highly variable in a fish population

1)--

2)--

2.3 Classify the main marine fishery resources that are being exploited in Sri Lanka.

2.4 Briefly describe the significance of estimating the Maximum Sustainable Yield in the management of fishery resources.

2.5 State three steps that could be taken to control the total catch if a fishery resource is over-exploited.

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2.6 " A knife-edge pattern recruitment of a fish population results in a high fishing mortality due to gear selection".
Comment on this statement.

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2.7 Table 1 shows length distribution of *Amblygaster sirm* caught by trawling.
Draw a graph for the trawl selection. (use the graph paper provided to you.)

Table 1

Length of fish (in mms)	40	70	100	130	160	190	220	250
Number of fish in the cod end	0	4	20	55	62	70	82	80
Number of fish in the cover	2	7	18	15	10	0	0	0
Portion of fish retained by the gear								

2.8 Determine the mean length at capture of *Amblygaster sirm* for trawl assuming the curve is not symmetrical.

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