Reg. No. 8 1 7 1 6 4 0 2

I Semester B.C.A.4 Degree Examination, Nov./Dec. 2017 KANNADA

Basic (Regular) : ಸಾಹಿತ್ಯ ಸಿಂಚನ – 1

ಸಂ: ಪ್ರೊ. ಬಿ.ಬಿ. ಕಡ್ಲಿ, ಡಾ. ಡಿ. ಎಸ್. ತಿಪ್ಪೇಸ್ವಾಮಿ, ಡಾ. ಸಾಹುಕಾರ ಕಾಂಬಳೆ

Time: 3 Hours Max. Marks: 80

ಸೂಚನೆ : ಭಾಷೆ ಹಾಗೂ ಬರಹದ ಶುದ್ದಿಗೆ ಗಮನ ಕೊಡಲಾಗುವುದು.

1. a) ವಚನಗಳಲ್ಲಿ ಭಕ್ತಿಯ ಸ್ವರೂಪ ಹೇಗೆ ವ್ಯಕ್ತಗೊಂಡಿದೆ – ವಿವರಿಸಿರಿ.

ಅಥವಾ

b) ಈಶ್ವರ ಸಣಕಲ್ಲರು ತಾಯಿಯ ಪ್ರೀತಿ–ವಾತ್ಸಲ್ಯ ಬಯಸಿ ಹಂಬಲಿಸಿದ ಬಗೆಯನ್ನು ಕವನದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ನಿರೂಪಿಸಿರಿ.

2. a) 'ಅಗ್ನಿ ಭೂತಿ–ವಾಯುಭೂತಿ' ಕಥೆಯ ಸ್ವಾರಸ್ಯವನ್ನು ಚರ್ಚಿಸಿರಿ.

ಅಥವಾ

b) 'ಶಾಜಮಹಲ್' ಕಥೆಯ ಸಾಬುದರ್ಗಾನ ಸಂಸಾರದ ಚಿತ್ರಣವನ್ನು ವಿವರಿಸಿರಿ.

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- ಬೇಕಾದ ನಾಲ್ಕಕ್ಕೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ:
 - a) ಬಸವಣ್ಣ
 - b) ರೊಕ್ಕದ ಮಹಿಮೆ
 - c) ಹ್ಯಾಂಗ ಬಳಕೆ ಮಾಡಬೇಕಣ್ಣ
 - d) ವಿಚಾರಕ್ರಾಂತಿಗೆ ಆಹ್ವಾನ
 - e) ವಿಜ್ಞಾನದಿಂದ ಪರಿಸರ ಸಂರಕ್ಷಣೆ
 - f) ಕೆ. ಪಿ. ಪೂರ್ಣಚಂದ್ರ ತೇಜಸ್ವಿ.
- 4. ಬೇಕಾದ ಮೂರಕ್ಕೆ ಸಂದರ್ಭದೊಡನೆ ಸ್ಪಷ್ಟೀಕರಿಸಿರಿ:
 - a) ದರ್ಪಣದೊಳಗಣ ಪ್ರತಿಬಿಂಬದಂತಿಪ್ಪನು.
 - b) ಒಳದಾರಿ ಹಿಡಿಯದೇ 'ಮಾರ್ಗ'ದಲಿ ಸಾಗುವ ಛಲ.

