

III SEMESTER END EXAMINATIONS DEC - 2023 (R/S)

III SEMESTER END EXAMINATIONS DEC - 2023 (R/S

[illegible]

Controller of Examinations

PRINCIPAL

222

Class : II Degree (All Groups)
 Subject : Telugu
 Title of Paper : General Telugu
 Paper Code : R20TEL301A
 W.E.F : 2023-24

Max Marks : 60
 Pass Mark : 24
 Duration : 3 Hrs
 Time : 09:00 to 12:00
 Date : 15/12/2023

విభాగము - ఆ**I. ఈ క్రింది వానిలో ఏదైనా ఐదంటేకి సంక్షిప్త పరిమాణాలు వ్రాయండి****5X4=20మార్కులు**

1. భాష ప్రయోగ ఉదాహరణలు
2. భువనం
3. ఆనందాచార్య ఆంధ్రకవిత్వం
4. సంపాదకీయాలు గూర్చి వ్రాయండి
5. వాక్యాల శిక్షణ ప్రాధాన్యతను వివరించండి
6. రేడియో వ్యవస్థలోని భాష ఎలా ఉండాలి
7. యాజుర్వేదం బ్రతుకను వివరించండి.
8. క్రింది జాబ్ మును తెలుగులోకి అనువదించండి.

Education is extremely important for Employment. It is certainly is a great opportunity to make a decent living. This is due to the Skills of a high paying Job that Education provides. Uneducated People are probably at a huge disadvantage when it comes to Jobs It seems like many poor people improve their lives with the help of Education

విభాగము - ఆ**II. ఈ క్రింది వానిలో ఆన్ని ప్రశ్నలకు పరిమాణములు వ్రాయండి****5X8=40మార్కులు**

9. చాక్లాన్ని నిర్వచించి వాళ్ళ లక్షణాలను వివరించండి.
(లేదా)
10. అర్థాన్ని అనుసరించి ఏర్పడి వాక్యాలను తెలుపండి
11. ఉత్తమ కవి లక్షణాలను వ్రాయండి.
(లేదా)
12. ఉత్తమ వ్యాస లక్షణాలను వ్రాయండి
13. ఆరువారి నిమిషాలకు వారి పరిష్కార మార్గాలను వ్రాయండి.
(లేదా)
14. ఆరువారాన్ని నిర్వచించి ఆరువారి పరిష్కారాలను వ్రాయండి
15. ముద్రణ సాంకేతికత పరిధి వికాసాలను పేర్కొండి
(లేదా)
16. వాక్యను నిర్వచించి వాళ్ళ లక్షణాలను తెలుపండి.
17. యాజుర్వేదం నిర్వచించి దీని తెలుగులను వివరించండి.
(లేదా)
18. ప్రాచీనమతాలను వివరించి, ప్రయోజనాలను తెలుపండి.

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
III SEMESTER END EXAMINATIONS

Class : II Degree (All Groups)
 Subject : Telugu
 Title of Paper : General Telugu
 Paper Code : R20TEL301
 W.E.F : 2021-22

Max Marks : 75
 Pass Mark : 30
 Duration : 3 Hrs
 Paper Time : 09:00 to 12:00
 Date : 15/12/2021

విభాగము - అ

I. ఈ క్రింది ప్రశ్నలలో ఏదైనా ఐదు ప్రశ్నలకు సంక్షిప్త సమాధానాలు వ్రాయుము

5 x 5 = 25 మార్కులు

- | | |
|---|-------------------------|
| 1. భాష ప్రయోజనాలు | 2. వాక్య లక్షణాలు |
| 3. టెలివిజన్ రచన | 4. బ్లాగ్ ను వివరించండి |
| 5. చారిత్రక వ్యాసాలు | 6. యాంకర్ లక్షణాలు |
| 7. సంపాదకీయాలు | |
| 8. ఈ క్రింది ఆంగ్లంలోని అంశాన్ని తెలుగులోకి అనువదించండి | |

As with most linguistic phenomena, there is a social reason for the growth of Telugu in the United States. The immigration of many engineers and technology developers from the Telugu-speaking states of Andhra Pradesh and Telangana started with the need for qualified professionals in the information technology sector. Many IT-savvy Indians from cities of Hyderabad, Vijayawada and Visakhapatnam migrated to the US in the 2000's along with their families, creating a Telugu-speaking community that continues to expand. This has, in turn, also increased the demand for Telugu-based services, such as language lessons, books and technology.

విభాగము - ఆ

II. ఈ క్రింది వానిలో అన్ని ప్రశ్నలకు సమాధానాలు వ్రాయుము

5 x 10 = 50 మార్కులు

9. భాషను నిర్వచించి, భాషా ప్రయోజనాలను తెలపండి

(లేదా)

భాషా లక్షణాలు రాసి, ప్రామాణిక భాషను పరిచయం చేయండి

10. పాశ్చాత్య విమర్శకులు కవిత్వ స్వరూపాన్ని ఏ విధంగా వివరించారో చెప్పండి

(లేదా)

కథానికకు ఒక నిర్వచనం చెప్పి, ఉత్తమ కథానికా లక్షణాల్ని వివరించండి

11. అనువాదాన్ని నిర్వచించి, అనువాద పద్ధతుల్ని వివరించండి

(లేదా)

వ్యాస రచనల్లో భేదాలను వివరించండి

12. పత్రికా భాషను గురించి, దాని శైలిని గురించి తెలపండి

(లేదా)

తెలుగు భాషలో పత్రికల వర్గీకరణను రాయండి

13. వార్తను నిర్వచించి, వార్తా లక్షణాల్ని తెలియజేయండి

(లేదా)

టెలివిజన్ రచనలో ఉపయోగించే భాష ఎలా ఉండాలి.

Regd No: _____

Room No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
III SEMESTER END EXAMINATIONS

Class : II Degree (All Groups)
Subject : English
Title of Paper: English Praxis Course- III A Course in Conversational Skills
Paper Code : R20ENG301
W.E.F : 2021-22

Max Marks : 75
Pass Mark : 30
Duration : 3 Hrs
Paper Time : 9am - 12 noon
Date : 14.12.2023

SECTION -A

I. Answer any FIVE Of the following questions.

5X5=25M

1. What does the title "A Tryst with Destiny" convey?
2. How many types of greetings are there?
3. How does Dr.Kalam support developing missiles as a positive act?
4. How do you make information question? Give two examples?
5. How do you give directions to your friend to reach your house from Bus station?
6. What is the loss, Steve Jobs faced and how did it help him?
7. Give a clear description of your College Library.
8. Name some interview techniques.

SECTION -B

II. Answer ALL the following Questions

5X10=50M

9. What, according to Pandit Jawaharlal Nehru, is the future of India?

(OR)

10. How do you introduce yourself in an interview?

11. Identify at least 3 points on the attitude, Obama expects from the people of America?

(OR)

12. What is a request and what are the different ways of requests in English?

13. What is team leadership or collective leadership? What does Mandela say about it?

(OR)

14. What is the pleasure in agreeing for a deal?

15. What do you assess about JRD Tata from his observations on G.D Birla and Dhirubai Ambani?

(OR)

16. Build a dialogue between a Teacher and a student in the class.

17. What is a Debate and mention the stages in Debate?

(OR)

18. How do role-plays help us to develop language skills?

Room No: _____	Regd. No: _____
KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)	
III – SEMESTER END EXAMINATIONS	
Class : II Degree (All Groups)	Max Marks : 60
Subject : English	Pass Mark : 24
Title of Paper : A Course in Conversational Skills	Duration : 3 Hours
Paper Code : R20ENG301A	Time : 9am - 12 noon
W.E.F : 2023-24	Date : 14-12-2023

SECTION-A

I. Answer any FIVE questions of the following

5 X 4 = 20 Marks

- 1) What according to the speaker in the future of India?
- 2) Describe the importance of Greetings.
- 3) What are the six leadership traits that Kalam talks about?
- 4) Seek information from the teacher about next week grand test.
- 5) How do you give directions to a stranger to reach railway station to Bus stop?
- 6) "The only work to do great is to love what you do"? Explain
- 7) Give a clear description of your village in about 75 words.
- 8) How should one prepare for an Interview?

SECTION - B

II. Answer the following questions

5 X 8 = 40 Marks

- 9) Explain briefly what Nehru means by the name of the phrase "The service of India"?
(OR)
- 10) How do you introduce your team members to the chief guest?
- 11) Summarize Obama's speech, "Yes we can."
(OR)
- 12) You are not feeling well and want to go home quickly. Make a request to your teacher asking him/her to permit you.
- 13) Explain in your own words Mandela says "he learnt while he was in prison".
(OR)
- 14) What is the pleasure in agreeing for a deal.
- 15) What do you assess about JRD from his observation on G.D.Birla and Dhirubhai Ambani?
(OR)
- 16) Build a dialogue between you and your childhood friend you have met after a long time.
- 17) What are the stages in a debate?
(OR)
- 18) What are the benefits of role-play?

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III - SEMESTER END EXAMINATIONS**

Class : II Degree (All Groups)

Max Marks : 75

Subject : Hindi

Pass Mark : 30

Title of Paper : Hindi

Duration : 3Hrs

Paper Code : R20HIN301

Time : 09:00 to 12:00

W.E.F : 2022-23

Date : 15/12/2023

PART - A**(Short Answers Questions)****25Marks**

निम्न लिखित प्रश्नों में से किन्हीं पाँच प्रश्नों का उत्तर दीजिए।

1. व्यख्या किजिए।

जब मैं था तब गुरु नहीं, अब गुरु हैं मैं नाहिं।

प्रेम गति अंति सों कति, या मैं दो न समाहिं ॥

2. किसी एक कवि का साहित्यिक परिचय दीजिए।

1. भवानी प्रसाद मिश्रा 2. कबीर

3. तोड़ती पत्थर कविता की विशेषताएं लिखिए।

4. व्यख्या किजिए।

जो गीत जनम का लिखूँ, मरन का लिखूँ

जो गीत जीत का लिखूँ, शरण का लिखूँ

5. प्रेमाश्रय शाखा की विशेषताएं लिखिए ?

6. प्रदूषण के नष्ट लिखिए ?

7. कार्यालय ज्ञापन के बारे में लिखिए ?

8. राष्ट्र भाषा हिंदी एक के बारे में लिखिए ?

PART - B
(Essay Questions)

50 Marks

इ). किसी एक कविता का सारांश विशेषताओं सहित लिखिए।

10M

1. मातृभूमि 2. तोड़ती पत्थर

ई). हिंदी साहित्य का इतिहास - काल विभाजन के बारे में लिखिए ?

10M

या

ज्ञानश्रय शाखा के बार में विशेषताएं के बारे में लिखिए?

उ). किसी एक निबन्ध के प्रति प्रकाश डालिए।

10M

1. कंप्यूटर 2. बेकारी समस्या 3. समाचार पत्र

ऊ). हिंदी में अनुवाद कीजिए।

5X2=10M

1. Don't waste Time.
2. We should respect our parents.
3. The clock is on the wall.
4. Where are you going now?
5. We shall go.

या

अंग्रेजी में अनुवाद कीजिए।

1. लडके गा रहे हैं।
2. हिंदी हमारा राष्ट्र भाषा है।
3. यह फल कैसा है ?
4. हम दिवाली मनाते हैं।
5. तुम कौन हो ?

ऊ). किसी एक पर टिपणी लिखिए।

10M

1. परिपत्र 2. राष्ट्र भाषा हिंदी 3. कार्यालय ज्ञापन

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III - SEMESTER END EXAMINATIONS**

Class : II Degree (All Groups)

Max Marks : 60

Subject : Hindi

Pass Mark : 24

Title of Paper : Hindi

Duration : 3Hrs

Paper Code : R20HIN301A

Time : 09:00 to 12:00

W.E.F : 2022-23

Date : 15/12/2023

SECTION - A**(Short Answers Questions)****5X4= 20Marks**

निम्न लिखित प्रश्नों में से किन्हीं पाँच प्रश्नों का उत्तर दीजिए।

1. किसी एक कवि का जीवन परिचय दीजिए।

1. सूर्यकांति त्रिपाठी निराला 2. सूरदास

2. गीत फिरोश कविता की विशेषताएं लिखिए।

3. ज्ञानश्रय शाखा की विशेषताएं लिखिए ?

4. परिपत्र के बारे में लिखिए ?

5. अनुवाद किसे कहते हैं ?

6. व्यख्या किजिए।

कबिरा सतगुरु न मिला, रही अधूरी सीख।

स्वांग जति का पहिरि करि धरि धरि माँग भीख ॥

7. व्यख्या किजिए।

जी, और गीत भी हैं, दिखलाता हूँ,

जी सुनना चाहे आप तो गाता हूँ,

जी, छंद और बेछंद पसंद करें

जी, अमर गीत और वे जो तुरंत मरे।

8. समाचारपत्र निबंध लिखिए ?

SECTION – B
(Essay Questions)

5x8=40 Marks

इ). किसी एक कविता का सारांश विशेषताओं सहित लिखिए।

1. मातृभूमि 2. तोड़ती पत्थर

ई). हिंदी साहित्य का इतिहास - काल विभाजन के बारे में लिखिए ?

या

प्रेमाश्रय शाखा के बारे में विशेषताएं के बारे में लिखिए?

उ). किसी एक निबन्ध के प्रति प्रकाश डालिए।

1. कंप्यूटर 2. बेकारी समस्या 3. पर्यावरण और प्रदूषण

ऊ. हिंदी में अनुवाद कीजिए।

1. When do you go to colleges.
2. Mother was making bread.
3. They run fast.
4. They are doing well?

या

अंग्रेजी में अनुवाद कीजिए।

1. सीता ने सुना।
2. वे खड़े रहे हैं।
3. कल छुट्टी थी।
4. बिल्ली दूध पीता है।

ऊ). किसी एक पर टिपण्णी लिखिए।

1. परिपत्र 2. राष्ट्र भाषा हिंदी 3. कार्यालय ज्ञापन

Room No: _____

Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III – SEMESTER END EXAMINATIONS**

Class : II B.Sc (MSCS/DS)

Max Marks : 75

Subject : Statistics

Pass Mark : 30

Title of Paper : Statistical Methods

Duration : 3 Hrs

Paper Code : CBSTT301B/DSDSM301A

Time : 9am - 12 noon

W.E.F : 2020-21

Date : 18-12-2023

SECTION-A**I. Answer any FIVE of the following Questions****5X5=25M**

1. Define independence of random variables.
2. Define conditional probability of x & y.
3. Define the type's correlation.
4. Explain Karl Pearson correlation coefficient.
5. What is correlation ratio?
6. Explain the principle of least squares.
7. Define the order of class and class frequencies.
8. Define the class symbols as operators.

SECTION-B**II. Answer ALL the following Questions****5X10=50M**

9. Explain the distribution function and explain its properties.

(OR)

10. Explain Joint distribution function and also explain marginal distribution function of x & y.

11. Derive the formula for rank correlation coefficient.

(OR)

12. Find the limits of correlation and effect of change of origin and scale on Correlation coefficient.

13. Explain the properties of regression lines.

(OR)

14. Explain the difference between correlation and regression.

15. Derive the normal equations for exponential curves.

(OR)

16. Fit a straight line of the form $Y = a + bx$ to the following data.

X	1	2	3	4	5	6
Y	55	46	40	38	33	30

17. Explain the criteria for consistency of attributes.

(OR)

18. Given that $(A) = 50$, $(B) = 60$, $(C) = 50$, $(A\beta) = 5$, $(A\gamma) = 20$ and $N = 100$. Determine the limits for (BC)

Regd No: _____

Room No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
III SEMESTER END EXAMINATIONS

Class : II B.Sc. (MSCS/DS)
Subject : Statistics
Title of Paper: Statistical Inference
Paper Code : R20STAT301/R20DSSTATA301
W.E.F : 2021-22

Max Marks : 75
Pass Mark : 30
Duration : 3 Hrs
Paper Time : 9am-12noon
Date : 18-12-2023

SECTION - A

I. Answer any FIVE Of the following questions.

5X5=25M

1. Explain the applications of t- distributions.
2. Define consistency and efficiency with their examples.
3. Distinguish between point and interval estimation.
4. Explain types of errors.
5. Explain the critical region, most power of test and level of significance.
6. Explain the paired t-test for difference means.
7. Distinguish between parametric and non- parametric test.
8. Explain the Mann Whitney U- test procedure.

