## SRI VENKATESWARA UNIVERSITY

PROGRAMME:THREE-YEARBCOM
B.Com CA with Business Analytics

Domain Subject: Commerce

Semester-wise Syllabus under
CBCS(w.e.f.2020-21AdmittedBatch)

## IIYearB ComB.ComComputer Applications withBusinessAnalytics\&

## Course3A: AdvancedAccounting

## LearningOutcomes:

Attheend of thecourse, thestudentwillableto;
$>$ Understand the concept of Non-profitorganisations andits accountingprocess
> Comprehendtheconceptofsingleentrysystemandpreparationofstatementofaffairs
$>$ Familiarizewith thelegalformalitiesatthetimeofdissolutionofthefirm
> Preparefinancialstatementsforpartnershipfirmondissolutionofthefirm.
> Employcriticalthinkingskillstounderstandthedifferencebetweenthedissolutionofthefir manddissolution of partnership

## Syllabus

Unit-I: Self Balancing System: Advantages - Self Balancing v/s Sectional balancing system Preparation of Debtor's Ledger adjustment account , Creditor's Ledger adjustment account \&GeneralLedger adjustmentaccount (Including Problems)
Unit-II:SingleEntrySystem:Features-DifferencesbetweenSingleEntryandDoubleEntry

- Disadvantages of Single Entry- Ascertainment of Profit in statement of affairs method only (including Problems).

Unit-III:AccountingforNonProfitOrganisations:NonProfitEntities-Meaning-FeaturesofNon-
ProfitEntities-ProvisionsasperSec8-AccountingProcess-PreparationofAccounting Records - Receipts and Payments Account- Income and Expenditure Account -Preparationof BalanceSheet(including problems).

Unit-IV: Partnership Accounts-I: Meaning - Partnership Deed - Fixed and FluctuatingCapitals-AccountingTreatmentofGoodwill-AdmissionandRetirementofaPartner (includingproblems).

Unit-V:PartnershipAccounts-II:DissolutionofaPartnershipFirmInsolvencyofoneormorePartners(including problems).

## References:

1. AdvancedAccountancy: TSReddyandAMurthybyMarghamPublications.
2. FinancialAccounting:SNMaheswari\&SKMaheswaribyVikasPublications.
3. PrinciplesandPracticeofAccounting: R.L.Gupta\&V.K.Gupta,SultanChand\&Sons.
4. AdvancedAccountancy:R.L.Gupta\&Radhaswamy,SultanChand\&Sons..
5. AdvancedAccountancy(Vol-II):S.N.Maheshwari\&V.L.Maheswari,Vikaspublishers.
6. AdvancedAccountancy:Dr.G.Yogeshwaran,JuliaAllen-PBPPublications.
7. Accountancy-III:Tulasian,TataMcGrawHillCo.
8. Accountancy-III:S.P.Jain\&K.LNarang,KalyaniPublishers.
9. AdvancedAccounting(IPCC):D.G.Sharma,TaxMannPublications.
10. AdvancedAccounting:ProfBAmarnadh,SevenHillsInternationalPublishers.
11. AdvancedAccountancy:MShrinivas\&KSreelathaReddy,HimalayaPublishers.

## SuggestedCo-CurricularActivities:

- QuizPrograms
- ProblemSolvingexercises
- Co-operativelearning
- Seminar
- Visitasingle-entryfirm,collectdataandCreationofTrialBalanceofthefirm
- VisitNon-profitorganizationandcollectfinancialstatements
- Criticalanalysis ofrateofinterestonhirepurchaseschemes
- Visitapartnershipfirmandcollectpartnershipdeed
- DebateonGarnerv/s MurrayruleinIndiaandoutsideIndia
- GroupDiscussionsonproblemsrelatingtotopicscoveredbysyllabus
- Examinations(Scheduledandsurprisetests)onallunits


# Programme: Three Year B.Com 

Domain Subject: Commerce
Semester-wise Syllabus under CBCS
(w.e.f. 2020-21 Admitted Batch)