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- c) ಬುದ್ದ-ಬಸವ-ಅಂಬೇಡ್ಕರ ಬಂದದ್ದು ಆಯಿತು.
- d) ನಮ್ಮಿಬ್ಬರ ಮನೇಲೂ ಒಂದೊಂದು ಬಾಂಡಲೆ ಕಿತ್ತಿ ಬಿಸಾಕಿ ಹೋಗಿದ್ದಾನೆ.
- e) ಈ ಕಾಲ್ದಾಗ ಇಂಥ ಹುಡುಗ ಎಲ್ಲಿ ಸಿಕ್ತಾನ.....
- 5. **ಒಂದೇ** ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿರಿ:
 - a) ಬಸವಣ್ಣನವರ ವಚನಗಳ ಅಂಕಿತವೇನು?
 - b) 'ಯೋಗಾಂಗ ತ್ರಿವಿಧಿ'ಯ ಕರ್ತೃ ಯಾರು?
 - c) 'ಘನ ಗುರುವೆ ನೀವಲ್ಲದೆನಗಾರು ಗತಿಯುಂಟು' ಎಂದ ಕವಿ ಯಾರು ?
 - d) ಶಿಶುನಾಳ ಶರೀಫರ ತಾಯಿ ಹೆಸರೇನು ?
 - e) 'ಮಹಾಮಾರ್ಗದ ಪಥಿಕ' ಕವನ ಬರೆದವರಾರು ?
 - f) 'ಜಾಜಿ ಮಲ್ಲಿಗೆ'ಯ ಕವಿ ಯಾರು ?
 - g) 'ವಡ್ಡಾರಾಧನೆ'ಯ ಕರ್ತೃ ಯಾರು?
 - h) ಅಗ್ನಿಭೂತಿ–ವಾಯುಭೂತಿಯರ ತಂದೆ–ತಾಯಿ ಹೆಸರೇನು?
 - i) ಕುವೆಂಪು ಅವರ ಪೂರ್ಣ ಹೆಸರೇನು?
 - j) ಪೂರ್ಣಚಂದ್ರ ತೇಜಸ್ವಿ ನಿಧನರಾದ ವರ್ಷ ಯಾವುದು?
 - k) ಡಾ. ಬಸವರಾಜ ಡೋಣೂರರು ಹುಟ್ಟಿದ ಊರು ಯಾವುದು?
 - i) 'ಕೃತಕ ಜೀವಿಗಳ ಆಗಮನ' ಲೇಖನ ಬರೆದವರಾರು ?
 - m) 'ನಗು' ಪ್ರಬಂಧವನ್ನು ಯಾವ ಸಂಕಲನದಿಂದ ಆಯ್ದು ಕೊಳ್ಳಲಾಗಿದೆ?
 - n) 'ಸದಾ ನಗುತ್ತಿರುವವನು ಸ್ಥಿತಪ್ರಜ್ಞೆನಾಗೆ' ಎಂದ ಲೆಖಕರು ಯಾರು ?
 - o) ಡಾ. ಪ್ರಹ್ಲಾದ್ ಆಗಸನಕಟ್ಟೆಯವರ ಪಿಎಚ್. ಡಿ. ಮಹಾಪ್ರಬಂಧ ಯಾವುದು?

41106/A 060/42106/A 060

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I Semester B.C.A. 4/B.	(Regular) (2016-17) HINDI Basic (MIL)		
	Text : 1) अभिनव कथाभ	गरता	
	2) व्याकरण		
ime : 3 Hours	3) अपठित रचना	Max. Marks : 80	ì
. किन्हीं दस प्रश्नों के उत्तर लिखिए	1	(10×1=10))
1) अभिनव कथाभारती में कित	नी कहानियाँ हैं ?		
अ) 12	ৰ) 13	क) 11	
2) 'हल्कु' क्या है ?			
अ) इंजिनियर	ब) किसान	क) जमींदार	
3) माँ-बेटे के सम्बन्धों की कह	ानी कौन सी है ?	· ·	
अ) बदला	ब) बहादूर	क) नेलकटर	
4) 'मक्रील' कहानी में होटेल व	ज नाम क्या है ?		
अ) ताज	ब) धवलगिरि	क) गौरीशंकर	
5) ग्रामीण लोगों की निष्कपटता	का यथार्थपरक वर्णन	कहानी में किया गया है ।	
अ) मक्रील	ब) गर्मियों के दिन	क) बदला	
6) 'शामनाथ' किस कहानी का	पात्र है ?		
	ब) चीफ की दावत	क) यही सच है	
7) कमलेश्वर का जन्म	· ·		
अ) 1932		क) 1936	
8) 'महुए का पेड़' कहानी के ले			
	• •	क) मार्कण्डेय	
) 9) 'सिरचन' किस कहानी का प	_		
अ) बहादुर		क) ठेर	
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411	06/A 060/42106/A 060	
	10) 'बदला' कहानी के लेखक	हैं।
	अ) अज्ञेय ब) रेणु	क) मन्नू भण्डारी
	11) प्रेमचंद जयंती को म	नाई जाती है ।
	अ) 2 अक्टूबर ब) 31 जुर	ाई क) 5 सितंबर
	12) 'मन्नू भंडारी' का जन्म	_ ई. में हुआ।
	अ) 1908	क) 1905
	13) 'नेलकटर' कहानी के लेखक	हैं।
	अ) उदय प्रकाश ब) रेणु	क) मार्कण्डेय
	14) 'संजय' किस कहानी का पात्र है ?	
	अ) बदला ब) यही स	व है। क) चीफ की दावत
11.	किन्हीं तीन की सप्रसंग व्याख्या कीजिए:	(5×3=15)
	1) सारे खेत का सत्यानाश हो गया। भला ऐस	भी कोई सोता है !
	2) ''आपको डर नहीं लगता ? कोई छुरा ही म	ार दे रात में''
•	3) यदि तुम्हें वह जॉब मिल जाये तो मजा आ	नाये, दीपा , मजा आ जाये !''
	4) ''वाह, माँ! मेहमान का कहा भी कोई टाल	ता है ?"
	5) ''अच्छा, तो मैं चला, मिलना था। मुझे इ	·
III.	किन्हीं दो प्रश्नों के उत्तर लिखिए :	(10×2=20)
	1) 'मक्रील' कहानी की समीक्षा कीजिए।	
	2) 'बहादुर' कहानी में मध्यवर्गीय परिवारों की स्पष्ट कीजिए।	थोथी प्रतिष्ठा और संकीर्ण मानसिकता का वर्णन है -
	3) 'पूस की रात' कहानी से हमें क्या संदेश मि	तता है ? स्पष्ट कीजिए ।
	4) 'नेलकटर' कहानी में संबंधों की संवेदना क	
N. /	,	
IV.	किन्हीं दो पर टिप्पणी लिखिए : 1) हल्कू	(5×2=10)
	2) शामनाथ	
	3) दीपा	
	4) त्रिबेणी ।	

