

Or

Draft a print advertisement for promoting the sale of the laptops and tablets that your company manufactures. Ad may be utilized for newspapers or magazines. 15

Unit IV

5. Prepare a press report on the inter-college technical festival recently held in your institute.

Or

Thanks to technology like e-mail, cellular phones and social networks, communication has become fast and easy. Discuss whether this change has improved the way people live. Use specific reasons and examples to support your answer. 15

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Roll No. 16008041049

A214

B. C. A. EXAMINATION, Dec. 2019

(First Semester)

(B. Scheme) (Main & Re-appear)

(BCA)

HUM501B

ENGLISH-I

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions. Each question carries 15 marks. Q. No. 1 is compulsory. Attempt other *four* questions selecting at least *one* question from each Unit.

Section A

1. (a) Correct any *five* of the following sentences :

- (i) The cloths he wears are costly.
- (ii) A book is printed on papers.
- (iii) She has suffered a heavy losses.
- (iv) He is older to me.
- (v) He is more better than I.
- (vi) Neither Rekha nor her friends was present at the party.
- (vii) Many a man have resigned in crisis.
- (viii) You need not to worry about us.

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Section B

(b) Fill in the blanks in any *five* of the sentences below from the options given against each :

(i) A light rain.....to the humidity.

- (1) increased

- (2) added
- (3) complemented
- (4) supplemented

(ii) Changes in the legal system are inevitable for we are not working for a.....society.

- (1) backward
- (2) dynamic
- (3) stagnant
- (4) developing.

(iii) I hope you will not turn.....my request.

- (1) around
- (2) off
- (3) aside
- (4) down

(iv) Despite his.....he had to suffer.

- (1) punishment
- (2) fault
- (3) innocence
- (4) negligence

(v) The child.....for the love of mother.

- (1) longed
- (2) asked
- (3) begged
- (4) desired

(vi) I.....him for the job and he got it.

- (1) commended
- (2) hired
- (3) asked
- (4) recommended

5

Section C

(c) Write a short note on importance of computers/net in promoting business. 3

Section D

(d) Write in brief the points to be taken care while drafting or sending e-Mails. 2

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Unit I

2. Correct the following sentences :

- (i) Your hairs are black.
- (ii) I am always true to my words.
- (iii) My females were in the room.
- (iv) He related the story in detail.
- (v) We had a two-hours talk.
- (vi) Of the two, he is clever.
- (vii) She is junior than me.
- (viii) You wasted your all wealth.
- (ix) He bought any books.
- (x) Health is more preferable than wealth.

10×1½=15

Or

Fill in the blanks in the following sentences by picking up the right alternative :

- (i) None of his speeches (has/have) been appreciated.
- (ii) A number of books (is/are) missing.

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- (iii) Most of the stories about him (is/are) false.
- (iv) The jury (has/have) given their views about the case.
- (v) My spectacles (was/were) misted with fog and smoke.
- (vi) I saw him (cross/to cross) the road.
- (vii) He made us (to laugh/laugh).
- (viii) It is no use (to repent/repenting) now.
- (ix) He avoids (seeing/to see) me.
- (x) I don't mind (waiting/to wait) here.

10×1½=15

Unit II

3. Pick up any *ten* of the following terms and define them clarify their meanings :

- (i) Streamlining
- (ii) Typo
- (iii) Spam

- (iv) Seminar
- (v) Curriculum Vitae's (CV)
- (vi) Book Review
- (vii) Net lab
- (viii) CPU
- (ix) Monitor
- (x) Virus
- (xi) Teenage
- (xii) Never mind
- (xiii) Laser printer
- (xiv) Laptop.

10×1½=15

Or

Think of any *ten* terms, from the areas of academic world, technology, sports or life stages and define them.

10×1½=15

Unit III

4. Build an imaginary interview with any *one* celebrity from the world of computers/cinema/music/performing arts or sports.

15

Unit IV

8. What are basic elements of Communication System ? Discuss different kinds of transmission media. 15
9. (a) Discuss different networking topologies. 8
- (b) Why communication protocol is required ? Explain TCP/IP. 7

A215

B.C.A. EXAMINATION, Dec. 2019

(First Semester)

(B. Scheme) (Main & Re-appear)

(BCA)

BCA107B

INFORMATION TECHNOLOGY

FUNDAMENTALS

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Q. No. 1 is compulsory. Attempt *Five* questions in all, selecting at least *one* question from each Unit.

