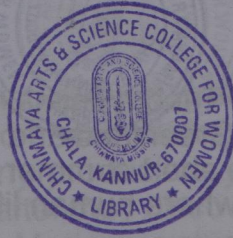




K20U 3343

Reg. No. : .....

Name : .....



I Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.(TTM)/B.B.A.(RTM)/B.T.T.M./  
B.C.A./B.S.W./B.Sc.(LRP)/B.A.-Afsal-UI-Ulama Degree CBCSS (OBE)

Reg./Sup./Imp. Examination, November 2020

(2019 Admn. Onwards)

COMMON COURSE IN ENGLISH

1A01 ENG : Communicative English

Time : 3 Hours

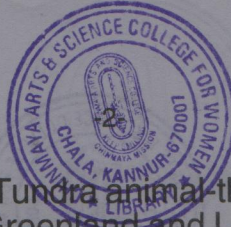
Max. Marks : 40

1. Read the following passage and answer the questions that follow :

Countries near the Equator are much warmer than countries further to the north or south. We all know that Kerala is much warmer than Punjab in winter. Why ? For the same reason, Italy is cooler than India, while England is cooler than Italy. Let us remember this simple weather fact. "The further we travel from the Equator, the colder the climate, we get." And when we travel north or south as far as we can go and reach the North or South Pole, we find ourselves in a strange white world of snow. These are the Polar regions where no one lives and nothing grows. Why ?

Look at the map of the world. One of the lines about which we have already learned something is called the Arctic Circle. Every place to the north of this line has at least one complete period of 24 hours darkness every year. The coldest places in the world are generally between the Arctic circle and the North pole. But as the Arctic circle is merely a line drawn on maps and globes, there is no sudden change on the surface of the earth itself. The same cold climate carries for some distance south. This very cold region lying around the Arctic Circle is called the Tundra region. Here the winters are long, cold and dreary while the summers are short and cool. Clumps of tough, wiry grass and small, stunted trees grow in most parts. Large trees cannot grow as the long roots cannot push their way through the frozen ground which lies 45-60 cm below the surface. Flowerless plants called lichens, are common. Some people in Iceland make bread from lichen moss while reindeer moss (another lichen) forms the

P.T.O.



principal food for that very useful Tundra animal the Reindeer. In sheltered parts of the Tundra-Alaska, Iceland, Greenland and Lapland-wild flowers and many kinds of berries grow during the short summer months. But, on the whole, the Tundras is a cold bleak region where human life is very difficult.

The Eskimos, numbering about 30,000 are a hardy race living in the Tundra region of Northern Canada, Alaska and Greenland. We often read that Eskimos live in snow houses called igloos but this is not altogether correct. Only about one-third of them use igloos while the majority live in pucca houses built of logs of wood or even stone. In summer, they live in skin tents which can be carried easily from place to place. Because of the bitter cold, the Eskimos need plenty of heat-giving food and this they find in plenty in their barren land.

Their main supply comes from the seal, which strange enough, is not a fish but an animal which has to breathe like our horses and cows. Since the sea is frequently frozen, the seal has to make a 'breathing hole' in the ice and keep it open by swimming round and round. The Eskimo fishermen wait patiently near those holes for hours and as soon as a seal appears, they throw a harpoon at it. This is a weapon with a sharp point and hook attached to a strong leather line. The point enters the seal's body, the hook prevents the point from coming out while the line gives no chance to the seal to escape beneath the ice. With the same harpoon, the Eskimos also hunt whales and walruses. To add a little variety to his usual meals of fish or meat, the Eskimo gathers tender shoots and such berries as wild currants and blue berries.

Give short answers to all the following questions :

- 1) Where do the Eskimos live in summer ?
- 2) Where are the coldest places of the world situated ?
- 3) What is the Tundra region ?
- 4) What is the main supply of heat giving food of the Eskimos ?
- 5) Find a word in the passage which means 'a cluster of trees or shrubs'.

(5×1=5)

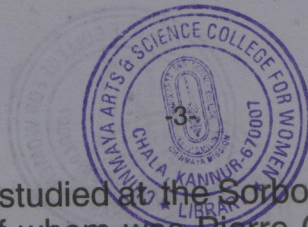
Attempt **any two** of the following questions in **two or three** sentences.

- 6) Why is Kerala much warmer than Punjab in winter ?
- 7) How do the Eskimos hunt the seals ?
- 8) What is a harpoon ?