V. किन्हीं तीन प्रश्नों के उत्तर लिखिए:

 $(5 \times 3 = 15)$

- 1) 'संज्ञा' की परिभाषा देते हुए उसके प्रकार, उदाहरण सहित स्पष्ट कीजिए।
- 2) 'सर्वनाम' और उसके भेदों पर चर्चा कीजिए।
- 3) 'विशेषण' किसे कहते हैं ? उदाहरण सहित चर्चा कीजिए।
- 4) 'क्रिया' की परिभाषा देकर, उसके भेदों पर प्रकाश डालिए।

VI. निम्नलिखित परिच्छेद पढ़कर, आधारित प्रश्नों के उत्तर लिखिए:

(1×10=10)

कई लोगों को जरूरत न होने पर भी चीजों को खरीदने और इकट्टा करने की आदत होती है। यह आदत T.V., अखबार आदि के विज्ञापनों से बहुत प्रभावित होती है। समाज में बड़े पैमाने में मौजूद इस स्थिति को उपभोक्तावाद कहते हैं। उपभोक्तावाद के विस्फोट पर अब सवाल उठने लगे हैं क्योंकि इसने पृथ्वी पर जीवन के अस्तित्व पर ही सवाल खड़ा कर दिया है। उपभोक्तावाद अति उपभोग, बेहिसाब, कचरा, उत्पादन और प्रदूषण का दानव तेल-संसाधनों की नीव पर खड़ा है। इन जीवाश्म इंधनों ने बेहिसाब मात्रा में प्रदूषण पैदा किया है जो जीवन के विविध रूपों के लिए बेहद विनाशकारी है। इसके लिए नई सदी में पश्चिमी विकसित जगत अपने भविष्य के लिए पर्यावरण की दृष्टि से भरोसेमंद और टिकाऊ विकल्प खोज रहा है। साइकल-रिक्शा एक ऐसा ही विकल्प है। यह पूरे एशिया और विशेषकर भारतीय उपमहाद्वीप में परिवहन का एक लोकप्रिय साधन है। भारत में साइकल-रिक्शो का आगमन पिछली सदी यानि 20 वीं सदी के पाँचवें दशक के शुरुआती दौर में हुआ। इससे पहले लकड़ी के पहिये वाले और श्रमसाद्य हाथ से खींचने वाले रिक्शा चलते थे।

प्रश्न :

- 1) बिना जरूरत चीजों को खरीदने एवं इकट्टा करने की आदत का कारण क्या है ?
- 2) उपभोक्तावाद किसे कहते हैं ?
- 3) बेहिसाब मात्रा में प्रदूषण किसने पैदा किया है ?
- 4) भारतीय उपमहाद्वीप में परिवहन का लोकप्रिय साधन क्या है ?
- 5) किसके कारण पश्चिमी जगत विकासशील देशों की तरफ मुड़ रहा है ?

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Reg. No.			
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I Semester B.C.A.4 Degree Examination, November/December 2017 (Regular) PROGRAMMING IN C

Time: 3 Hours

Max. Marks: 80

Instruction: All Sections are compulsory.

SECTION-A

1. Answer any 10 of the following:

 $(2 \times 10 = 20)$

- a) What is C-programming?
- b) What is an Algorithm?
- c) Define the term variable and write the syntax of variable declaration.
- d) Covert the following expression to C expression.

i)
$$x_1 = -b + \frac{\sqrt{b^2 - 4ac}}{2a}$$
 ii) $Sin \left(\frac{b}{\sqrt{a^2 + b^2}} \right)$.

ii) Sin
$$\left(\frac{b}{\sqrt{a^2+b^2}}\right)$$
.

- e) Write a syntax of while-loop statement.
- f) List the different types of error occurred during execution.
- g) What is global variable?
- h) Define the term an array.
- i) What are arguments?
- i) What is recursion?
- k) Give the syntax of union definition.
- I) Define the term structure.



SECTION-B

Answer any four of the following:

(5×4=20)

- 2. Describe the basic steps involved in problem solving.
- 3. What is flowchart? Draw and explain various symbols used in flowchart.
- 4. Write a program to find maximum between three numbers.
- 5. Discuss briefly one-dimensional array's declaration with an example.
- 6. Explain any 5 string handling functions.
- 7. Differentiate between array and structure.

