

Exam.Code:0027  
Sub. Code: 0911

2031  
Bachelor of Computer Application  
First Semester  
BCA-16-101: English (Compulsory)

Time allowed: 3 Hours

Max. Marks: 65

**NOTE:** Attempt parts of a question together.

x-x-x

**UNIT – I**

- I. How does Edgar Alien Poe create an atmosphere of horror in his story, "The Tell-Tale Heart".

OR

Draw a character sketch of Hughie Erskine, as portrayed in the story, "The Model Millionaire" written by Oscar Wilde. (10)

- II. Give a brief summary of the essay 'Prayer' written by Mahatma Gandhi?

OR

How does B. K. Nehru describe the character and personality of John F. Kennedy in his essay on him? (10)

- III. a) Give the summary of the poem: -  
On the Morning of Christ's Nativity

OR

Lord Ullin's Daughter (5)

- b) Answer any two of the following questions:

1. What kind of attitude does the poet have in the poem, 'When I Consider Life'?
2. Give in brief the central idea of the poem, 'On Receipt of my Mother's Picture'.
3. How does Nature plan to educate Lucy? (5)

- c) Explain with reference to the context:

She lived unknown, and few could  
know When Lucy ceased to be;  
But she is in her Grave, and, oh,  
The difference to me!

P.T.O.

(2)

OR

Sigh no more, ladies, sigh nor more;

Men were deceivers ever;

One foot in sea and one on shore,

To one thing constant never;

Then sigh not so,

But let them go

(5)

UNIT – II

IV. Change the form of any five of the following words as instructed

and use the changed form in sentences of your own:-

Grand (noun), sharp (verb), industry (adjective), attention (adjective) New (verb),

local (noun), rapid (adverb), humour (adverb)

(10)

V. Use any five of the following In sentences of your own: -

Audacity, profile, to make a conquest of, repartee, mandate, impromptu, capital story, sulkily

(10)

VI. Translate the following passage into English:-

हमारा शरीर मशीन की तरह है। यदि किसी मशीन का पुर्जा खराब हो जाए तो वह ठीक कार्य नहीं करती। ठीक यही स्थिति हमारे शरीर की है। यदि हमारे शरीर में कोई दोष आ जाए तो हमारी सेहत खराब हो जाती है। हम बीमार हो जाते हैं। बीमार शरीर वाला व्यक्ति जीवन का आनन्द नहीं ले सकता, न ही वह अच्छा नागरिक साबित हो सकता है। इसलिए कहते हैं कि अरोग शरीर में ही अरोग मन का निवास होता है।

ਸਾਡਾ ਸਰੀਰ ਮਸ਼ੀਨ ਵਾਂਗ ਹੈ। ਜੇ ਕਿਸੇ ਮਸ਼ੀਨ ਦਾ ਪੁਰਜਾ ਖਰਾਬ ਹੋ ਜਾਵੇ ਤਾਂ ਉਹ ਠੀਕ ਕੰਮ ਨਹੀਂ ਕਰਦੀ। ਠੀਕ ਇਹੋ ਹਾਲਤ ਸਾਡੇ ਸਰੀਰ ਦੀ ਹੈ। ਜੇਕਰ ਸਾਡੇ ਸਰੀਰ ਦੇ ਕਿਸੇ ਅੰਗ ਵਿਚ ਕੋਈ ਦੋਸ਼ ਪੈ ਜਾਵੇ ਤਾਂ ਸਾਡੀ ਸਿਹਤ ਵਿਗੜ ਜਾਂਦੀ ਹੈ, ਅਸੀਂ ਬਿਮਾਰ ਹੋ ਜਾਂਦੇ ਹਾਂ। ਬਿਮਾਰ ਸਰੀਰ ਵਾਲਾ ਆਦਮੀ ਜੀਵਨ ਦਾ ਆਨੰਦ ਨਹੀਂ ਲੈ ਸਕਦਾ, ਨਾ ਹੀ ਉਹ ਚੰਗਾ ਨਾਗਰਿਕ ਸਾਬਿਤ ਹੋ ਸਕਦਾ ਹੈ। ਇਸ ਲਈ ਆਖਦੇ ਹਨ ਕਿ ਅਰੋਗ ਸਰੀਰ ਵਿਚ ਹੀ ਅਰੋਗ ਮਨ ਦਾ ਨਿਵਾਸ ਹੁੰਦਾ ਹੈ।

(3)

OR

(For foreign students only)

Paraphrase the following passage:-

I long for scenes where man has never trod—

For scenes where woman never smiled or wept—

There to abide with my Creator, God,

And sleep as I in childhood sweetly slept,

Full of high thoughts, unborn. So let me lie,

The grass below; above, the vaulted sky.

(5)

- VII. Write a letter to a dealer in mobile phones from whom you had recently purchased a phone that has started giving some problems within a month. Ask him/her to rectify the defect or replace the set.

OR

Write a letter to the Editor of a newspaper highlighting the absence of a playground in your locality.