SECTION -B

II. Answer ALL the following Questions.

5X10=50M

9. Explain the relation between F and χ^2 distributions.

(OR)

10. Define t- distribution and derive its mean and variance.

11. State and prove Crammer Rao inequality.

(OR)

12. Explain the method of maximum likelihood estimation and what are its properties?

13. State and prove Neymann- pearson's lemma.

(OR)

14. Find the best critical region for testing $H_0: \lambda = 2$ against $H_1: \lambda = 3$ based on the sample drawn from a poisson population.

15. Explain the test procedure for large samples of two population standard deviations.

(OR)

16. Explain the F - test for equality of population variance.

17. Explain the Wilcoxon signed rank test procedure.

(OR)

18. Explain the sign test for two samples.

Room No: _____

Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III – SEMESTER END EXAMINATIONS**

Class	: II B.Sc (MSCS, DS)	Max Marks	: 60
Subject	: Statistics	Pass Mark	: 24
Title of Paper	: Statistical Inference	Duration	: 3 Hrs
Paper Code	: R20STAT301A/R20DSSTAT301A	Time	: 9am - 12 noon
W.E.F	: 2021-22	Date	: 18-12-2023

SECTION-A**I. Answer any FIVE of the following Questions****5X4=20M**

1. Explain reproductive property of chi-square distribution
2. Relation between t and F distribution
3. Distinguish between point and interval estimation.
4. Explain the method of moments
5. Describe the following – Null hypothesis, alternative hypothesis and power of test
6. Define one -tailed and two tailed test
7. Explain test procedure for testing of hypothesis.
8. What are the assumptions on Non – Parametric test

SECTION-B**II. Answer ALL the following Questions****5X8=40M**

9. Relation between F and chi square distribution

(OR)

10. Define t distribution and derive its mean and variance

11. Write the characteristic of good estimator

(OR)

12. Explain the method of maximum likelihood estimation and what are its properties

13. State and prove Neyman -Pearson lemma.

(OR)

14. Obtain best critical region for testing $H_0:P=P_0$ against $H_1:P=P_1$ in a binomial population

15. Explain test procedure of two proportions

(OR)

16. Explain the conditions for the validity of chi square test and also Explain the chi square test for independence of attributes.

17. Explain the sign test for two samples.

(OR)

18. Explain the median test procedure.

SECTION-A

10X2=20M

I. Answer any TEN of the following Questions

- Find the odd man out of the series 3 5 9 11 14 17 21
- Simplify: $9358-6014+3127$
- If $a:b = 5:7$ and $b:c = 4:7$ find $b:c$?
- Find the missing number in the series? 6 15 33 69 141 285?
- Find the wrong number in the series? 1, 2, 6, 15, 31, 56, 91
- Find the odd man out in the series? 284, 362, 242, 393, 472
- 15% of? = 94.5
- Find the LCM of 28, 35, 56 and 84?
- How many number's from 200 to 800 which are divisible by 5.
- Find the day of week august 15th, 1947?
- If $x/4 - ((x-3)/6) = 1$. Then find the value of x .
- If $x:y = 3:4$. Find $4x+5y:5x-2y$.
- The speed of train is 90Kmph. What is the distance covered by it in 10mins?
- What will come in the place of question mark in the following series 21, 34? 89, 144
- Find the simple interest on Rs. 68,000 at 162/3% per annum for 9 months?

SECTION-B

5X6=30M

II. Answer any FIVE of the following Questions

16. Subject (maximum marks recorded out of 100)

Students	Hindi	English	Maths	Social	Science	Sanskrit	PES
Anupama	85	95	87	87	65	35	71
Bhaskar	72	97	55	77	62	41	64
Charu	64	78	74	63	55	25	33
Deepak	65	62	69	81	70	40	50
Garima	92	82	81	79	49	30	61
Vishal	55	70	65	69	44	28	30

- How many students have scored lowest marks in two or more subjects?
- Who has scored the highest marks in all the subjects together
- What is the Deepak percentage of marks in all the subjects together
- What is the average percentage of marks obtained by all the students together in science?
- Marks obtained by charu in Hindi is what percent marks the Anupama got in science* subject?

17. What was the day week on 16th July 1775?
18. Find the angle between the hours hand and minute's hand of the clock when the time is 03:25?
19. At what time between 2 and 3 'o clock will the hands of clock be together?
20. The average monthly income of P&Q is Rs. 5050. The average monthly income of Q&R is Rs. 6250 and average monthly income of P&R is Rs. 5200. Then find the monthly income of P?
21. The present age of a father is 3 years more than 3 times the age of his son. 3 years hence, father's age will be 10 years more than twice the age of the son. Find the present age of the father?
22. Explain BODMAS rule?
23. An article is sold at a certain price. By selling it at $\frac{2}{3}$ of that prices one loses 10%. Find the gain percent at original price?
24. Explain types of VENN diagrams?
25. What will be the HCF of 1785, 1995 and 3381?

Regd No: _____

Room No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)
III SEMESTER END EXAMINATIONS

Class	: II B.Sc. (MPC, MPCs, MECS, MSCS, MCCS)	Max Marks	: 75
Subject	: Mathematics	Pass Mark	: 30
Title of Paper	: Abstract Algebra	Duration	: 3 Hrs
Paper Code	: R20MAT301	Paper Time	: 09:00 to 12:00
W.E.F	: 2021-22	Date	: 16/12/2023

SECTION - A

I. Answer any FIVE Of the following questions.

5X5=25M

1. Show that fourth roots of unity form an abelian group under multiplication.
2. Define order of an element. In a group G , prove that if $a \in G$ then $O(a) = O(a^{-1})$.
3. If H_1 and H_2 are two subgroups of a group G then prove that $H_1 \cap H_2$ is also a subgroup of group G .
4. Prove that every subgroup of an abelian group is normal.
5. Examine whether the permutation $\begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 \\ 3 & 2 & 4 & 5 & 6 & 7 & 1 \end{pmatrix}$ is even or odd.
6. If a is a generator of a cyclic group G , then prove that a^{-1} is also a generator of G .
7. Prove that the characteristic of an integral domain is either a prime or zero.
8. Prove that a field has no proper ideals.

SECTION -B

II. Answer ALL the following Questions

5X10=50M

- 9) Show that the set of n^{th} roots of unity forms an abelian group under multiplication.
(OR)
- 10) Prove that a finite semi group G satisfying cancellation laws is a group.
- 11) Prove that the necessary and sufficient condition for a finite complex H of a group G is $a, b \in H \Rightarrow ab \in H$.
(OR)
- 12) State and prove Lagrange's theorem.
- 13) A subgroup H of a group G is a normal sub group of G iff each left coset of H in G is a right coset of H in G .
(OR)
- 14) State and prove fundamental theorem of homomorphisms of groups.
- 15) State and prove Cayley's theorem.
(OR)
- 16) Prove that every subgroup of cyclic group is cyclic.
- 17) Prove that every finite integral domain is a field.
(OR)
- 18) Let S be a non-empty subset of a ring R . Then prove that S is a subring of R iff $a-b \in S$ and $ab \in S \forall a, b \in S$.

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III – SEMESTER END EXAMINATIONS**

Class	: II B.Sc (MPC , MPCS, MECS, MSCS, MCCS)	Max Marks	: 60
Subject	: Mathematics	Pass Mark	: 24
Title of Paper	: Abstract Algebra	Duration	: 3 Hrs
Paper Code	: R20MAT301A	Time	: 09:00 to 12:00
W.E.F	: 2023-24	Date	: 16/12/2023

SECTION-A**I. Answer any FIVE of the following Questions****5X4=20M**

1. Let (G, \cdot) be a group. Then prove that $(ab)^{-1} = b^{-1}a^{-1} \quad \forall a, b \in G$
2. Show that the fourth roots of unity forms an abelian group under multiplication.
3. If H_1, H_2 are two subgroups of a group G then prove that $H_1 \cap H_2$ is a subgroup of G .
4. Prove that a subgroup H of a group G is normal if and only if $xHx^{-1} = H \quad \forall x \in G$
5. Prove that whether the permutation $f = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 \\ 3 & 2 & 4 & 5 & 6 & 7 & 1 \end{pmatrix}$ is even or odd permutation.
6. Prove that every cyclic group is abelian.
7. Prove that every Boolean ring is abelian.
8. Prove that a field has no proper ideals.

SECTION-B**II. Answer ALL the following Questions****5X8=40M**

9. Show that the set Q_+ of all +ve (positive) rational numbers forms an abelian group under the operation 'O' defined by $aob = \frac{ab}{3} \quad \forall a, b \in Q_+$
- (OR)**
10. Prove that a finite semi group satisfying cancellation laws is a group.
 11. If H is a non-empty complex of a group G then prove that the necessary and sufficient condition for H to be a subgroup of G is $a, b \in H \Rightarrow ab^{-1} \in H$. Where b^{-1} is the inverse of b in G
- (OR)**
12. State and prove Lagranges theorem for cosets.
 13. If ϕ is a homomorphism from a group G into G^1 then prove that Kernel is a normal subgroup of G .
- (OR)**
14. State and prove fundamental theorem of homomorphism for groups.

15. State and prove Cayleys theorem.

(OR)

16. If p is a prime number then prove that every group of prime order is a cyclic group.

17. Prove that every finite Integral domain is a field.

(OR)

18. Let S be a non-empty subset of a ring R . Then prove that S is a subgroup of R if and only if $a-b \in S$ & $ab \in S \quad \forall a, b \in S$

Room No: _____

Regd No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III - SEMESTER END EXAMINATIONS**

Class : II B.Voc (WT)

Max Marks : 75

Subject : Mathematics

Pass Mark : 30

Title of Paper : Algebraic Solutions and Numerical Analysis

Duration : 3 Hrs

Paper Code : R20WSMAT301/WSMAT301/ITMAT301/CBCMAT301B

Time : 09:00 to 12:00

W.E.F : 2021-22

Date : 16/12/2021

SECTION-A**I. Answer any FIVE Questions****5X5=25M**

1. Find the 3 A.M' S between 14 & 38.
2. For the series of $2+8+14+20+\dots$ find the 10th term & sum of 10 terms.
3. Find the value of $\lim_{x \rightarrow 0} \frac{1-\cos x}{x^2}$.
4. Find the value of $\lim_{x \rightarrow a} \frac{\tan(x-a)}{x^2-a^2}$.
5. Prove that a) $(1+\Delta)(1-\nabla) = 1$ b) $\Delta \log f(x) = \log\left(1 + \frac{\Delta f(x)}{f(x)}\right)$.
6. Derive the stirling's Difference Formula.
7. If $12_{c_{r+1}} = 12_{c_{3r-5}}$ then find 'r'.
8. Prove that $25_{c_4} + \sum_{r=0}^4 (29-r)_{c_3} = 30_{c_4}$.

SECTION-B**5X10=50M****II. Answer ALL the Questions**

- 9) If the continuous product of 3 numbers in G.P IS 216 & sum of their products in pairs is 156, then Find the numbers.

(OR)

- 10) Find the three numbers in A.P whose sum is 9 and their product is -165.

- 11) Find the value of $\lim_{x \rightarrow 0} \frac{\sqrt{a+2x} - \sqrt{a} - \sqrt{3x}}{\sqrt{3a+2x} - 2\sqrt{a}}$

(OR)

- 12) Find the value of $\lim_{x \rightarrow a} \frac{\sin(x-a)\tan^2(x-a)}{(x^2-a^2)^2}$

- 13) State and prove Newton-Gregory formula for backward interpolation with equal intervals.

(OR)

- 14) If $\mu_0=1, \mu_1=0, \mu_2=5, \mu_3=22, \mu_4=57$ find $\mu_{0.5}$ by using Newton's forward formula.

- 15) State and prove Gauss's Backward Difference formula.

(OR)

- 16) Use Gauss forward interpolation formula to find $f(3.3)$ from the following table

X	1	2	3	4	5
Y = f(x)	15.30	15.10	15.00	14.50	14.00

- 17) Find the number of 4 digit numbers that can be formed using the digits 1,2,5,6,7
How many of them are divisible by
i) 2 ii) 3 iii) 4 iv) 5 v) 25

(OR)

- 18) Find the number of ways of arranging 6 boys and 6 girls. In how many of them
(i) All the girls are together (ii) No two girls are together (iii) Boys & girls come alternatively.

Room No: _____

Regd. No: _____

KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**III - SEMESTER END EXAMINATIONS**

Class : I B.VOC (WS)

Max Marks : 60

Subject : MATHEMATICS

Pass Mark : 24

Title of Paper : ALGEBRIC SOLUTIONS AND NUMERICAL ANALYSIS

Duration : 3 Hrs

Paper Code : R20WSMAT301A

Time : 09:00 to 12:00

W.E.F : 2023-24

Date : 16/12/2023

SECTION-A**Answer any FIVE questions.****5 X 4 = 20M**

- Find the 3 A.M's between 14 & 38.
- Find the sum of all odd numbers between 51 and 99 inclusive.
- Evaluate $\lim_{x \rightarrow \frac{\pi}{2}} \frac{\cos x}{x - \frac{\pi}{2}}$
- Evaluate $\lim_{x \rightarrow 0} \frac{a^x - 1}{b^x - 1}$.
- Define Backward difference operator.
- Given $y_{20} = 24$, $y_{24} = 32$, $y_{28} = 35$, $y_{32} = 40$ find y_{25} by Bessel's formula.
- Find the number of ways of arranging the letters of the word INDEPENDENCE.
- If ${}^{12}C_{r+1} = {}^{12}C_{3r-5}$ then find r.

SECTION-B**Answer the following questions.****5 x 8 = 40M**

- 9) The 6th term of G.P is 1215 and 3rd term is 45. Find the sum of 6 terms.

(OR)

- 10) The 4th term of a A.P is 17 and 8th term is 33. Determine the number of terms to give the sum of 230.

- 11) Evaluate $\lim_{x \rightarrow a} \frac{\cos ax - \cos bx}{x^2}$.

(OR)

- 12) Evaluate $\lim_{x \rightarrow 0} \frac{e^x - 1}{\sqrt{1+x} - 1}$.

- 13) State and prove Newton- Gregory's forward interpolation formula with equal intervals.

(OR)

- 14) The population of country in decimal census were as under. Estimate the population for the year 1925.

Year	1891	1901	1911	1921	1931
Population (in thousands)	46	66	81	93	101

15) Derive Gauss's forward difference formula.

(OR)

16) Use Stirling's formula to find y_{28} , given $y_{20} = 49225$, $y_{25} = 48316$, $y_{30} = 47236$, $y_{35} = 45926$, $y_{40} = 44306$.

17) Find the number of ways of arranging 6 boys and 6 girls in a row. In how many of them

- (i) All the girls are together
- (ii) No two girls are together
- (iii) Boys & Girls come alternatively.

(OR)

18) Find the number of ways of arranging 3 Mathematics, 2 physics & 1 chemistry books in a shelf such that the books of same kind are together.

Room No. : _____

Regd No. : _____

III SEMESTER END EXAMINATION

Class : II B.Sc (IOT)
Subject : Computer Science
Title of Paper : OOPs with Python
Paper Code : IOTOP 301 / ITPP301 / R201OTOP301
W.E.F : 2019-20

Max Marks : 70
Pass Marks : 28
Duration : 3 Hrs
Time : 9 am - 12 noon
Date : 19-12-2023

SECTION-A

I. Answer any FIVE of the following questions

5X5=25M

1. Explain data types available in Python.
2. Explain string manipulation functions.
3. What is a directory? Explain its Properties and functions.
4. Write down the Procedure to executing a python Program.
5. Differentiate between Global and Local variables with example.
6. What are the operators available in python? Explain.
7. Explain command line arguments in python.
8. What is Regular expressions? Explain.

