**Faculty of Commerce, Sciences & Business Management**

**B.Com./B.Sc./BBA I-Year II-Semester Examinations, Jan-2024**

**ENVIRONMENTAL STUDIES**

Time: 2 Hours                                                    Max Marks: 40

**Section-A**

I.    **Answer any two of the following questions.**                    **(2x5=10)**

1.  Write a note on Insitu conservation of biodiversity.
2.  Explain the Genetic and Species diversity.
3.  Write a brief account on Disaster management.
4.  Write about Ozone layer depletion.

**Section-B**

II.   **Answer all of the following questions.**                    **(2x15=30)**

5.  a) Define Environmental Studies & write an essay on scope & importance of Environmental Studies.

**(OR)**

b) Explain the structure of an ecosystem. Write a detailed account on Producers, Consumers and Decomposers of different ecosystems?

6.  a) Give a detailed account on causes and effects of Global warming? What are the measures for controlling Global warming.

**(OR)**

b) What are the causes and effects of Water pollution? Explain in detail the measures for Controlling water pollution.

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# Faculty of Commerce/Science/Business Management
### (Affiliated to Telangana University)
### English
### B.Sc., /B.Com.,(CA & BA)/ BBA I Year II Semester Backlog Examinations-Dec 2023

Time: 3 Hours

Max. Marks: 70

## Section – A

(5x4=20)

I. Answer any **Five** from the following: ( 5 out of 8 )

1. Write the definitions with the **two** examples for the each of the following.

a. Define Non finite verb with two examples.

b. What is the finite verb,give two examples.

c. Define plosives, write the types of voiced plosives.

d. Give examples for voiceless plosives.

2. Fill in the blanks with the suitable **Adjectives.**

a. She is a _____Girl(lazy/lazier/laziest).
b. This Book is pretty _____(good/better/best).
c. Obama is a _____leader(great/greater/greatest).
d. Ramu is the _____Boy(clever/cleverer/cleverest).

3. Find out the following figure of **Speech**.
a. Cruel kindness.
b. I have a million issues to sort out.
c. Open secret.
d. His honour rooted in dishonoured stood.

4. Fill in the blanks with the Correct **Articles.**
a. Roopa is _____Singer.
b. Suman is _____Indian.
c. _____Andaman Nicobar Islands.
d. Aishu is _____Sania mirza of our college.

5. Fill in the blanks with the suitable **Loan words.**
a.Algebra was originated in _____(Arabian/Chinese/African).

b.Ketch up word taken from_____(African/Chinese/French).

c.Zebra word borrowed from_____(Chinese/African/French).

d.Cashew word taken from_____(Portuguese/Dutch/German).

6. Find out the types of **Adverbs** used in the following sentences.
a.The soldier fought  bravely.

b.The college will reopen tomorrow.

c.God is everywhere.

d.I am fully prepared.

**7.** Define the **Palindromes** and write **EIGHT** examples.

a.                                          e.

b.                                          f.

c .                                         g.

d.                                          h.

**8.** Write the **Portmanteau** words

a.Breakfast+Lunch _____

b.Camera+Recorder _____

c.Fact+Fiction _____

d.International+Network _____

<div align="center">Section – B</div>                                    (5x10=50)

**Answer all the questions :**

**9. A. i.** Annotate the following lines: "I had my hair cut off and sold it"            **5 Marks**

ii.Explain the poem "The Cloud"                                        **5 Marks**

<div align="center">OR</div>

**B. i.** Comprehension passage                                        **5 Marks**

Della finished her cry and attended to her cheeks with the power rag. She stood by the window and looked out dully at a grey, cat walking a grey fence in a grey backyard.Tomorrow would be Christmas day,and she had only one dollar and eighty-seven cents with which to buy jim a present.She had been save every penny she could for months,with this result.Twenty dollars a week doesn't go far.