1. Write short notes on the following :
- (a) Digital and Analog Computer
 - (b) Micro Programmed Control Unit
 - (c) Low Level vs. High Level Languages
 - (d) Application Software
 - (e) Data Processing
 - (f) DBMS
 - (g) Loader
 - (h) Distributed Computing Systems. 15

Unit I

2. Discuss different generation of computer along with characteristics. 15
3. Do the following conversions and operations :
- (a) $(5112)_{10} = (?)_{16}$
 - (b) $(101011)_2 = (?)_8$
 - (c) $110011 + 10010 + 1100 = (?)$
 - (d) $(E1642)_{16} = (?)_2$. 15

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Unit II

4. (a) Differentiate between Compiler and Interpreter. 5
- (b) How pseudocode is different from flowchart ? Draw a flowchart to print greatest of three numbers. 10
5. Differentiate between primary memory and secondary memory. Explain structure of Hard Disk. 15

Unit III

6. Define Operating System. Discuss different types of operating systems. 15
7. Write short notes on the following :
- (a) Role of Database Administrator
 - (b) External commands of DOS. 15

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3

P.T.O.

Unit IV

8. Define Computer. Draw its block diagram.
Explain its various physical components. 15
9. Explain the following :
- (a) Installing a software
- (b) Detection of viruses. 7,8

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Roll No.

A213

B.C.A. EXAMINATION, Dec. 2019

(First Semester)

(B. Scheme) (Main & Re-appear)

(BCA)

BCA105B

**PERSONAL COMPUTING SOFTWARE AND
HARDWARE**

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Q. No. 1 is compulsory. Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

1. (i) Explain memory used in third generation of computer.
- (ii) Differentiate between interpreter and compiler.
- (iii) Write difference between analog and digital computer.
- (iv) Write objectives of computer networks.
- (v) Write function of ATTRIB command in DOS.
- (vi) Define warm reboot.
- (vii) What is a Directory ?
- (viii) Define batch Files.
- (ix) What is a Computer Virus ?
- (x) Write four types of operating system.

10×1½

Unit I

2. Explain the various types on computer based on size and architecture. 15
3. What is a Computer Language ? Explain the various generation of computer languages. 15

Unit II

4. Explain the following DOS commands :
 - (a) PROMPT
 - (b) XCOPY
 - (c) AUTOEXEC.BAT. 3×5
5. (a) What do you mean by booting of a system ? Explain booting from floppy and HDD. 8
- (b) What is Disk ? Explain disk organization. 7

Unit III

6. Write notes on the following :
 - (a) Utility commands
 - (b) File management through window. 8,7
7. (a) Explain the methods of inserting pictures in a Wordpad. 8
- (b) Explain loop structures in Batch files. 7

No. of Printed Pages : 05

Roll No.

A211

B. C. A. EXAMINATION, Dec. 2019

(First Semester)

(B. Scheme) (Main & Re-appear)

(BCA)

BCA101B

**HUMAN VALUES AND PROFESSIONAL
ETHICS**

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 9 is compulsory.

Unit I

1. (a) Explain the process of Value Education. 7½
(b) What is the need and importance of Self Exploration ? What are its contents ? 7½
2. (a) Explain the basic requirements for fulfilment of aspirations. What is their correct priority ? 7½
(b) Why is living in Harmony Important ? Illustrate using examples. 7½

Unit II

3. (a) What do you understand by the concept of Self and Body ? What makes it important in present day lives ? 7½
(b) Explain the characteristics and activities of Harmony in "I". 7½
4. (a) What do you interpret by prosperity ? Explain Sanyam and Swasthya. 7½

- (b) Explain the importance of Harmony in Self. How is it related with Peace ? 7½

Unit III

5. (a) What are basics of Human—Human relationship ? Explain their foundation values. 7½
(b) Explain the differences between Intention and Competence. 7½
6. (a) Explain any *five* effects that harmony in society can bring about. 7½
(b) Explain the concept of World as Global Village. What do you understand by World Family ? 7½