SECTION-B

II. Answer all of the following questions

5X10=50M

9. Explain the conditional statements in python with syntax and example.

(OR)

10. Explain the history and features of python.

11. Explain about Lists in python. How to create a Lists?

(OR)

12. What is a tuple. Explain how to accessing and working with tuples.

13. Define function. Explain the types of functions in python.

(OR)

14. What is a Module? Explain how to importing a module

15. Write a program in python. How to read and write files in python.

(OR)

16. Explain about exception handling in python.

17. Explain about OOPs concept in python.

(OR)

18. Explain about multithreading in python.

~~~~~



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II BCA, B.Sc (MPCS, MECS, MSCS, MCCS, DS)  
& B.Voc (WT)

Subject : Computer Science

Title of Paper : OOPS With Java/Programming in Java

Paper Code : CBCSC301/CBBCA301/DSOJ301/WSPJ301/

W.E.F : 2019-20 R2005PJ301/R20DSOJ301

Max Marks : 75

Pass Mark : 30

Duration : 3 Hrs

Time : 9am - 12 noon

Date : 19-12-2023

**SECTION-A**

**5X5=25M**

**I. Answer any FIVE of the following Questions**

1. Discuss about Applets with Suitable examples?
2. Explain about Java Source File Structure?
3. Discuss about i) Data Types ii) Building Blocks of java
4. Discuss about Wrapper Classes in Java?
5. Discuss about Demon Threads and Thread groups in Java?
6. Explain about Checked and unchecked exceptions.
7. Discuss about file input stream and output stream?
8. Define and explain how to run a servlet?

**SECTION-B**

**5X10=50M**

**II. Answer ALL the following Questions**

9. Discuss about different features of Java?

**(OR)**

10. Explain different concepts of OOPs?
11. Explain about identifiers and different Data Types in Java?

**(OR)**

12. Explain about Decision Making and Looping Statements in java?
13. Explain the different methods for handling exceptions java?

**(OR)**

14. Explain about Thread life cycle in detail with suitable examples?
15. What is Applet Tag? Explain with a suitable example?

**(OR)**

16. Define JDBC and explain its architecture in detail?
17. Explain about the life cycle of the servlet with suitable example?

**(OR)**

18. Explain the architecture of RMI?



Room No: \_\_\_\_\_

Regd No \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (MPCS/MECS/MSCS/MCCS)  
Subject : Computers  
Title of Paper : Database Management System  
Paper Code : R20CSC301A  
W.E.F : 2022-23

Max Marks : 60  
Pass Mark : 24  
Duration : 3Hrs  
Time : 9am - 12 noon  
Date : 19-12-2023

**SECTION-A**

**I. Answer any FIVE of the following questions.**

**5 X 4 = 20 M**

1. What is the difference between data and information?
2. Write about IS A relationship and attribute inheritance.
3. Write about the advantages of ER model.
4. What is Relational DATA model?
5. Explain Domain Relational Calculus.
6. Explain about Commit and Rollback commands.
7. Explain about different set operations.
8. Explain data types in PL/SQL.

**SECTION-B**

**II. Answer ALL of the following questions.**

**5 X 8 = 40 M**

9. Explain the components of database management system.

**(OR)**

10. Briefly explain about database architecture.
11. What is attributing? Explain about classification of attribute?

**(OR)**

12. Explain basic concepts of EER Model?
13. Write about the advantages and disadvantages of relational algebra.

**(OR)**

14. Explain about Relational calculus in DBMS.
15. Explain about DML commands.

**(OR)**

16. What is a view? Explain about views.
17. Explain about looping control statements in PL/SQL.

**(OR)**

18. Briefly explain about triggers in PL/SQL.

Room No: \_\_\_\_\_

Regd No: 24

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III – SEMESTER END EXAMINATIONS**

|                |                       |           |                  |
|----------------|-----------------------|-----------|------------------|
| Class          | : II B.Voc (WT)       | Max Marks | : 60             |
| Subject        | : Computer Science    | Pass Mark | : 24             |
| Title of Paper | : Advanced Angular JS | Duration  | : 3 Hrs          |
| Paper Code     | : R20WSAAJ303A        | Time      | : 9 am - 12 noon |
| W.E.F          | : 2022-23             | Date      | : 20-12-2023     |

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain the features of Angular2?
2. Explain about Angular2 Components?
3. What are Angular 2 Directives? Explain with examples?
4. Explain about Attribute binding in Angular2?
5. Explain about class binding in Angular2?
6. Explain about In-Built pipes in Angular 2?
7. Explain about custom Pipes in Angular 2?
8. Explain about Modules in Angular 2?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain about Angular 2 Architecture?

**(OR)**

10. Explain about Features of Angular 2?

11. Explain about container components in Angular 2?

**(OR)**

12. Explain about styling Angular2 components?

13. Explain about Angular attribute binding?

**(OR)**

14. Explain event Binding

15. Explain in detail about Angular2 templates?

**(OR)**

16. Discuss about Interfaces in Angular2?

17. Explain about Angular2 Routing?

**(OR)**

18. Explain in detail about Dependency Injection in Angular2?



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Voc (WT)  
Subject : Computer Science  
Title of Paper : Advanced Angular- JS  
Paper Code : R20WSAAJ303/WSAAJ303  
W.E.F : 2022-23

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Time : 9am - 12noon  
Date : 20-12-2023

**SECTION-A**

**5X5=25M**

**I. Answer any FIVE of the following Questions**

1. Explain the Features of Angular2.
2. Explain about Styling angular2 Components.
3. Explain about Attribute Binding in Angular2.
4. Explain about Class Binding in Angular2.
5. Explain about Built Pipes in Angular2.
6. Explain about Custom Pipes in Angular2.
7. Explain about Angular2 Life Cycle Hooks.
8. Explain Angular2 Error Handling.

**SECTION-B**

**5X10=50M**

**II. Answer ALL the following Questions**

9. Explain the Key Components of Angular2.

**(OR)**

10. Explain about Angular2 Architecture.

11. Explain about Angular2 Nested Components.

**(OR)**

12. Explain Angular Component input properties and output properties.

13. Explain Event Binding.

**(OR)**

14. Explain Two way Data Binding.

15. Explain about Angular2 templates.

**(OR)**

16. Explain about Angular2 directives.

17. Explain about routing in Angular2.

**(OR)**

18. Explain Angular2 Services.



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (MPCS, MECS, MSCS, MCCS)  
Subject : Computer Science  
Title of Paper : Database Management System  
Paper Code : R20CSC301  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Time : 9am - 12 noon  
Date : 19-12-2023

**SECTION-A****I. Answer any FIVE of the following Questions****5X5=25M**

1. What is Database Management System?
2. Explain the Advantages of DBMS.
3. Explain the feature of ER-MODEL.
4. Explain Components of ER-Model.
5. Explain Relational Data Model.
6. Explain various types of Keys.
7. Explain Sub-Queries.
8. Explain PL/SQL Program Structure.

**SECTION-B****II. Answer ALL the following Questions****5X10=50M**

9. Explain Drawbacks of File management System.

**(OR)**

10. Explain different types of Data Models.

11. Explain about EER Model.

**(OR)**

12. Write a note on a) Entities b) Attributes.

13. Explain the EF-CODD'S Rules.

**(OR)**

14. Explain Normal Forms with example.

15. Explain DDL and DML Statements with example.

**(OR)**

16. Write a note on a) Joins b) Views.

17. Explain Procedures in PL/SQL.

**(OR)**

18. Explain Triggers in PL/SQL and Give Examples.



Regd No: \_\_\_\_\_

Room No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II B.C.A (BCA)  
Subject : Computers  
Title of Paper : Operating System  
Paper Code : R20BCA303  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 9am - 12noon  
Date : 19-12-2023

**SECTION - A**

**I. Answer any FIVE Of the following questions.**

**5X5=25M**

1. Explain about process Management.
2. Explain operating system services.
3. Explain about CPU scheduler.
4. Explain about semaphores.
5. Explain Dead Lock necessary condition.
6. Explain about fragmentation.
7. Explain about swapping.
8. Explain about directory structure.

**SECTION -B**

**II. Answer ALL the following Questions.**

**5X10=50M**

9. What is an operating system? Explain functions of an operating system

**(OR)**

10. What is system call? Explain different types of system calls in operating system.

11. Explain about FCFS scheduling.

**(OR)**

12. Explain about Round – Robin scheduling.

13. Explain about the Dining – Philosophers problem.

**(OR)**

14. Explain methods for handling dead locks.

15. Explain the concept of FIFO page Replacement.

**(OR)**

16. Explain about contagious memory allocation.

17. Explain different file Access methods.

**(OR)**

18. Explain the features of UNIX operating system.



Regd No: \_\_\_\_\_

Room No: 28

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II B.Com (Computers)  
Subject : Computer Science  
Title of Paper : Programming with C & C++  
Paper Code : R20COMC303  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 9am - 12 noon  
Date : 19-12-2023

**SECTION - A**

**I. Answer any FIVE Of the following questions.**

**5X5=25M**

1. Explain I/O functions in C language.
2. Explain different types of arrays with syntax.
3. What is function? Write procedure to create user defines function.
4. Explain the concept of Function over loading.
5. Describe the difference between C and C++.
6. Explain Unconditional branching statements.
7. Explain Destructor with example.
8. What is Inheritance? Explain multi-level inheritance?

**SECTION -B**

**II. Answer ALL the following Questions**

**5X10=50M**

9. Briefly Explain C Tokens?

**(OR)**

10. Explain conditional control statements in C?

11. Explain String Handling functions in C?

**(OR)**

12. Explain different types of Functions in C?

13. Explain the concept of OOPs?

**(OR)**

14. Explain the structure of C++.

15. Briefly Explain about Function overloading with example?

**(OR)**

16. Define Constructor? Explain types of constructors with example?

17. What is Hierarchical Inheritance? Explain with example program?

**(OR)**

18. Describe advantages and disadvantages of Inheritance?



Room No: \_\_\_\_\_

Regd No: 29

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II B.Com (Comp)  
Subject : Computer Science  
Title of Paper : Programming With C & C++  
Paper Code : R20COMC303A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 19-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain about Break and Continue statements.
2. Explain I/O functions in c language.
3. What is Recursion? Explain with example.
4. Define String? Explain initialization of string variables.
5. Explain the concept of function overloading.
6. Explain difference between C and C++.
7. Define Constructor with example.
8. Explain different Access specifiers.

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain Structure of C program.

**(OR)**

10. Explain different operators available in C.
11. Explain different types of string handling functions.

**(OR)**

12. Explain different types of Functions in C.
13. Explain the concepts of OOPs.

**(OR)**

14. Explain the difference between normal function and static function with example.
15. Explain briefly about operator overloading with example.

**(OR)**

16. Explain about Unary operator with example.
17. Explain different types of Inheritance with example.

**(OR)**

18. What is difference between multi-level and multiple inheritance.

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III – SEMESTER END EXAMINATIONS**

Class : II B.Sc (DS) /B.Voc (WT)  
Subject : Computer Science  
Title of Paper : OOPs With Java /Programming With Java  
Paper Code : R20DSOJ301A/R20WSPJ301A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 19-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain about type Casting in Java?
2. Explain about Wrapper Classes?
3. Explain about switch statement with an example?
4. Explain about java API packages?
5. Explain about interfaces in java?
6. Explain about thread priority
7. Discuss about finally statement with an example?
8. Define and explain how to run a Applet?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain about Java Program Structure?

**(OR)**

10. Explain different operators in java?

11. Explain the concept of Abstract classes with suitable example?

**(OR)**

12. Explain about Decision Making and Looping Statements in java?

13. What is multiple Inheritance? Explain how to achieve it through Interfaces?

**(OR)**

14. Explain about the process of creating and using the user defined packages in Java?

15. Explain about multiple catch statements?

**(OR)**

16. Explain Thread life cycle with an example?

17. Write a program to get input from the user in Applets?

**(OR)**

18. Explain the concept of adding Applet to html?



Room No: \_\_\_\_\_

Regd No: (31)

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II BCA  
Subject : Computer Science  
Title of Paper : Operating Systems  
Paper Code : R20BCA303A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 19-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain about Storage Management.
2. Write about logical versus physical address space.
3. Explain about Inter process communication.
4. What is Synchronization. Explain.
5. Explain about CPU Scheduling.
6. Explain about Thrashing.
7. Discuss about Demand Paging.
8. Explain about Directory Structure.

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain about the operating system Services

**(OR)**

10. Explain different types of an Operating Systems

11. Explain about priority scheduling

**(OR)**

12. Explain multiple levels Queues Scheduling

13. Explain deadlock Prevention techniques

**(OR)**

14. Explain about deadlock detection and avoidance

15. Explain the Concept of FIFO Page Replacement

**(OR)**

16. Write about Segmentation in Hardware

17. Explain the features of UNIX Operating System

**(OR)**

18. Explain about different file operations



Room No: \_\_\_\_\_

Regd No: 33

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Voc (WT/IT)

Max Marks : 75

Subject : Computer Science

Pass Mark : 30

Title of Paper : E-Commerce

Duration : 3 Hrs

Paper Code : R20WSEC302/WSEC302/ITEC302

Time : 9am to 12pm

W.E.F : 2021-22

Date : 18/12/2023

**SECTION-A**

**5X5=25M**

**I. Answer any FIVE Questions**

1. Define E-commerce. Write its advantages and disadvantages.
2. Define EDI with its advantages.
3. What is Internal Commerce and how it is influenced global markets?
4. Write about limitations of online marketing
5. Write about E-check with its advantages.
6. Write about Supply Chain Management with its types
7. Write about Work-flow Automation and Coordination
8. Write about the concept of Digital Library.

**SECTION-B**

**5X10=50M**

**II. Answer ALL the following Questions**

9. Explain about E-commerce consumer applications

**(OR)**

10. Explain about B2C, B2B e-Commerce with their advantages and disadvantages

11. Explain about MIME with components

**(OR)**

12. Explain about EDI with its architecture.

13. Explain new forms of organizational Structure

**(OR)**

14. What are the advantages and disadvantages of virtual organizations?

15. Explain three approaches to marketing in e-Commerce

**(OR)**

16. Explain different online advertising paradigms

17. Explain EFT.

**(OR)**

18. Write in types of credit card based e-payment methods.



Regd No: \_\_\_\_\_

Room No: 33

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

|                                                          |                            |
|----------------------------------------------------------|----------------------------|
| Class : II BCA                                           | Max Marks : 75             |
| Subject : Computer Science                               | Pass Mark : 30             |
| Title of Paper: Object Oriented Programming through JAVA | Duration : 3 Hrs           |
| Paper Code : R20BCA302                                   | Paper Time : 9am - 12 noon |
| W.E.F : 2021-22                                          | Date : 18-12-2023          |

**SECTION - A**

**I. Answer any FIVE Of the following questions.**

**5X5=25M**

1. What are the Differences between Applet and Applications?
2. Explain Java Development kit?
3. Explain various string functions in java?
4. What is Array? Explain types of arrays in java?
5. Explain Thread Synchronization?
6. Explain the Thread priority in java?
7. Explain Random Access files?
8. Explain Advantages of Servlets?

**SECTION -B**

**II. Answer ALL the following Questions**

**5X10=50M**

9. Explain the Java features?

**(OR)**

10. Explain the java Program Structure?

11. Explain the different Data types in java?

**(OR)**

12. Explain the various types of Operators in java?

13. Define Thread? Explain the life cycle of a Thread in detail?

**(OR)**

14. Explain different Handling exceptions in java?

15. Explain the JDBC architecture?

**(OR)**

16. Explain the Applet life cycle in detail?

17. Explain the Networking classes in JDK?

**(OR)**

18. Explain Life Cycle of an Servlet?

\*\*\*\*\*



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

|                |                                            |           |                  |
|----------------|--------------------------------------------|-----------|------------------|
| Class          | : II BCA                                   | Max Marks | : 60             |
| Subject        | : Computer Science                         | Pass Mark | : 24             |
| Title of Paper | : Object Oriented Programming Through Java | Duration  | : 3 Hrs          |
| Paper Code     | : R20BCA302A                               | Time      | : 9 am - 12 noon |
| W.E.F          | : 2023-24                                  | Date      | : 18-12-2023     |

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain about Java Development Kit?