## II Year B.ComComputer Applications <br> withBusinessAnalytics\& <br> Semester - III

## Course3A: Advanced Accounting <br> MODEL QUESTION PAPER

## Time: $\mathbf{3}$ hrs

Max. Marks 75

## Section A <br> Answer any Five of the following $\quad 5 \times 3=15 \mathrm{M}$

1) Write self-balancing adjusting entries.
a. Credit Sales
b. Sales returns
c. Cash received from debtors
2) Prepare sales Ledger adjustment account in the General Ledger

Opening Debtors ₹ 10,000 ; Credit sales ₹ 30,000 ; Cash received from debtors ₹ 6000 ; Bills receivable received ₹ 5000 ; Bills receivable dishonour₹ 1000
3) Find out profit from the following data

| Capital at the beginning of the year | $8,00,000$ |
| :--- | ---: |
| Drawings during the year | $1,80,000$ |
| Capital at the end of the year | $9,00,000$ |
| Capital introduced during the year | 50,000 |

4) From the following find credit purchases

Opening Creditors ₹ 6,000 ; Cash paid to creditors₹ 8000 ; Bills payable accepted ₹ 5000 ;
Closing creditors₹ 9000
5) Write short note on Receipts and Payments Account.
6) Write short note on Income and Expenditure account
7) Calculate Goodwill on the basis of 3 years average profits and 2 years purchase net profits are 2019 ₹ 18,000 , 2020 ₹ 20,000 and 2021 ₹ 19,000
8) Fixed and Fluctuating Capitals.
9) Garner Vs Murray Case.
10) A and $B$ were in partnership and agreed to dissolve. The assets realised ₹ 75,000 . The Liabilities were as follows:- Sundry Creditors ₹ 45,000 , L:oan from A ₹ 20,000 , A’s Capital $₹ 10,000$, and B's Capital ₹ 15,000 . They share profits and losses in proportion of A: $3 / 4$ and B: $1 / 4$. Prepare Realisationaccount.

## Section - B

## Answer any Five from the following

( $5 \times 12$ = 60 Marks)
11) From the following particulars, prepare the debtors ledger adjustment $A / c$ as it would appear in the General ledger for the year ended 31.12.2021.

| Sundry Debtors (on 1.1.2021) (Dr.) | $1,60,000$ |
| :--- | ---: |
| (Cr.) | 8,000 |
| Sales (including cash sales of ₹ 40,000) | $2,40,000$ |
| Cash received from debtors | $1,20,000$ |
| Return inward | 20,000 |
| Discount and rebate allowed to debtors | 12,000 |
| Allowances to customers on goods damaged in transit | 8,000 |
| Bad debts written off | 16,000 |
| Provision for bad debts | 24,000 |
| Provision for discount on debtors | 4,000 |
| Bad debts previously written off, now recovered | 20,000 |
| Interest on customers overdue account | 4,000 |
| Trade discount | 2,000 |
| Bills receivable received | 56,000 |
| Bills receivable dishonoured | 24,000 |
| Bills receivable discounted | 8,000 |
| Bills receivable endorsed | 10,000 |
| Bills receivable honoured at maturity | 8,000 |
| Bills receivable renewed | 6,000 |
| Interest on bills renewed | 200 |
| Bills receivable as endorsed dishonoured | 2,000 |
| Discount allowed but later on disallowed | 2,000 |