(5)

x-x-x

2031  
Bachelor of Computer Application  
First Semester  
BCA-16-102: Fundamentals of Mathematical Statistics

Time allowed: 3 Hours

Max. Marks: 65

**NOTE:** Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I-IV. Use of calculator is allowed.

x-x-x

**UNIT – I**

- I. a) How statistical investigation is carried out? Explain the uses and limitations of statistics.  
b) The weighted G.N. of a series of 5 values 10, 20, 30, 40 and 50 is 35. If the weights of first 4 values are 5,4,3 and 2 respectively. Find the weight of 5<sup>th</sup> value. (7,6)
- II. a) Draw key differences among AM, GM and HM.  
b) The mean of two numbers is 25 and geometric mean is 20. Find the two numbers. (7,6)

**UNIT – II**

- III. a) Determine qualities, 1<sup>st</sup> and 9<sup>th</sup> deciles and 10<sup>th</sup> percentile for the following students:-

Roll No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Marks	29	65	33	45	51	72	48	33	42	25	28	35	46

- b) Compute mean and standard deviation:-

Class interval	2.5 - 7.5	7.5 - 12.5	12.5 - 17.5	17.5 - 22.5	22.5 - 27.5
F	3	2	4	6	5

(7,6)

- IV. a) In a series of 5 items, three are 3,5, and 7 respectively. The mean and standard deviation of series is 5 and 3 respectively. Find other two items.  
b) Locate the value of mode through the computation procedure of any appropriate method

Marks	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
No. of students	4	6	20	32	33	17	8	2

(6,7)

P.T.O.

(2)

**UNIT - III**

- V. a) Find Karl-Pearson's coefficient of correlation for

Sales	50	60	55	65	75	70	75	80	90	80
Cost of sales	10	14	15	11	12	15	16	20	18	19

- b) Explain positive, negative, multiple, partial, linear and non-linear correlation. (7,6)

- VI. a) Evaluate spearman's coefficient of rank correlation for the marks in A and B subjects:-

A	26	25	38	37	41	45	60	42	53	57
B	52	25	30	35	48	77	38	43	68	64

- b) Draw difference between 'Rank', and 'Karl-Pearson's coefficient of correlation. (7,6)

**UNIT - IV**

- VII. a) Why regression analysis is required? Explain its various types.

- b) Compute two regression coefficient and two regression equations for the data:-

X	11	7	9	5	8	6	10
Y	10	8	6	5	9	7	11

(7,6)

- VIII. a) What is the difference between correlation and regression? Also explain uses and limitation of regression analysis.

- b) Derive two lines of regression for

X	1	2	3	4	5	6	7	8	9
Y	9	8	10	12	11	13	14	16	15

(7,6)

(3)

UNIT - V

IX. Explain the following:-

- a) Standard error of estimate. (3)
- b) Properties of regression coefficient (2)
- c) Coefficient of determination (2)
- d) Coefficient of variation (2)
- e) Combined standard deviation (2)
- f) Combine Harmonic Mean (2)

x-x-x

2031

Bachelor of Computer Application

First Semester

BCA-16-103: Computer Fundamentals and Computing Software

Time allowed: 3 Hours

Max. Marks: 65

**NOTE:** Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I -IV.

x-x-x

**UNIT – I**

- I. a) How do you organize a computer system? Explain their functionality in detail.  
b) How Direct memory access takes place? Explain through examples. (7,6)
- II. a) Explain any two output devices of your choice.  
b) What is programming language? Explain generation of languages. (7,6)

**UNIT – II**

- III. a) Explain how booting process takes place? Draw difference between worm and cold boot.  
b) Explain any three external command of DOS. (7,6)
- IV. a) What do you understand by Anatomy of Windows? Explain Windows special features, also.  
b) Explain any three internal commands. (7,6)

**UNIT – III**

- V. a) Explain various built-in language tools of any word processor.  
b) How 'tables of contents', 'indexes' and 'Bibliographics' are created? Explain. (7,6)
- VI. a) Explain important features of any word-processor.  
b) How a document is mail-merged? Explain. (7,6)

**UNIT – IV**

- VII. a) Which various important functions are performed by spreadsheet package? Explain.  
b) Explain how animation is added to presentation through example also. (7,6)

P.T.O.

(2)

- VIII. a) How various data-box functions are implemented in spreadsheet?  
b) How presentation is created to utilize various features of any presentation package? Explain. (7,6)

**UNIT - V**

- IX. Explain the following:-
- a) Macros (3)
  - b) Legends and Gridlines (2)
  - c) Creating fill-in forms (2)
  - d) Headers and Footers (2)
  - e) Registry of windows (2)
  - f) Optical disk (2)

*x-x-x*



2021  
Bachelor of Computer Application  
First Semester  
BCA-16-104: Problem Solving Through C

Time allowed: 3 Hours

Max. Marks: 65

**NOTE:** Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I - IV.

x-x-x

**UNIT – I**

- I. Explain the role of algorithm and flow chart in the programming process. Prepare flowchart and algorithms to find whether the given number is even or odd. (13)
- II. Discuss various types of operators available in C language. Explain the structure of C program with example code for finding smallest of given three numbers. (13)

**UNIT – II**

- III. What are the major decision control structures available in C programming languages? Explain the syntax and working with suitable examples. (13)
- IV. Differentiate between library and user defined functions. Write a C program to compute the factorial of a given number using recursion. (13)

**UNIT – III**

- V. Explain the declaration and initialization of single and two dimensional arrays. Write a C program to compute multiplication of two 3x3 matrices. (13)
- VI. Discuss the connection between pointer and array. Write the syntax for passing 2D array to a function taking suitable example. (13)

**UNIT – IV**

- VII. How string variables are declared and initialized? Discuss string manipulation in C with at least four string handling functions available in C language. (13)
- VIII. What are the similarities and differences between structures and unions? Write a note on basic I/O operations on files. (13)

P.T.O.

(2)

UNIT – V

IX. Answer the following:-

- a) List major features of C language. (2)
- b) Define the role of data flow diagram. (2)
- c) Write rules for constructing integers. (2)
- d) List various loop control instructions in C. (2)
- e) What is the significance of an array? (2)
- f) Write a note on nested structure? (3)

x-x-x