SECTION-C

Answer any four of the following:

 $(10 \times 4 = 40)$

- 8. a) Write the different between algorithm and flowchart.
 - b) Write an algorithm and flowchart for computing nth Fibonacci numbers. (5+5=10)
- 9. Demonstrate the usage of switch statement with an example.
- 10. Discuss the different types of looping statements in C-programming.
- 11. Define the term function and explain the Call By Value method with an example.
- 12. a) How do you access members of the structures? Explain with an example.
 - b) Write a program to sort an array of elements in an ascending order.

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41123/A 230

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Reg. No.					

First Semester B.C.A.4 Degree Examination, Nov./Dec. 2017 COMPUTER FUNDAMENTALS (Regular)

Time: 3 Hours

Max. Marks: 80

Instructions: 1) All the three Sections are compulsory.

- 2) Answer the questions of a Section together.
- 3) Draw diagram where necessary.

PART-A

1. Answer any ten of the following:

 $(10 \times 2 = 20)$

- a) What is data processing?
- b) State the functions of input unit.
- c) Why binary numbers are used in computer system?
- d) Expand the term BCD and MIPS.
- e) Define word length.
- f) What is microprocessor?
- g) Hardware and software of computer system are like two sides of a coin. Justify.
- h) What are the two modes of editing text in MS word? Explain briefly:
- i) Define operating system.
- j) What is the purpose of title bar in windows operating system?
- k) What is multiprogramming?
- I) What is the purpose of 'tail' and 'cat' command in Linux operating system?

PART-B

Answer any four questions of the following:

 $(4 \times 5 = 20)$

- 2. Explain John Von Neuman's 'Stored program' concept for computer.
- 3. Draw the block diagram to illustrate the basic organization of computer system and state the functions of each unit.
- 4. Explain the code (any one):
 - i) ASCII
 - ii) EBCDIC.
- 5. Explain the advantages and limitations of magnetic disk.
- 6. Distinguish between system software and application software. Explain briefly any two commonly known application software.
- 7. State the purpose and syntax of following commonds (any five):
 - i) ls
 - ii) cd
 - iii) mkdir
 - iv) mv
 - v) cp
 - vi) rm.

PART-C

Answer any four full questions:

 $(4 \times 10 = 40)$

- 8. a) Explain any five characteristics of computer.
 - b) Explain five basic functions performed by computer system.

(5+5)

- 9. a) i) Convert the given binary (110110)₂ to its equivalent decimal, octal and hexadecimal number.
 - ii) Convert the given decimal number (425)₁₀ to its equivalent binary and octal number.
 - b) Discuss various number system and state their base and symbols (digits) in them. (5+5)

10.	a) What is primary memory and brieflyb) Write note on (any one):i) Printer	explain any four types of ROM.	•
	ii) Access time w.r.t. disk.		(5+5)
11.	a) Discuss formatting of document.		
	b) Explain the concept (any one):i) Multi programming		
	ii) Time sharing.		(5+5)
12.	a) Explain (any one): i) Task bar		
٠	ii) File and folders.b) Write note on (any one):		· .
	i) Desktop ii) Display properties.		(5+5)

41122/A 220

Reg. No.

I Semester B.C.A. 4 Degree Examination, November/December 2017 (Regular) MATHEMATICS – I

Time: 3 Hours

Max. Marks: 80

Instruction: Answer all Sections.

SECTION - A

I. Answer any ten of the following questions:

(10×2=20)

- 1) a) Express $\frac{3+4i}{3-4i}$ in the form x + iy.
 - b) Simplify $\frac{(\cos 4\theta + i\sin 4\theta)^3}{(\cos 2\theta i\sin 2\theta)^4}.$
 - c) If the first term of an A.P. is 5 and seventh term is -7, then find the common difference.
 - d) Find the Geometric mean of a, G, b.
 - e) If α and β are the roots of equation $2x^2 + 4x 5 = 0$. Find the value of $\alpha + \beta$ and $\alpha \beta$.
 - f) Expand using Binomial theorem $(a + b)^3$.
 - g) P.T. $\sin\theta \sec\theta \cot\theta = 1$.
 - h) If $\vec{a} = i j + 3k$ and $\vec{b} = 2i + j + k$, find $\vec{a} \cdot \vec{b}$.
 - i) S.T. the pairs of vectors are perpendicular to each other 7i j + 2k and 2i + 6j 4k.
 - j) Find the distance between the points (5, 2) and (9, 5).
 - k) Find the equation of the line with slope of 2 and cutting off an intercept 3 on y-axis.
 - Find the coordinates of midpoint of line joining the points P(3, 5) and Q (-1, 8).