Discount allowed but later on disallowed 2,000
Carriage charged to customers
4,000
Transfer from debtors ledger to creditors ledger
24,000
Transfer from creditors ledger to debtors ledger
28,000
Sundry debtors (on 31.12 .2021 )(Cr) 12,000
12) Prepare Creditors Ledger Adjustment $A / c$, Debtors Ledger Adjustment $A / c$ and General ledger Adjustment A/c.
₹
Debtors Balance in General Ledger Adjustment A/c (Cr.) 60,500
Creditors Balance in General Ledger Adjustment A/c (Dr.) 38,500
Total Sales 53,100
Cash Sales $\quad 12,800$
Total Purchases $\quad 42,790$
Cash Purchases 16,390
Received through Bank From Debtors 48,000
Discount allowed to the Business 375
Discount allowed by the Business 450
Returns by customers 1,225
Return to suppliers 875
Accepted bills Payable 3,200
Accepted bills receivable $\quad 4,800$
Bills receivable dishonored 200
Interest Charges on dishonored bills 15
Trade discount 975
Bad debts 375
Set off 195
Cash paid to Creditors 32,500
13) Mr. X has maintained his books by single entry method. From the following details calculate profit for the year and a statement of affairs at the end of the year. ₹. 1,000 (cost) furniture was sold for ₹. 5,000 on 1.1.2021. $10 \%$ depreciation is to be charged on furniture. Mr. X has drawn
₹. 1,000 p.m. ₹. 2,000 was invested by Mr. X in 2021 as further capital.

|  | $\mathbf{1 . 1 . 2 0 2 1 ₹}$ | $\mathbf{3 1 . 1 2 . 2 0 2 1 ~ ₹}$ |
| :--- | :--- | :--- |
| Stock | 40,000 | 60,000 |
| Debtors | 30,000 | 40,000 |
| Cash | 2,000 | 1,000 |
| Bank | 10,000 | 5,000 |
| Creditors | 15,000 | 25,000 |
| Outstanding expenses | 5,000 | 2,000 |
| Furniture(cost) | 3,000 | 2,000 |

Bank balance on 1.1.2021 is as per cash book but the bank overdraft on 31.12.2021 is as per bank statement. ₹. 2,000 Cheques drawn in Dec. 2021 have not been encased within the year.
14) Ramesh keeps his books on single entry basis. Prepare a statement of affairs as on
31.10.2022 and a statement of profit (or) loss for the period ending 31.10.2022.

|  <br> liabilities | $\mathbf{1 . 1 1 . 2 0 2 1}$ | $\mathbf{3 1 . 1 0 . 2 0 2 2}$ |
| :--- | ---: | ---: |
| Bank balance | $560(\mathrm{cr})$ | $350(\mathrm{dr})$ |
| Cash on hand | 10 | 50 |
| Debtors | 4,500 | 3,600 |
| Stock | 2,700 | 2,900 |
| Plant | 4,000 | 4,000 |
| Furniture | 1,000 | 1,000 |

Ramesh had withdrawn ₹. 2,000 during the year and had introduced fresh capital of ₹.4,200 on 1.7.2022. A provision of $5 \%$ on debtors is necessary. Write off depreciation on plant at $10 \%$ and furniture at $15 \%$. Interest on capital is to be allowed at $5 \%$.
15) From the following Receipts and Payments, prepare an Income and Expenditure account for the year ended 31-12-2020.

2020
Jan. 1 To Opening Balance:
₹ ₹
By Buildings $\quad 15,00$
$\begin{array}{llll}\text { Cash } & 1,000 & \text { By Rent } & 700\end{array}$
Bank 100
By Furniture $\quad 1,500$
1,100 By Salaries 600
Dec. 31 To Donations 20,000 By Cricket 200
To Life members fees $\quad 4,000$ By Tennis 500
To Subscription $\quad 1,800$ By Gardening 100
$\begin{array}{llll}\text { To Interest on } & 50 & \text { By Printing } & 50\end{array}$
Investments
To Cricket 150 By Telephones 175
To Tennis
400 By Advertisement 100
To Playing cards
To Sale of old news papers
To Sundries
300 By Playing cards 200
125 By Investments 8,000
100 By Balance c/d 900
28,025 28,02
5
Outstanding were: Subscriptions ₹ 400; Interest on Investments ₹ 150; Salaries ₹200; Rent ₹200; Subscriptions received in advance for the year 2021 were ₹ 100 .
16)Write any Ten differences between Receipts and Payments Account and Income and Expenditure Account
17) The Balance sheet of $B$ and $D$ as on 31-12-2021 is given below who share profits and losses in the ration of 2: 1 .

