ѫ

ѿ à Ղ (2 №˘ ˜ 20 №)

1. ˆ Pisces˜ʻ
2. ı ˆ Retrogressive metamorphosis˜ʻ
3. ѣ ˆ Ectothermal˜ʻ
4. ʌʾ ѣ Ь Ƶʾ ѣ ˆ Protostomia and Deuterostomia˜ʻ
5. ӧ ˆ Biogenetic law˜ʻ
6. ʾ ˆ Oral groove˜ʻ
7. ο hˆ Anoerobic respiration˜ʻ
8. ˆ Cryptobiosis˜ʻ
9. ʅ ˆ Single circulation˜ʻ
10. ˆ Community succession˜ʻ

Ҥ à ˆ 0.5 №˘ ˜ 20 №˜

1. ѿ ч˘ˆ ˜ ѣ Ƶ ѣ ˘ ѣ ي ı Ţ ı β ˘ ť ˆ ˜ ã ˜ ã ˜ ã ˜ ˘ ʌ ɣ Ƶ ѣ Â
2. ѣ ˜˜ ˆ ˜ˆà ˜ ˘ˆ ˜ Â
3. ʌ ѣ ɣ N ч ѣ ҕ˘ N ѣ ˘ ˘ N Ь Ջ˘ ˧ № чˆ ˜ ã ˜ ã ˜ ˘ N Â
4. ѣ ѿ № чˆ ˜ ã ˜ ˘ h ˘ ť Ţ h ˧ № ч 3 ɷ ˘ ˘ №≠ ˆ ˜ ã ˜ ã ˜ Â
5. ѣ ˆ ˜ ˘ ɾѣ ˘ ѣ ˆ ˜ ˘ ѣ № ı Ŧ ҂ˆ ˜ ˘ˆ ˜ ť̋ Â
6. ѣ ı ѿ ʅ ⌡ ˘ ɣ ⌡ ı Ծ ˘ ı ҕ ѿ ı ي ˘ ı ˆà ˜ˆà ˜ à ˆ ˜ ã ˜ ˘ˆ ˜ Â

₩ à Ղ ˆ 2 №˘ ˮ 20 №˜

1. ˆ Coefficient of difference˜
2. Peterson ˆ Peterson's mark-recapture method˜
3. Trophic level
4. Overfishing
5. Von Bertalanffy ˆ Growth equation˜
6. Ձ ı ˆ Convergent evolution˜
7. h ˆ Absorption efficiency˜
8. ˆ Euryoxybiotic fish˜
9. (Sexual characters)
10. ‰ ך (Standard metabolism)

ʜ à ˆ 0.5 №˘ ˮ 10 №˜

1. Ƃ Ղ ₩ ך № ֆ ɷ ˘ Ո_____ à____ ˇ_____ Â
2. ᴅ ֆ ˑ _____ à _____ ˇ _____Â
3. Ţ ᛋ ˇ ĩ ﺝ _____ ˆ Anadromous fish˜ ,

↕ ĩ ﺝ_____ ˆ Catadromous fish˜ Â

4. ᶩ ˆ Life history ˜ ₩ №

Ч _____ à_____ à_____ à_____ à ˇ Ἐ ɷ Â

5. ₩ Ң ɷ ˘ ₩ ɷ _____ Ո ↕˘ ˆ

₩ ɷ _____ ﺝ Â

6. ط Ղ ˑ _____Â

7. ˆ Mating ˜ Ч ˘ ₩ №

Ч _____ à _____ à _____ ﺝ Â

8. ˚˚ Ո ᵣ h _____ ˇ _____ Â

ˆˆ à ˆ 6 №˜ ˮ 30 №˜

1. ▼ φ ˚˚ ˆ Surplus yield model˜ ṗ Â

2. Abundance

3. Niche separation

4. Silver carp (Bighead carp)

5.

20 40

1. Life-history traits

2.

Sluice gate

Ü

(4 20)

1. mosaic development regulative development
2. gynogenesis parthenogenesis
3. epiblast hypoblast
4. monospermy polyspermy
5. preformation theory epigenesis theory

(10 40)

1.

2.

2 à Ī ı ╠ ط r ˘ ɾ Ŧ ŭ˘ r ך ќ ŭ ì ŭ ѽ Â

₩ à Й ↓ Ղ ˘ ҙ ᛈ (ɷ Ղ 1 № à 2 №˘ ˀ 30 №)

1. ˘ ᵒᵒ
2. ˘
3. ˘
4. ˘
5. ˘

ʜ à (10 №˘ ˀ 40 №)

1. ɷ r à à à ˘ ṗ Â
2. ʁ ₩ ˘ ₩ ɷ ˘ Ꮮ ң ɷ r Â
3. ش ˘ ˘ ط Â
4. ˘ ى ₩ ɷ ҽ ᴅ ˘ ↓ Ь Ƣ п Â

⁝⁝ à (15 №˘ ˀ 30 №)

1. ᛈ ₩ ڃ ч ᴅ˘ ش ˘ Й ف ŭ̆ ì Ꮮ˘ Ŧ ќ Âخ Ꮮ ˘ ќ ˘ ш ʌ Â
2. Ẋ - ך Ih ˘ ʌ P ~~~Ĥ~ṽ Oc o Hc˘ ì Ꮋ ‘ ɾ = ₩ ɷ ^ P~ Ŧ ŭ˘ -----

Ⱶ ı ^ ~~~~~~ Ŧ ₩ ɷ Ẋ ^, H˜ Ŧ^ V˜ ך ^ Oc˜’ ’ ʜ ˘ ↕ Ŧ^ o˜ Â ҽ ң ɷ ŭ̆ ᴅ˘ ҙ ᛈ Â . ₩ ɷ ^ à ı ˜ ˘ ₩ ɷ Â

l

w̄ à Ղ (2 №˘ ˆ 20 №)

1¨ Epigenetics

2˙ Apoptosis

3˙ Warburg effect

4˙ Metastasis

5˙ Phagocytosis

6˙ Promoter

7˙ Protein phosphorylation

8˙ Transcription factor

9˙ Sumoylation

10˙ Enhancer

Hʊ à (6 №˘ ˆ 60 №)

1¨ CRISPR/Cas9 ʌ Â

2˙ Ƛ ḱ h Â

3. ῖ ı Â

4˙ DNA ῖ ı Â

5˙ ı Â

6˙ ῖ Ə ı Â

7. ᶎ Â

8. TGF-beta Ḥ„ ᴰ Â

9. Wnt/beta-catenin Ḥ„ ᴰ Â

10. ﻫ ˆ Necrosis˜ Â

ΐΐ à (20 №˘ ˆ 20 №)

1¨ w̄ ɷ ˘ № w̄ ɷ Ь ŭ à ŭ ˜ ﻧ ˇ

˘ ᒣ ᐯ ی ﻧ ą ῖ ˇ à ı ᒪ Â

₱