(2×2=4)

2. Read the following profile of Marie Curie and answer the questions that follow :

Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women. Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university, where she earned her Master's degree and Doctorate in Physics.



Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress, Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world.

Give **short** answers to all the following questions.

- 1) What made Marie to leave Poland ?
- 2) How was Pierre Curie killed ?
- 3) When did Curie's feeling of desolation begin to fade ?
- 4) For what achievement did Marie receive the Nobel Prize ?
- 5) What was the cause of Marie's fatal illness ?

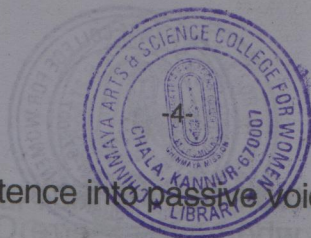
(5×1=5)

3. Answer **any fourteen** of the following :

- 1) Correct the following sentence :  
He is a best man for the job.
- 2) Use the appropriate modal from the given options and complete the sentence :  
I might/can/will follow a strict timetable. (determination).
- 3) Convert the following sentence to a question using the appropriate modal :  
We change our appointment.
- 4) Complete the table with the correct forms of the verbs :

Present Tense	Present Participle	Past Tense	Past Participle
Write			

- 5) Correct the following sentence :  
Those mangoes was bad.
- 6) Convert the following sentence into a yes/no question without changing the tense :  
We shall meet the Principal again.



- 7) Convert the following sentence into passive voice :  
Close the gate.
- 8) Correct the following sentence :  
Fifty kilograms are not a small weight.
- 9) Fill up the sentence using the appropriate word.  
A great deal of discussions have/has taken place on the matter.
- 10) Convert the following sentence into reported speech :  
Sanjay said, "I met him last year".
- 11) Convert the following sentence into reported speech :  
My brother said, "I am leaving for Delhi tomorrow".
- 12) Add an appropriate question tag for the following sentence :  
He seldom visits his village.
- 13) Add an appropriate question tag for the following sentence :  
I suppose I am right.
- 14) Select a synonym for the word 'objective' from the following :  
rejection, accumulation, association, intention.
- 15) Select the appropriate antonym for the word 'unknown' from the following :  
anonymous, popular, ignorant, illiterate.
- 16) What are the two different meanings of the word 'current' ?
- 17) Identify the idiom in the following sentence. What does it mean ?  
The man murdered his wife in dutch courage. **(14×1=14)**
4. Answer **any one** of the following topics in **not** more than **two** pages :  
1) Write an essay on "India in the Globalised World".  
2) Write an essay on "Travel as Part of Education". **(1×6=6)**
5. Answer **any one** of the following topics in **not** more than **two** pages :  
1) Write a letter of complaint to the police drawing their attention to the increased incidence of theft in your area and the need to conduct patrolling.  
2) You are an experienced employee at firm. You are looking for a new job with better prospects to advance your research work. Write a resume and cover letter for the opening of a full-time researcher at a reputed institution. **(1×6=6)**



K20U 3344

Reg. No. : .....

Name : .....

I Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.(TTM)/B.B.A.(RTM)/B.T.T.M./  
B.C.A./B.S.W./B.Sc.(LRP) Degree (CBCSS)(OBE)Reg./Sup./Imp.  
Examination, November 2020  
(2019 Admn. Onwards)  
**COMMON COURSE IN ENGLISH**  
**1A02ENG : Readings on Kerala**

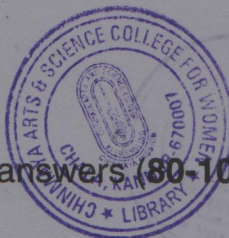
Time : 3 Hours

Max. Marks : 40

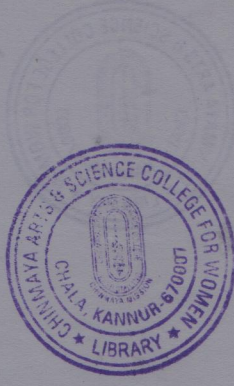
1. Write an essay (200-250 words) on **any one** of the following : (1×8=8)
  - 1) Discuss the ways in which *Eri* questions mainstream notions of culture and scholarship.
  - 2) How does the play *Kelu* bring out the struggle between the historical figure Vidwan P. Kelu Nair and the character Kelu ?
2. Write an essay (200-250 words) on **any one** of the following : (1×8=8)
  - 1) Poykayil Appachan's poem "About my Race : A Song" is a criticism of written histories. Elucidate.
  - 2) Discuss how Ayisha's life and career reflect a stage in the development of present day Keralam.
3. Write paragraph length answers (80-100 words) on **any two** of the following : (2×4=8)
  - 1) "Every deed should have a purpose" (Sree Narayana Guru). Explain.
  - 2) What according to Sahodaran Ayyappan is the first step towards curing caste disease ?
  - 3) What were the explanations given by Cherukad's Kunjammaman for not sending him to school ? Were they the real reasons ?

