

शासकीय रेवतीरमण मिश्र स्नातकोत्तर महाविद्यालय सूरजपुर,  
जिला –सूरजपुर (छ0ग0)

---

बी.सी.ए. – प्रथम वर्ष के नियमित विद्यार्थियों हेतु एसाइन्मेन्ट की प्रश्नावली  
विषय:– आधार पाठ्यक्रम (हिन्दी भाषा)

नोट:– निम्नलिखित में से किन्ही दो प्रश्नों के उत्तर दीजिए।

- प्र0 1. पत्र के प्रकार एवं अच्छे पत्र की विशेषताएं लिखिए।  
प्र0 2. नागरी के प्रारंभिक स्वरूप पर प्रकाश डालते हुए उसकी विशेषताएं लिखिए।  
प्र0 3. सूचना प्रौद्योगिकी घटकों का सविस्तार वर्णन कीजिए।

==xx==

विषय:– आधार पाठ्यक्रम (पर्यावरण अध्ययन)

नोट:– निम्नलिखित में से किन्ही दो प्रश्नों के उत्तर दीजिए।

- प्र0 1. पारिस्थितिक तंत्र की परिभाषा, प्रकार व संरचना का वर्णन कीजिए।  
Explain the definition, types and structure of Ecosystem.
- प्र0 2. निम्न का वर्णन कीजिए (कोई 02)  
(अ) खाद्य श्रृंखला (ब) पारिस्थितिक पिरामिड (स) ऊर्जा प्रवाह  
Explain the following.(Any Two)  
(a) Food chain (b) Ecological pyramid (c) Energy flow
- प्र0 3. वायु प्रदूषण क्या है? इसके कारण व निवारण पर निबंध लिखिए।

What is Air pollution? Write an Essay on its causes and preventions.

विषय:- आधार पाठयक्रम (अंग्रेजी भाषा)

नोट:- निम्नलिखित में से किन्ही दो प्रश्नों के उत्तर दीजिए।

Q.1 Write an essay on any one.

- (a) Science
- (b) Pollution
- (c) Power of Yoga
- (d) Computer Education in India

Q.2 Write a short story on any one.

- (a) Vedic literature
- (b) Discipline
- (c) Advantage of green trees
- (d) The Hindu Trinity

Q.3 Answer the questions (any five)

- (a) How do the trees sing?
- (b) Mention three sacrificial fires?
- (c) What will happen if the trees are not taken care of?
- (d) In what does the cultural heritage of India lie?
- (e) Who were called the extremists?
- (f) Why does poet compare reason with stream?

==xx==

NOTE :- Attempt Any Two Questions per Subject.

Subject - 1 - Fundamental of IT & OS :-

Question 1 :- What is Computer System? Also Explain Input Devices, memory unit and central processing unit in detail.

Question 2 :- What is Operating System? Explain GUI and Disk Operating System with Commands.

Question 3 :- What is Computer Software? Explain System Software and Application Software in detail.

Subject :- 2 :- PC Software

Question 1 :- What is word Processing Software. Explain MS word and its all features in detail.

Question 2 :- Explain MS Excel. Also Explain Function and Formula in detail.

Question 3 :- Write Short notes :-

- ① MS Access
- ② MS Power point.

Subject :- 3 :- Programming in Visual Basic.

Question 1 :- What is Visual Basic. Explain its features.

Question 2 :- Explain Array in Visual Basic.

Question 3 :- What is SDI and MDI Application in Visual Basic.

Subject - (4):- Programming in C - Language:-

Question:- (1), Explain C-programming language with its tokens and structure of C-programming.

Question:- (2), What is Function in C-language.

Question:- (3), Write short notes:-

- ① Array
- ② string
- ③ Structure, Union, Enum.

Subject :- (5):- Introductory Electronics:-

Question:- ① what is logic Gates in detail.

Question:- ② Explain Combinational circuit and sequential logic circuit.

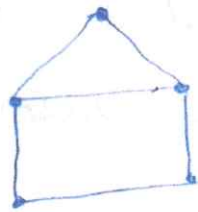
Question:- ③ Write short notes:-

- ① BCD
  - ② ASC II
  - ③ ~~FB~~ BCD
  - ④ Gray codes
  - ⑤ Excess-3
  - ⑥ Error detection and correcting codes.
-

Subject: (C) Discrete Mathematics: (3)

Question: (1) (a) To prove that maximum number of edges in a simple graph with  $n$  vertices is  $\frac{n(n-1)}{2}$ .

(b) Which of the following graphs have a Hamiltonian circuit?



(c). Define:-

- (i). Tree
- (ii). Binary Trees
- (iii). Spanning Trees

Question: (2) (a) Express the following function into disjunctive normal form:-

- (i).  $x \cdot y' + x \cdot z + x \cdot y$
- (ii).  $(x+y) (x+y') (x'+z)$

(b) Draw the simplified circuit of the expression:-

$$f(x, y, z) = x \cdot y' \cdot z + (z + y) \cdot x'$$

(c). The function  $xy + x'y + x'y'$  is given in disjunctive normal form, change it into conjunctive normal form.

Question: (3) (a) If  $A, B, C$  are any three non-empty sets then prove that,

$$(A-B) * C = (A \cap C) - (B \cap C)$$

(b). If  $I$  is the set of integers and the relation  $xRy \Rightarrow x-y$  is an even integer, then prove that  $R$  is an Equivalence relation, where  $x, y \in I$ . (4)

(c). To show that if  $R^{-1}$  and  $S^{-1}$  are inverse of the relations  $R$  and  $S$  respectively, then

$$(SOR)^{-1} = R^{-1} \circ S^{-1}.$$

Subject: - (7) Calculus and Statistical Analysis:-

Question:- (1):- Ten students got the following Percentage of marks in Economics & Statistics:-

Roll no:- 1    2    3    4    5    6    7    8    9    10  
Marks in Economics 78    36    98    25    75    82    90    62    65    39

Marks in Statistics 84    51    91    60    68    62    86    58    33    47.

Calculate the coefficient of Correlation.

Question (2):- In the curve  $36^2y = x^3 - 36x^2$ , Find the points at which the tangent is parallel to the axis of  $x$ .

Question (2):- Find the derivative of

$$\sqrt{\frac{1+x}{1-x}}$$