PLATE-1

Fig. a

Fig. b
a) *M.masoninana* (MM-3)  
   (MM-2)  
   (MM-1)

b) *H.emphysetum* (HE-3)  
   (HE-2)  
   (HE-1)

c) *M.dayanum* (MD-3)  
   (MD-2)  
   (MD-1)
PLATE-5
Shell of *Maydelliathelphusa masoniana*  
Chitosan yield (27.6%)

Shell of *Himalayapotamon emphysetum*  
Chitosan yield (21.40%)

Shell of *Macrobrachium dayanum*  
Chitosan yield (17.21%)
Zone of inhibitions recorded for the different test samples against *Staphylococcus*

Fig. 146

Zone of inhibitions recorded for the different test samples against *Klebsiella*

Fig. 147
Zone of inhibitions recorded for the different test samples against *E.coli*

![Zone of inhibitions against E.coli](Image)

**Fig. 148**

Zone of inhibitions recorded for the different test samples against *Pseudomonas*

![Zone of inhibitions against Pseudomonas](Image)

**Fig. 149**
Aspergillus

Candida

Zone of inhibitions recorded for the different test samples against Candida

Fig. 150
Plate-1

Fig.a: Sampling site at Gho-Manhasan stream.

Fig. b: Sampling site at Jhajjar stream.
Plate-2

Showing different size groups of local shell fish species i.e.

a) *M. masoniana* (MM-3, MM-2, MM-1)
b) *H. emphysatum* (HE-3, HE-2, HE-1)
c) *M. dayanum* (MD-3, MD-2, MD-1)
Plate-3

Chitosan extraction and yield from the shell of the investigated species i.e.

a) *Maydelliathelphusa masoniana*
b) *Himalayapotamon emphysetum*
c) *Macrobrachium dayanum*
Plate-4

Experimental set up for studying the effect of different diets on the biochemical composition of *M.masoniana*
Plate-5

Experimental set up for studying the effect of different diets on the biochemical composition of *H.emphysetum*
Plate-6

Experimental set up for studying the effect of different diets on the biochemical composition of *M.dayanum*. 
Plate-7

Fig. showing Zone of inhibitions recorded for the different test samples against *Staphylococcus*

Fig. showing Zone of inhibitions recorded for the different test samples against *Klebsiella*
Plate-8

Fig. showing Zone of inhibitions recorded for the different test samples against *E.coli*

Fig. showing Zone of inhibitions recorded for the different test samples against *Pseudomonas*
Plate-9

Fig. showing Zone of inhibitions recorded for the different test samples against *Candida and Aspergillus*