

**WRAP Exams · wrapexams.com**

Prelims PYQ, Mains model answers, and copy evaluation. Write to the desk for this paper, a doubt, or the AI waitlist.

[ask@wrapexams.com](mailto:ask@wrapexams.com) · +91 85951 84903 · [wrapexams.com](https://wrapexams.com)

Q30

**Which of the following have species that can establish symbiotic relationship with other organisms? 1. Cnidarians 2. Fungi 3. Protozoa Select the correct answer using the code given below (a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3**

**Official key: D.**

UPSC Civil Services Prelims 2021 · General Studies · 2 marks · Environment and Ecology  
Environment, ecology, climate, biodiversity - Prelims GS Paper I.

**Explanation**

**(a)**

1 and 2 only. Protozoa also form symbioses (e.g. termite gut, coral?).

**(b)**

2 and 3 only. Cnidarians (coral-**zooxanthellae**) too.

**(c)**

1 and 3 only. Fungi (**mycorrhiza**, lichen) too.

**(d) Official key**

All three. Coral, lichen/**mycorrhiza**, and protozoan endosymbionts.

**Summary**

Official key is (d) 1, 2 and 3. Cnidarians (coral and algae), fungi (**mycorrhiza**, lichen) and protozoa (gut and aquatic symbionts) all form symbiotic ties.

**Related possible facts**

These can be asked in a future Prelims paper.

**Zooxanthellae**

Dinoflagellates in coral tissue.

**Mycorrhiza**

Fungus-root mutualism.