

NPTEL 2024 - Basic Course in Ornithology

Final Week 5 Assignment

- 1) A collection of all song types sung by a bird is referred to as its
 - a. Song phrase
 - b. Syllable
 - c. Note
 - d. **Repertoire**

- 2) What happens during the sensory phase of song learning in birds?
 - a. **Young birds memorize from an auditory memory of the song template**
 - b. Young birds practice singing with their tutors
 - c. Young birds start producing a subsong
 - d. Young birds produce the final song that is not modified any further

- 3) A phrase is a group of
 - a) Words
 - b) **Notes**
 - c) Coins
 - d) Songs

- 4) According to the Acoustic Adaptation hypothesis,
 - a) species in dense forests vocalize at low frequencies
 - b) species in open habitats vocalize at high frequencies
 - c) **Both a & b**
 - d) None of the above

- 5) Which parts of the frequency range of a bird song are likely to get impacted by anthropogenic noise
 - a) Higher frequency
 - b) **Lower frequency**
 - c) Both
 - d) None of the above

- 6) The sampling rate when recording any signal needs to be ascertained with respect to the target signal. What should be the sampling rate to capture a song that falls between 4-6kHz?
 - a) **14kHz**
 - b) 7kHz
 - c) 6kHz

d) 10kHz

7) Sexual selection and repertoire size in bird songs shows a:

- a) **Positive relationship**
- b) Negative relationship
- c) Can be both
- d) Neither

8) Certain techniques can help visualise different aspects of an acoustic signal. Which of the following statements is True?

- a) Waveform visualization of songs helps to see frequency bands
- b) Spectrogram form of visualisation of songs helps to see the amplitude of songs
- c) **Waveform of visualisation of songs helps to see the amplitude of songs**
- d) Spectrogram form of visualization does not show the time duration of songs

9) A plot of bird song data, with X-axis as Time and Y-axis as Frequency, is called a

- a) **Spectrogram**
- b) Waveform
- c) Power spectrum
- d) None of the above

10) A Bay-backed Shrike is found to be making the same calls that a Jerdon's Courser does. What is the term for this?

- a) **Mimicry**
- b) Duetting
- c) Song matching
- d) Species discovery

11) Song Bandwidth is not:

- a) High Frequency/ Low Frequency
- b) High Frequency + Low Frequency
- c) $(\text{High Frequency} + \text{Low Frequency}) / 2$
- d) **all of the above**

12) We know that different frequencies of sounds travel differently. Which of the following statements is True?

- a) **Low frequencies can travel farther**
- b) High frequencies may travel farther
- c) Both Low and High frequencies travel same distances
- d) None of the above

13) Where are superb lyrebirds found?

- a) **Australia**
- b) India
- c) South America
- d) Europe

14) Which of these could be intraspecific (within a species) benefits of vocal mimicry in birds (choose two)

- a) **Mate attraction**
- b) **Repelling rivals**
- c) Foraging
- d) Brood parasitism

15) Which set of species comprises only Indian birds that are vocal mimics?

- a) Indian Robin, Racket-tailed Drongo, Red-whiskered Bulbul, House Sparrow
- b) **Magpie Robin, White-rumped Shama, Racket-tailed Drongo, Tawny Lark**
- c) Common Tailorbird, Magpie Robin, Superb Lyrebird, Northern Mockingbird
- d) House Sparrow, Magpie Robin, Superb Lyrebird, Northern Mockingbird

16) What do Fork-tailed Drongos use mimicry for?

- a) Brood parasitism
- b) **Kleptoparasitism**
- c) Mutualism
- d) Commensalism

17) Which of the following species are not brood parasites? (Choose two)

- a) Cuckoos
- b) **Larks**
- c) **Drongos**
- d) All of the above

18) In what context do male lyrebirds perform the D song? (choose two)

- a) Foraging
- b) **When females exit the display arena**
- c) **Copulation**
- d) Flight

19) Racket-tailed drongos are reported to mimic which of the following

- a) Only other birds
- b) Other birds and some mammals
- c) Other birds, some insects, and some man-made sounds
- d) Other birds, some mammals, some frogs and some man-made sounds**

20) In which of these bird families is vocal mimicry not an ancestral state? (choose two)

- a) Mimidae
- b) Dicruridae
- c) **Lanidae**
- d) Phasianidae**