 P.T.O

SECTION - B

II. Answer any four questions:

 $(4 \times 5 = 20)$

- 2) Express $\frac{1-2i}{3+4i} + \frac{i-3}{i}$ in the form x + iy.
- 3) Find the sum of $7 + 77 + 777 + \dots$ to n terms.
- 4) Find the 12th term in expansion of $\left(x + \frac{1}{x}\right)^{13}$.
- 5) P.T. $\frac{\tan \theta}{\sec \theta 1} + \frac{\tan \theta}{\sec \theta + 1} = 2 \csc \theta$
- 6) Find cosine of angle between vectors 2i 3j + k and 5i + j k.
- 7) Find the coordinates of the point which divides (i) internally and (ii) externally the line joining the points (-3, 6) and (4, -7) in ratio 5 : 7.

SECTION - C

III. Answer any four of the following:

 $(4 \times 10 = 40)$

8) a) If
$$x = \text{Cis } \alpha$$
 $y = \text{cis } \beta$ P.T. $\frac{x^2}{y^3} + \frac{y^3}{x^2} = 2 \cos{(2\alpha - 3\beta)}$.

b) Simplify
$$\frac{(\cos 6\theta - i\sin 6\theta)^{3} (\cos 2\theta + i\sin 2\theta)^{-7}}{(\cos 5\theta + i\sin 5\theta)^{-4} (\cos \theta + i\sin \theta)^{8}}.$$
 (5+5=10)

9) a) In a A.P. the seventh term is 20 and thirteenth term is 38. Find the fourteenth term.

b) Find the sum to
$$\infty$$
 of $4 - \frac{8}{3} + \frac{16}{9} - \frac{32}{27} + \dots$ (5+5=10)



- 10) a) Find the middle term in the expansion of $(3-x)^{11}$.
 - b) If α and β are the roots of $x^2 + px + q = 0$ then find the values of $\alpha^2 + \beta^2$. (5+5=10)
- 11) a) In any triangle ABC P.T. $a(\sin B - \sin C) + b(\sin C - \sin A) + c(\sin A - \sin B) = 0.$
 - b) Find the area of parallelogram whose adjacent sides are i + j k and 2i j + k. (5+5=10)
- 12) a) Find the equation of the line passing through the point of intersection of 2x y + 5 = 0 and x + y + 1 = 0 and the points (5, -2).
 - b) Find the equation of a straight line which passes through (3, -4) and (-2, 5). (5+5=10)



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I Semester B.C.A. 3 Degree Examination, November/December 2017 (Repeaters)

ALGEBRA AND CO-ORDINATE GEOMETRY

Time: 3 Hours

Max. Marks: 80

Instruction: Answer all Sections.

SECTION - A

I. Answer any ten of the following questions:

 $(10 \times 2 = 20)$

- 1) a) Define unit matrix.
 - b) Evaluate 2501 2503 2507
 - c) In a group $(G, \star) \forall a, b \in G$ prove that $a \star b = a \star c \Rightarrow b = c$.
 - d) Find the scalar product of $\vec{a} = 2i 2j + k$ and $\vec{b} = 2i 3j + 6k$.
 - e) Find the distance between the points (-1, -6), and (4, -1).
 - f) Find the co-ordinates of mid point of the line joining the points A (4, 7) and B (6, 9).
 - g) Find the centroid of the triangle formed by the vertices (4, -6), (-5, 7) and (10, -1).
 - h) Find the equation of the circle with centre (2, 3) and radius 6.
 - i) Find the centre and radius of the circle $x^2 + y^2 2x + 6y 6 = 0$.
 - j) Find the length of the latus-rectum of the ellipse $\frac{x^2}{16} + \frac{y^2}{9} = 1$.
 - k) Find the focus and length of latus-rectum of the parabola $x^2 = 12y$.
 - I) Find the transverse and conjugate axis of the hyperbola $\frac{x^2}{25} \frac{y^2}{144} = 1$.

P.T.O.

SECTION - B

II. Answer any four questions:

 $(4 \times 5 = 20)$

2) If
$$A = \begin{bmatrix} 1 & 3 & 3 \\ 3 & 1 & 3 \\ 3 & 3 & 1 \end{bmatrix}$$
 prove that $A^2 - 5A - 14I = 0$.

- 3) Find the area of the triangle, the coordinates of whose angular points are (5, 1), (1, -1) and (11, 0).
- 4) Prove that G = {2, 4, 6, 8} is an abelian group under multiplication modulo 10.
- 5) Prove that the circles $x^2 + y^2 + 6x y 6 = 0$ and $2x^2 + 2y^2 6x + 10y 11 = 0$ intersect orthogonally.
- 6) Find the equation of the parabola with focus (2, 0) and directrix x + 2 = 0.
- 7) Find the sine of the angle between the vectors $\vec{a} = i 3j + 2k$ and $\vec{b} = 3i + j 2k$.