| Liabilities | ₹ | Assets | ₹ |
| :---: | :---: | :---: | :---: |
| B's capital | 45,000 | Furniture | 6,000 |
| D's capital | 25,000 | Freehold property | 20,000 |
| General reserve | 24,000 | Debtors | 60,000 |
| Creditors | 16,000 | Stock cash | 12,000 |
|  |  |  | 12,000 |
|  | 1,10,000 |  | 1,10,000 |

They agreed to admit $\mathbf{K}$ into the firm subject to the following conditions:
(a) K will bring in ₹ 21,000 of which ₹ 9,000 will be treated as his share of goodwill to be retained in the business.
(b) $50 \%$ of the general reserve is to remain as provision for doubtful debts.
(c) Depreciation is to be provided on furniture @ $15 \%$.
(d) Closing stock is to be valued at ₹ 10,500 .
(e) K is entitled to $1 / 4^{\text {th }}$ share of the profit.

Prepare necessary accounts to give effect to these arrangements and prepare the Balance sheet of the new firm.
18) The Balance Sheet of $P, Q$ and $R$ who were sharing profits in proportion to their Capitals stood as follows on $31^{\text {st }}$ December 2021:

Liabilities
Sundry Creditors
Capital Accounts
P
Q
R
₹
13,800
45,000
30,000
15,000

Assets
Cash at Bank
Sundry Debtors
Less: Provision
Stock
Machinery
Land \& Buildings

$$
\underline{1,03,800}
$$

Creditors
Capitals
A
B

59000 Cash at bank
1500
Debtors 45500
30000 Less: provision 2500
43000
20000 Stock
60000
C's capital overdrawn 4500
1,09,000

B reports the result of realization as follows: Debtors realize ₹ 35000 ; stock realize ₹ 45,000 ; goodwill is sold for ₹ 2000 Creditors are paid Rs. 57,500 in full settlement. Outstanding creditor’s ₹ 500 have also been paid. The expenses of realization came to ₹ 600 which b met personally. A and B agree to receive from C ₹3000 in full settlement of the firm's claim against him. Show necessary ledger accounts.
20) A and B are in equal partnership. Their Balance sheet stood as follows:

| Liabilities | $₹$ | Assets | ₹ |
| :--- | ---: | :--- | ---: |
| Capital A: | 600 | Plant \& Machinery | 1,475 |
| Sundry Creditors | 3,900 | Furniture | 400 |
|  |  | Debtors | 500 |
|  |  | Stock | 625 |
|  |  | Bank | 300 |
|  |  | B's Capital | 1,200 |
|  |  |  | 4,500 |
|  |  |  | 4,500 |

The assets were realised as follows:
Stock ₹ 350 , Furniture ₹ 200 , Debtors ₹ 500 and Plant \& Machinery ₹ 700. The cost of collecting the estate amounted to ₹ 150 .
A's private estate is not sufficient even to pay his private liabilities, where as in B's private estate, there is a surplus of ₹ 50 .
Prepare Realisation A/c, Cash A/c, Creditors A/c, Capital A/c's and the Deficiency A/c of the partners.

Note : Question Paper setters are strictly requested to prepare the question papers as per the model question paper enclosed. No theory questions are to be given in the place of problem questions.

# SRI VENKATESWARA UNIVERSITY : TIRUPATI 

## B.COM Computer Applications with Business Analytics <br> SYLLABUS - III SEMESTER <br> (Under CBCS W.E.F. 2020-21)

## COURSE 3B(1): STATISTICS FOR BUSINESS ANALYTICS

## CourseObjectives

1. Statisticians help to design data collection plans, analyze data appropriately and interpret anddraw conclusions from those analyses. The central objective of the undergraduate major inStatistics is to equip students with consequently requisite quantitative skills that theycanemployandbuildoninflexibleways.
2. Majors are expected to learn concepts and tools for working with data and have experience inanalyzing real data that goes beyond the content of a service course in statistical methods fornon-majors.Majorsshouldunderstand[1]thefundamentalsofprobabilitytheory,[2]statistical reasoning and inferential methods, [3] statistical computing, [4] statistical modelingand its limitations, and have skill in [5] description, interpretation and exploratory analysis ofdata by graphical and other means; [6] graduates are also expected to learn to communicateeffectively.