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4. Write paragraph length answers (80-100 words) on **any two** of the following : (2×4=8)
- 1) The poem "The Kuttippuram Bridge" oscillates between pride and pain. Explain.
  - 2) Describe the outcome of the Vaikom Sathyagraha.
  - 3) What according to Yesudas is ironic about his interactions with Semmangudi Srinivasa Iyer ?
5. Write short answers (**one** or **two** sentences) on **any four** of the following : (4×1=4)
- 1) What are Buddha's five ideals of purity ?
  - 2) What are the symptoms of inwardly drawn caste disease according to the sages ?
  - 3) Why did the father use the phrase "white cloth" to describe Eri, according to the narrator ?
  - 4) What was the resolution passed at the Payyannoor INC conference about ?
  - 5) Who, according to the narrator, were the chief enemies of a matrilineal family head ?
6. Write short answers (**one** or **two** sentences) on **any four** of the following : (4×1=4)
- 1) How does Poykayil Appachan attempt to overcome the feeling of grief ?
  - 2) What is described as "the threshold of a new world" in the poem "The Kuttippuram Bridge" ?
  - 3) What is Ayisha's opinion about contemporary theatre ?
  - 4) What was Gandhiji's advice to T.K. Madhavan regarding the conduct of the struggle at Vaikom ?
  - 5) What analogy does Yesudas use to describe his achievements ?



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Reg. No. : .....

Name : .....

I Semester B.C.A./B.S.W./B.Sc. (LRP) Degree CBCSS (OBE) Reg./Sup./Imp.  
Examination, November 2020

(2019 Admn. Onwards)

ADDITIONAL COMMON COURSE IN HINDI

1A07-2HIN : Naya Sahithya

Time : 3 Hours

Max. Marks : 40

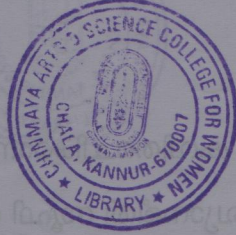
(8=1×8)

- I. किसी एक प्रश्न का उत्तर 300 शब्दों में लिखिए। (1×7=7)
- 1) ईर्ष्या द्वारा मानव पर कौन-कौन से बुरे प्रभाव पड़ते हैं ?
  - 2) आलोचकों के संबंध में शरद जोशी ने कैसा व्यंग्य किया है ?
- II. किसी एक प्रश्न का उत्तर 300 शब्दों में लिखिए। (1×7=7)
- 3) 'माँ पर लिख नहीं सकता कविता' के शीर्षक की सार्थकता पर विचार प्रस्तुत कीजिए।
  - 4) 'फर्क नहीं पड़ता' कविता के माध्यम से कवि क्या व्यक्त करना चाहते हैं ?
- III. किन्हीं तीन प्रश्नों के उत्तर लगभग 125 शब्दों में लिखिए। (3×3=9)
- 5) प्रोफेसर शशांक के व्यक्तित्व को रेखांकित कीजिए।
  - 6) द्विवेदी जी जब गुरुदेव के दर्शन करने गए तो वहाँ कौन आया था और क्यों ?
  - 7) सुशीला टाकभौरे 'स्त्री' कविता के माध्यम से क्या अभिव्यक्त करना चाहती है ?
  - 8) 'चम्पा काले-काले अच्छर नहीं चिह्नी' कविता का भाव समझाइए।
- IV. किन्हीं तीन की सप्रसंग व्याख्या कीजिए। (3×3=9)
- 9) उनकी वह व्यवस्था उनके लिए अधिक लाभप्रद है कि जेबकतरों के लिए यह कहना मुश्किल है। - सप्रसंग व्याख्या कीजिए।
  - 10) जिस दिन उसके भीतर यह जिज्ञासा आणी, उसी दिन से वह ईर्ष्या करना कम कर देगा।

P.T.O.







K20U 3356

Reg. No.: .....

Name : .....

