### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table No.</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 a</td>
<td>Sum of squares and cross product of log length and log weight for male and female of <em>N. mesoprion</em> (September 2005 – May 2006)</td>
</tr>
<tr>
<td>1 b</td>
<td>Sum of squares and cross product of log length and log weight for male and female of <em>N. mesoprion</em> (September 2006 – May 2007)</td>
</tr>
<tr>
<td>3 a</td>
<td>Seasonal variations in relative condition factor (K) of <em>N. mesoprion</em> (September 2005-May 2006)</td>
</tr>
<tr>
<td>3 b</td>
<td>Seasonal variations in relative condition factor (K) of <em>N. mesoprion</em> (September 2006-May 2007)</td>
</tr>
<tr>
<td>4 a</td>
<td>Mean values of relative condition factor (K) of different size groups of <em>N. mesoprion</em> (September 2005- May 2006)</td>
</tr>
<tr>
<td>4 b</td>
<td>Mean values of relative condition factor (K) at different size groups of <em>N. mesoprion</em> (September 2006- May 2007)</td>
</tr>
<tr>
<td>5 a</td>
<td>Percentage composition of food items in the stomachs of <em>N. mesoprion</em> from September 2005 to May 2006</td>
</tr>
<tr>
<td>5 b</td>
<td>Percentage composition of food items in the stomachs of <em>N. mesoprion</em> from September 2006 to May 2007</td>
</tr>
<tr>
<td>6 a</td>
<td>Percentage composition of food items in the stomachs of <em>N. mesoprion</em> in various size groups from September 2005 to May 2006</td>
</tr>
<tr>
<td>6 b</td>
<td>Percentage composition of food items in the stomachs of <em>N. mesoprion</em> in various size groups from September 2006 to May 2007</td>
</tr>
<tr>
<td>7 a</td>
<td>Percentage occurrence of <em>N. mesoprion</em> in various degrees of fullness from September 2005 to May 2006.</td>
</tr>
<tr>
<td>7 b</td>
<td>Percentage occurrence of <em>N. mesoprion</em> in various degrees of fullness from September 2006 to May 2007</td>
</tr>
<tr>
<td>8 a</td>
<td>Percentage occurrence of stomachs in various degrees of fullness and the average volume of food per fish in relation to size in <em>N. mesoprion</em> from September 2005 to May 2006</td>
</tr>
</tbody>
</table>
8 b Percentage occurrence of stomachs in various degrees of fullness and the average volume of food per fish in relation to size in *N. mesoprion* from September 2006 to May 2007

9 Ova diameter at various stages of maturity (in m.d.) of *N. mesoprion*

10 a Percentage occurrence of gonads of *N. mesoprion* in different stages of maturity from September 2005 to May 2006
10 b Percentage occurrence of gonads of *N. mesoprion* in different stages of maturity from September 2006 to May 2007

11 a Percentage occurrence of male of *N. mesoprion* in different stages of maturity in various size groups during September 2005 to May 2006
11 b Percentage occurrence of female of *N. mesoprion* in different stages of maturity in various size groups during September 2005 to May 2006

12 a Percentage occurrence of male of *N. mesoprion* in different stages of maturity in various size groups during September 2006 to May 2007
12 b Percentage occurrence of female of *N. mesoprion* in different stages of maturity in various size groups during September 2006 to May 2007

13 Estimation of size at first maturity by cumulative percentage frequency curve

14 a Computation for estimation of mean size at first maturity of *N. mesoprion* with confidence limits – male (September 2005-May 2006)
14 b Computation for estimation of mean size at first maturity of *N. mesoprion* with confidence limits – female (September 2005-May 2006)

15 a Computation for estimation of mean size at first maturity of *N. mesoprion* with confidence limits – male (September 2006-May 2007)
15 b Computation for estimation of mean size at first maturity of *N. mesoprion* with confidence limits – female (September 2006-May 2007)

16 a Monthly variations in Gonado-Somatic Index of *N. mesoprion* during September 2005 – May 2006

17 Number of mature ova in individuals of *N. mesoprion*

18 a Results of Chi-square test applied to test significance of observed difference in sex ratio of *N. mesoprion* during September 2005 – May 2006
18 b Results of Chi-square test applied to test significance of observed difference in sex ratio of *N. mesoprion* during September 2006 – May 2007

19 a Sex-ratio of *N. mesoprion* in different size groups during September 2005 – May 2006.


20 Details of month wise catch (tonnes) of Nemipterids during September 2005 – May 2007 along Dakshina Kannada coast

21 a Length – Frequency (percentage) distribution of *N. mesoprion* in various months - Male (September 2005 – May 06)

21 b Length – Frequency (percentage) distribution of *N. mesoprion* in various months - Female (September 2005 – May 06)

21 c Length – Frequency (percentage) distribution of *N. mesoprion* in various months - Male (September 2006 – May 07)

21 d Length – Frequency (percentage) distribution of *N. mesoprion* in various months - Female (September 2006 – May 07)

22 Estimated mean length (cm) of male and female of *N. mesoprion*

23 The growth parameters of *Nemipterus mesoprion* obtained by different methods during the period September 2005 – May 2007

