

R-3085

Sub. Code

821T

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Integrated Marine Biology

இடைக்கால இலக்கியமும் சிறுகதையும்

(CBCS – 2018 onwards)

Time : 3 Hours

Maximum : 75 Marks

பகுதி அ

(10 × 2 = 20)

பின்வரும் அனைத்து வினாக்களுக்கும் ஒரிரு சொல்/தொடரில் விடை தருக.

1. திருக்கானப்பேர் என்ற பதிகத்தைப் பாடியவர் யார்?
2. திருப்பெருந்துறை பதிகத்தைப் பாடியவர் யார்?
3. அபிராமி அந்தாதியைப் பாடியவர் யார்?
4. திருக்குற்றாலக் குறவஞ்சியைப் பாடியவர் யார்?
5. வேற்றுமை எத்தனை வகைப்படும்?
6. இடைச்சொல் என்றால் என்ன?
7. திருவாசகத்தை இயற்றியவர் யார்?
8. அப்பர் என்றழைக்கப்படுபவர் யார்?
9. முதல் சிறுகதையின் தந்தை யார்?
10. சிறுகதை ஆசிரியரின் பெயர் ஒன்றினை எழுதுக.

பகுதி ஆ

(5 × 5 = 25)

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) திருப்புனவாசல் பதிகம் கூறும் கருத்துக்களை விளக்குக.

(அல்லது)

(ஆ) திருப்புவணம் பதிகக் கருத்துக்களை விளக்குக.

12. (அ) சிறுகதையின் வழி புலப்படும் சமுதாயச் சீர்திருத்தக் கருத்துக்களை விளக்கு.

(அல்லது)

(ஆ) ஏதேனும் ஒரு சிறுகதையைத் திறனாய்க.

13. (அ) வேற்றுமை மயக்கம் என்றால் என்ன? விளக்குக.

(அல்லது)

(ஆ) பெயர்ச்சொல் என்றால் என்ன? விளக்குக.

14. (அ) திருஞான சம்பந்தர் பற்றி எழுதுக.

(அல்லது)

(ஆ) திருநாவுக்கரசர் பற்றி எழுதுக.

15. (அ) ஒரு பக்க அளவில் 'மனசு' என்னும் தலைப்பில் சிறுகதை எழுதுக.

(அல்லது)

(ஆ) ஒரு பக்க அளவில் 'உறவு' என்னும் தலைப்பில் சிறுகதை எழுதுக.

பகுதி இ

(3 × 10 = 30)

பின்வரும் வினாக்களுள் எவையேனும் மூன்றனுக்கு விரிவாக விடையளி.

16. மாணிக்கவாசகரின் இறைப்பற்றை விளக்குக.
 17. உமக்குப் பாடமாக வந்துள்ள சிறுகதைகளுள் ஏதேனும் ஒன்றைத் திறனாய்வு செய்க.
 18. ஆகுபெயர் என்றால் என்ன? அவற்றின் வகைகளை விளக்குக.
 19. சிற்றிலக்கியம் பற்றிய இலக்கிய வரலாற்றை எழுதுக.
 20. 'விழுதுகள்' என்னும் தலைப்பில் மூன்றுபக்க அளவில் சிறுகதை எழுதுக.
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R-3086

Sub. Code

822 E

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Marine Biology

ENGLISH FOR ENRICHMENT — II

(CBCS – 2018 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. Who is Luz Long? What does Jesse say about him?
2. Was Gandhiji hypocritical in preaching voluntary poverty?
3. What is the theme of Coffee worries by R.K. Narayan.
4. What is spoon feeding?
5. When has the narrator made repairs alone in Frost's 'Mending Wall'?
6. What is the significance of 'as usual' in the poem 'A River'?
7. Define Adjective with examples.
8. What is meant by Conjunction?
9. Why do we write letters?
10. What is meant by precise writing?

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Briefly state how Luz and Owens performed in the finals.

Or

- (b) What did Ishbel Ros write about Helen Keller?

12. (a) Comment on R.K. Narayan's 'Coffee Worries'.

Or

- (b) Analyse the theme of 'Spoon Feeding' by W.R. Inge.

13. (a) What was the speaker doing when he first saw the Daffodils?

Or

- (b) Explain the repetition in the poem 'A River' by A.K. Ramanujan.

14. (a) Choose the correct Adjective form those in brackets.

(i) Can you please buy _____ apples?
(a few, few, little)

(ii) Is there _____ milk left? (few, some, any)

(iii) We need _____ furniture in this dance hall than in the big one. (little, less, some)

(iv) She dedicates _____ time to her home work than to her hobbies. (little, less, a lot)

(v) How much _____ do you intend to take this legal matter? (farther, further, later)

Or

- (b) Fill in the blanks with suitable conjunction:-
- (i) He was tired ————— he had been working for a long time.
 - (ii) You will win the first prize ————— you work hard.
 - (iii) He was angry ————— somebody had stolen his bicycle.
 - (iv) Neither Ramesh ————— Suresh did the work.
 - (v) They must have fallen asleep ————— there is no light in their room.
15. (a) Write a letter to the manager of a factory, asking permission for a party to visit the factory.

Or

- (b) What is the real purpose of A Resume?

Part C

(3 × 10 = 30)

Answer any **three** questions.

- 16. Describe the political culture that Gandhi advocates in voluntary poverty.
- 17. Explain the critical analysis of 'A Night Among the Pines'.
- 18. Give the central idea of the poem 'Mending Wall' by Roberts Frost.
- 19. What are the different types of conjunctions and define three types of conjunctions with examples.