SECTION - C

III. Answer any four of the following:

 $(4 \times 10 = 40)$

8) a) Solve
$$\begin{vmatrix} x+3 & 5 & 7 \\ x & x+5 & 7 \\ 3 & 5 & x+7 \end{vmatrix} = 0$$
.

b) Solve by Crammer's rule

$$x + y + 2z = 7$$

 $3x + 2y - z = 2$
 $5x + 2y - z = 3$

(5+5=10)

- 9) a) Show that the points A (-1, -1), B(3, -4) and C (-5, 2) are collinear.
 - b) Find the coordinates of the points which divides internally the line joining the points (-1, 4) and (2, -7) in the ratio 5 : 3. (5+5=10)

- 10) a) Prove that in a group G the identify is unique.
 - b) Find the value of ' λ ' when $\vec{a} = 6i + \lambda j 2k$ and $\vec{b} = 2i + 2j + 14k$ are perpendicular to each other. (5+5=10)
- 11) a) Find the equation of the circle passing through the points (1, -3), (3, -1) and (-5, 7).
 - b) Find the radical axis of the circle

$$x^2 + y^2 - x + 2y + 5 = 0$$
 and $x^2 + y^2 - 3x + 4y - 1 = 0$. (5+5=10)

- 12) a) Find the focus, vertex, two ends of the latus rectum and equation of the directrix of the parabola $y^2 = 20 x$.
 - b) Find the equation of the hyperbola in the form $\frac{x^2}{a^2} \frac{y^2}{b^2} = 1$ given that

distance between foci = 8 and distance between directries $\frac{9}{2}$. (5+5=10)

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I Semester B.C.A.4 Degree Examination, November/December 2017 (New Syllabus) (Regular) FINANCIAL ACCOUNTING

Time: 3 Hours Max. Marks: 80

Instructions: 1) Write question numbers correctly.

- 2) Answer required as per internal choice given.
- 3) Non programmable calculators are allowed.

PART-I

- 1) Answer any ten of the following questions. Each question carries
 2 marks. (10×2=20)
 - a) State any four fixed assets.
 - b) What do you mean by computerised accounting?
 - c) What is bank reconciliation?
 - d) What is Balance Sheet?
 - e) What is pass book?
 - f) What is cash discount?
 - g) What is depreciation?
 - h) What are subsidiary books? Mention them.
 - i) What is credit note?
 - j) What is narration?
 - k) What is drawing?
 - I) What is accounting standards?

P.T.O.



PART - II

(B)

- II. Answer any four of the following. Each question carries 5 marks: (4x5=20)
 - 2) Distinguish between trade discount and cash discount.
 - 3) What are the merits of double entry system?
 - 4) Prepare accounting equation for the following transactions.
 - 1-8-15 Commenced business with cash Rs. 80,000/-
 - 8-8-15 Bought goods and paid cash Rs. 20,000/-
 - 10-8-15 Withdrawn cash from office for domestic use Rs. 500/-
 - 12-8-15 Bought furniture Rs. 1,000/-
 - 13-8-15 Sold goods costing Rs. 2,000/- for Rs. 2,800/- on credit.
 - 18-8-15 Paid wages Rs. 1,000/-
 - 20-8-15 Received Commission Rs. 1,800/-
 - From the following information prepare Bank Reconciliation Account as on 31-3-2017.
 - 1) Bank balance as per pass book Rs. 20,000/-
 - Cheques deposited into bank Rs. 5,000/- as on 25th March 2017 but collected and credited in pass book as on 5th April 2017.
 - 3) Cheque issued to Bharavnath Rs. 10,000/- on 28th March but presented for payment on 10th April 2017.
 - 4) A customer who directly deposited into Bank Rs. 1,200/-
 - Cheques deposited into Bank on 28th March 2017 but credited on pass book on 6th April 2017.



6) From the following ledger balance of Durga Traders Belgoam. Prepare Trial Balance on 31-3-2016.

SI. No.	Name of Account	Amount
1.	Cash in hand	400
2.	Bank overdraft	2,800
3.	Purchase Return	800
4.	Sundry Expenses	2,400
5.	Sales Return	1,600
6.	Purchases	5,600
7.	Salaries	1,500
8.	Sales	8,800
9.	Debtors	1,700
10.	Suppliers	2,400
11.	Opening stock	6,000
12.	Capital A/c	4,400

7) What are the objective of preparing Trial Balance?

PART – III (C)

III. Answer any four of the following questions. Each carries 10 marks. (4×10=40)

8) Journalise the following transaction in the books of Datta Prasad for the month of November 2016.