**a.** Who stood by the window?

**b.** Which festival is celebrated by them?

**c.** How many dollars della saved in a week?

**d.** What is the part of speech of the word "dully"?

**e.** Write an antonym of finish?

ii.What is the twist in "The Gift Of Magi"                                **5 Marks**

**10. A. i.**Annotate the following lines:" And laugh as I Pass in Thunder "            **5 Marks**

ii.Write Phonetic transcription for the following english words            **5 Marks**

**a.** Awake

**b.** Noble

**c.** Harmful

**d.** Doubt

**e.** Destroy

<div align="center">OR</div>

**B.i.**Annotate the following lines: " It is very important to transform religious forces into

spiritual forces "                                                                                    **5 Marks**

**ii.**Comprehension passage.                                                                          **5 Marks**

Sometimes ,I feel a nation of billion people think like a nation of million people. Why is it so? I consider no other nation has got a civilisational heritage like india to live a near-peaceful life.Indian minds were capable of absorbing the best of cultures from successive invasions.Now we should not allow any religion or any individual fanaticism to endanger our nation.Because, the nation is more important compared to any individual or party or religion.

**a.** Who is feeling for the nation?

**b.** What is the capability of Indian minds?

**c.** Write the synonym of invasion?

**d.** What is more important?

**e.** Write the part of speech of  the word heritage?

**11. A. i.**Annotate the following lines:"Go one and call the jew into the court "          **5 Marks**

**ii.**Comprehension passage                                                                         **5 Marks**

Ashoka believes the ability to adapt to and drive change is essential for everyone to thrive in a rapidly changing world. Ashoka is building a global community that is laying the foundation for a world where everyone is a changemaker. At the heart of the Everyone a Changemaker movement is a vision to transform the way children and young people grow up so everyone has the power and skillset to create change for the good of all.

**a.** What is belived by Ashoka?

**b.** Write the antonym of ability?

**c.** Write the part of speech of changing?

**d.** What is the synonym of transform?

**e.** Meaning of the word essential used in the passage?

<div align="center">OR</div>

**B. i.**Explain the story of the merchant of venice.                                               **5 Marks**

  **ii.**Write a dialogue asking for information.                                                    **5 Marks**

**12. A. i.**Write a paragraph on:"A stitch in time saves Nine "                                     **5 Marks**

ii.Write the words for the following phonetic Transcription.    **5 Marks**

**a.**/æktɪv/

**b.**/swiːt/

**c.**/kɒnvɪkt/

**d.**/aɪdəl /

**e.** /keɪm/

 **B. i.**Comprehension passage    **5 Marks**

Make room,and let him stand before our face. Shylock,the world thinks,and I think so too, That thou but lead'st this fashion of thy malice.To the last hour of act;and then 'tis thought thou'lt show thy mercy and remorse more strange.Than is thy strange apparent cruelty,And where thou now exact'st the penalty,Which is a pound of this poor merchant's flesh, Thou wilt not only loose the forfeiture,But,touch'd with human gentleness and love,Forgive a moiety of the principal; Glancing an eye of pity pn his losses.

**a.** "Let him stand...", Who said these words?
**b.** Who is the money lender?
**c.** Who is victimised in the above passage by shylock?
**d.** What is the part of speech of the word malice?
**e.** Write the antonym of mercy?

ii.Spelling    **5 Marks**

a.Sca_ _ ity
b.De_ _ endant
c.De_ _ rture
d.Bar_ _ rous
e.Bene_ _ lent

**13. A. i.**Write a dialogue:    **5 Marks**

"How do you converse with the manager when you attend an interview "

 **ii.**Write  antonym for the following words    **5 Marks**
 a.Acquit
 b.Barbarous
 c.Bind
 d.Courtesy
 e.Former

**OR**

B ii.Write a paragraph on:" Failures are the stepping stones of success"    **5 Marks**
ii.Synonyms    **5 Marks**
a.Amateur
b.Banishment
c.Betray
d.Schaus
e.Dreadful

Code: 005

**Faculty Commerce, Sciences, Social Sciences and Business Management**
**B.Com/B.Sc/BBA I-Year, CBCS–II Semester Examinations Aug- 2023**
**PAPER: Second Language Telugu**

Time: 3 Hours

Max Marks: 70

### భాగము--- అ

### క్రింది వానిలో ఏవైనా నాలుగు ప్రశ్నలకు సమాధానములు రాయండి        4×5=20

1. భూ వరుడే దొంగ యంద్రు బుధ నుత చరితా --- సందర్భ సహిత వ్యాఖ్య.