20. Develop the following hints into a readable passage and give a suitable title.

Dick — actor — brilliant — strange character — insists on realism — headache to the manager — a new drama — first drinking scene — water provided in a cup as usual — Dick insists on liquor — manager has to buy a bottle of liquor second scene — fight — insists on real swords — refuses to handle wooden swords — steel swords brought — third scene — hero drinks poison — manager has real poison — actor in a fix — promises to be sensible in future.

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548201

M.Sc. (Integrated) DEGREE EXAMINATION, APRIL 2019.

Second Semester

Marine Biology

BIOLOGICAL OCEANOGRAPHY

(CBCS – 2018 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Nekton.
2. Oceanic zone.
3. Holoplankton.
4. *Lucifer sp.*
5. Littoral Zone.
6. *Gracilaria sp.*
7. Sponges.
8. Marine mammals.
9. *Phoresis.*
10. Endoceleism.

Part B**(5 × 5 = 25)**

Answer **all** questions, choosing either (a) or (b).

11. (a) Note on Red-tide phenomena and causes.

Or

- (b) Discuss about the divisions of marine environment

12. (a) Write briefly on horizontal distribution of Zooplankton.

Or

- (b) Mention the factors affecting secondary productivity.

13. (a) Write the economic importance of Mangroves.

Or

- (b) Explain the role of seaweeds in the coastal ecosystem.

14. (a) Explain the biology of any marine vertebrate.

Or

- (b) Discuss the minor Phyla - Chaetognatha.

15. (a) Note on Epizoism with suitable examples.

Or

- (b) Note on Parasitism with suitable examples.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Give an account on primary productivity in the Indian Seas.
 17. Describe on Zooplankton and their taxonomic classification with reference to Phyla.
 18. Explain the taxonomy of Seagrass, distribution and their role in the coastal ecosystem.
 19. Expound the classification and biology of one marine invertebrate and one vertebrate.
 20. Discuss the following animal association modes with illustration :
 - (a) Hermit crab and sea – anemone.
 - (b) Corals and *Zooxanthellae*.
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R-3088

Sub. Code

548202

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Integrated Marine Biology

MARINE ECOLOGY AND ZOOGEOGRAPHY

(CBCS – 2018 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Salinity
2. Barriers
3. Energy flow
4. Ecological pyramids
5. Carrying capacity
6. Sex ratio
7. Niche
8. Stability
9. IUCN
10. Pollution

Part B**(5 × 5 = 25)**

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe the adaptations of Benthos.

Or

- (b) Write note on the hydrothermal vent.

12. (a) Briefly explain the food-web in a marine ecosystem.

Or

- (b) Discuss on recycling of nutrients.

13. (a) Explain the age structure and sex ratio of a population.

Or

- (b) Expound the prey-predator relationship in a population.

14. (a) Write briefly the marine fouling and boring community.

Or

- (b) Write note on the edge effect with suitable examples.

15. (a) Discuss the biodiversity assessment techniques.

Or

- (b) Expound the biosecurity.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the importance, conservation and management of coral reef environment.
 17. Expound the marine ecosystem services.
 18. Describe population density. Add the role of density dependant and independant factors.
 19. Explain with suitable examples of animal associations in the sea.
 20. Describe the major threats to marine biodiversity.
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R-3089

Sub. Code

8MB2A1

M.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Integrated Marine Biology

Allied Course IV — GENERAL CHEMISTRY II

(CBCS – 2018 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are the raw materials needed for the manufacturing of paper?
2. What is pyrotechnique?
3. What is meant by vacuum drying?
4. What is sublimation? Give any two examples.
5. Name any two nitrogen fixing bacteria.
6. What is fertility index?
7. Name any three organophosphorus pesticides.
8. What is Bordeaux mixture and how to prepare the Bordeaux mixture?
9. What is the use of Nelson method?
10. How do you estimate glucose in urine using Benedict's method?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What are the raw materials needed for the match industry?

Or

- (b) Discuss the synthesis and hazardous nature of the following explosives

(i) Nitroglycerine (ii) Cordite.

12. (a) List out the differences between column and thin layer chromatography.

Or

- (b) List out the classifications of desiccants in detail.

13. (a) What is the effect of nitrogen on the plant growth and development?

Or

- (b) What is soil testing? How to choose different fertilizer based on the soil types?

14. (a) How do you prepare different fertilizer mixtures?

Or

- (b) What is the role of phosphate mobilizing biofertilizer? Explain it with suitable examples.

15. (a) Mention the role of organic fungicides in plant growth.

Or

- (b) Draw the structure and applications of the following

(i) Endosulfan

(ii) Dithiane M

(iii) Nicotine.

Part C

(3 × 10 = 30)

Answer any **three** of the following.

16. Discuss the principle, methodology and applications of the following.
 - (a) Gas chromatography
 - (b) Ion exchange chromatography.
 17. Explain the following in detail :
 - (a) Galvanisation
 - (b) Electroplating
 - (c) Tinning.
 18. Explain biofertilizers with examples and mention its importance in the plant growth.
 19. Explain the synthetic protocols and the applications of the following fungicides with examples for each
 - (a) Sulphur compounds
 - (b) Copper compounds
 - (c) Mercuric compounds.
 20. What are the synthetic procedures and applications of the following?
 - (a) Indigo
 - (b) Alizarin
 - (c) Phenolphthalein.
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