2. What is the difference between OOP and procedure oriented programming?
3. Explain about Strings functions in Java?
4. Explain the procedure for user defined packages in Java?
5. Explain about thread priorities?
6. Explain Unchecked and Checked exceptions?
7. Explain Random Access files?
8. What is Servlet and how to run servlets?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain about different OOPs concepts in Java?

**(OR)**

10. Explain the structure of Java?

11. Explain about different Data types in Java?

**(OR)**

12. Explain about Decision Making and Looping statements in Java?

13. Explain different ways of handling Exceptions in Java?

**(OR)**

14. Define Thread and explain the life cycle of thread with an example?

15. Explain HTML Applet Tag?

**(OR)**

16. Explain JDBC Architecture?

17. Explain Networking Classes in JDK?

**(OR)**

18. Explain the life cycle of a Servlet?



Room No: \_\_\_\_\_

Regd No: 35

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

|                |                    |           |                 |
|----------------|--------------------|-----------|-----------------|
| Class          | : II B.Voc (WT)    | Max Marks | : 60            |
| Subject        | : Computer Science | Pass Mark | : 24            |
| Title of Paper | : E-Commerce       | Duration  | : 3 Hrs         |
| Paper Code     | : R20WSEC302A      | Time      | : 9am - 12 noon |
| W.E.F          | : 2023-24          | Date      | : 18-12-2023    |

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Define E-Commerce? Write its Advantages and Disadvantages?
2. Explain transmission of EDI messages through the internet?
3. Define EDI? What are the components of EDI?
4. Write about functions of SCM?
5. Write about Work-Flow Automation and Customization?
6. Write about the Concept of Digital Library?
7. Write about the limitations of online Marketing?
8. Write about risks associated with Electronic Payment system?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain about E-Commerce organization applications?

**(OR)**

10. Explain in detail about E-Commerce Framework?

11. Explain in detail about Value added networks?

**(OR)**

12. Write about EDI Implementation and applications of EDI?

13. Define SCM? Explain about Supply Chain Management Fundamentals?

**(OR)**

14. Explain about New forms of Organizational Structure?

15. Explain in detail about various types of digital documents?

**(OR)**

16. Explain different online advertising paradigms?

17. Explain in detail about Electronic Fund Transfer?

**(OR)**

18. Write about E-Cash, Smart Cards, Credit Cards? Explain legal and security issues?



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (DS)  
Subject : Computer Science  
Title of Paper : Data Mining And Data Analysis  
Paper Code : R20DSDD301A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9.00 Am - 12.00 Pm  
Date : 16.12.2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. What is Knowledge representation in Data Mining.
2. What is Data Cleaning?
3. Explain Feature selection.
4. Describe Random Sampling.
5. What is boot Strap?
6. What is Associative Classification?
7. Explain about Density based method.
8. What is outlier analysis?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain the stages of Data mining process.

**(OR)**

10. Explain about the architecture of data mining.

11. Explain about Data Pre processing

**(OR)**

12. Explain about Association rule mining.

13. Explain the working & building of a decision tree.

**(OR)**

14. Explain how to evaluate the performance of a classifier.

15. Explain in detail about classification by back propagation.

**(OR)**

16. Explain support vector machines.

17. Explain in detail about clustering methods.

**(OR)**

18. Explain in detail about K-means.



Regd No: \_\_\_\_\_

Room No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II B.Sc. (DS)  
Subject : Computers  
Title of Paper : Data mining & Data Analysis  
Paper Code : R20DSDD301/DSDD301  
W.E.F : 2019-20

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 9:00 AM - 12:00  
Date : 16.12.2023

**SECTION - A**

**I. Answer any FIVE Of the following questions.**

**5X5=25M**

1. What is data mining?
2. Explain the advantages and disadvantages of data mining.
3. Explain data cleaning.
4. Explain dimensionality reduction.
5. What is a boot strap?
6. Describe lazy learning.
7. What is grid based methods.
8. Write an algorithm for decision tree.

**SECTION -B**

**II. Answer ALL the following Questions**

**5X10=50M**

9. Explain the stages of data mining process.  
(OR)
10. Explain about KDD process with a neat diagram.
11. Explain integration of Data mining system with a Data ware house.  
(OR)
12. Explain about associate rule mining.
13. Explain the working and building of a decision tree.  
(OR)
14. Explain how to evaluate the performance of a classifier.
15. Explain Bayesian classification.  
(OR)
16. Explain classification by Back propagation.
17. Explain categorization of Major clustering methods.  
(OR)
18. Explain model based methods and outlier analysis.



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (MPC, CBZ)  
Subject : Computer Science  
Title of Paper : C Language  
Paper Code : CBCL301  
W.E.F : 2020-21

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Time : 09:00 to 12:00  
Date : 15/12/2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X5=25M**

1. Explain about variables?
2. Define Programming? Explain types of programming Languages?
3. Explain I/O Functions?
4. Explain break and continue statements in C?
5. Explain while loop with an example?
6. Define array? Write a program to read and print 'n' numbers?
7. Write a program for Factorial of given number using Recursion?
8. Describe three categories of function prototype?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X10=50M**

9. Explain different Data Types in C with examples?

**(OR)**

10. Explain the structure of C?

11. What is operator? Explain different types of operators in C??

**(OR)**

12. Explain conditional control structure in C?

13. Explain Decision making statements in C?

**(OR)**

14. Explain looping statements in C with an example?

15. Explain about different string functions ?

**(OR)**

16. Give a brief account on Arrays?

17. What is function? What are the different types of function?

**(OR)**

18. How can we pass array variable as argument to function?



Roll No : \_\_\_\_\_

Regd No: 39

### III SEMESTER END EXAMINATION

Class : II B.Sc(MPC/MPCS)

Max Marks : 75

Subject : Physics

Pass Marks : 30

Title of Paper : Wave Optics

Duration : 3 Hrs

Subject Code : CBPHY 301

Date : 9am - 12 noon

W.E.F : 2016-2017

Time : 18-12-2023

#### PART-A

I Answer the following questions

5 × 10 = 50 M

Each question carries 10 Marks

(1) Explain Spherical aberration. Deduce the condition for minimum spherical aberration in a combination of two lenses separated by a certain distance.

Or

2 What is Chromatic aberration and Achromatism? Derive the condition for achromatism when two lenses are separated by a distance.

3 Discuss change of Phase on reflection. Derive expression for oblique incidence of a plane wave on a thin film due to reflected light.

Or

4 Describe construction and working of Michelson interferometer and explain how wavelength of monochromatic light is determined.

5 Describe Fraunhofer diffraction. Derive expression for intensity of normal incident light at a double slit and discuss its intensity distribution.

Or

6 Explain the construction and working of a Zone plate. Derive expression for its focal length.

7 Describe the construction and working of Nicol prism with necessary neat diagram. Explain how it can be used as polariser and analyser.

Or

8 What is Optical activity? Describe how specific rotation of optically active substance is determined using Laurent's half shade polarimeter with neat diagram.

9 Explain the principle of Holography. Describe the recording of a hologram and reconstruction of image from a hologram.

Or

10 What is an optical fibre? Describe the different types of optical fibres with necessary diagrams.

(P.T.O)



PART-B

II Answer any **THREE** of the following questions

$3 \times 5 \text{ M} = 15 \text{ M}$

Each question carries 5 Marks

- 11) Write a short note on Coma with neat diagram.
- 12) Explain coherence.
- 13) Compare a zone plate with a convex lens.
- 14) Distinguish between Quarter wave plate and Half wave plate.
- 15) Mention any five applications of LASER.

PART-C

III Answer any **TWO** of the following questions

$2 \times 5 \text{ M} = 10 \text{ M}$

Each question carries 5 Marks

- 16) Calculate the focal length of a lens of dispersive power 0.031 which should be placed in contact with a convex lens of focal length 84 cm and dispersive power 0.021 to make the combination achromatic.
- 17) In Newton's ring experiment the diameter of the 10<sup>th</sup> ring is 0.433 cm. Find the wavelength of the incident light if the radius of curvature is 70 cm.
- 18) A grating has surface ruled with 90000 lines/cm. What is the resolving power of grating in the first order.
- 19) A ray of light is incident on the surface of a glass plate of refractive index 1.55 at the polarising angle. Calculate the angle of refraction.
- 20) A sugar solution of specific rotation  $52^\circ$  per decimeter per gram per c.c. causes a rotation of  $12^\circ$  in a column of 10 cm long. What is the concentration of the solution?

\*\*\*\*\*



Room No: \_\_\_\_\_

Regd No. (41)

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (MECS)

Max Marks : 60

Subject : Electronics

Pass Mark : 24

Title of Paper : Analog Circuits and Communication

Duration : 3Hrs

Paper Code : R20ELE301A

Time : 9 am - 12 noon

W.E.F : 2022-23

Date : 18-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain the working of Op-Amp Subtractor.
2. Explain the working of Op-Amp Logarithmic Amplifier.
3. Explain the working of Schmitt's trigger?
4. Explain the working of Triangular wave generator?
5. Explain the need for modulation.
6. Explain the side band frequencies of AM wave.
7. Explain the side band frequencies of FM wave.
8. Explain Radio Broadcasting and Reception.

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Draw and explain the block diagram of Operational Amplifier?

**(OR)**

10. Explain the working of Op-Amp Integrator and Differentiator.
11. Draw and explain the functional block diagram of IC 555 Timer?

**(OR)**

12. What is Active filter? Explain the Low, high and band pass filters?
13. What is Amplitude modulation? Discuss the frequency spectrum of AM wave.

**(OR)**

14. What is Detection? Describe the working of a diode detector for AM waves.
15. Draw and explain how FM waves can be detected using PLL method?

**(OR)**

16. Explain the generation of FM modulation by using varactor diode.
17. Draw the block diagram of FM Transmitter and explain each block.

**(OR)**

18. Draw the block diagram of FM Superheterodyne receiver and explain each block.



|                                                       |                       |
|-------------------------------------------------------|-----------------------|
| Room No: _____                                        | Regd No: <u>42</u>    |
| <b>KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)</b> |                       |
| <b>III – SEMESTER END EXAMINATIONS</b>                |                       |
| Class : II B.Sc (MPC & MPCS)                          | Max Marks : 60        |
| Subject : Physics                                     | Pass Mark : 24        |
| Title of Paper : Heat And Thermodynamics              | Duration : 3 Hrs      |
| Paper Code : R20PHY301A                               | Time : 9 am - 12 noon |
| W.E.F : 2023-24                                       | Date : 18-12-2023     |

### SECTION-A

#### **I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain the transport phenomena.
2. State and explain Carnot's theorem.
3. Show that the entropy increases in an irreversible process.
4. Derive expression for ratio of  $C_p$  to  $C_v$
5. Explain the principle and working of refrigerator.
6. Define solar constant. Give its significance.
7. A reversible engine works between two temperatures whose difference is  $100^\circ\text{C}$ . If it Absorbs 746 J of heat from the source and gives 546 J of heat to the sink, then calculate the temperatures of source and sink.
8. Calculate the temperature of the sun from the following data  $S=1.34\text{KW/m}^2$ , radius of the Sun= $7.92\times 10^5\text{km}$ . Distance of the sun from the earth= $1.5\times 10^8\text{km}$  and Stefan's constant is  $5.7\times 10^{-8}\text{W/m}^2/\text{K}^4$ ?

### SECTION-B

#### **II. Answer any FIVE of the following Questions**

**5X8=40M**

9. Deduce Maxwell's law of distribution of molecular speeds of a gas on the basis of Kinetic theory of gases
- (OR)**
10. On the basis of kinetic theory of gases, derive an expression for Viscosity of gas and discuss the conclusion.
- (OR)**
11. State and prove carnot's theorem.
- (OR)**
12. What is T-S diagram? How efficiency can be determine from it. Mention its uses.
13. What are thermodynamic potentials? Derive Maxwell's thermodynamic relations from thermodynamic potentials.
- (OR)**
14. What is Joule-Kelvin effect? Explain the Joule-Kelvin effect from Maxwell's Thermodynamic relations.
- (OR)**
15. What is Joule-Thomson effect? Obtain the expression for cooling produced when gas suffers Joule-Thomson effect.
- (OR)**
16. Explain adiabatic demagnetization method for producing very low temperatures with necessary theory.
17. What is Pyrometer? Describe the construction and working of disappearing filament Optical Pyrometer
- (OR)**
18. What is solar constant? Determine the temperature of the Sun.



Regd No: \_\_\_\_\_

Room No: 43

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II B.Sc. (MPC, MPCS)  
Subject : Physics  
Title of Paper: Heat and Thermodynamics  
Paper Code : R20PHY301  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 09:00 to 12:00  
Date : 18/12/2023

**SECTION - A**

**I. Answer ALL the following Questions**

**5X10=50M**

1. (a) Derive an expression for Maxwell's Law of molecular speeds in a gas.  
(OR)  
(b) Derive an expression for the coefficient of viscosity of a gas on the basis of kinetic theory of gases.
2. (a) Explain the working of Carnot's engine and derive an expression for its efficiency.  
(OR)  
(b) Explain the second law of thermodynamics. State and prove Carnot's theorem.
3. (a) What are thermodynamic potentials? Derive Maxwell's thermodynamic relations from thermodynamic potentials.  
(OR)  
(b) Explain specific heats  $C_p$  and  $C_v$  of a gas. Derive an expression for ratio of  $C_p$  to  $C_v$ .
4. (a) Explain adiabatic demagnetization method with necessary theory for producing low temperatures.  
(OR)  
(b) What is Joule Kelvin effect? Describe Porous plug experiment and give the results.
5. (a) State Plank's hypothesis. Derive Plank's law of black body radiation.  
(OR)  
(b) Define solar constant. Describe how the solar constant is determined by using Angstrom's Pyrheliometer.

**SECTION - B**

**II. Answer any THREE Of the following questions.**

**3X5=15M**

6. Explain the transport phenomena on the basis of kinetic theory of gases.
7. Show that the change in entropy in a reversible cycle is zero.
8. Derive Clausius-Clayperon's equation.
9. Explain the principle and working of refrigerator.
10. State and explain Stefan's-Boltzmann law.

**(P.T.O)**



### SECTION - C

III. Answer any TWO Of the following questions.

2X5=10M

11. The r.m.s. speed of hydrogen molecule is 1.84 km/sec. What will be the r.m.s. speed of oxygen molecule at the same temperature.
12. Calculate the efficiency of a reversible heat engine working between the temperatures  $200^{\circ}\text{C}$  and  $120^{\circ}\text{C}$ .
13. Calculate the change in entropy when 1kg of ice at  $0^{\circ}\text{C}$  is converted into water at the same temperature.  $L$  of ice =  $0.336 \times 10^6 \text{ J/kg}$ .
14. In an atomic explosion, the maximum temperature produced was of the order of  $10^7 \text{ K}$ . Calculate the wavelength of maximum energy. Wien's constant is  $0.292 \text{ cm K}$ .

\*\*\*\*\*



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III - SEMESTER END EXAMINATIONS**

|                |                                      |           |                  |
|----------------|--------------------------------------|-----------|------------------|
| Class          | : II B.Sc (MPC, MCCS,CBZ)            | Max Marks | : 60             |
| Subject        | : Chemistry                          | Pass Mark | : 24             |
| Title of Paper | : Organic Chemistry And Spectroscopy | Duration  | : 3 Hrs          |
| Paper Code     | : R20CHE301A                         | Time      | : 9 am - 12 noon |
| W.E.F          | : 2023-24                            | Date      | : 20-12-2023     |

**SECTION-A****I. Answer any FIVE of the following Questions****5X4=20M**

1. Explain the differentiation of 1°, 2° and 3° alcohols by Victor-Meyer's test.
2. Write a short note on the preparation of phenols.
3. Write a note on Clemmensen and Wolf-Kishner reductions.
4. Write one preparation and one synthetic application of diethyl malonate.
5. Explain Arndt-Eistert synthesis.
6. Define Chromophore and Auxochrome with an example.
7. Describe Equivalent and Non-equivalent protons with examples.
8. Write a short note on Finger print region.

**SECTION-B****II. Answer ALL the following Questions****5X8=40M**

9. Explain the mechanism and stereo chemistry of SN<sup>1</sup> and SN<sup>2</sup> reactions in alkyl halides.

**(OR)**

10. Explain the following reactions with mechanism

i) Pinacol – Pinacolone rearrangement      ii) Riemer – Tiemann reaction

11. Explain the following reactions with mechanism

i) Aldol condensation      ii) Perkin reaction

**(OR)**

12. Write the preparation and any two synthetic applications of ethyl acetoacetate.

13. Explain the following reactions