## CourseOutcomes

Aftersuccessfulcompletionofthis course,thestudentwillbeableto;

1. KnowledgeofStatisticsandits scopeandimportanceinvariousareas suchasMedical,Engineering,AgriculturalandSocialSciencesetc.
2. Knowledgeofvarioustypesofdataindiagrammaticrepresentation.
3. Briefanalyzingindifferent typesofdataandtabulated.
4. Knowledgeofvarioustypesofdata,their organizationandevaluationofsummarymeasuressuchasmeasuresofcentraltendency anddispersionetc.
5. Insightsintopreliminaryexplorationofdifferenttypesofdata.

## UNIT- I

Introduction to Statistics: Introduction of Statistics-Sources of data-techniques of data collection-primarydataandsecondarydata-methodsofcollectingprimarydataandsecondarydata-classificationofdata-frequencydistribution.

## UNIT-II

Diagrammatic and graphic representation: Introduction-significance of diagrams and graphsdifferencebetweendiagramsandgraphs-generalrulesforconstructingdiagrams-Bardiagrams -Piecharts-techniqueofconstructionofgraphs-histogram-frequencypolygon-ogivecurves.

## UNIT-III

Measures of Central Tendency: Introduction-features of a good average-Arithmeticmean,merits and demerits - Arithmetic mean individual observation, discrete series, continuous series -Median, merits and demerits - median individual observation, discrete series, continuous series -Mode,meritsanddemerits-Modeindividualobservation,discreteseries,continuousseries.

## UNIT-IV

Measures of Dispersion : Introduction - properties of a good measures of dispersion-methods ofstudying dispersion-Range, Quartile deviation, Mean deviation(MD), Standard deviation(SD),itsmeritsand demerits,calculation forIndividual observation,calculation ondiscrete andcontinuousSeries-Coefficientof Variation.

## UNIT-V

Measures of Skewness:Concept of Skewness, Karl pearson's coefficient of skewness, Bowley's Coefficient ofskewness, Kelley's Co-efficient of Skewness.

## Note:

1. Concentrationonnumericalproblemsonly.
2. ProofsoftheoremsandDerivationsofexpressionsareomitted.

## TextBooks:

1. Statistical methods-S.P.Gupta.
2. FundamentalsofMathematicalstatistics-SCGuptaandV.K.Kapoor

## ReferenceBooks:

QuantitativeTechniques1-SulthanChandPublication

# Sri Venkateswara University: Tirupati <br> Programme: Three Year B.Com <br> Domain Subject: Commerce <br> w.e.f. 2022-23 Academic year 

# II Year B.Com Computer Applications with Business Analytics - Semester -III Course 3B(1) : Statistics for Business Analytics Model Question Paper 

Time:3hours

Note:This questionpapercontains twopartsAandB.
Part A is compulsory which carries 25 marks. Answer any five of the following questions in Part A.Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10marks

## PART - A

Answerany Fiveofthefollowingquestion.
(3X5=15M)

1. Characteristics features of statistics
2. Primary and Secondary data
3. Draw a simple bar diagram

| Countries | India | Germany | UK | China |
| :--- | :--- | :--- | :--- | :--- |
| Birth rates <br> ' 000 | 33 | 16 | 20 | 40 |