2. సుకవి జీవించే ప్రజల నాలుకల యందు---- సందర్భ సహిత వ్యాఖ్య.

3. సింగిరెడ్డి నారాయణరెడ్డి

4. ఈ క్రింది కవిత ఖండికను విశ్లేషణ చేయండి

మురళి పాట వలె నొకింత ముద్దుగలిపై

భ్రమర గీత బాతిని కొంత భ్రమ ఘటించే

సుకవి జయదేవీ సరళ గీతిక విధాన

కొంత రుచి  గొల్పే శృతి యంతరమున

5. మామిడి పండుకు వివిధ భాషల్లో ఉన్న పేర్లు తెలపండి.

6. ఈ క్రింది పద్య పాదాన్ని గణ విభజన చేసి చందస్సును తెలపండి

ఏ) సిరికిం జెప్పడు శంఖచక్రయుగముం జేదోయి సంధింప డే.


### భాగము – ఆ                                              5X10=50

7. ఈ క్రింది వానిలో ఒక దానికి ప్రతిపదార్థా తాత్పర్యములతో పాటు వ్యాఖ్యానించండి.

ఏ) తనవెంటన్ సిరి లచ్చి వెంట నవరోధ వ్రాతమున్ దానివె

న్కను బక్షీంద్రుడు వాని పొంతను ధనుఃకొమొదకీ శంఖ చ

క్ర నికాయంబును నారదుండు ధ్వజినీకాంతుడురావచ్చి రొ

య్యన వైకుంఠపురంబునం గలుగు వారాబాల గోపలమున్.

లేదా

బి)"రాముని డాగురించి, నిను రావణు డెత్తుక వచ్చు వేళ

నీ హేమ విభూషణావళుల నేర్పడబ్బుశ్య మహాద్రి వైచినన్

మేమవి తీసి దాచితిమి, మీపతి యచ్చటి కెగుదేరగా

దామరసాప్త నందనుడు తానవి చూపిన జూచి మెచ్చుచున్.

8. ఏ) లక్షణ కవి సుభాషితాల నుండి మీరు గ్రహించిన నీతులను పేర్కొనండి ?

లేదా

బి) దాశరథి అంతర్నాదము లో ప్రకటించిన ఆత్మవిశ్వాసాన్ని తెలపండి ?

9. ఏ) ' యుగాంతం'ఇతివృత్తాన్ని తెలియజేయండి?

<div align="center">లేదా</div>

బి) గ్రామీణ ప్రజలు పశువులను ఎంతగా ఆదరిస్తారో "ఎంకన్న" కథ ద్వారా నిరూపించండి?

10. ఏ) ఎంకన్న కథను రాయండి.

<div align="center">లేదా</div>

బి) మామిడిపండు పుట్టు పూర్వోత్తరాలను తెలిపి దాని చరిత్రను జాతి భేదాలు తెలియజేయండి?

11. ఏ) ఈ క్రింది వానిలో మూడింటికి లక్ష్య లక్షణ సమన్వితంగా వివరించండి

1) చంపకమాల 2) మత్తేభం 3) తేటగీతి 4) ద్విపద 5) ఉత్సాహం

<div align="center">లేదా</div>

బి) ఈ క్రింది వానిలో ఈ క్రింది వానిలో రెండు పద్య పాదాలకు గణ విభజన చేసి యతిస్తానాన్ని చందస్సును తెలపండి.

1. అక్కట లాతులైన బగత్రైనను జంపగ కోరనేల యొం

2.కుటిల మతులవి నీతులు క్రూర కర్ము.

**Faculty of Arts, Commerce, Sciences, Social Sciences and Business Management**

**B.A/B.Com/B.Sc/BBA I-Year, CBCS–II Semester Examinations- 2023**

**PAPER: CLASSICAL PROSE, MODERN PROSE, GRAMMAR & HISTORY OF ARABIC LITERATURE**

Time: 3 Hours                                                    Max Marks: 70

### Section-A

I-  Answer any **4** Questions. Each Question carry Five marks.   (4x5=20 Marks)

**Q.1.**  **Translate the following verses with reference to the context:**

١)  ترجم الآيات التالية مع الإشارة إلى نصها:

يومئذ يصدر الناس أشتاتا ليروا أعمالهم * فمن يعمل مثقال ذرة خيرا يره* .