I Semester B.C.A./B.S.W./B.Sc.(LRP) Degree CBCSS (OBE)  
Reg./Sup./Imp. Examination, November 2020  
(2019 Admn. Onwards)

ADDITIONAL COMMON COURSE IN MALAYALAM

1A07-2 MAL : സാഹിത്യഗണങ്ങൾ

Time : 3 Hours

Max. Marks : 40

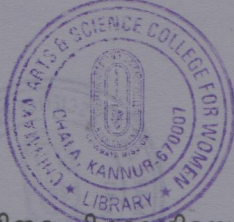
I. 4 ചോദ്യങ്ങളിൽ നിന്ന് 2 എണ്ണത്തിന് 300 വാക്കിൽ കവിയാതെ ഉത്തരമെഴുതുക.

- 1) അധ്യാനമഹത്വത്തിന്റേയും പാരമ്പര്യഘോഷണ നിഷ്ഫലതയുടെയും ആവിഷ്കാരമാണ് കറുത്തചെട്ടിച്ചികൾ. വിശകലനം ചെയ്യുക.
- 2) സാമൂഹികവ്യവസ്ഥിതി ആവശ്യപ്പെടുന്ന അധഃസ്ഥിതന്റെ വിധേയത്വമാണ് പൊന്തൻമാടയെന്ന സിനിമയുടെ പ്രമേയം. വിശദീകരിക്കുക.
- 3) ലാഭം നേടാനുള്ള ഗൂഢപദ്ധതികൾ തനതുഭക്ഷണസംസ്കാരത്തെ തകർക്കുന്ന ചിത്രം ഒരു സ്വാഭുനോട്ടക്കാരന്റെ ഭക്ഷണപര്യവേഷണങ്ങൾ എന്ന നോവലിൽ ആവിഷ്കരിച്ചിരിക്കുന്നതെങ്ങനെ ?
- 4) ന്യൂപ്പപ്പായ്ക്കൊരാണെങ്ങാർന്ന് എന്ന നോവലിലൂടെ ബഷീർ അവതരിപ്പിച്ച പ്രതിബോധകാവ്യശാസ്ത്രത്തെ വിശദീകരിക്കുക. (2x7=14)

II. 6 ചോദ്യങ്ങളിൽ നിന്ന് 4 എണ്ണത്തിന് 150 വാക്കിൽ കവിയാതെ ഉത്തരമെഴുതുക.

- 5) ജീവിതമാധുര്യവും ഗ്രാമസ്തുതികളും ഒത്തുചേർന്ന കവിതയാണ് ചോറുണ് - സമർത്ഥിക്കുക.
- 6) വർത്തമാനകാല ആകുലതകൾ പങ്കുവയ്ക്കുന്ന നാടകമാണ് ഹിംസാടനം - പരിശോധിക്കുക.
- 7) തന്റെ സന്തോഷത്തിന് നടത്തിയ പങ്കുകൂട്ടലിൽ താൻതന്നെ കഴിഞ്ഞുപോകുന്ന രീതിയിൽ കൈച്ചുമച്ചൻ ഇങ്ങനെ ചിന്തിക്കാനിടയാക്കിയ സാഹചര്യമെന്ത് ?

P.T.O.



K20U 3356



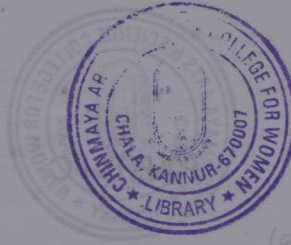
- 8) ചുളളിക്കാട് അന്നമെന്ന കവിതരചിക്കാനിടയാക്കിയ അനുഭവം വിവരിക്കുക ?
- 9) ബഷീർകൃതികളുടെ ആഖ്യാനരീതി സൂഫി ആഖ്യാനമാതൃകയുടെ തുടർച്ചയാണെന്നു പറയാൻ കാരണമെന്ത് ?
- 10) പങ്കുകച്ചവടവുമായി ബന്ധപ്പെട്ട കൊച്ചുമ്മച്ചന്റെ ബാല്യകാലസ്മരണകൾ എന്തെല്ലാം ? (4x3=12)