i) Huns-Diecker reaction      ii) Hell-Volhard-Zelinsky reaction.

**(OR)**

14. Write one preparation and any two reactions of esters and amides.

15. Explain various types of electronic transitions in electronic spectroscopy.

**(OR)**

16. Explain the following

i) Chemical Shift      ii) Spin-Spin coupling

17. Write Woodward-Fieser rules for calculating  $\lambda_{\max}$  of conjugated Dienes and  $\alpha,\beta$ -unsaturated compounds.

**(OR)**

18. Give the I.R interpretation for alcohols, aldehydes, ketones and carboxylic acids.



Room No: \_\_\_\_\_

Regd No: 46

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (MPC, MCCS, CBZ)

Max Marks : 75

Subject : Chemistry

Pass Mark : 30

Title of Paper : Organic Chemistry And Spectroscopy

Duration : 3 Hrs

Paper Code : R20CHE301

Time : 9 am - 12 noon

W.E.F : 2020-21

Date : 20-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X5=25M**

1. Explain the Mechanism for Pinacol - Pinacolone Rearrangement.
2. Explain any two Methods for the Preparation of Alcohol.
3. Write the Mechanism of Claisen Ester Condensation.
4. Write the Reaction and Mechanism of perkin Reaction
5. Explain the effect of Substituent on acidic strength of Mono - Carboxylic acid.
6. Explain Beer - Lambert's Law.
7. Explain the NMR Splitting in acetaldehyde.
8. Write a Short Note on Finger print Region.

**SECTION-B**

**II. Answer ALL the following Questions**

**5X10=50M**

9. Give the mechanism & Stereo chemistry of  $SN^1$  &  $SN^2$  Reactions of Alkyl Halides.  
(OR)
10. Differentiate  $1^\circ$ ,  $2^\circ$ ,  $3^\circ$  - Alcohols by using the following tests.  
(a) Lucas Test. (b) Victor Mayer Test.
11. Discuss the Reaction and Mechanism of following the Reactions  
(a) Aldol Condensation. (b) Benzoin Condensation.  
(OR)
12. Write the Preparation and any two Synthetic Application of Diethyl Malonate
13. Discuss the Following Reactions in detail  
(a) Hunsdiecker Reaction. (b) HVZ Reaction.  
(OR)
14. Describe any two Properties of amides and esters.
15. Discuss Different types of electronic transitions in molecules.  
(OR)
16. Discuss the NMR Splitting in the following compounds  
(a) Toluene (b) Acetophenone.
17. Write Woodward - Fieser rules for Calculating  $\lambda_{max}$  for Conjugated dienes and apply them for one Example.  
(OR)
18. Discuss different types of Molecular Vibrations.



Regd No: \_\_\_\_\_

Room No: 47

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

|                |                       |            |              |
|----------------|-----------------------|------------|--------------|
| Class          | : II B.Sc.            | Max Marks  | : 50         |
| Subject        | : Chemistry           | Pass Mark  | : 20         |
| Title of Paper | : Environmental Audit | Duration   | : 2 Hrs      |
| Paper Code     | : R20SDC301C          | Paper Time | : 9am - 11am |
| W.E.F          | : 2021-22             | Date       | : 13.12.2023 |

**SECTION - A**

**I. Answer any FOUR Of the following questions.**

**4X5=20M**

1. Write any three global environmental problems?
2. Write a short note on water pollution and its impact?
3. What is BOD and explain its significance in determining the quality of water?
4. What are the objectives of the environmental acts and Environmental laws?
5. What are the institutional arrangements?
6. Write a note on Environmental act, 1986.
7. What are objectives of Environmental Audit?
8. What is GOI notification on Environmental audit.

**SECTION -B**

**II. Answer any THREE Of the following Questions**

**3X10=30M**

9. What is Air pollution and explain in detail about the Air pollutants.
10. What is Soil pollution and explain in detail about the soil pollutants.
11. Write an essay on the Water (prevention and control of pollution) Cess Act 1977, amended in 1991.
12. Write an essay on Air (prevention and control of pollution) act 1981 amended in 1987.
13. What is environmental audit and explain the various stages involved in it and the benefits of environmental audit to the industry.

\*\*\*\*\*



Room No: \_\_\_\_\_

Regd No: 48

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Com (Gen,TP, Comp, Log) BBA & BCA  
Subject : Commerce  
Title of Paper : Retailing  
Paper Code : R20SDC302B  
W.E.F : 2021-22

Max Marks : 50  
Pass Mark : 20  
Duration : 2 Hrs  
Time : 9 am - 11 am  
Date : 13.12.2023

**SECTION-A**

**4X5=20M**

**I. Answer any FOUR Questions**

1. Role of retailing
2. Importance of retailing
3. Store location
4. Merchandise planning
5. Visual merchandising
6. Service to customer in retailing
7. Various duties of customer care
8. Objective of retailing

**SECTION-B**

**3X10=30M**

**II. Answer any THREE of the following Questions**

9. Explain the factors influencing the growth of retailing in India?
10. Briefly explain different types of retailing?
11. How different factors influencing selection of location?
12. Briefly explain different types of retail outlets?
13. Briefly explain visual merchandising activities?



Regd No: \_\_\_\_\_

Room No: 49

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II Degree (All Groups)  
Subject : Foundation Course  
Title of Paper : Environmental Education  
Paper Code : R20LSC304  
W.E.F : 2021-22

Max Marks : 50  
Pass Mark : 20  
Duration : 2 Hrs  
Paper Time : 9am - 11 am  
Date : 11.12.2023

**SECTION - A**

**I. Answer any FOUR Of the following questions.**

**4X5=20M**

1. Water Resources.
2. Forest Resources.
3. Non-Renewable Energy Resources.
4. Ozone Layer Depletion.
5. Soil Erosion.
6. Kyoto Protocol.
7. Afforestation.
8. Biological, Industrial and Solid Wastes in Urban area.

**SECTION -B**

**II. Answer any THREE Of the following Questions**

**3X10=30M**

9. Explain Nature, scope and importance of Environment Education.
10. What is Biodiversity? Explain levels of Biodiversity.
11. Explain about various types of pollutions.
12. What is Deforestation? Explain its causes and effects.
13. Explain about various laws for environmental protection.
14. Explain about Threats to Biodiversity.

\*\*\*\*\*



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (CBZ)  
Subject : Zoology  
Title of Paper : Cell Biology, Genetics, Molecular Biology and Evolution  
Paper Code : R20ZOO301A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 18-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Ribosomes
2. Haemophilia
3. Y-Linked inheritance
4. Mutations
5. Transcription
6. Pedigree analysis
7. Germ plasm theory
8. Genetic drift

**SECTION-B**

**II. Answer any FIVE of the following Questions**

**5X8=40M**

9. Explain the fluid mosaic of plasma membrane

**(OR)**

10. Write an essay on the structure and functions of Endoplasmic reticulum

11. Write an essay on Sex determination in animals

**(OR)**

12. Discuss X-linked recessive inheritance with suitable examples

13. Write an essay on chromosomal disorders

**(OR)**

14. Discuss the basic concept of genomics and a note on its applications

15. Write an essay on DNA replication

**(OR)**

16. Write an essay on LAC OPERON model of gene regulation

17. Explain the modern synthetic theory of evolution

**(OR)**

18. Write an essay on speciation



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

(31)

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Sc (CBZ)

Max Marks : 60

Subject : Botany

Pass Mark : 24

Title of Paper : Anatomy and Embryology of Angiosperms,

Plant Ecology & Biodiversity

Duration : 3 Hrs

Paper Code : R20BOT301A

Time : 9.00 Am - 12.00 Pm

W.E.F : 2023-24

Date : 16/12/2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Rose Wood
2. Types of Ovules
3. Ecological Pyramids
4. Growth Curves
5. Density
6. Value of Biodiversity
7. Mortality
8. Double Fertilization.

**SECTION-B**

**II. Answer any FIVE of the following Questions**

**5X8=40M**

9. Describe the anomalous Secondary growth in Boerhavia

**(OR)**

10. Explain the Organisation of Apical meristematic tissue in the shoot tip.

11. Give an account on megasporogenesis in angiosperms related to monosporic type of Embryosac

**(OR)**

12. Explain different types of Endosperms in Angiosperm Plant.

13. Describe the effect of light on Vegetation and growth of plants.

**(OR)**

14. Give a detailed account on components of Ecosystem.

15. What are the main factors influence the population ecology.

**(OR)**

16. Describe the components of Grassland Ecosystem.

17. Explain concept and scope of Biodiversity.

**(OR)**

18. Describe roles of NBPGR and NBA



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II BBA  
 Subject : Commerce  
 Title of Paper : Financial Management  
 Paper Code : R20BBA303  
 W.E.F : 2022-23

Max Marks : 75  
 Pass Mark : 30  
 Duration : 3 Hrs  
 Time : 9 am - 12 noon  
 Date : 19-12-2023

**SECTION-A****5X5=25M****I. Answer any FIVE of the following Questions**

1. Profit Maximization
2. Dividend decisions
3. What do you mean by return on investment
4. Capital budgeting process
5. Write about Working Capital
6. Benefits of Cash Management
7. Cost of Capital
8. Walter's dividend model

**SECTION-B****5X10=50M****II. Answer ALL the following Questions**

9. Define Finance ? Explain its nature and scope

**(OR)**

10. Discuss the role of Financial Manager in an Organization

11. What are the factors influencing Capital Expenditure decisions

**(OR)**

12. A firm whose cost of capital is 10% is considering two mutually exclusive projects X and Y, the cash flows of which are given as follows :

| Year | Project X<br>RS. | Project Y<br>RS. | P.v. Factor<br>At 10% |
|------|------------------|------------------|-----------------------|
| 0    | - 120000         | - 90000          | 1                     |
| 1    | 80000            | 60000            | .909                  |
| 2    | 80000            | 60000            | .826                  |

Suggest which project should be taken up using :

- (i) Net Present Value Method
- (ii) Profitability Index Method

13. Explain the factors influencing Working Capital Management

**(OR)**

14. Prepare an estimate of working capital requirement from the following information of a trading concern :



|                                                                 |
|-----------------------------------------------------------------|
| a) Projected annual sales 1,00,000 units                        |
| b) Selling price Rs.8 per unit                                  |
| c) % age of net profit on sales 25%                             |
| d) Average credit period allowed to customers 8 weeks           |
| e) Average credit period allowed by suppliers 4 weeks           |
| f) Average stock holding in terms of sales requirement 12 weeks |
| g) Allow 10% for contingencies                                  |

15. Explain the factors influencing Capital Structure

(OR)

16. The following figures relate to Arvind Ltd Company

| Particulars       | Rs.<br>(in Lakhs) |
|-------------------|-------------------|
| Sales             | 1000              |
| Variable Costs    | 300               |
| Contribution      | 700               |
| Fixed Costs       | 400               |
| EBIT              | 300               |
| Interest          | 100               |
| Profit Before Tax | 200               |

You are required to calculate the operating, financial and combined leverage.

17. Explain the determinants of dividend policy

(OR)

18. The earning per share of company are Rs.8 and the rate of capitalization applicable to The company is 10%. The company has before it an option of adopting a payout ratio of 25%. Using Water's formula of dividend payout, compute the market value of the company's share if the productivity of retained earnings is (a) 15% (b) 10% and (c) 5%



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II BBA  
 Subject : Commerce  
 Title of Paper : Financial Management  
 Paper Code : R20BBA303A  
 W.E.F : 2023-24

Max Marks : 60  
 Pass Mark : 24  
 Duration : 3 Hrs  
 Time : 9 am - 12 noon  
 Date : 19-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Explain about Business Finance?
2. What are the aims of Financial Management?
3. What is the nature of Capital Budgeting?
4. Write a short notes on Payback Period.?
5. What is Working Capital?
6. What is EOQ?
7. What is meaning of Preferential Shares?
8. What is Dividend Policy?

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain the functions of Financial Management?
- (OR)**
10. Explain various goals in Financial management.
- (OR)**
11. Explain various types of Capital Budgeting?
- (OR)**
12. Suresh confectionary ltd. Is contemplating the purchase of machinery. Two machines A and B are available in the market each costing to be as under.

| Cash inflows after tax |           |           |
|------------------------|-----------|-----------|
| Year                   | Machine A | Machine B |
| Cost of investment     | 5,00,000  | 5,00,000  |
| 1                      | 1,50,000  | 50,000    |
| 2                      | 2,00,000  | 1,50,000  |
| 3                      | 2,50,000  | 2,00,000  |
| 4                      | 1,50,000  | 3,00,000  |
| 5                      | 1,00,000  | 2,00,000  |

Indicate which machine will be more profitable investment using the NPV and IRR methods assuming 10% rate of discount.

13. Explain various factors determining Working Capital?

**(OR)**

14. Management of XYZ ltd seeks your assistance on assessing the working capital requirements for an activity level of 1, 00,000 units of output for the year 2023. The cost details of the product are as follows



| Particulars   | cost per unit Rs. |
|---------------|-------------------|
| Raw material  | 20                |
| Direct labour | 5                 |
| Overheads     | 15                |
| Total cost    | 40                |
| Profit        | 10                |
| Sales         | 50                |

The other details are

- In order to ensure smooth flow of production, two months raw material inventory is to be held in the stores.
- Finished goods remain in stores for one month
- Credit allowed for purchase of raw material is one month
- Credit allowed to customers is two months
- Cash balance is maintained Rs.25, 000
- Assuming that product process is uninterrupted and even during the year.
- Lag in payment of overheads 1 month.

Compute the amount of working capital required for the given level of activity.

15. Explain the different theories in Capital Structure?

(OR)

16. Determine the Earning Per Share of a company which has operating profit of Rs. 4, 80,000. Its capital structure consists of the following securities.

| Securities             | Amount in Rs. |
|------------------------|---------------|
| 10 % Debentures        | 15, 00,000    |
| 12% Preference Shares  | 3, 00,000     |
| Equity Shares @ Rs.100 | 12, 00,000    |

The company is in the 55% tax bracket.

17. Explain Walter's model of Dividend?

(OR)

18. Give the following information about ABC limited, show the effect of the dividend policy on the share market price of its shares, using the Walter's model:

Equity Capitalisation rate ( $k_e$ ) = 12%

Earnings Per Share (E) = Rs.8

Assumed Returns on Investment @ are as follows 1)  $R=15\%$  2)  $R = 10\%$

Show the effect of the different dividend policies on the share value of the firm, when Dividend pay-out ratio is (a).25% (b) 50% (c)75% and (d) 100%.



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

Class : II B.Com (TP)  
Subject : Commerce  
Title of Paper : Indian Banking System  
Paper Code : R20COMT303A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 19-12-2023

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Define Banking?
2. Credit Creation.
3. What is REPO Rate?
4. Write a short notes on Open Market Operations(OMOs)?
5. Indigenous Banks.
6. Define Customer?
7. KYC Norms.
8. What is meant by Offshore Banking?

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

9. Explain various types of Banks?

**(OR)**

10. Explain the function of Commercial Banks ?

11. Explain RBI and its Organizational Structure?

**(OR)**

12. Explain the Credit control measures of RBI?

13. What are the advantages and disadvantages of Internet Banking?

**(OR)**

14. Explain the terms ATM, RTGS, NEFT and Debit Cards?

15. Define NABARD and Explain Its Functions?

**(OR)**

16. Define SIDBI and Explain Its Functions?

17. Duties and responsibilities of Collecting Banker?

**(OR)**

18. Special relationship between Banker and Customer ?



Room No: \_\_\_\_\_

Regd No: 57

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III – SEMESTER END EXAMINATIONS**

Class : II B.Com (Gen)  
Subject : Commerce  
Title of Paper : Marketing  
Paper Code : R20COMG303A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 19-12-2023

**SECTION-A**

**I. Answer any FOUR of the following Questions**

**5X4=20M**

1. What is Marketing Mix?
2. Define the term Marketing?
3. Buying Behavior Models?
4. What is Market Segment?
5. Product Life Cycle?
6. Determination Of Price?
7. Skimming and penetrating?
8. Sales promotion?

**SECTION-B**

**II. Answer the following Questions**

**5X8=40M**

9. Explain the Marketing Environment?

**(OR)**

10. What is Marketing Mix? It is practice or reactive in nature.

11. What are the advantages of Segmentation?

**(OR)**

12. Explain various types of Market Segmentation?

13. Explain the Product Mix and Product Line Decisions?

**(OR)**

14. Explain the terms Design, Branding, Packing and Labeling?

15. Explain different types of Price Strategies?

**(OR)**

16. What are the factors influencing Price?

17. What are advantages and disadvantages of Publicity?

**(OR)**

18. Explain the terms Personal Selling and Direct Marketing?



## III - SEMESTER END EXAMINATIONS

Class : II B.Com (Log)  
Subject : Commerce  
Title of Paper : Material Management  
Paper Code : R20COML303A  
W.E.F : 2023-24

Max Marks : 60  
Pass Mark : 24  
Duration : 3 Hrs  
Time : 9 am - 12 noon  
Date : 19-12-2023

**SECTION-A****I. Answer any FIVE of the following Questions****5X4=20M**

1. What is Material Management?
2. Supply Chain Management ?