**Q.2.**  **Answer the following question:**

٢)  هل عمل الملك مير عثمان علي خان لصالح البلاد ؟

**Q.3.**  **Write possessive phrase with examples.**

٣)  اكتب عن المركب الإضافي مع الأمثلة.

**Q.4.**  **Write briefly about the Quran influenced on Arabic oration.**

٤)  اكتب عن أثر القرآن الكريم على الخطابة.

**Q.5.**  **Write any five meaning of the following words:**

٥)  هات معاني خمس كلمات من التالية:

العناية   المنتجات   تحولات   يهتف   تشرح   تفقد   الأقصى   مدة.

**Q.6.**  **Convert any five of the following singular words into plurals:**

٦)  آت بخمسة جموع الكلمات الآتية:

بلد – فاكهة – أب – أثر – سيارة – تذكرة – معارض– عهد

*Cont. Page – 2*

## Section-B

II- Answer all questions Each question carry (10)          (5x10=50 Marks)

Q.7.  (A) Describe the summary of "Suratul Zilzal"

٧    اكتب تفسير سورة "الزلزال"

(OR)

(B) Write the summary of Suratul Qad`r:

بيّن تفسير سورة القدر:

Q.8.  (A) Write the summary of "The Industrial Exhibition":

٨    اكتب خلاصة "المعرض الصناعي":

(OR)

(B) Write the summary of the "Nawab Mir Osman Ali Khan: the seventh Nizam":

اكتب خلاصة "النظام السابع: مير عثمان علي خان":

Q.9.  (A) Explain Nominal Sentence with Example:

٩    اكتب عن الجملة الاسمية مع الأمثلة.

(OR)

(B) Define "the Adjectival phrase" with examples:

عرّف المركب التوصيفي بالأمثلة.

Q.10.  (A): Write a note on "Impact of the Hadith -e- Shareef on Arabic Literature":

١٠    اكتب عن "تأثير الحديث الشريف على الأدب العربي".

(OR)

(B) Write in detail about the "Compilation of Holy Qur`an":

اذكر عن تدوين القرآن المجيد مفصلا.

Q.11.  (A): Translate and explain with reference to the context:

١٠    ترجم واشرح واذكر مرجع هذه العبارة:

أيها الأولاد ينبغي لنا أن نعرف شيئا عن نشأة هذا المعرض قبل دخوله حتى نعرف مقاصده ونتمتع

بمناظره الجميلة، هذه المعارض وسلية كبيرة لدعاية التجارة والترويج أحدث السلع والمنتجات، ولذا

خصصت الحكومة في كل ولايات قطعة أرض واسعة لمعارضها باسم الميدان، وبدأ هذا المعرض في مدينة

حيدرآباد عام ١٩٣٨م من قبل مجموعة من خريجي الجامعة العثمانة لعرض المنتجات المحلية في عهد نظام

آخر مير عثمان علي خان في "باغ عامة".

(OR)

**(B) Write a note on "Impact of the Quran on Arabic Literature":**

اكتب عن "أثر القرآن الكريم على الأدب العربي":

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## Faculty of Science

**B.Sc. (Mathematics) I-Year CBCS II-Semester Backlog Examinations Jan – 2024**

### Paper: DIFFERENTIAL EQUATIONS

Time: 3 Hours                                               Max. Marks: 70

### SECTION – A

I. Answer any SIX questions. All questions carry equal Marks       (6 x 5 = 30 Marks)

1. Solve $(x^2 + y^2)dx - 2xy\, dy = 0$.

2. Solve $(e^y + 1)Cosx\, dx + e^y\, Sinx\, dy = 0$.

3. Solve $y = px + Sin^{-1}p$

4. Solve $x = y - p^2$

5. Solve $(D^3 - D^2 + 6)y = 0$.

6. Solve $y'' - y = Sin\, x$.

7. Solve $x^2 y'' - 2xy' + 2y = 4x^3$.

8. Form p.d.e by eliminating arbitrary function from $F(x^2 + y^2,\ z - xy) = 0$.

9. Solve $(D^3 - 2D^2 + 4D - 8)y = 0$.

10. Solve $(x^2 - y^2 - z^2)P + 2xyzq = 2xz$.

### SECTION B

II. Answer any ALL questions. All questions carry equal Marks       (4 x 10 = 40 Marks)

11.(a) Solve : $[xySinxy + Cosxy]ydx + (xy\, Sinxy - Cosxy)xdy = 0$

**OR**

(b) Solve $\frac{dx}{x^2 - yz} = \frac{dy}{y^2 - zx} = \frac{dz}{z^2 - xy}$.