III. 6 ചോദ്യങ്ങളിൽ നിന്ന് 4 എണ്ണത്തിന് 100 വാക്കിൽ കവിയാതെ ഉത്തരമെഴുതുക:

- 11) മാതൃലാപൊരുത്താലും - തീർന്നു മാമ്പഴക്കാലം കവി ദു:ഖിക്കാൻ കാരണമെന്ത് ?
- 12) ഉണ്ണിമറക്കായ് പക്ഷേയൊരമ്മതൻ - നെഞ്ഞിൽനിന്നുണ്ട മധുരമൊരിക്കലും. വ്യാഖ്യാനിക്കുക.
- 13) ടി. വി. ചന്ദ്രന്റെ സിനിമകളെ പരിചയപ്പെടുത്തുക.
- 14) ഒരു പരമ്പരാഗത കലാപുനരുജ്ജീവനവാദിക്ക് ഒന്നും പ്രശ്നമല്ലെന്നു തീരുമാനിക്കാൻ കൊച്ചുമ്മച്ചനെ പ്രേരിപ്പിച്ചതെന്ത് ?
- 15) പങ്കുകശാപ്പിനെ കൊച്ചുമ്മച്ചന്റെ സഹോദരങ്ങൾ ആദ്യം എതിർക്കാൻ കാരണമെന്ത് ?
- 16) ആത്മീയാന്വേഷണത്തിനായി ഉത്തരേന്ത്യയിലെത്താൻ ബഷീറിനെ പ്രേരിപ്പിച്ച ഘടകങ്ങളേവ ? (4x2=8)

IV. 6 ചോദ്യങ്ങളിൽ നിന്ന് 4 എണ്ണത്തിന് ചെറുകുറിപ്പുകൾ തയ്യാറാക്കുക.

- 17) വർണ്ണങ്ങൾ ചൊല്ലുകൾ വെച്ചേറൊയെങ്കിലും ഒന്നിച്ചുകൂടിക്കഴിഞ്ഞതാണിന്നിലം - സൂചിതമെന്ത് ?
- 18) പൊറത്താരോ എന്നിക്ക് പേടിയില്ല. വ്യംഗ്യമെന്ത് ?
- 19) കൊച്ചുമ്മച്ചന് സമയം പോകാൻ അലക്സ് കണ്ടുപിടിച്ച ഉപാധിയെന്തായിരുന്നു ?
- 20) കല്പറ്റ നാരായണന്റെ അഭിപ്രായത്തിൽ ചുളളിക്കാടിന്റെ മികച്ച കവിതകളേവ ?
- 21) അനർഘനിമിഷത്തിലെ സൂഫി ആത്മീയത നിറഞ്ഞ ആദ്യവാക്യമേത് ?
- 22) പക്ഷിപ്പാട്ട് എന്ന കൃതിയെപ്പറ്റി കുറിപ്പെഴുതുക. (4x1½=6)



K20U 3328

Reg. No. : .....

Name : .....

I Semester B.Sc. Degree CBCSS (OBE) Reg./Sup./Imp.  
Examination, November 2020  
(2019 Admn. Onwards)

**COMPLEMENTARY ELECTIVE COURSE IN MICROBIOLOGY**  
**1C01MCB : Basic Microbiology – I**

Time : 3 Hours

Max. Marks : 32

**PART – A**

Short answer. (Answer all questions).

(5×1=5)

1. Define antiseptis.
2. Resolving power of a microscope.
3. Teichoic acid.
4. Spontaneous Generation Theory.
5. Volutin granules.

**PART – B**

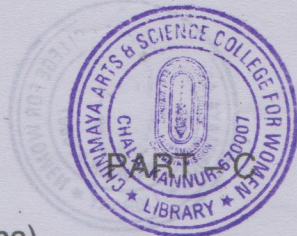
Short essay. (Answer any 4 questions).

(4×2=8)

6. Write a note on organic inclusion bodies.
7. AFB staining.
8. Differentiate symport and antiport.
9. Koch's postulates.
10. Differential staining.

P.T.O.

K20U 3328



Essay. (Answer **any 3** questions)

(3×3=9)

11. Explain briefly the experiments to disprove theory of abiogenesis.
12. Discuss on various nutritional types of bacteria.
13. Bright field microscopy.
14. Gram positive bacterial cell wall.
15. Difference between prokaryotes and eukaryotes.

**PART - D**

Long essay. (Answer **any 2** questions).

(2×5=10)

16. Write a detailed note on the history of microbiology.
17. What are endospores ? Discuss on various stages in endospore formation.
18. Write on different chemical sterilization methods.
19. Discuss on electron microscopy. Write a note on specimen preparation in electron microscopy.

**PART - B**

(4×2=8)

P.T.O.



K20U 3305

Reg. No. : .....

Name : .....