24 Total mortality (Z), Natural mortality (M), Fishing mortality coefficient (F) and Exploitation ratio (E)

25 The exploitation ratio (E), Yield per recruit and Biomass per recruit for *Nemipterus mesoprion*
LIST OF FIGURES

Fig. No. | CONTENTS
--- | ---
1 a | Parabolic length-weight relationship of *N. mesoprion* for the year 2005-06
1 b | Logarithmic length-weight relationship of *N. mesoprion* for the year 2005-06
2 a | Parabolic length-weight relationship of *N. mesoprion* for the year 2006-07
2 b | Logarithmic length-weight relationship of *N. mesoprion* for the year 2006-07
3 a | Seasonal variations in relative condition factor (K<sub>n</sub>) of *N. mesoprion* (September 2005 - May 2006)
3 b | Seasonal variations in relative condition factor (K<sub>n</sub>) of *N. mesoprion* (September 2006 - May 2007)
4 a | Mean values of relative condition factor (K<sub>n</sub>) of different size groups of *N. mesoprion* (September 2005 - May 2006)
4 b | Mean values of relative condition factor (K<sub>n</sub>) at different size groups of *N. mesoprion* (September 2006 - May 2007)
5 a | Percentage occurrence of food items in the stomach of *N. mesoprion* from September 2005 to May 2006
5 b | Percentage occurrence of food items in the stomach of *N. mesoprion* from September 2006 to May 2007
6 a | Percentage occurrence of food items in the stomach of *N. mesoprion* in various size groups from September 2005 to May 2006
6 b | Percentage occurrence of food items in the stomach of *N. mesoprion* in various size groups from September 2006 to May 2007
7 a | Percentage occurrence of *N. mesoprion* in various degrees of fullness from September 2005 to May 2006.
7 b | Percentage occurrence of *N. mesoprion* in various degrees of fullness from September 2006 to May 2007
8 a | Percentage occurrence of feeding intensity in different size groups of *N. mesoprion* (September 2005 to May 2006)
8 b | Percentage occurrence of feeding intensity in different size groups of *N. mesoprion* (September 2006 to May 2007)
9 | Ova diameter frequency polygon of *N. mesoprion* in various stages of maturity
10 a (i) Month-wise percentage occurrence of Testes in different stages of maturity of *N. mesoprion* (September 2005 – May 2006)

10 a (ii) Month-wise percentage occurrence of Ovary in different stages of maturity of *N. mesoprion* (September 2005 – May 2006)

10 b (i) Month-wise percentage occurrence of Testes in different stages of maturity of *N. mesoprion* (September 2006 – May 2007)

10 b (ii) Month-wise percentage occurrence of Ovary in different stages of maturity of *N. mesoprion* (September 2006 – May 2007)

11 a Percentage occurrence of testes in different stages of maturity in various size groups of *N. mesoprion* during September 2005 to May 2006

11 b Percentage occurrence of ovary in different stages of maturity in various size groups of *N. mesoprion* during September 2005 to May 2006

12 a Percentage occurrence of testes in different stages of maturity in different size groups of *N. mesoprion* (September 2006 – May 2007)

12 b Percentage occurrence of ovary in different stages of maturity in different size groups of *N. mesoprion* (September 2006 – May 2007)

13 a Length at first maturity of *N. mesoprion* (September 2005 – May 2006)

13 b Length at first maturity of *N. mesoprion* (September 2006 – May 2007)

14 a Monthly variations in Gonado-Somatic Index of *N. mesoprion* during September 2005 – May 2006


15 a Logarithmic length and fecundity relationship of *Nemipterus mesoprion*

15 b Logarithmic Weight and fecundity relationship of *Nemipterus mesoprion*

15 c Logarithmic ovary weight and fecundity relationship of *Nemipterus mesoprion*

16 a Monthly Sex-ratio of *N. mesoprion* (September 2005 – May 2006)

16 b Monthly Sex-ratio of *N. mesoprion* (September 2006 – May 2007)

17 a Sex-ratio of *N. mesoprion* in different size groups during September 2005 – May 2006.

17 b Sex-ratio of *N. mesoprion* in different size groups during September 2006 – May 2007
Seasonal abundance of Nemipterus s (Threadfin breams) at Dakshina Kannada coast during September 2005 – May 2007

19 a Length – Frequency (percentage) distribution of N. mesoprion in various months - Male (September 2005 – May 06)
19 b Length – Frequency (percentage) distribution of N. mesoprion in various months - Female (September 2005 – May 06)
19 c Length – Frequency (percentage) distribution of N. mesoprion in various months - Male (September 2006 – May 07)
19 d Length – Frequency (percentage) distribution of N. mesoprion in various months - Female (September 2006 – May 07)

20 Von – Bertalanffy growth curve of N. mesoprion

21 a Restructured length – frequency distribution for male of N. mesoprion
21 b Powel – Wetherall plot for male of N. mesoprion

22 a Restructured length – frequency distribution for female of N. mesoprion
22 b Powel – Wetherall plot for female of N. mesoprion

23 a Restructured length – frequency distribution for sexes pooled of N. mesoprion
23 b Powel – Wetherall plot for sexes pooled of N. mesoprion

24 Ford – Walford, Gulland and Beverton and Holt plot to estimate growth parameters

25 Length converted catch curve of Nemipterus s mesoprion for estimation of Z.

26 Probability of capture curve

27 Relative yield per recruit and Bio mass per recruit as function of exploitation in Nemipterus mesoprion