12.(a) Solve: $p^2 + 2pyCotx = y^2$

**OR**

(b) Find Orthogonal Trajectories of Family of rectangular hyperbolas $xy = c^2$ where 'c' is parameter.

13.(a) Slove $(D^2 + 1)y = Cos\, x + xe^{2x} + e^x Sinx$.

**OR**

(b) Solve $y'' - 3y' + 2y = xe^{2x} + Sinx$ using Method of un-determined coefficients.

14.(a) Solve $(D^2 + a^2)y = Sec\, ax$ using method of variation of parameter.

**OR**

(b) Solve $x^2 y'' - xy' + 2y = x\, logx$.

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**Faculty of Science**

**B.Sc. (Physics) I-Year CBCS II-Semester Backlog Examinations Jan – 2024**

Paper: **Thermal Physics**

Time: 3Hours

Max. Marks: 70

## SECTION – A

**I. Answer any SIX of the following questions.**                    **(6X5=30Marks)**

1. State and explain Maxwell's-Boltzmann distribution law.
2. What is Entropy-Temperature diagram? What are its uses?
3. Derive: $C_P – C_V = R$.
4. Write the properties of good refrigerant.
5. Define: a) Planck's law ; b) Rayleigh-Jeans law.
6. Define solar constant.
7. Using Maxwell-Boltzmann distribution law of energies, fined the average energy per molecule of gaseous system at 27☐.
8. Explain: a) Phase cell; b) Ensemble.
9. Calculate the temperature of inversion ($T_i$) of He-gas.
   [Given: $a = 3.44 \times 10^{-3}$ N-m$^4$/mol$^2$ and $b = 0.0237 \times 10^{-3}$ m$^3$/mol and R = 8.31 joule/(mol-K).]
10. What are white dwarfs and Neutron stars?

## SECTION – B

**II. Answer the following questions.**                    **(4X10=40Marks)**

11. a) What are Transport phenomena in gas? On the basis of kinetic theory, derive an expression for the coefficient of thermal Conductivity of a gas. How this is related to viscosity of a gas?          (3+6+1)

**(OR)**

b) Define Entropy? Calculate the change in Entropy of a perfect gas.          (2+8)

12. a) Define the four thermodynamic potentials. Obtain Maxwell's thermodynamic equations using these potentials.          (2+8)

**(OR)**

b) Explain with theory the adiabatic demagnetization method for producing very low temperature. (10)

13. a) Define Wien's law. Derive Wien's law of black body radiation.          (2+8)

**(OR)**

b) What is pyrometer? Explain the construction and working of disappearing filament optical pyrometer in measurement. Write at least two advantages.          (2+6+2)

14. a) Give a comparison of M-B, B-E and F-D statistics. Under what limits B-E and F-D statistics approach M-B statistics?          (6+4)

**(OR)**

b) State and explain Fermi-Dirac distribution law and apply it to an electron gas to get electron energy distribution $n(E)$ with energy $(E)$.          (4+6)

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**Faculty of Science**

**B.Sc. (Computer Science) I-Year CBCS II-Semester Backlog Examinations Jan – 2024**

**Paper: PROGRAMMING IN C++**

**Time: 3 Hours**                                                                           **Max. Marks: 70**

**SECTION – A**

I. Answer any SIX questions. All questions carry equal Marks          (6 x 5 = 30 Marks)

1. What is Token? Explain C++ Tokens.
2. Write advantages of OOPS.
3. Explain Operator Overloading.
4. Explain the role of has-a relationship in aggregation.
5. Discuss about Copy Constructors.
6. Write the differences between input and output streams.
7. What are the advantages of using Templates? Explain.
8. Is it Possible to rethrow the Exception? Explain.
9. Explain the difference between entry controlled and exit controlled iterative statements.
10. What are the main components of STL? Discuss.