1 st Nov.	Commenced business with cash Rs. 30,000/- building
	Rs. 15,000/- and bank Rs. 5,000/-
4 th Nov.	Bought goods from Manohar Rs. 10,000/- and paid cash Rs. 2,500/-

5 th Nov.	Sold goods for cash 10,000/- of which deposited into bank Rs. 2,000/-
8 th Nov.	Received cash from Sidhi Rs. 8,000/- and allowed him discount Rs. 200/-
10 th Nov.	Paid commission to Deepak Rs. 8,000/-
12 th Nov.	Withdrawn cash from Bank for office use Rs. 3,000/- and for domestic use Rs. 1,000/-
15 th Nov.	Paid for advertisement and wages Rs. 1,000 and 500 respectively
18 th Nov.	Bought machinery from Kirloskar Co. for Rs. 20,000/- of which paid Rs. 8,000 in cash
20 th Nov.	Received interest on FDR Rs. 1,200/-
21 st Nov.	Received cheque of Rs. 4,800/- from Gopal and allowed him discount Rs. 200/-
28 th Nov.	Paid office rent for 2 months at Rs. 450/- per month by cheque
30 th Nov.	Appointed Pushpank as Manager on a monthly salary of Rs. 20,000/

9) M/s Karuna and Roopa Co. bought a machinery for Rs. 45,000/- on 1st April 2010 and spent for its installation Rs. 5,000/-. The charges depreciation @ 10% per annum on reducing balance method. Prepare machinery A/c and Depreciation A/c for 3 years under diminishing balance method. The co. closes it account on 31st March each year.



10) From the following transactions you are required to prepare 3 column cash book for the month of March 2016.

1st March Hemant commenced business with cash Rs. 80,000/-3rd March Opened S.B. A/c with Bank of India with Rs. 20,000/-5th March Bought goods and paid cash Rs. 2.000/-10th March Sold goods to Ramesh Rs. 8,000/- and received cash Rs. 7,800/- and allowed discount 200/-12th March Purchased office furniture for Rs. 6,000/- and issued for the same 14th March Withdrawn cash from Bank for office use Rs. 2,000 and personal use 800/-18th March Received cash from Mohan Rs. 7.000/-Paid for purchase of stationary Rs. 800/- by cheque 20th March 22nd March Received dividend from Super Star Co. Rs. 8,000/-24th March Paid salary by cheque Rs. 2,500/-29th March Bank charges Rs. 200/- debted in pass book.

11) From the following particulars prepare subsidiary book for the month April 2016.

5th April Purchased goods from Raju Modagekar Traders

10 Quintals of Jowar at Rs. 200/- per quintal and trade discount

@ 10% Invoice No. 1

10th April Sold goods to Shridevi Traders Kolapur Invoice No. 2

- 1) 4 Quintals of Basmati rice at Rs. 500/- per quintal.
- 2) 10 Quintals of Jowar at Rs. 600/- per quintal, the trade discount @ 15%

- 15th April Bought goods costing Rs. 20,000/- from Mahakali Traders and 50% paid in cash Invoice No.3
- 18th April Rajanikant Traders bought goods from us at 10%. Trade discount Invoice No. 4.
 - I) 10 quintals Rawa @ 400/- per quintal.
 - II) 20 quintals Maida @ 600/- per quintal.
 - III) Transport charges Rs. 500/-

28th April Bought goods from Hanif Traders for Rs. 20,000/- as per Invoice No. 5 and issued cheque for the same.

12) From the following Trial Balance on 31st March 2016. Prepare Final Account.

SI. No.	Name of A/c	Debit	Credit
1.	Capital and Drawing	5,000	20,000
2.	Wages A/c	4,000	_
3.	Machinery A/c	5,000	· _
4.	Debtors and Creditors	10,000	2,000
5.	Commission received	· _	8,000
6.	Purchases and Sales	30,000	60,000
7.	Rent	2,000	1,000
8.	Opening stock	10,000	_
9.	Salary A/c	3,000	· <u> </u>
10.	Travelling Exp.	400	



Total		92.000	92,000
15.	Bank A/c	6,500	_
14.	Cash A/c	10,000	.
13.	Returns	500	1,000
12.	Furniture	5,000	- -
11.	Bad Debts	600	-

Adjustments:

- 1) It stock Rs. 20,000/-.
- 2) Outstanding salary 500/-.



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I Semester B.C.A.3 Degree Examination, November/December 2017 (Repeaters) BUSINESS ACCOUNTING

Time: 3 Hours Max. Marks: 80

Instructions: 1) Write Question correctly.

- 2) Write required number of questions as per internal choice given.
- 3) Simple calculator is allowed.

SECTION-I

1. Answer any ten of the following. Each question carries 2 marks.

 $(10 \times 2 = 20)$

- a) What is capital?
- b) What is Journal?
- c) State any two fixed Assets.
- d) What is cash book?
- e) State any two concepts of Accounting.
- f) What is trial balance ?
- g) What is Computerised Accounting System?
- h) What is balance sheet?
- i) State any two methods of depreciation.
- j) What is contra entry?
- k) Name any four subsidiary books.
- I) What is Bank Reconciliation Statement?