Unit IV

7. (a) Explain using suitable examples the Harmony in Nature. 7½
(b) How are Interconnectedness and Mutual Fulfilment necessary in today's world ? 7½

8. (a) Explain the concept of Ethical Human Conduct. What do you understand by Humanistic Education ? $7\frac{1}{2}$
- (b) Illustrate the need for Competence in Professional Ethics. $7\frac{1}{2}$

Unit V

9. (a) What is Harmony in Family ? Why is it important in Indian System ?
- (b) In any given situation, how can you distinguish whether your desire is based on feelings, or on preconditioning or on your social acceptance ? Justify your answer with examples.
- (c) In your own self-exploration, what is the difference between verifying and analyzing the proposals ? Give any *one* example to support your answer.

- (d) Critically examine the role of 'madness for power' in human being for the destruction of orders of nature.
- (e) Explain the term 'holistic' in reference to present day technologies. How are holistic technologies worthy of deployment in cities. $3 \times 5 = 15$

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Roll No. 19008041015

A212

B. C. A. EXAMINATION, Dec. 2019

(First Semester)

(B. Scheme) (Main & Re-appear)

(BCA)

BCA103B

MATHEMATICS-I

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Attempt remaining *four* questions out of Units I, II, III and IV by selecting *one* question from each Unit. All questions carry equal marks.

(3-31/20)M-A212

P.T.O.

1. (a) Find the value of $\cos(-1710^\circ)$.
- (b) Solve $\sin x = 1/2$.
- (c) Give the statement of the binomial theorem for the positive integral index.
- (d) Find the equation of the line, which makes intercepts -3 and 2 on the x and y axes respectively.
- (e) Find the distance of the point $(3, -5)$ from the line $3x - 4y - 26 = 0$.
- (f) Find the 10th and n th terms of the GP $5, 25, 125, \dots$.

Unit I

2. (a) Show that :

$$\tan 3x \tan 2x \tan x = \tan 3x - \tan 2x - \tan x$$
- (b) Prove that :

$$\cos^2 x + \cos^2 \left(x + \frac{\pi}{3} \right) + \cos^2 \left(x - \frac{\pi}{3} \right) = \frac{3}{2}$$

3. (a) If $\cos x = -\frac{3}{5}$, x lies in the third quadrant, find the value of five other trigonometric functions.
- (b) Solve :

$$\sin 2x - \sin 4x - \sin 6x = 0$$

Unit II

4. (a) Show that the middle term in the expansion of $(1+x)^{2n}$ is :

$$\frac{1.3.5 \dots (2n-1)}{n!} 2^n x^n$$
 where n is a positive integer.
- (b) The coefficients of three consecutive terms in the expansion of $(1+a)^n$ are in the ratio $1 : 7 : 42$. Find n .
5. (a) If α, β are the roots of the equation $ax^2 + bx + c = 0$, find the value of

$$\left(\frac{\alpha}{\beta} - \frac{\beta}{\alpha} \right)^2$$

- (b) If α, β are the roots of the equations $ax^2 + bx + c = 0$, form the equation whose roots are $(\alpha - \beta)^2$ and $(\alpha + \beta)^2$.

Unit III

6. (a) Find the angle between the lines :
 $\sqrt{3}x + y = 1$ and $x + \sqrt{3}y = 1$.
- (b) Find the equation of the line whose perpendicular distance from the origin is 4 units and the angle which the normal makes with the positive direction of x -axis is 15° .
7. (a) If the angle between two lines is $\pi/4$ and slope of one of the lines is $1/2$, find the slope of the other line.
- (b) Find the equation of the line passing through the point of intersection of the lines $4x + 7y - 3 = 0$ and $2x - 3y + 1 = 0$.

Unit IV

8. (a) The sum of n terms of two arithmetic progressions is in the ratio $3n + 8 : 7n + 5$. Find the ratio their 12th terms.
- (b) How many terms of the G.P. $3, 3/2, 3/4, \dots$ are needed to give the sum $3069/512$?
9. (a) If A.M. and G.M. of the two numbers are p and q are 10 and 8 respectively, find the numbers.
- (b) If p th, q th, r th and s th terms of an arithmetic progression are in geometric progression, then show that $(p - q), (q - r), (r - s)$ are also in geometric progression.