3. Explain the objectives of Material Planning?
4. Write about G O L F?
5. What is Material Handling?
6. Explain about Direct Material & Indirect Material?
7. What is Material Codification?
8. Write about Kodak System?

**SECTION-B****II. Answer ALL the following Questions****5X8=40M**

9. Explain the Functions of Material Management?

**(OR)**

10. Distinguish between Material Management & Supply chain management?

11. Explain the importance of Material Control?

**(OR)**

12. What is Material Planning? Explain the techniques of Material Planning?

13. Write about Types of material Handling Equipment?

**(OR)**

14. Explain the classification of materials Handling Equipment?

15. Explain Types of Material Classification?

**(OR)**

16. What is the need for classification of Materials?

17. Explain the Process of Codification?

**(OR)**

18. Explain the system of codification?



Room No: \_\_\_\_\_

Regd No: \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III – SEMESTER END EXAMINATIONS**

Class : II BBA  
Subject : Commerce  
Title of Paper : Human Resource Management  
Paper Code : R20BBA302  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Time : 9 a.m – 12 noon  
Date : 18-12-2023

**SECTION-A**

**I. Answer any FIVE Questions**

**5X5=25M**

1. State the benefits of Training.
2. Scope of HRM
3. Define HRM.
4. Role of Induction Programmes
5. Process of HRM
6. What is Job Specification?
7. What is Career Planning and Development?
8. Role of Culture in International Management.

**SECTION-B**

**II. Answer ALL the following Questions**

**5X10=50M**

9. ) Explain Differences between Personal Management Vs HRM.

**[OR]**

10. Define HRM, Explain it's Objectives & Importance.

11. a) Explain the Process of Job Analysis.

**[OR]**

12. b) Explain Recruitment and Selection Process.

13. c) Explain various Training Methods.

**[OR]**

14. d) Explain Various Techniques involved in Career Planning and Development.

15. a) Explain Importance and Concepts of Performance Appraisal.

**[OR]**

16. e) Explain Objectives and Basic Components of Compensation.

17. a) Define International HRM? Explain the role of Culture in International HRM.

**[OR]**

18. b) Explain the Concept of Quality of Work life.



14. Calculate Standard Deviation and Co-efficient of Variation.

| Age in Years | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 | 60 - 70 | 70 - 80 | 80 - 90 |
|--------------|---------|---------|---------|---------|---------|---------|---------|
| F            | 3       | 61      | 132     | 153     | 140     | 51      | 2       |

15. Explain various measures of Skewness.

(OR)

16. Calculate Karl Pearson Co-efficient of Skewness.

| Wages | 0 - 10 | 10 - 20 | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 | 60 - 70 | 70 - 80 |
|-------|--------|---------|---------|---------|---------|---------|---------|---------|
| F     | 5      | 9       | 8       | 12      | 10      | 4       | 3       | 2       |

17. Write about various measures of Correlation.

(OR)

18. From the following data compute Karl Pearson's Co-efficient of Correlation.

|   |    |    |    |    |    |
|---|----|----|----|----|----|
| X | 48 | 35 | 17 | 23 | 47 |
| Y | 45 | 20 | 40 | 25 | 45 |



Regd No: \_\_\_\_\_

Room No: 60

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II B.Com (GEN, TP, COMP, & LOG)  
Subject : Commerce  
Title of Paper : Business Statistics  
Paper Code : R20COM302  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 9am - 12noon  
Date : 18-12-2023

**SECTION - A**

**5X5=25M**

**I. Answer any FIVE Of the following questions.**

1. Explain the meaning and definition of Statistics.
2. Explain the Importance of Statistics.
3. What is Arithmetic Mean in Statistics?
4. What is Geometric Mean in Statistics?
5. What do you mean by Range?
6. Explain different types of Skewness?
7. What is Kurtosis?
8. Explain various Types of Correlation.

**SECTION - B**

**5X10=50M**

**II. Answer ALL the following Questions**

9. What are the Advantages and Limitations of Statistics.

**(OR)**

10. Prepare a Histogram from the following data.

| Wages in Rs. | 10 - 20 | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 | 60 - 70 | 70 - 80 |
|--------------|---------|---------|---------|---------|---------|---------|---------|
| F            | 60      | 140     | 110     | 150     | 120     | 100     | 90      |

11. Explain the qualities of a good average.

**(OR)**

12. Calculate mean for Wages.

| Wages in Rs. | 0 - 10 | 10 - 20 | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 | 60 - 70 | 70 - 80 |
|--------------|--------|---------|---------|---------|---------|---------|---------|---------|
| F            | 5      | 10      | 20      | 40      | 30      | 20      | 10      | 4       |

13. Write about Various Measures of dispersion.

**(OR)**

**(PTO)**



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III - SEMESTER END EXAMINATIONS**

Class : II B.Com (Gen, Tp, Log, Comp)

Max Marks : 60

Subject : Commerce

Pass Mark : 24

Title of Paper : Business Statistics

Duration : 3 Hrs

Paper Code : R20COM302A

Time : 09:00 to 12:00

W.E.F : 2022-23

Date : 18/12/2023

**SECTION-A****I. Answer any FIVE of the following Questions****5X4=20M**

1. Write the features of the business statistics
2. What are the features of a good Questionnaire
3. What are the advantages of Central Tendency
4. Explain about Geometric Mean
5. Discuss the concept Dispersion
6. Probable error - Discuss
7. Explain the importance of Correlation
8. Explain types of Skewness

**SECTION-B****II. Answer ALL the following Questions****5X8=40M**

9. What are the advantages and disadvantages of Statistics ?

**(OR)**

10. From the following data draw simple bar diagram

| Item        | Food | Cloth | Rent | Education | Entertainment | medicine |
|-------------|------|-------|------|-----------|---------------|----------|
| Expenditure | 40   | 20    | 10   | 10        | 15            | 5        |

11. What are the essentials of a good average?

**(OR)**

12. From the following data calculate Arithmetic Mean

| C. I      | Less than 10 | Less than 20 | Less than 30 | Less than 40 | Less than 50 | Less than 60 | Less than 70 |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Frequency | 7            | 18           | 35           | 56           | 70           | 76           | 80           |

13. Write about uses of Dispersion.

**(OR)**

14. Compute Standard Deviation from the following data?

| C.I | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
|-----|------|-------|-------|-------|-------|-------|-------|
| F   | 1    | 4     | 17    | 45    | 26    | 5     | 2     |

15. Explain various measures of Kurtosis.

**(OR)**

16. From the following data Calculate Skewness by using Bowley formula.

| Mid values | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|------------|----|----|----|----|----|----|----|----|----|-----|
| frequency  | 2  | 9  | 11 | 14 | 20 | 24 | 20 | 16 | 5  | 2   |

17. Discuss about Correlation.

**(OR)**

18. Calculate the Spearman's Rank Correlation coefficient for the following data.

| X | 20 | 25 | 33 | 17 | 38 | 60 | 30 | 70 |
|---|----|----|----|----|----|----|----|----|
| Y | 35 | 36 | 45 | 38 | 20 | 10 | 30 | 50 |



| 2015 March | Particulars                             | Rs.    |
|------------|-----------------------------------------|--------|
| 1          | Ramu Started Business with              | 60,000 |
| 2          | Paid into Bank                          | 20,000 |
| 4          | Bought goods for cash                   | 10,000 |
| 12         | Sold goods for cash                     | 20,000 |
| 17         | Purchased Furniture from Vijay          | 5,000  |
| 18         | Sold goods to Ganesh                    | 10,000 |
| 19         | Withdraw from the Bank for personal use | 5,000  |
| 20         | Purchase goods from Ramu                | 5,000  |
| 25         | Interest received                       | 200    |
| 30         | Salaries Paid                           | 1,000  |

11. Following is the Trial Balance of Shukla as on 31-12-2016

| Particulars           | Dr<br>Rs.       | Cr<br>Rs.       |
|-----------------------|-----------------|-----------------|
| Capital and Drawings  | 10,000          | 90,000          |
| Purchase and sales    | 21,900          | 51,800          |
| Returns               | 800             | 500             |
| Debtors and Creditors | 16,100          | 30,000          |
| Discount              | 1,000           | 2,200           |
| Opening Stock         | 12,000          |                 |
| Wages                 | 1,840           |                 |
| Furniture             | 2,560           |                 |
| Motor Car             | 24,000          |                 |
| Buildings             | 60,000          |                 |
| Rent & Rates          | 900             |                 |
| Advertisements        | 1,300           |                 |
| Salaries              | 8,200           |                 |
| Insurance             | 3,400           |                 |
| Interest              |                 | 1,500           |
| Cash                  | 12,000          |                 |
|                       | <b>1,76,000</b> | <b>1,76,000</b> |

**Adjustments:-**

- Closing stock Rs. 25,000
- Outstanding wages Rs. 160
- Prepaid insurance Rs. 400

Prepare the trading and profit and loss account and balance sheet of Shukla.

**(OR)**

12. Give the proforma of Trading and profit and loss account and Balance sheet

13. From the following particulars, prepare three columns cash book of Hari Charan.

| 2008 November | Particulars                             | Rs.    |
|---------------|-----------------------------------------|--------|
| 1             | Cash Balance                            | 58,000 |
|               | Bank Balance                            | 30,000 |
| 5             | Cash Sales                              | 5,000  |
| 6             | Paid into bank                          | 25,000 |
| 8             | Cash received from Mohan                | 2,000  |
| 10            | Cash withdrawn from bank for office use | 2,000  |
| 18            | Bought machinery paid by cheque         | 10,000 |
| 21            | Received commission                     | 800    |
| 25            | Purchases paid through cheque           | 4,000  |
| 30            | Paid to Vardan by cheque                | 7,000  |

**[Continued to Next Page]**



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II BCA  
 Subject : Commerce  
 Title of Paper : Financial Accounting - I  
 Paper Code : CBAFM301  
 W.E.F : 2016-17

Max Marks : 75  
 Pass Mark : 30  
 Duration : 3 Hrs  
 Time : 09:00 to 12:00  
 Date : 18/12/2023

**SECTION-A**

**5X5=25M**

**I. Answer any FIVE of the following Questions**

1. Rules of Double Entry Book-keeping
2. Write about contra entry
3. Debit Note and Credit Note
4. Petty Cash Book
5. Prepare Trial Balance from the following

| Particulars | Rs.    |
|-------------|--------|
| Capital     | 30,000 |
| Drawings    | 4,500  |
| Purchases   | 39,000 |
| Sales       | 30,000 |
| Salaries    | 15,000 |
| Wages       | 1,500  |

6. Prepare Cash Ledger Account from the following transactions

| 2014 June | Particulars                    | Rs.    |
|-----------|--------------------------------|--------|
| 1         | Purchased goods for cash       | 11,000 |
| 2         | Goods sold for cash            | 32,000 |
| 3         | Paid wages                     | 8,000  |
| 4         | Sold goods to Ramana on credit | 9,000  |
| 5         | Received Commission            | 7,000  |

7. Rectification of errors
8. Journalise the following transactions

| 2015 March | Particulars                | Rs.      |
|------------|----------------------------|----------|
| 1          | Started Business with Cash | 1,98,000 |
| 1          | Paid into Bank             | 70,000   |
| 2          | Bought goods for cash      | 30,000   |
| 3          | Purchased Furniture        | 15,000   |
| 4          | Drew Cash from Bank        | 20,000   |

**SECTION-B**

**5X10=50M**

**II. Answer ALL the following Questions**

9. Define Accounting, write the Advantages of Accounting.

**(OR)**

10. Journalise the following Transactions



(OR)

63

14. Enter the following transactions in Suitable Subsidiary books.

| 2014 Oct | Particulars                    | Rs.    |
|----------|--------------------------------|--------|
| 1        | Purchased goods from Venkatesh | 17,000 |
| 3        | Sold goods to Sachin           | 33,000 |
| 4        | Returned goods to Venkatesh    | 1,000  |
| 5        | Bought goods from Suresh       | 16,000 |
| 6        | Goods returned by Sachin       | 2,000  |
| 7        | Goods Sold to Mohan            | 27,000 |
| 8        | Returned goods to Suresh       | 1,000  |
| 9        | Mohan returned goods           | 1,000  |

15. Prepare a Bank Reconciliation Statement from the following

|    | Particulars                                               | Rs.    |
|----|-----------------------------------------------------------|--------|
| a) | Balance as per cash book                                  | 10,000 |
| b) | Cheques issued but not presented                          | 1,500  |
| c) | Cheques paid into the Bank but not collected              | 1,000  |
| d) | Interest credited in pass book only                       | 100    |
| e) | Cheques received entered in cash book but omitted to bank | 500    |
| f) | Bills collected and credited in pass book only            | 2,000  |
| g) | Commission charged and debited in pass book               | 150    |
| h) | Wrong debit in pass book                                  | 800    |

(OR)

16. Prepare Bank Reconciliation Statement from the following

|    | Particulars                                               | Rs.   |
|----|-----------------------------------------------------------|-------|
| a) | Overdraft as per pass book                                | 3,540 |
| b) | Cheques drawn but not presented                           | 2,800 |
| c) | Cheques paid into the Bank but not collected              | 3,900 |
| d) | Interest on overdraft as per pass book only               | 100   |
| e) | Insurance premium paid by the bank not enter in cash book | 400   |

17. Rectify the following errors

|    | Particulars                                                                    |
|----|--------------------------------------------------------------------------------|
| a) | Goods purchased from Mani for Rs. 300 passed through sales book.               |
| b) | Received a bill from Arun for Rs. 500 passed through bills payable book.       |
| c) | An item of Rs. 150 relating to prepaid rent has omitted to be brought forward. |
| d) | Rs. 500 paid to Hari were debited to Giri account.                             |
| e) | Sales day book was overcast by Rs. 200                                         |
| f) | Goods sold to Krishna for Rs. 430 has been credited as Rs. 340.                |
| g) | Salaries paid Rs. 890 posted to salaries account as Rs. 980.                   |

(OR)

18. Rectify the following errors

|    | Particulars                                                               |
|----|---------------------------------------------------------------------------|
| a) | Goods sold to Rama Rs. 1000 were not posted to his account.               |
| b) | Purchase book was overcast by Rs. 400.                                    |
| c) | Sales book was undercast by Rs. 53.                                       |
| d) | Purchase returns book was undercast by Rs. 16.                            |
| e) | Cash received from Govind Rs. 111 was posted to his account as Rs. 1,111. |
| f) | Payment of Rs. 140 rent debited to Landlord a/c.                          |
| g) | Cash paid to Raghu Rs. 770 was posted to his account as Rs. 170.          |



Room No: \_\_\_\_\_

Regd No: 64

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**

**III - SEMESTER END EXAMINATIONS**

|                |                             |           |                  |
|----------------|-----------------------------|-----------|------------------|
| Class          | : II BBA                    | Max Marks | : 60             |
| Subject        | : Commerce                  | Pass Mark | : 24             |
| Title of Paper | : Human Resource Management | Duration  | : 3 Hrs          |
| Paper Code     | : R20BBA302A                | Time      | : 9 am - 12 noon |
| W.E.F          | : 2022-23                   | Date      | : 18-12-2023     |

**SECTION-A**

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Importance of HRM
2. Job analysis
3. Promotion
4. Objectives of training
5. Benefits of training
6. Job evaluation
7. Process of performance appraisal
8. Quality of work life

**SECTION-B**

**II. Answer ALL the following Questions**

**5X8=40M**

9. Explain the duties and responsibilities of HR managers

**(OR)**

10. Explain the history and evolution of HRM
11. Define Recruitment? Explain the sources of recruitment

**(OR)**

12. Discuss in detail the various steps involved in selection process
13. Explain the process of executive development

**(OR)**

14. Discuss the objectives and process of career planning
15. Define compensation management? Explain its components

**(OR)**

16. Explain the various methods of performance appraisal
17. Discuss the difference between domestic HRM and international HRM

**(OR)**

18. Explain the objectives of international human resource management



Room No: \_\_\_\_\_

Regd No: (65) \_\_\_\_\_

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III - SEMESTER END EXAMINATIONS**

Class : II B. Com (Gen, TP, Comp, Log)  
 Subject : Commerce  
 Title of Paper : Advanced Accounting  
 Paper Code : R20COM301  
 W.E.F : 2019-20

Max Marks : 75  
 Pass Mark : 30  
 Duration : 3 Hrs  
 Time : 09:00 to 12:00  
 Date : 16/12/2019

**SECTION-A****I. Answer any FIVE of the following Questions****5X5=25M**

1. Meaning of Non-Profit Organisation.