4. $N_{1}=30 ; N_{2}=20 ; \overline{X_{1}}=40 ; \overline{X_{2}}=60$. Find $\overline{X_{12}}$
5. Calculate the value of Median from the following data

| 391 | 384 | 591 | 407 | 672 |
| :--- | :--- | :--- | :--- | :--- |

6. In a moderately symmetrical distribution the Median is 10 and Mean is 10 . Find Mode
7. Calculate Range and its Co-efficient

| Marks | 10 | 20 | 30 | 40 | 50 | 80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Students | 4 | 7 | 15 | 8 | 7 | 2 |

8. Find Co-efficient of Variation. Mean 100; Standard Deviation 40
9. Find Bowley's Coefficient of Skewness Median $=20, \mathrm{Q}_{1}=10, \mathrm{Q}_{3}=30$.
10. Find Karl Pearson's Co-efficient of SkewnessMean $=50$; Mode $=60 ; S . D=10$.

## PART-B

## Answerany Fiveofthefollowingquestion.

$(5 \times 12=60 \mathrm{M})$
11. Draw a Frequency Distribution table. The marks scored by 25 students are given below

| Marks: |
| :---: |
| 18, | 24,$\quad 32, \quad 40,48,52,59,60, \quad 09,11,05,13,26,30,41$

12.Following figures give the ages of newly married husbands and their wives in years.

Represent the data by a frequency distribution.

| Ages of <br> Husband | 24 | 26 | 27 | 25 | 28 | 24 | 27 | 28 | 25 | 26 | 25 | 26 | 27 | 25 | 27 | 26 | 25 | 26 | 26 | 26 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ages of <br> Wives | 17 | 18 | 19 | 17 | 20 | 18 | 18 | 19 | 18 | 19 | 17 | 18 | 19 | 19 | 20 | 19 | 17 | 20 | 17 | 18 |

13. Draw a subdivided bar diagram

| Year | Public Companies | Private Companies | Total |
| :--- | :---: | :---: | :---: |
| 2019 | 5000 | 20,000 | 25,000 |
| 2020 | 4000 | 16,000 | 20,000 |
| 2021 | 7,000 | 21,000 | 28,000 |

14. Find Mode graphically

| Class | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ | $80-90$ | $90-100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 11 | 19 | 21 | 16 | 10 | 8 | 6 | 3 | 1 |

15. Calculate Arithmetic Mean

| Temperature in ${ }^{\circ} \mathrm{C}$ | -40 to -30 | -30 to -20 | -20 to -10 | -10 to 0 | 0 to 10 | 10 to 20 | 20 to 30 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Days | 10 | 28 | 30 | 42 | 65 | 180 | 10 |

16. Calculate Median

| Class | $0-100$ | $100-200$ | $200-300$ | $300-400$ | $400-500$ | $500-600$ | $600-700$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 14 | 16 | 20 | 40 | 20 | 16 | 14 |

17.Calculate Mean Deviation from Mean

| Class | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 4 | 6 | 10 | 20 | 10 | 6 | 4 |

18. Calculate Standard Deviation

| Class | $0-20$ | $20-40$ | $40-60$ | $60-80$ | $80-100$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 10 | 12 | 18 | 15 |

19. Find Karl Pearson's Co-efficient of Skewness Mean $=40$, Median $=30, S . D=20$
20. Find Bowley's Co-efficient of Skewness

| Class | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 20 | 12 | 18 | 30 | 10 | 10 |

Note : Question Paper setter should set the Question paper as per Model Question paper Only. In place of Problem Only Problem should be given not a theory Question. No Deviation at all.

# SRI VENKATESWARA UNIVERSITY <br> B.Com Computer Applications with Business Analytics <br> IIISEMESTER (UnderCBCSW.E.F.2021-22) <br> COURSE 3C: PROGRAMMINGWITHC\&C++ <br> (Fiveunitswitheachunithaving12hoursofclasswork) 

Model Outcomes:

Attheendofthecourse,thestudentsisexpectedtoDEMONSTRATEthefollowingcognitiveabilities(th inkingskill)andpsychomotorskills.
A. Remembersandstatesinasystematicway(Knowledge)