**I Semester B.Sc. Degree CBCSS (OBE) Reg./Sup./Imp.**  
**Examination, November 2020**  
**(2019 Admn. Onwards)**  
**CORE COURSE IN BIOTECHNOLOGY**  
**1B01BTC : Cell-Biology**

Time : 3 Hours

Max. Marks : 40

**PART – A**

Write about **each** of the following in **2 or 3** sentences. **Each** carries **1** mark. **(6×1=6)**

1. Nucleoids
2. Integral membrane proteins
3. Polysomes
4. Cell wall composition of plant cell
5. Centromere
6. Synapsis.

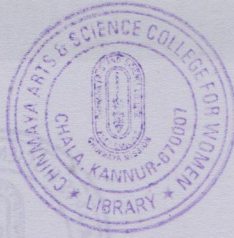
**PART – B**

Explain about **any six** of the following. **Each** carries **2** marks. **(6×2=12)**

7. Cell doctrine
8. Nuclear pore complex
9. Leucoplast
10. Salivary gland chromosome

P.T.O.

K20U 3305



11. Apoptosis and its importance
12. Structural difference between prokaryotic and eukaryotic ribosomes
13. Structure and functions of lysosome
14. Plasma membrane composition.

PART - C

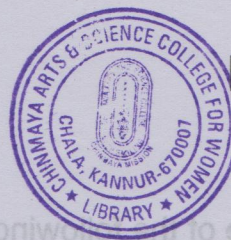
Write short essay on **any four** of the following. **Each** question carries **3** marks. **(4×3=12)**

15. Organisation of multi-cellular organisms
16. Cytoplasmic matrix
17. Structural organization of chloroplast for its function
18. Cytoskeletal systems
19. Peroxisomes and their enzymes
20. Chromatin structure and nucleosome
21. Appendages involved in motility and attachment of bacteria.

PART - D

Write essay on **any two** of the following. **Each** question carries **5** marks. **(2×5=10)**

22. Discuss the different stages of mitosis.
23. Discuss the structural organization and functions of Mitochondria.
24. Elaborate transport systems across the membranes and transporters involved in the process.
25. Explain the structure and role of endoplasmic reticulum and Golgi complex in the production, modification, transport and secretion of proteins.



K20U 3303

Reg. No. : .....

Name : .....

**I Semester B.Sc. Degree CBCSS (OBE) Reg./Sup./Imp.  
Examination, November 2020  
(2019 Admn. Onwards)  
COMPLEMENTARY ELECTIVE COURSE IN BIOCHEMISTRY  
1C01 BCH : Biochemistry – I**

Time : 3 Hours

Max. Marks : 32

**SECTION – A**

Answer **all** questions. **Each** question carries **1** mark.

1. The bond present between water molecules is \_\_\_\_\_
2. The 2'epimer of glucose is \_\_\_\_\_
3. Define a solvent.
4. Deficiency of Vit B12 causes \_\_\_\_\_
5. Name the carbohydrate present in honey. **(5×1=5)**

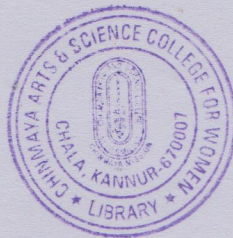
**SECTION – B**

Answer **any four** of the following. **Each** question carries **2** marks :

6. Which vitamin deficiency causes Beriberi ?
7. What is normality ?
8. State Bronsted theory of acids and bases.
9. Define mutarotation.
10. Define reducing sugars. Give examples.
11. Name some sources and deficiency disease of Vitamin D. **(4×2=8)**

P.T.O.

K20U 3303



SECTION – C

Reg. No. : .....

Answer **any three** of the following. **Each** question carries **3** marks :

Name : .....

12. How will you prepare 0.1 N HCl ?
13. What are the functions and chemical nature of Vit E ?
14. Compare true solution with colloidal solution.
15. What are the basic properties of water ?
16. Draw and explain DL isomers.

Time : 3 Hours

(3×3=9)

SECTION – D

Write an essay on **any two** of the following. **Each** question carries **5** marks :

17. Write about the role and scope of biochemistry.
18. Explain Colloids and its applications.
19. Name the source, functions and deficiency disease caused by fat soluble vitamins.
20. Draw and explain Fischer's and Haworth's projection formula for carbohydrates.

(2×5=10)

SECTION – B

Answer any four of the following. Each question carries 2 marks :

6. Which vitamin deficiency causes Beriberi ?

7. What is normality ?

8. State Bronsted theory of acids and bases.

9. Define mutation.

10. Define reducing sugars. Give examples.

(8=4×2)

11. Name some sources and deficiency disease of Vitamin D.