2. Statement of Affairs
3. Hire Purchase System
4. Essential features of Partnership.
5. What is meant by dissolution?
6. Entrance fees Vs Life membership.
7. Cash Price Vs Instalment price
8. Revaluation Account.

**SECTION-B****II. Answer ALL the following Questions****5X10=50M**

- 9) What is Receipt and Payment account? Distinguish between Receipt and Payment a/c and Income Expenditure a/c.

**(OR)**

- 10) From the following Trail Balance, Prepare an Income & Expenditure a/c of Delhi Club for the year ended 31<sup>st</sup> December 2019 and Balance Sheet as on that date after considering the following adjustments.

1. Depreciate Furniture by 10%, Billiards Table by 20% and Glass & Cutlery by 30%
2. of the Subscriptions Rs.400/- is received in advanced and Rs.250/- is arrears.
3. Rs.300/- is owing for salaries to staff.

**Trial Balance**

| Particulars           | Amount | Particulars                       | Amount |
|-----------------------|--------|-----------------------------------|--------|
| Furniture             | 2,500  | Membership Subscription           | 10,500 |
| Billiards Table       | 1,250  | Sundry Receipts from Billiards    | 1,743  |
| Glass & Cutlery       | 333    | Sale of Tickets for Entertainment | 3,234  |
| Repairs               | 734    | Sundry Creditors                  | 2,600  |
| Salaries and wages    | 2,262  | Entrance Fees                     | 448    |
| Rent and Telephone    | 3,194  | Capital Fund                      | 4,000  |
| Fuel and Light        | 1,618  |                                   |        |
| Cost of Entertainment | 2,190  |                                   |        |
| Sundry expenses       | 1,600  |                                   |        |
| Cost of Annual Dinner | 760    |                                   |        |
| Sundry Debtors        | 1,170  |                                   |        |
| Cash at Bank          | 4,800  |                                   |        |
| Cash in Hand          | 174    |                                   |        |

**(P.T.O)**



11) Explain the features and defects of Single Entry and Double Entry System.

(OR)

12) Anand a retail trader, had no proper methods of accounting, but the following information is made available to you:

| Particulars      | 1-1-2020 | 31-12-2020 |
|------------------|----------|------------|
| Furniture        | 3,000    | 3,000      |
| Motor Car        | 3,800    | 3,800      |
| Cash             | 500      | 2,400      |
| Stock            | 33,400   | 37,000     |
| Bank Overdraft   | 40,400   | 38,800     |
| Debtors          | 22,400   | 21,000     |
| Bills Receivable | 30,100   | 28,400     |
| Creditors        | 30,800   | 28,000     |

**Additional Information:**

1. During the year he withdrew Rs.5,200/- for personal use.
2. Depreciate furniture by 10%
3. Write off Rs.200/- from Motor Car.
4. Debtors include Rs.400/- irrecoverable and a further reserve of 2% is to be made.
5. A bills receivable of Rs.500/- is considered doubtful.

Prepare a statement showing profit or loss for the year ended 31-12-2020 and a Revised Statement of Affairs as on that date.

13) Briefly explain the salient features of an Instalment Purchase System.

(OR)

14) A Star Company purchased a machine on hire purchase system on 1-1-2018, the cash price of which was Rs. 54,600/-. The first instalment of Rs. 12,000/- was paid immediately on taking delivery and the balance by four equal instalments of Rs.12,000/- each to be paid on the last day of each year. The vendors charged 5% per annum interest on the unpaid balance and depreciation is to be charged at 10% on diminishing balance of asset. Draw up Hire vendors a/c and Machine a/c in the books of the buyer.

15) Enumerate the main points which usually require attention at the time of admission of a partner.

(OR)

16) Following is the Balance Sheet of Amar and Sunil who share profit and losses in the ration of 3/5 and 2/5:

| Liabilities               | Amount        | Assets            | Amount        |
|---------------------------|---------------|-------------------|---------------|
| Amar's Capital            | 10,000        | Buildings         | 8,000         |
| Sunil's Capital           | 8,000         | Plant & Machinery | 10,000        |
| Creditors                 | 12,000        | Stock             | 12,000        |
| General Reserve           | 16,000        | Debtors           | 11,000        |
| Workmen Compensation Fund | 4,000         | Cash              | 9,000         |
|                           | <b>50,000</b> |                   | <b>50,000</b> |

(Continue to Next Page)



They are agreed to admit Vimal on following terms:

1. The value of Buildings to be increased to Rs.18,000/-
2. The value of stock to be increased to Rs.16,000/-
3. There is a liability on workmen's compensation fund which was determined at Rs. 2,000/-
4. Vimal has to bring cash as his capital equal to 20% of the combined capital of Amar and Sunil after all adjustments.

Show the necessary ledger accounts in the books of the firm and new Balance Sheet after the admission of Vimal.

- 17) What do you mean by dissolution of a firm? Give the entries needed to close the books of the firm upon its dissolution.

(OR)

- 18) Following is the Balance Sheet of Vasu and Ramana as on 31<sup>st</sup> December, 2020, on which date they have decided to wind up their affairs:

| Liabilities      | Amount        | Assets          | Amount        |
|------------------|---------------|-----------------|---------------|
| Reserve          | 2,000         | Furniture       | 400           |
| Sundry Creditors | 3,800         | Stock           | 7,200         |
| Vasu's Capital   | 11,000        | Debtors         | 12,000        |
| Ramana's Capital | 8,000         | Machinery       | 1,800         |
|                  |               | Prof & Loss a/c | 3,400         |
|                  | <b>24,800</b> |                 | <b>24,800</b> |

The book debts were collected at a cost of 7 ½ %; Stock sold for Rs.6,000/-; Machinery for Rs1,400/-; furniture for Rs.500/-;

Open the necessary ledger a/c on the basis of the above Balance Sheet and show the final closing of the books.



|                                                       |                       |
|-------------------------------------------------------|-----------------------|
| Room No: _____                                        | Regd No: _____        |
| <b>KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)</b> |                       |
| <b>III – SEMESTER END EXAMINATIONS</b>                |                       |
| Class : II BBA                                        | Max Marks : 60        |
| Subject : Commerce                                    | Pass Mark : 24        |
| Title of Paper : Organisation Behaviour               | Duration : 3 Hrs      |
| Paper Code : R20BBA301A                               | Time : 09:00 to 12:00 |
| W.E.F : 2022-23                                       | Date : 16/12/2023     |

### SECTION-A

**I. Answer any FIVE of the following Questions**

**5X4=20M**

1. Organisation Behaviour
2. Values
3. Attitude
4. Work teams
5. Discipline
6. Conflict
7. Perception
8. Organisational change

### SECTION-B

**II. Answer ALL the following Questions**

**5X8=40M**

9. Briefly explain the challenges and opportunities of Organisational Behaviour?

**(OR)**

10. Describe the role of Manager in organisation behaviour?
11. Discuss the Herzberg's Two factor Theory of Motivation?

**(OR)**

12. Write in brief the concept of Personality?
13. Describe the process of Decision Making in detail?

**(OR)**

14. What is Learning? Explain various theories of Learning?
15. Discuss the theories of Leadership?

**(OR)**

16. Explain in detail about Johari Window Model?
17. Describe the various types of organisational Conflict in detail?

**(OR)**

18. What is Organisational Culture? Describe the features of organisational Culture?



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III – SEMESTER END EXAMINATIONS**

Class : II B.Com (Gen, TP, Comp & Log)  
 Subject : Commerce  
 Title of Paper : Advanced Accounting  
 Paper Code : CBAA301  
 W.E.F : 2019-20

Max Marks : 75  
 Pass Mark : 30  
 Duration : 3 Hrs  
 Time : 09:00 to 12:00  
 Date : 16/12/2023

**SECTION-A****I. Answer any FIVE of the following Questions****5X5=25M**

1. Explain about Single Entry System.
2. Write about Departmental accounts
3. Explain the features of Hire Purchase System
4. Write the objectives of Branch Accounting.
5. Explain the features of Instalment Purchase System.
6. Inter Departmental Transfer
7. Explain about Debtor system
8. Write any five differences between Single Entry and Double Entry

**SECTION-B****II. Answer ALL the following Questions****5X10=50M**

9. Krishna keeps his books on Single entry system. You are required to ascertain his Profit and Loss for the year ending 31.12.2020.

|                | <b>1-1-2020</b> | <b>31-12-2020</b> |
|----------------|-----------------|-------------------|
| Furniture      | 4,000           | 5,000             |
| Stock          | 2,800           | 4,000             |
| Debtors        | 4,200           | 4,500             |
| Bank Overdraft | 3,200           | 5,000             |
| Creditors      | 5,400           | 4,000             |

**(OR)**

10. Moha has not maintained proper books of accounts. He furnishes the following information before you. Prepare necessary statements for the year ending 31.03.2019 and find out the profit or loss.

|                   | <b>1-4-2018</b> | <b>31-03-2019</b> |
|-------------------|-----------------|-------------------|
| Cash at bank      | 5,000           | 6,000             |
| Bank Overdraft    | 45,000          | 40,000            |
| Stock             | 60,000          | 62,000            |
| Creditors         | 38,600          | 37,200            |
| Buildings         | 50,000          | 50,000            |
| Debtors           | 30,000          | 32,000            |
| Bills Receivables | 40,000          | 38,000            |
| Bills Payable     | 60,000          | 57,000            |
| Furniture         | 5,000           | 5,000             |

His drawings during the year Rs.750 per month. Depreciation on buildings at 5%, on furniture 10%, Reserve for doubtful debts at 5% on Sundry debtors.

**[P.T.O.]**



11. A motor company purchased two trucks on 1<sup>st</sup> Jan 2014. The cost price being Rs.56,000. The purchase is on Hire purchase basis Rs.15,000 being paid. On signing the agreement and there after Rs.15,000 being paid annually for 3 years. Interest was charged at 5%. Depreciation was written off at the rate of 20% per annum on the reducing instalment system. Give necessary Journal entries in the books of Motor Company.

(OR)

12. Lodhi Singh purchased a machine on Hire purchase system. The total cash price of the machine is Rs.31,960. payable Rs.8,000 down and three installments of Rs.12,000, Rs.10,000 and Rs.4,000 payable at the end of the first, second and third year respectively. Interest is charged at 5% p.a. charge depreciation on straight line method. Give necessary Ledger accounts in the books of Lodhi Singh.

13. On 1-1-2015 Raju purchased a Machine on instalment system from Gupta & Co., the cash price of the Machine was Rs.11,175 and payment was to be made as under Rs.3,000 was to be paid on signing of the agreement and the balance in three installments of Rs.3,000 each at the end of each year. 5% interest is to be charged by the Vendor per annum. The purchaser decided to write off 10% p.a. on diminishing balance of cash price. Pass necessary Journal entries in the books of Raju.

(OR)

14. A Laundry Company Purchases machinery on the instalment system. The Cash Price of the machinery is Rs. 8,000, the deposit is Rs. 800 and four annual installments of Rs.1,800 are to be paid commencing a year after delivery. In addition, interest is to be paid at 7% on yearly balances and the purchaser has to pay the seller an insurance premium of 1/4% per annum on the outstanding balance. Show the accounts in the books of Laundry Company.

15. From the following particulars relating to Hyderabad branch for the year ending 31<sup>st</sup> December 2018. Prepare Hyderabad Branch account in the Head Office books.

|                                      | Rs.    |
|--------------------------------------|--------|
| Stock at branch on 1-1-2018          | 8,900  |
| Branch Debtors on 1-1-2018           | 4,700  |
| Petty Cash at Branch on 1-1-2018     | 20     |
| Goods sent to Branch during the year | 28,400 |
| Goods returned by Branch             | 800    |
| Cash sales during the year           | 15,800 |
| Credit sales during the year         | 40,400 |
| Cash received from debtors           | 37,900 |
| Cash sent to branch for expenses     | 9,000  |
| Stock at branch on 31-12-2018        | 5,400  |
| Petty cash at branch on 31-12-2018   | 30     |

(OR)

16. A head office in Tirupati has a branch at Visakhapatnam to which goods are involved by the head office at cost price from plus 25%. All cash received by the branch is daily remitted to the head office. All expenses are paid Tirupati. From the following particulars show how the branch account will appear in the head office books.

[Continued to Next Page]



|                                                    |               | Rs.    |
|----------------------------------------------------|---------------|--------|
| Stock on 1-1-2018 (Invoice price)                  |               | 12,500 |
| Debtors on 1-1-2018                                |               | 12,000 |
| Goods invoiced from Tirupati                       |               | 40,000 |
| <b>Remittances to Tirupati</b>                     |               |        |
| Cash Sales                                         | 16,000        |        |
| Cash received from debtors                         | <u>29,500</u> | 45,500 |
| <b>Cheques received from Tirupati</b>              |               |        |
| Wages and Salaries                                 | 11,000        |        |
| Rent, Rates etc.,                                  | 3,000         |        |
| Sundry expenses                                    | <u>510</u>    | 14,510 |
| Stock on 31 <sup>st</sup> Dec 2018 (Invoice Price) |               | 15,000 |
| Debtors on 31 <sup>st</sup> December 2018          |               | 22,500 |

17. A Company has two departments viz piece goods and Tailoring. All goods purchased by the Tailoring department from piece goods department are sold at normal market prices, same as prices charged to outside customers. From the following particulars prepare Departmental Trading and Profit and Loss Account.

|                                          | Piece goods<br>Department<br>RS. | Tailoring<br>Department<br>RS. |
|------------------------------------------|----------------------------------|--------------------------------|
| Opening Stock                            | 20,000                           | Nil                            |
| Purchases                                | 2,20,000                         | 10,000                         |
| Goods from piece goods department        | --                               | 60,000                         |
| Wages                                    | 600                              | 6,400                          |
| Salaries(Departmental)                   | 4,800                            | 1,200                          |
| Closing Stock(at cost to the department) | 38,600                           | 14,000                         |
| Sales                                    | 2,43,000                         | 1,36,000                       |
| Printing and Stationery                  | 1,000                            | 600                            |
| Machinery                                | --                               | 12,000                         |

**Further Information:**

|                   |          |
|-------------------|----------|
| Advertisement     | 10,000   |
| Salaries(General) | 18,000   |
| Capital           | 1,20,000 |
| Debtors           | 54,000   |
| Creditors         | 7,000    |
| Drawings          | 1,00,000 |
| Cash at bank      | 41,000   |
| Cash in hand      | 6,400    |

Depreciate machinery by 10%. The general unallocated expenses are to be apportioned in the ratio of piece goods 3 and tailoring 2.

(OR)

18. Raju and Sons has two departments Cloth and Ready made cloths. Ready made cloths Are manufactured by the firm itself out of cloth supplied by the cloth department as its usual selling price. From the following figures prepare Departmental Trading and Profit and Loss account and General Profit and Loss account for the year 31.12.2014.

[Continued to Another page]



|                              | Cloth Dept. | Ready made cloth dept. |
|------------------------------|-------------|------------------------|
|                              | Rs.         | Rs.                    |
| Stock 1.1.2014               | 3,60,000    | 60,000                 |
| Purchases                    | 29,00,000   | 20,000                 |
| Sales                        | 35,00,000   | 7,00,000               |
| Transfer to Ready made Dept. | --          | 4,50,000               |
| Manufacturing expenses       | --          | 1,40,000               |
| Closing Stock 31.12.2014     | 1,00,000    | 48,000                 |

General expenses incurred for both the departments were Rs.1,20,000. The stocks in the ready made cloth department may be considered as consisting at  $66\frac{1}{3}\%$  cloth and  $33\frac{1}{3}\%$  other expenses. The cloth department earned profit at the rate of 18% in 2013.



Regd No: \_\_\_\_\_

Room No: \_\_\_\_\_

(73)

**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III SEMESTER END EXAMINATIONS**

Class : II B.C.A  
Subject : Commerce  
Title of Paper : Accounting and Financial Management  
Paper Code : R20BCA301  
W.E.F : 2021-22

Max Marks : 75  