**SECTION B**

II. Answer any ALL questions. All questions carry equal Marks          (4 * 10 = 40 Marks)

11. (a) What is a reference variable? How the reference variables are used as function parameters in C++? Compare with Pointer variable.

**OR**

(b) What is an Array? Write and Explain the code to search an element in a given list using Binary Search. Compare with Linear search.

12. a) How to declare a class? Explain the usage of static member variables and functions in class with advantages.

**OR**

b) Demonstrate inline, friend and virtual functions with code.

13. a) What is Inheritance? Explain the difference between public, private and protected inheritance in C++.

**OR**

b) How can you override base class methods in a derived class using function overloading? Demonstrate with program.

14. Can you have multiple catch blocks for different types of exceptions in C++? How does the catch block selection work? Explain.

**OR**

b) How to create a Template with multiple template parameters in C++? Explain with Program.

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**Faculty of Science**

**B.Sc. (Statistics) I-Year CBCS II-Semester Backlog Examinations JAN– 2024**

**PAPER: PROBABILITY DISTRIBUTIONS**

Time: 3 Hours                                                                 Max. Marks: 70

**SECTION – A**

I. Answer any SIX questions. All questions carry equal Marks                    (6 x 5 = 30 Marks)

1) Define Poisson distribution. Give a real life example.
2) Find characteristic function of Binomial distribution.
3) Find mean of Negative Binomial distribution.
4) Define Hyper Geometric distribution. Give an example.
5) Define Normal distribution does the odd moments exist of this distribution.
6) Write characteristic function of Normal distribution. Find mean.
7) Define Rectangular distribution find mean.
8) Define Exponential distribution
9) State any two properties of Normal distribution.
10) Define Cauchy distribution.

**SECTION B**

II. Answer any ALL questions. All questions carry equal Marks                   (4 x 10 = 40 Marks)

11) (a) Obtain the recurrence formula for the central moments of Binomial distribution.

OR

(b) Derive Poisson distribution is a limiting form of a binomial distribution.

12) a) Obtain the Poisson distribution, as a limiting case of the negative Binomial distribution.

OR

b) Find first four moments generating function of Geometric distribution.

13) a) Find the Mode of Normal distribution.

OR

b) X and Y two independent Normal random variables, find p.d.f. of x-y.

14) a) Define gamma distribution, Find man and variance.

OR

b) Discuss briefly the role of Cauchy distribution in statistics.

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Faculty of Science

**B.Sc. (Data Science) I-Year CBCS II-Semester Backlog Examinations Jan – 2024**

**Paper: Problem Solving and Python Programming**

Time: 3 Hours                                    Max. Marks: 70

**SECTION – A**

I. Answer any SIX questions. All questions carry equal Marks          (6 x 5 = 30 Marks)

1. What are Flow Charts? Write the Symbols used and their purpose in drawing Flow chart.

2. Differentiate between Break and Continue Statements.

3. What is Scope and Life Time of a Variable?

4. How to access Characters in String by Index number? Explain.

5. Define a Tuple. Write Tuple Assignment.

6. What is a Format Operator? Explain

7. How Polymorphism is achieved in Python? Explain.

8. Write a short note on Generators.

9. What are Dictionaries? Write the Methods of Dictionaries.

10. What are Keyword Arguments? Specify.

**SECTION B**

II. Answer any ALL questions. All questions carry equal Marks          (4 x 10 = 40 Marks)

11.(a) Explain about Variables, Operators, Data Types used in Python Programming.

**OR**

(b) Explain the Control Flow Statements used in Python with sample Code.

12.(a) Define a Function. How to Call a Function. Describe some Built-In Functions.

**OR**

(b) Define a String. Describe Basic String Operations.

13. (a) Define List. What are List Methods? Write a Python Program for Insertion Sort.

**OR**

(b) What are different Errors and Exceptions raises in Python? How to handle them?

14.(a) How to create Classes and Objects in Python? Explain with an example.

**OR**

(b) Describe about Lambda Functional Programming.