Bachelor of Computer Application
Second Semester Main Examination, June-2021
Mathematics-II [BCA201T]

Time: 3:00 Hrs   **Max Marks 40**

Note: **(i) Attempt all questions.**
        (ii) All questions carry equal mark.

Q.1   Test the Convergence of $\int_0^2 \frac{xn-1}{(1+x)m+n \, dx}$

Q.2   Evaluate $\int_0^l \int_0^1 \sqrt{} 1 + x^2 \ \frac{dx \ \ dy}{1+x^2+y^2}$

Q.3   If $r(t) = 5(t^2)\hat{\imath} + t^2\hat{\jmath} - 3t\hat{k}$ Show that

Q.4   Prove that β (m_1,n) $\frac{\sqrt{m}\sqrt{n}}{\sqrt{m}+\sqrt{n}}$

Q.5   Discuss the maximum and minimum of the function

       $$\mu = xy + \frac{a^3}{x} + \frac{a^3}{y}$$

Q.6   Test the convergence of the following series

       $$\frac{x}{1.2} + \frac{x2}{3.4} + \ldots\ldots x > 0$$

Q.7   Trace the cure

       $r = a (1 + cos\theta)$

Bachelor of Computer Application
Second Semester Main Examination, June-2021
Statistics - II [BCA202T]

Time: 3:00 Hrs   **Max Marks 40**

Note: (i) Attempt Any Five questions.
(ii) All questions carry equal mark.

Q.1   State Cramer rao inequality?

Q.2   What is the procedure of testing a statistical hypothesis?

Q.3   Define x^2 distribution write short note on the testis of statistical hypotheses based on x^2 distribution

Q.4   Write a note on Contingency table and signets

Q.5   What are Latin square designs?

Q.6   State and prove Neumann person's fundamentals lemma?

Q.7   Explain the following-
(1) Critical region
(2) Power of the test
(3) Size of the test

Bachelor of Computer Application
Second Semester Main Examination, June-2021
Physics - II [BCA203]

Time: 3:00 Hrs   **Max Marks 40**

Note: Attempt all questions.
All questions carry equal marks.

Q.1   State and explain Maxwell eqation

Q.2   Describe reflection of radio waves from ionosphere

Q.3   Explain the construction and working of a zone plate .

Q.4   How is plane wave front divided Ruto the half period zone.

Q.5   Describe Doppler effect in light illustrate with example

Q.6   Define laser. How it is different from ordinary source of light?

Q.7   What is optical activity? Define it

Bachelor of Computer Application
Second Semester Main Examination, June-2021
Programming and Problem Solving Through C-II (BCA204T)

<u>**Time: 3:00 Hrs**</u>   <u>**Max Marks 50**</u>

Note : Attempt all questions.
        All questions carry equal marks.

Q.1   Differentiate between in build library and user defined function?

Q.2   What do you mean by Recursion? Explain with an example.

Q.3   What are the Various types of flies?

Q.4   Write note on Display Adapters.

Q.5   What do you mean by Designing animations? Explain?

Q.6   How can you draw a live on screen?

Q.7   Describe colour selections and representations in text mode.

Bachelor of Computer Application
Second Semester Main Examination, June-2021
Programming and Problem Solving Through C-II (BCA204T)

Time: 3:00 Hrs   **Max Marks 50**

Note : Attempt all questions.
All questions carry equal marks.

Q.1 Define data type of C Language?

Q.2 What do you mean by loop? Write the difference between "While" and "do while" loop?

Q.3 What do you mean by Function? Write the difference between call by Value and call by Reference?

Q.4 What do you mean by Arrey?

Q.5 What do you mean by recursion? Explain with example?

Q.6 What is file and how many types of files are available?

Q.7 Write a C programme to find the sun of the digits of any given positive integer?

Bachelor of Computer Application
Second Semester Main Examination, June-2021
Introduction to Information System [BCA205]

Time: 3:00 Hrs   **Max Marks 50**

Note: (i) Attempt all questions.
(ii) All questions carry equal mark.

Q.1   Explain business information system

Q.2   Write short note on software issues and trends

Q.3   Explain different application of Database

Q.4   Explain different application of E commerce

Q.5   Write a short note on computer waste and mistake

Q.6   Explain the working of E payment system

Q.7   Explain various types of internet connection

Bachelor of Computer Application
Second Semester Main Examination, June-2021
हिन्दी [BCA206T]

Time: 3:00 Hrs   **Max Marks 40**

नोट : किन्हीं पाँच प्रश्नों के उत्तर देना अनिवार्य है।
       सभी प्रश्नों के अंक समान हैं।

प्र.1   मानक हिन्दी को परिभाषित कर उसकी आवश्यकता एवं स्वरूप पर प्रकाश डालिये।

प्र.2   भारतीय समाज व्यवस्था के अंतर्गत आश्रम व्यवस्था को समझाइये।

प्र.3   बड़े घर की बेटी का सांराश लिखिए।

प्र.4   "बुध्द की करूणा" पाठ के आधार पर कोई दृष्टांत लिखिए।

प्र.5   अपने बड़े भाई के विवाह का निमंत्रण पत्र बनाइयें।

प्र.6   भारतीय संस्कृति की प्रमुख विशेषता है। अनेकता में एकता इस कथन की पुष्टि कीजिये।

प्र.7   म.प्र. की लोक कलाओं का परिचय दीजिए।