Pass Mark : 30  
Duration : 3 Hrs  
Paper Time : 9.00 AM - 12.00 PM  
Date : 16-12-2023

**SECTION - A**

**I. Answer any FIVE Of the following questions.**

**5X5=25M**

1. Meaning & Scope of Accounting
2. What are the Types of Cash Books?
3. Components of Financial Statements.
4. Classification of Accounting Ratio.
5. Cost center.
6. Meaning of Cash flow Statement.
7. Break Even Analysis.
8. Meaning of Shares & Debentures.

**SECTION - B**

**II. Answer ALL the following Questions.**

**5X10=50M**

9. Journalise the following transactions in the books of Mr. Gopi.

- 2021 January
- 1 Gopi Started a Business with cash Rs. 10,00,000.
  - 2 Purchased goods for Cash Rs. 2, 00,000.
  - 3 Sold goods for Cash Rs.3.00,000
  - 4 Goods Purchased from Venkat Rs.1, 00,000.
  - 5 Goods Sold to Hari for Cash Rs.80, 000.
  - 6 Furniture Purchased for Cash Rs.5, 00,000
  - 7 Machinery Sold for Cash Rs.15, 00,000
  - 8 Salary Paid to Mahesh Rs.50, 000
  - 9 Additional Capital Brought into Business Rs.2,00,000
  - 10 Commission Received from Krishna Rs.18, 000

**(OR)**

10. Write the causes for Disagreement of Cash Book balance with balance as per Pass Book?
11. Explain the Objectives of Preparation of Financial Statements?

**(OR)**

12. Define direct expenses & indirect expenses Specify the list of direct & indirect Expenses?

**[P.T.O]**



13. What is Ratio Analysis? Explain its Objectives and Classification?

(OR)

14. Calculate Cash Flow from Operating Activities (Indirect Method)

|                               |   |            |
|-------------------------------|---|------------|
| Opening balance of P&L a/c    | - | ₹50,000.   |
| Closing Balance of P& L a/c   | - | ₹1,00,000. |
| Transfer to General Reserve   | - | ₹20,000.   |
| Depreciation During the year  | - | ₹60,000.   |
| Goodwill write off            | - | ₹20,000.   |
| Loss on sale of a fixed Asset | - | ₹30,000.   |
| Profit on Sale of Investment  | - | ₹40,000    |
| Proposed dividend             | - | ₹16,000    |

15. Explain the Classification of Costs?

(OR)

16. From the following figures relating to the manufacturing company Prepare Cost sheet.

|                   |               |                              |              |
|-------------------|---------------|------------------------------|--------------|
| Raw Material      | 50,000        | Direct Wages                 | 30,000       |
| Factory over Head | 20,000        | Office Over Head             | 15,000       |
| Selling Over Head | 12,000        | Units Produced               | 20,000 Units |
| Units Sold        | 18,000(Units) | Selling Price Rs.20 per Unit |              |

17. What is Budget? Explain steps in Preparation of Budget?

(OR)

18. Write the differences between Shares & Debentures?



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)****III - SEMESTER END EXAMINATIONS**

Class : II B.Com (Gen,Tp,Log,Comp)  
 Subject : Commerce  
 Title of Paper : Advanced Accounting  
 Paper Code : R20COM301A  
 W.E.F : 2022-23

Max Marks : 60  
 Pass Mark : 24  
 Duration : 3Hrs  
 Time : 09:00 to 12:00  
 Date : 16/12/2023

**SECTION-A****I. Answer any FIVE of the following Questions****5X4=20M**

1. Explain About Non Profit Organisation
2. Discuss Important terms in Non Trading Organisations
3. Single entry system Vs Double entry System
4. Write about Repossession in hire purchase system
5. Explain about Partnership Deed
6. Write about factors of goodwill
7. Revaluation account Vs Realisation Account
8. Write about Dissolution of a partnership firm

**SECTION-B****II. Answer ALL the following Questions****5X8=40M**

9. Write the difference between Income and Expenditure account and Receipt and Payment account.

**(OR)**

10. Visakha Sports Association extracts the following Receipts and Payments Account for the year ended 31st Dec. 2020. From the particulars given, prepare Income and Expenditure Account for the year ended 31st Dec. 2020.

Dr. Receipts and Payments Account for the year ended 31-12-2020 Cr.

|                            | Rs.          |                        | Rs.          |
|----------------------------|--------------|------------------------|--------------|
| To Balance b/d             | 1,125        | By Newspapers          | 750          |
| To Subscriptions           | 2,900        | By Rent                | 250          |
| To Tournament Fund         | 750          | By Salaries            | 1,800        |
| To Life membership         | 1,000        | By Office expenses     | 1,200        |
| To Entrance fees           | 100          | By Sports equipments   | 1,150        |
| To Donations for buildings | 1,500        | By Tournament expenses | 450          |
| To Sale of Newspapers      | 50           | By Balance c/d         | 1,825        |
|                            | <b>7,425</b> |                        | <b>7,425</b> |

Subscriptions outstanding on 31st Dec. 2019 Rs. 450 and on 31st Dec. 2020 Rs. 400.  
 Subscriptions received includes Rs. 100 on account of the year 2021.  
 Sports equipment was valued on 31st Dec. 2019 at Rs. 550 and on 31st Dec. 2020 at Rs. 1,090.  
 Office expenses include Rs. 150 for 2019 where as Rs. 200 is still payable on this account for 2020.

11. Write features and limitations of Single Entry system.

**(OR)**

12. Hari keeps his books on a single entry system. You are required to ascertain his position for the year ending 31.12.2020 from the following.



|                       | 1/1/2020 | 31/12/2020 |
|-----------------------|----------|------------|
|                       | Rs.      | Rs.        |
| Stock in trade        | 6,700    | 8,500      |
| Sundry creditors      | 5,400    | 4,000      |
| Sundry debtors        | 4,200    | 4,500      |
| Cash in hand          | 200      | 150        |
| Bank over draft       | 3,200    | 5,000      |
| Bills receivable      | 1,050    | 2,000      |
| Fixtures and Fittings | 1,500    | 1,500      |
| Motor van             | 4,000    | 4,000      |
| Plants                | 10,000   | 10,000     |

Total drawings during the year amounting to Rs. 3,600. During the year, he introduced further capital of Rs 3,000. Depreciate fixtures at 10%, plant at 20% and write off motor van Rs. 500. As regards sundry debtors, it is ascertained that Rs 500 was irrecoverable and 5% were doubtful. There was a need for reserving Rs. 500 in respect of Bills Receivable. Also prepare the final Statement of Affairs.

13. Write the difference between Hire Purchase System and Installment System

(OR)

14. A Motor Car was purchased by Ram & Co., on hire purchase system. The cash price was Rs.1,80,000, payment to be made Rs.45,000 down and three installments of Rs.54,000 each at the end of each year. Rate of interest charged by the selling company is 10% p.a. Buyer depreciates the asset at 15% p.a. on written down value method The agreement was signed on 1<sup>st</sup> January 2019. Write journal in the books of Ram & co.

15. Define partnership & explain its features?

(OR)

16. Smt. Vani and Smt. Laxmi share profits and losses equally. But by agreement Laxmi pays Vani, salary of Rs. 1,000 per month out of her share in profits. The accounts at 31-12-2002 show the following results :  
 Capitals : Vani Rs. 76,860, Laxmi Rs. 83,580.  
 Net profit before charging interest on capital Rs. 47,010.  
 Drawings : Vani Rs. 15,000, Laxmi Rs. 21,000.  
 Paid by Laxmi to Vani in cash privately on account of salary Rs. 6,000. After charging 5 % interest on capital, Write up the Profit and loss appropriation account and Capital account of each partner.

17. What are the elements to be consider before admission of a partner.

(OR)

18. The following was the Balance Sheet of Vidyanand Chary and Suresh who were sharing profits in the ratio of 3 : 2 on 31<sup>st</sup> December 2020.



**Balance Sheet as on 31<sup>st</sup> Deceber 2020**

| <u>Liabilities</u> | <u>Amt.</u> | <u>Assets</u>       | <u>Amt.</u> |
|--------------------|-------------|---------------------|-------------|
| General Reserve    | 30,000      | Cash at Bank        | 5,000       |
| Creditors          | 60,000      | Sundry Debtors      | 10,000      |
| Capital            |             | Stock               | 20,000      |
| Vidyanand Chary    | 30,000      | Plant and machinery | 55,000      |
| Suresh             | 20,000      | Buildings           | 50,000      |
|                    | 1,40,000    |                     | 1,40,000    |

They agreed to admit Srinivas into partnership on the following terms :

- vi) Srinivas was to be given one third share in profits, and was to bring Rs. 25,000 as his capital and Rs. 10,000 as his share of goodwill.
- vii) That the values of stock and plant were to be reduced by 10 per cent.
- viii) That a provision of 5 per cent was to be created in respect of sundry debtors.
- ix) That Building Account was to be appreciated by 20 % and
- x) That the goodwill amount was to be withdrawn by the old partners.

Draft journal entries to give effect to the above arrangement and prepare the opening balance sheet of the new firm.



**KAKARAPARTI BHAVANARAYANA COLLEGE (AUTONOMOUS)**  
**III - SEMESTER END EXAMINATIONS**

Class : II BCA

Max Marks : 60

Subject : Commerce

Pass Mark : 24

Title of Paper : Accounting And Financial Management

Duration : 3 Hrs

Paper Code : R20BCA301A

Time : 09:00 to 12:00

W.E.F : 2023-24

Date : 18/12/2023

**SECTION-A****I. Answer any FIVE of the following Questions****5X4=20M**

1. Define the terms Accounting and Book keeping?
2. General ledger and Self-ledger?
3. Explain the components of Financial Statements?
4. What is Ratio Analysis and Explain its Objectives?
5. Write a short notes on Cost Unit and Cost Centre?
6. What is Cash Flow Statement?
7. State the advantages of Budgetary Control System?
8. Break Even Analysis.

**SECTION-B****II. Answer ALL the following Questions****5X8=40M**

9. Explain various books of Accounts?

**(OR)**

10. Journalise the following transactions of M/s Mallika Fashion House

|                |                                                                      |
|----------------|----------------------------------------------------------------------|
| 20/12 June 05. | Business started with cash. Rs. 2, 00,000                            |
| June 12.       | Goods purchased on credit from M/s Gulmohar Fashion House Rs.30, 000 |
| June 12        | Purchase office machines, paid by cheque Rs.20, 000                  |
| June 18        | Rent paid Rs.5, 000                                                  |
| June 20        | Sale of goods on credit to M/s Mohit Bros Rs.10, 000                 |
| June 22        | Cash sales Rs.15, 000                                                |
| June 25        | Cash paid to M/s Gulmohar Fashion House Rs.30, 000                   |
| June 30        | Salary paid in cash Rs.6, 000                                        |

11. Explain the objectives for preparation of Financial Statements?

**(OR)**

12. What are the steps taken for preparation of Balance Sheet?

13. Explain the importance of Ratio Analysis?

**(OR)**

14. Following are the Balance Sheets of a Vijay & Son:



| Particulars       | 31-03-2022      | 31-03-2023      | Particulars | 31-03-2022      | 31-03-2023      |
|-------------------|-----------------|-----------------|-------------|-----------------|-----------------|
| Creditors         | 36,000          | 41,000          | Cash        | 4,000           | 3,600           |
| Loan from Partner | -               | 20,000          | Debtor      | 35,000          | 38,400          |
| Loan from Bank    | 30,000          | 25,000          | Stock       | 25,000          | 22,000          |
| Capital           | 1,48,000        | 1,49,000        | Land        | 20,000          | 30,000          |
|                   |                 |                 | Building    | 50,000          | 55,000          |
|                   |                 |                 | Machinery   | 80,000          | 86,000          |
|                   | <b>2,14,000</b> | <b>2,35,000</b> |             | <b>2,14,000</b> | <b>2,35,000</b> |

During the year Rs. 26,000 paid as Dividend. The provision made for Depreciation against Machinery as on 31-03-2022 was Rs. 27,000 and on 31-03-2023 Rs 36,000.  
Prepare a Cash Flow Statement.

7. Explain various Cost Concepts And Cost Centres?

(OR)

8. Bombay Manufacturing Company submits the following information on 31-3-2023

Sales for the year Rs.2, 75,000

Inventories at the beginning of the year- Inventories at the end of the year -

- |                                 |                               |
|---------------------------------|-------------------------------|
| a) Raw Materials Rs. 3,000      | a) Raw Materials Rs.4, 000    |
| b) Work in Progress. Rs. 4, 000 | b) Work in Progress Rs.6, 000 |
| c) Finished Goods Rs.1, 10,000  | c) Finished Goods Rs.8, 000   |

Purchase of Materials Rs. 65,000

Direct Labour Rs. 6,000

Other Expenses for the Year -

Selling Expenses Rs. 27, 500

Administrative Expenses Rs.13, 000

Factory Overheads Rs.40, 000

Prepare Statement of Cost

7. What are the merits and demerits of Budgetary Control System?

(OR)

8. What is meant by the Working Capital? And explain its Components?



Room No. : \_\_\_\_\_

Regd No. : 20**III SEMESTER END EXAMINATION**

Class : II B.Com (All Groups)  
 Subject : Commerce  
 Title of Paper : Business Statistics  
 Paper Code : CBBS 301 / CBBS 301 A  
 W.E.F : 2016-17

Max Marks : 75  
 Pass Marks : 30  
 Duration : 3 Hrs  
 Time : 9 am to 12 pm  
 Date : 18/12/202

**SECTION-A****I. Answer any FIVE of the following questions****5X5=25M**

1. Explain the advantages of Statistics.
2. Differences between Primary and Secondary data.
3. Explain the good features of questionnaire.
4. Calculate Arithmetic mean.

|   |    |    |    |    |    |    |    |    |    |
|---|----|----|----|----|----|----|----|----|----|
| X | 70 | 65 | 55 | 75 | 80 | 85 | 65 | 70 | 95 |
|---|----|----|----|----|----|----|----|----|----|

5. Compute Median.

|   |   |    |    |    |    |    |    |   |
|---|---|----|----|----|----|----|----|---|
| X | 8 | 12 | 20 | 32 | 30 | 28 | 12 | 4 |
|---|---|----|----|----|----|----|----|---|

6. Compute Geometric mean.

|   |     |    |    |     |    |     |   |
|---|-----|----|----|-----|----|-----|---|
| X | 135 | 79 | 38 | 286 | 59 | 176 | 7 |
|---|-----|----|----|-----|----|-----|---|

7. Calculate Mean deviation.

|   |   |    |    |    |   |   |    |    |   |    |    |
|---|---|----|----|----|---|---|----|----|---|----|----|
| X | 9 | 19 | 15 | 21 | 4 | 3 | 23 | 11 | 7 | 26 | 14 |
|---|---|----|----|----|---|---|----|----|---|----|----|

8. Calculate Range and co-efficient of Range.

|   |    |    |    |    |   |    |    |    |    |
|---|----|----|----|----|---|----|----|----|----|
| X | 17 | 13 | 11 | 19 | 9 | 14 | 21 | 23 | 16 |
|---|----|----|----|----|---|----|----|----|----|

**SECTION-B****II. Answer the following questions****5X10=50M**

9. Construct histogram for the following frequency distribution

|           |       |       |       |       |       |
|-----------|-------|-------|-------|-------|-------|
| Variable  | 35-40 | 40-45 | 45-50 | 50-55 | 55-65 |
| Frequency | 12    | 30    | 22    | 30    | 28    |

**(OR)**

10. Show the following data of expenditure of an average working-class family by a suitable diagram.

|                      |       |          |         |                 |               |
|----------------------|-------|----------|---------|-----------------|---------------|
| Items of Expenditure | Food  | Clothing | Housing | Fuel & Lighting | Miscellaneous |
| Total Expenditure    | 9,750 | 1,500    | 1,800   | 750             | 1,200         |

11. Calculate Median from the following data.

|   |     |     |      |       |       |       |       |       |
|---|-----|-----|------|-------|-------|-------|-------|-------|
| X | 0-4 | 4-8 | 8-12 | 12-16 | 16-20 | 20-24 | 24-28 | 28-32 |
| F | 4   | 17  | 36   | 90    | 123   | 110   | 66    | 14    |

**(OR)**

12. Calculate Mode of the following

|   |      |        |         |         |         |         |         |
|---|------|--------|---------|---------|---------|---------|---------|
| X | 0-50 | 50-100 | 100-150 | 150-200 | 200-250 | 250-300 | 300-350 |
| F | 7    | 16     | 31      | 48      | 26      | 14      | 8       |



13. Calculate Arithmetic mean.

|   |      |       |       |       |       |       |       |       |
|---|------|-------|-------|-------|-------|-------|-------|-------|
| X | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-45 |
| F | 5    | 12    | 13    | 20    | 18    | 15    | 10    | 7     |

(OR)

14. Calculate Harmonic mean.

|   |      |       |       |       |       |       |       |       |
|---|------|-------|-------|-------|-------|-------|-------|-------|
| X | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
| F | 20   | 45    | 85    | 160   | 70    | 55    | 35    | 30    |

15. Compute Standard deviation for the data given below.

|   |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|
| X | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
| F | 10    | 12    | 15    | 20    | 14    | 24    |

(OR)

16. Compute Quartile deviation.

|   |       |       |       |       |       |        |
|---|-------|-------|-------|-------|-------|--------|
| X | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
| F | 6     | 9     | 16    | 12    | 5     | 2      |

17. Calculate Karl pearson's skewness

|   |      |       |       |       |       |       |
|---|------|-------|-------|-------|-------|-------|
| X | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| F | 5    | 12    | 20    | 16    | 5     | 2     |

(OR)

18. Calculate Bowley's skewness for the following data.

|   |     |      |       |       |       |       |       |       |
|---|-----|------|-------|-------|-------|-------|-------|-------|
| X | 4-8 | 8-12 | 12-16 | 16-20 | 20-24 | 24-28 | 28-32 | 32-36 |
| F | 6   | 10   | 18    | 30    | 15    | 12    | 10    | 2     |

\*\*\*\*\*