1. Developprogrammingskills
2. Declarationofvariablesandconstantsuseofoperatorsandexpressions
3. learnthesyntaxandsemanticsofprogramminglanguage
4. BefamiliarwithprogrammingenvironmentofCandC++
5. Abilitytoworkwithtextualinformation(charactersandstrings)\&arrays
B. Explains(Understanding)
6. Understandingafunctionalhierarchicalcodeorganization
7. Understandingaconceptofobjectthinkingwithintheframeworkoffuncti onalmodel
8. Write program on a computer, edit, compile, debug, correct,recompileandrunit
C. Criticallyexamines, usingdataandfigures(AnalysisandEvaluation)
9. Choosetherightdatarepresentationformatsbasedontherequirement softheproblem
10. AnalyzehowC++improvesCwithobject-orientedfeatures
11. Evaluatecomparisonsandlimitationsofthevariousprogrammingconst ructs and choosecorrect one for thetask inhand.
D. Working in'OutsideSyllabusArea'under aCo-curricularActivity (Creativity)

Planningofstructureandcontent,writing,updatingandmodifyingcompu terprogramsforusersolutions
E. ExploringCprogrammingandDesignC+
+classesforcodereuse(Practicalskills***)

# PROGRAMMINGWITHC\&C++ <br> SYLLABUS 

## Unit

I IntroductionandControl Structures:
History of 'C' - Structure of C program - C character set,
Tokens,Constants, Variables, Keywords, Identifiers - C data types - C operators-StandardI/OinC-ApplyingifandSwitchStatements

II LoopsAndArrays:
UseofWhile,DoWhileandForLoops-UseofBreakandContinueStatements-
ArrayNotationandRepresentation-ManipulatingArrayElements
-UsingMultiDimensionalArrays

## III StringsandFunctions:

DeclarationandInitializationofStringVariables-StringHandlingFunctions-Defining Functions -
Function Call - Call By Value, Call By Reference -Recursion

## IV ClassesandObjects

IntroductiontoOOPanditsbasicfeatures-C++programstructure-Classesandobjects-
FriendFunctions-StaticFunctions-Constructor
-Typesofconstructors-Destructors-UnaryOperators

V Inheritance:
Inheritance - Types of Inheritance -Types of derivation- Public - Private -ProtectedHierarchicalInheritance-MultilevelInheritance-MultipleInheritanceHybridInheritance

LearningResources(Course3C::ProgrammingwithC\&C++)References:
(1) E.Balagurusamy"ObjectorientedprogrammingwithC++
(2) R.Ravichandran"ProgrammingwithC++"
(3) MasteringCbyKRVenugopalandSudeepRPrasad,McGrawHill
(4) ExpertCProgramming:DeepSecretsKindleEditionPetervanderLinden
(5) LetUsCYashavantKanetkar
(6) TheC++ Programming LanguageBjarneStroustrup
(7) C++PrimerStanleyB.Lippman,JoséeLajoie,BarbaraE.Moo
https://www.tutorialspoint.com/cprogramming/index.htmlhttps://www.learn-c.org/ https://www.programiz.com/c-programminghttps://www.w3schools.in/c-tutorial/https://www.cprogramming.com/tutorial/c-tutorial.htmlhttps:// www.tutorialspoint.com/cplusplus/index.htmlhttps://www.programiz.com/ cpp-programminghttp://www.cplusplus.com/doc/tutorial/https://www.learn-cpp.org/https://www.javatpoint.com/cpp-tutorial

## B.Com Computer Applications with Business Analytics

## III SEMESTER - CBCS W.E.F. 2022-23

## COURSE 3C: PROGRAMMING WITH C \& C++

SECTION - A (Total 15 marks)

## Answer any FIVE Questions

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

SECTION - B (Total 60 marks)
Answer any FIVE Questions
(5X12 = 60Marks)
11.

12
13.
14.
15.
16.
17.
18.
19.
20.

Note: The Question Paper Setter should set Questions covering all units (both 3 marks and 12 marks) equally.

