Unit IV

8. Draw the chart showing in detail, the different categories of units of nature in co-existence in space. What is your role in Existence ? **15**

9. Briefly discuss the following : **15**

   (a) Natural acceptance of human values.

   (b) Holistic perception of harmony at all levels of existence.

A-211

B.C.A. EXAMINATION, Dec. 2018

(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 : Q. No. **1** is compulsory. Attempt *four* questions from the remaining Units, selecting at least *one* question from each Unit. All questions carry equal marks.

1. (a) What is the need of human values ?

   (b) Define self exploration.

   (c) Name any *two* qualities of a good human being.

   (d) Define the term "understanding".

   (e) Define the term BMI.

   (f) Define ego.

   (g) How world has become a global village ?

   (h) What is need of meditation ?

   (i) Define the term self regulation.

   (j) What is the importance of "Seh Astitva" ?

   $10 \times 1\frac{1}{2} = 15$

Unit I

2. Self exploration is the process of dialogue between "what you are" and "what you want to be". Explain and illustrate. 15

3. What do you mean by values ? How do they differ from skills ? How are values and skills complimentary ? 15

Unit II

4. With suitable examples illustrate that "physical facilities are needed for the body in a limited quantity. When we try to exceed these limits it becomes troublesome for us after some time." 15

5. (a) List and explain the programs to take care of the body. 8

   (b) How does the feeling of Sanyam facilitates the correct appraisal of our physical needs ? 7

Unit III

6. Right understanding in the individual is the basis for harmony in the family, which is the building block for harmony in the society ? Elaborate. 15

7. Define "universal human order". What could be your role in moving towards it ? 15

A-212

B.C.A. EXAMINATION, Dec. 2018

(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, selecting at least *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(3-07/22)M-A-212

P.T.O.

1. (a) Show that :
$$\tan 3x \tan 2x \tan x = \tan 3x - \tan 2x - \tan x$$

(b) Show that :
$$(1.01)^{1000000} > 10000$$

(c) Find the roots of the equation $5x^2 - 6x - 2 = 0$ by the method of completing the square.

(d) Find a relation between x and y, if the points (x, y), $(1, 2)$ and $(7, 0)$ are collinear.

(e) Find the sum of all natural numbers lying between 1000 and 2000, which are multiples of 5 (including 1000 and 2000).

(f) Insert 3 numbers between 1 and 256 so that the resulting sequence is a G.P.

Unit I

2. (a) Prove that :
$$\sin(n+1)\sin(n+2)x + \cos(n+1)x$$
$$\cos(n+2)x = \cos x$$

(b) $\cot x \cot 2x - \cot 2x \cot 3x -$
$$\cot 3x \cot x = 1$$

3. (a) Solve :
$$\sin 2x - \sin 4x + \sin 6x = 0$$

(b) Find the value of $\tan \dfrac{\pi}{8}$.

Unit II

4. (a) The coefficients of three consecutive terms in the expansion of $(1 + a)^n$ are in the ratio $1 : 7 : 42$. Find the value of n.

(b) Find the middle terms of the expansion of $\left(\dfrac{x}{3} + 9y\right)^{10}$.

5. (a) Find the value of K for which the following quadratic equation has equal roots :
$$Kx(x - 2) + 6 = 0$$

(b) Two water taps together cab fill a tank in $9\frac{3}{8}$ hours. The tap of larger diameter takes 10 hours less than the smaller one to fill the tank separately. Find the time in which each tap can separately fill the tank.

Unit III

6. (a) Without using the Pythagoras theorem, show that the points $(4, 4)$, $(3, 5)$ and $(-1, -1)$ are the vertices of a right angled triangle.

   (b) A line perpendicular to the line segment joining the points $(1, 0)$ and $(2, 3)$ divides it in the ratio $1 : n$. Find the equation of the line.

7. (a) In the triangle ABC with vertices $A(2, 3)$, $B(4, -1)$ and $C(1, 2)$, find the equation and length of attitude from the vertex A.

   (b) Find the equation of the lines through the point $(3, 2)$ which make an angle of $45°$ with the line $x - 2y = 3$.

Unit IV

8. (a) The ratio of the sum of m and n terms of an A.P. is $m^2 : n^2$. Show that the ratio of mth and nth term is $(2m - 1) : (2n - 1)$.

   (b) Insert 5 numbers between 8 and 26 such that the resulting sequence is an A.P.

9. (a) If A and G be arithmetic mean and geometric mean respectively between two positive number, prove that the numbers are $A \pm \sqrt{(A+G)(A-G)}$.

   (b) Find the sum to n terms of sequence 8, 88, 888, 8888,..............

7. Write notes on the following :

(a) Renaming files and directories   7

(b) Explain loop structures in Batch files. 8

Unit IV

8. Define Computer. Draw its block diagram. Explain its various physical components.   15

9. Explain the following :   8,7

(a) Internal cards

(b) Protection on a PC.

A-213

B.C.A. EXAMINATION, Dec. 2018

(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 : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Q. No. I is compulsory. All questions carry equal marks.

P.T.O.

Unit III

6. (a) Write and explain with syntax any five DOS commands. **10**

   (b) List different types of operating systems. **5**

7. (a) What are the main parts of a DBMS. Write the responsibilities of DBA. **10**

   (b) What are the different users involved in a DBMS ? **5**

Unit IV

8. (a) Internet has become an essential part of our life. Comment. **7**

   (b) How guided transmission is different from unguided transmission ? **8**

9. (a) What precautions you will take while shopping from online websites ? **7**

   (b) Write advantages of e-mail. Explain all header of an e-mail message. **8**

M-A-215   4   400

A-215

B.C.A. EXAMINATION, Dec. 2018

(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 *four* questions from the remaining units, selecting at least *one* question from each Unit. All questions carry equal marks.

