

## **Sample collection Performa**

Questionnaire was divided into two parts which were as follows: (a) host analysis (b) Risk factors analysis.

### **Part A. Information related to cattle Host and management practices**

#### **1- Signs and symptoms**

- a) Symptomatic host
- b) Asymptomatic host

#### **2-Infection history**

- a) Frist time infected
- b) Several time infected

#### **3-Ticks infestation**

- a) Present
- b) Absent

### **Part B. Information related to associated Risk factors**

#### **1-Different characteristics of host**

- a) Indigenous
- b) Exotic
- c) Age group < 2 year and > 2 years- 6 year
- d) Gender- Male, female
- e) Breed-  
Holstein Frisian,  
Jersey  
Sahiwal

#### **2-Management practices**

- a) Feeding system  
Free grazing  
Stall fed
- b) Hygienic measures  
Hygienic

Unhygienic

c) Farming system

Combine

Separate

d) Stall pattern

Congested

Open

**3 Season of the year and dates**

Winter

Summer