

**E Content for student of Patliputra University, Patna**

**B.Sc. Part I Paper –II**

**Subject:-** Zoology Hons.

**Topic:-** Write an Essay on Migration of Birds

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**Q. 13. Write an essay on migration of birds.**

**Ans.** Individual organisms often move about in their environment in response to a variety of stimuli. When such movements result in the temporary or permanent absence from their home range and the establishment of a residence in another, the resulting movement is said to be a migration.

In birds, the migration means, two journey—onward journey from the home, to the 'new' places and back journey from the new places to the home. This movement occurs during the particular period of the year and the birds usually follow the same route.

**Kinds of Migration :** Following kinds of avian migrations have been recognised by different ornithologists.

**1. Latitudinal Migration :** In latitudinal migration usually means the movement from north to south and vice versa. Most birds live in the temperate zones of the northern hemisphere and sub-tropical zones where they get facilities for nesting and feeding during summer. During winter when the northern hemisphere becomes covered with ice and snow, these birds move towards south for shelter.

**2. Altitudinal Migration :** Altitudinal or vertical migrations from high mountains in the summer to large valleys in the winter in many Indian and foreign mountain birds. In India a number of species during summer migrate from plains to the slopes of Himalayas ascending thousands of feet above sea level and return to plains on the commencement of winter, in common wood-cock, 'Bish chat and scolohax.

**3. Longitudinal Migration :** Longitudinal or east-west migration includes the migration of birds living in southern which in east-west direction. The pintagoonian in September and October for breeding.

**4. Partial Migration :** Many avian species (e.g. blue birds) are only partial migration. In such cases all the birds of a group of migratory birds do not leave the native land and hence are always represented by certain individuals.

**5. Erratic Migration :** The erratic migration occurs in great blue heron, cuckoos, thrushes and warblers. In such birds, after breeding the adults and the young may stray from their home to disperse in all directions over many or few hundred miles in search of food and safety from enemies.

**6. Seasonal Migration :** Some ornithologists of temperate countries have classified migratory birds according to seasons. Thus in Britain, swallows, nightingales and cuckoos are summer visitors, because they arrive in spring from the south, remain to breed and leave for the south in autumn. Some birds such as fieldfare, show hunting and redwing are winter visitors. as they arrive in autumn, chiefly from north, stay through out the winter and fly northwards again in spring.



**Modes of Migration :** During their migration most migratory birds display following significant features.

**1. Time of Migratory Flight :** The migratory flights of most migratory birds may occur during day time or night time and accordingly two types of migratory birds can be recognised.

(a) Diurnal migration (b) Nocturnal migration.

**2. Range of Migration :** The range of migration commonly varies from one few miles to thousand of miles in different groups of migratory birds but it is almost constant for a particular group. For examples, the Himalayan snow partridges cover a distance of about one or two miles.

**3. Altitude of Flight :** Some birds fly quite close to the earth, while most routing migration occurs within 31000 feet of earth.

**4. Velocity During Migration :** The speed of flight of migratory birds varies from individual to individual and species to species.

During migration, thus cranes, carriars, crows and fling ches flight with the speed of 30 miles per hours. The maximum speed recorded so far is about 17 miles per hour. (e.g. Indian swifts).

**5. Routes of Migration :** The migratory birds usually follow definite of flight. They follow by them may be the same whole going and returning back or may be different.

**6. Segregation During Migration :** Some birds such as kingfishers, swits, and mght hawks travel in separate companies. but certain other birds such as swallows, vultures, blue birds, turkeys etc usually travel in mixed companies of several species.

**7. Order of Migration :** During migration the birds follow a definite order and thus orderius strictly followed. Normally the adults migrate first and they are followed by youngs.

**Problems of Migration :** Certain scientific explanations have been forwarded from time to time to exyplain certain problematical issues concerning the avian migration and they are the following : (i) Problem of way finding or navigation. (ii) Problem of origin of migration. (iii) Problem of stimulus.

Thus migration is the most adventurous period of avian life. Every year hundreds of millions of migrants never reach their destination.