A-214

B.C.A. EXAMINATION, Dec 2018

(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 : All questions are compulsory. Marks allocated to each question have been mentioned against them.

1. (a) Correct any *five* of the following sentences : 5
   (i) We read pages after pages.
   (ii) He has sold all of his furnitures.
   (iii) I am comfortable with my study.
   (iv) Read two first chapters of the book.
   (v) His English knowledge is very poor.
   (vi) This house is made of bricks.
   (vii) The Jury has given its verdict.

   (b) Match the groups of words under A and B to make good sentences : (Do any *five*) : 5

	A		B
(i)	He is the wiser	(1)	off all boys
(ii)	He is senior	(2)	than me
(iii)	He has not got many	(3)	silver
(iv)	He is the wisert	(4)	of the two boys
(v)	She is taller	(5)	to me
(vi)	She has not got much	(6)	gold rings.

   (c) Fill in the blanks with the correct alternative from the ones given. (attempt any *five*) : 5
   (i) The teeth of a comb (do/does) not bite us.
   (ii) Sweet (is/are) the uses of adversity.
   (iii) India (has/have) won the test match.
   (iv) There (is/are) trees in forest.
   (v) Plenty of eggs (has/have) been bought.
   (vi) She is one of those who (has/have) served the poor.

   (d) Choose the right alternative to fill in the blanks in any *five* of the following sentences : 5
   (i) (finishing/having finished) the work they went home.
   (ii) (reading/having read) the book I returned it to the library.

(iii) He does nothing but (sit/to sit) idle.

(iv) I wish him (live/to live) long.

(v) She had better (stay/to stay) in bed.

(vi) (taking off/having taken off) his shoes he went to bed.

2. (a) Use any *ten* of the following words into sentences so as to make their meanings clear :   10

(i) Adapter

(ii) Amplifier

(iii) Monitor

(iv) CPU

(v) Backup

(vi) Biodegradable

(vii) Byte

(viii) Database

(ix) Hardware

(x) Modem

(xi) ROM (Read Only Memory)

(xii) Software

(xiii) Tele Communication

(xiv) Current.

(b) Do as directed (attempt all) :   10

(i) Pick up the right alternative : When you see some one at 8 p.m. you say :

(1) Good night

(2) Good evening

(3) Good afternoon.

(ii) What are your supposed to wish when going for sleep at 12 in the night ?

(1) Good morning

(2) Good night

(3) Good day

(4) Soon to see you

(iii) The railway compartment is fully crowded. Pickup the right alternative to express the same :

There is no (space/place/area left/ room) in the compartment.

(iv) When do you use the expression- 'It was nice meeting you' :

(1) When you happen to meet someone.

Or

(2) When you have met someone and are taking leave of ?

(v) Complete the following sentence :

I wonder if you would mind.........

(vi) What to say when someone thanks you for something ?

(vii) Write how can you answer to the offer :

Shall ! should I drop you at the airport ?

(viii) Frame reply...................may I ask you to do we a favour ?

(ix) Which address is better ?

(1) Ladies and gentlemen

Or

(2) Dear women and men.

(x) What do you say when you meet someone ?

(1) It was nice seeing you.

(2) It is good to see you.

3. (a) Write how will you explain to your mother about how to operate a computer ? (**100** words)

Or

Suppose you are asked to explain the features of a mobile phone set to a customer. How will you explain—write a paragraph (**100** words)   **10**

(b) Suppose you are a student of computer science and want to participate in an intercollegiate paper presentation competition to be organized at DCRUST Murthal. Write an e-Mail to the organizing secretary enquiring details of the competition. Invent necessary details.

Or

Write your expectations from a good teacher and a good college in 100 words.

10

4. Write your view either in favour or against (in 150 words) the following advertising slogan for social movement :

15

Call from the Nation

Rein Privatization

Bring within our Reach

Out Right to Education

Or

Comprehend the following passage— an extract from Swami Vivekananda's speech and answer the questions given at the end :

Do you ask anything from your children in return for what you have given them ? It is your duty to work for them, and there the matter ends. In whatever you do for a particular person, a city or a state, assume the same attitude towards it as you have towards your children- expect nothing in return. If you can inveriably take the position of a giver, in which everying given by you is a free offering to the world, without any thought of return, then will your work bring you no attachment. Attachment comes only where we expect a return.

If working like slaves results in selfishness and attachment, working as master of our own mind gives rise to the bliss of non-attachment. We often talk of right and justice, but we find that in the world right and justice are mere baby's talk. There are two things which guide

the conduct of men : might and mercy. The exercise of might is invariably the exercise of selfishness. All men and women try to make the most of whatever power or advantage they have. Mercy is heaven itself; to be good, we have all to be merciful. Even justice and right should stand on mercy. All though of obtaining return for the work we do hinders our spiritual progress; nay, in the end it brings misery. There is another way in which this idea of mercy and selfless charity can be put into practice; that is, by looking upon work as "workship" in case we believe in a Personal God. Here we give up all the fruits our work unto the Lord, and workshipping Him thus, we have no right to expect anything from man kind for the work we do.

Questions :

(a) What does Swami Ji advocate about attachment to work done by us ? Illustrate his opinion.

(b) Explain the statement-'exercise of might is invariably the exercise of selfishness'.

(c) Do you agree with the statement-justice and right should stand on mercy ? Explain your argument.

(d) How do expectations bring misery ? What is the solution advocated by Swami Vivekanand ?

(e) Do you agree to Swami Ji's philosophy of work ? Is it practical in today's world to end misery ? $3 \times 5 = 15$