SECTION-II

Answer any four of the following. Each question carries 5 marks.

 $(4 \times 5 = 20)$

- 2. Explain the difference between Journal and Ledger.
- 3. Classify the following accounts into Personal, Real and Nominal Accounts.
 - a) Capital Account
 - b) Building Account
 - c) Salary Account
 - d) Machinery Account
 - e) Rent Account
- 4. Journalise the following transactions.
 - 1-6-2017. Commenced business with cash ₹50,000.
 - 5-6-2017 Purchased goods for cash ₹ 20,000.
 - 10-6-2017 Goods sold for cash ₹ 25,000.
 - 15-6-2017 Salary paid ₹8,000.
 - 20 6 2017 Machinery purchased for cash ₹ 15,000.
- 5. From the following transaction prepare personal Ledger Account of Mr. Pradeep.
 - 1-7-2017 Bought goods from him ₹ 10,000
 - 3 7 2017 Sold goods to him ₹ 15,000
 - 5-7-2017 Cash paid to him ₹ 8,000
 - 7-7-2017 Cash received from him ₹ 12,000
 - 9-7-2017 Sold goods to him Rs. 8,000 and received a cash of Rs. 5,000.
- 6. A firm purchased Machinery on 1-1-2013 at a cost of Rs. 80,000. The firm charges depreciation at 10% p.a under original cost method. Prepare the Machinery Account for first 3 years.
- 7. Explain the difference between Accounting and Book-keeping.

SECTION - III

Answer any four of the following. Each question carries 10 marks.

 $(4 \times 10 = 40)$

- 8. Explain the users of Accounting information.
- 9. Explain the merits and demerits of computerised accounting system.
- 10. A firm acquired machinery on 1 04 2011 at a cost of ₹ 50,000. The firm writes off depreciation at 10% p.a. under diminishing balance method. The firm closes its books of accounts on 31st March of every year.

Show the machinery account and depreciation account for 3 years.

- 11. Record the following transactions in a proper subsidiary books.
 - 1 1 2017 Bought goods from Sharath₹ 5,000
 - 3-1-2017 Purchased goods from Vikas ₹8,000 at 10% trade discount.
 - 4-1-2017 Sold goods to Vinayak ₹ 10,000 at 5% trade discount.
 - 7-1-2017 Goods returned to Sharath ₹ 1,000.
 - 9 1 2017 Vinayak returned goods to us ₹2,000.
 - 10-1-2017 Sold goods to Sagar ₹ 6,000.
 - 12-1-2017 Purchased goods from Arun for cash ₹ 3,000.
 - 15-1-2017 Purchased from Manoj Rs. 4,000.
- 12. Enter the following transactions in three column cash book.
 - 1-2-2016 Cash in hand ₹4,000 and cash at bank ₹13,200.
 - 3-2-2016 Cash sales ₹20,000.
 - 4-2-2016 Purchased goods and paid by cheque ₹2,000.
 - 6-2-2016 Purchased furniture for cash ₹ 6,000.
 - 8-2-2016 Cash paid to Mahesh ₹ 5,000.
 - 10-2-2016 Rent paid by cheque ₹800.
 - 11-2-2016 Received cash from Kiran₹10,000.
 - 14-2-2016 Draw cash from bank for personal use ₹ 5,000.
 - 18-2-2016 Paid salary ₹ 6,000.
 - 21-2-2016 Interest collected by bank ₹ 1,500.

13. From the following trial balance of Miss.Rani Prepare Trading Account, Profit and Loss Account and Balance Sheet as on 31 – 03 – 2016.

Trial Balance as on 31 – 03 – 2016

i riai Bala	ince as on 31 - 03 - 2016	•
Particulars	Debit (₹)	Credit(₹)
Capital	_	58,000
Drawings	1,520	
Purchases and Sales	17,800	30,000
Sales Returns and Purchases R	eturns 560	900
Stock [on 01 – 04 – 2015]	2,400	-
Wages	1,600	· -
Land and Building	44,000	
Manufacturing Expenses	4,000	-
General Expenses	400	• • • • • • • • • • • • • • • • • • •
Advertisement .	480	<u> </u>
Interest	-	700
Tax and Insurance	260	-
Debtors and Creditors	13,000	2,400
Bills receivable	3,000	_
Bills Payable	-	1,400
Cash at Bank	2,400	4. 4. 4. 4. —
Cash in hand	380	· -
Salaries	1,600	· · ·
Total	93,400	93,400

Adjustments:

- 1) Stock on 31-03-2016 was valued at ₹ 3,000.
- 2) Outstanding liabilities were salaries ₹ 400 and taxes ₹ 260.
- 3) Depreciate Land and Building at 2%.