04

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- 2. (a) What are the differences between microcomputer, minicomputer, mainframe computer and supercomputer?
 - (b) Explain in detail the components of computer hardware.
- 3. (a) List five important registers of the CPU. Also state the purpose of each register.
 - (b) Show the classification of the input devices. Give a description of joystick along with its features.
- (a) Convert E16, 389, E4.16 and 2A. 1B hexadecimal numbers into decimal numbers.
 - (b) Perform binary subtraction on the following pairs of binary numbers.
 - (i) 111000, 011010
 - (ii) 0110, 0010
 - (iii) 1111, 1001
 - (iv) 1100, 1010

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(2)

- 5. (a) What are the differences between Compiler and Interpreter?
 - (b) Describe the two categories of system software and give an example of each category.
- 6. (a) State the purpose of each of the control structures: Sequence, Selection, and Iteration.
 - (b) Write an algorithm and draw a flowchart to find the sum of all odd numbers till 100.
- 7. (a) Describe the Second generation computer based on the hardware, software, computing characteristics, physical appearance, and their applications.
 - (b) What are the functions of the Arithmetical Logical Unit and Control Unit?
- 8. (a) Explain the need of the cache memory. State three important features of the cache memory.
 - (b) What is the meaning of Volatile memory? Also give an example of volatile memory with explanation.

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(3)

- 9. (a) Describe the functionality of a daisywheel printer.
 - (b) What are the differences between impact and Non-impact Printers?
- 10. (a) What is Direct Memory Access (DMA) controller? Describe with a diagram.
 - (b) Describe architecture of 8086 microprocessor with a diagram.

4008-2

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Printed Pages: 8

Degree (Part-I) (Vocational) Examination, 2020

(Honours)

BCA

[Paper: Second]

[PPU-D-I (V) H-BCA-2]

Time: Three Hours]

[Maximum Marks: 75

Note: Attempt any five questions in all. All the questions are of equal value. Question No. 1 is compulsory.

- 1. Choose the correct answer of the following:
 - (i) What is the ready state of a process?
 - (a) when process is scheduled to run after some execution
 - (b) when process is unable to run until some task has been completed

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(1)

	(c)	when process is using the CPU
	(d)	none of the mentioned
(ii)		ddress of the next instruction to be executed e current process is provided by the:
	(a)	CPU registers
	(b)	Program counter
	(c)	Process stack
	(d)	Pipe
(iii)	concu	rently and the outcome of the execution and on the particular order in which the stakes place, is called:
	(a)	dynamic condition
	(b)	race condition
	(c)	essential condition
	(d)	critical condition
4008-2/1500		(2)

(iv)	The interval from the time of submission of a process to the time of completion is termed			
	as			
	(a)	waiting time		
	(b)	turnaround time		
	(c)	response time		
	(d)	throughput		
(v)	Semap	hore is a/anto solve the critical		
	section	problem,		
	(a)	hardware for a system		
	(b)	special program for a system		
	(c)	integer variable		
	(d)	none of the mentioned		
(vi)	Which	one of the following is the deadlock		
	avoidance algorithm?			
	(a)	Banker's algorithm		
	(b)	Round-robin algorithm		
	(c)	Elevator algorithm		
4008-2/1500	(d)	Karn's algorithm (3) [P.T.O.]		

- (viii) Input: A="11/05/1983" Choose the right function to get Output: 198
 - (a) ?SUBSTR (A,7,2)
 - (b) ?STUFF (A,7,3)
- (c) ?SUBSTR(A,8,3) (d) ?SUBSTR(A,7,3)
 - (viii) Decision Table is a:
 - (a) Tabular representation of a program logic
 - (b) Symbolic representation of a program logic
 - (c) Graphical representation of a program logic
 - (d) All of the above
 - (ix) The command to create a new database file based on two open database files is:
 - (a) SET RELATION
 - (b) UPDATE

4008-2/1500 (4)

		(c)	JOIN			
		(d)	None of the above			
	(x)	The ??	?? Indicates :			
		(a)	Print text to output screen			
		(b)	Print text directly to printer			
		(c)	Comment			
		(d)	Logical Operation			
2. Write short notes on any three out of the following four terms/keywords:						
	(i)	Proces	ss switching			
	(ii)	Binary	semaphore			
	(iii)	Deadlo	ock condition			
	(iv) External fragmentation					
What is Process Control Block (PCB) ? Describe the various attributes of a PCB.						
A single processor system has three resource types X, Y and Z, which are shared by three processes. There 1008-2/1500 (5) [P.T.O.]						

are five units of each resource type. Consider the following Allocation and Request (Claim-Allocation) matrixes. Identify the given system state is safe or not. Show the state of the system after each process completion. Which of these processes will finish last?

Allocation			
	X	Y	Z
P0	1	2	1
P1	2	0	1
P2	2	2	1

Request			
	X	Y	Z
P0	1	0	3
P1	0	1	2
P2	1	2	0

- Consider a main memory with five page frames and the following sequence of page reference: 3, 8, 2, 3, 9, 1, 6, 3, 8, 9, 3, 6, 2, 1, 3. Calculate the number of page faults by using First, In, First Out (FIFO) page replacement policy.
- What is File Allocation method? Describe the various types of File Allocation methods.
- 7. What are the main functions of DBMS and how will you differentiate it from File Management System?
- 8. Describe briefly the various types of fields supported in FoxPro.

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Describe the following data displaying and monitoring commands with syntax and example:

- (i) Display
- (ii) List
- (iii) Browse
- (iv) Recall
- 10. Write a procedure in FoxPro to reverse the first and last names of employee, which is separated by a space.

 Assume the field name to be NAME in a database called EMPLOYEE.

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Printed Pages: 20

Degree (Part-I) (Vocational) Examination, 2020

(Subsidiary)

MATHEMATICS

[PPU-D-I(V) (SUB)-MATH]

Time: Three Hours

|Maximum Marks: 100

Note: Candidates are required to give their answers in their own words as far as practicable. The questions are of equal value. Answer five questions in all. First question is compulsory. Besides this attempt one question from each section.

परीक्षार्थी यथासम्भव अपने शब्दों में ही उत्तर दें। सभी प्रश्नों के मान बराबर हैं। कुल पाँच प्रश्नों के उत्तर दीजिए। प्रथम प्रश्न अनिवार्य है। इसके अलावा, प्रत्येक खण्ड से एक प्रश्न का उत्तर दीजिए।

1. (i). If A, B and C are non-empty sets then A-(B-C) =

(a) $(A-B) \cap (A \cup C)$

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(1)

- (b) (A-B)U(AAC)
- (c) (AUB)-(AUC)
- (d) $(A \cap B) (A \cap C)$

यदि A, B और C रिक्त समुच्चय नहीं हैं, तब A-(B-C)=

- (a) $(A-B)\cap(AUC)$
- (b) $(A-B)U(A\cap C)$
- (c) (AUB)-(AUC)
- (d) $(A \cap B) (A \cap C)$
- (ii) How many elements in A × B and B × A are common if n elements are common to A and B?
 - (a) r
 - (b) 2n
 - (c) n²
 - (d) n^2+1

A × B और B × A में उभयनिष्ठ अवयवों की संख्या कितनी है यदि A और B के n अवयव उभयनिष्ठ हैं ?

(a) n

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(2)

- (b) 2n
- (c) n²
- (d) n^2+1
- (iii) In the group of non-zero rational numbers under the binary operation * given by $a*b = \frac{ab}{2}$ the inverse of 4 is :
 - (a) $\frac{1}{4}$
 - (b) $\frac{1}{2}$
 - (c) 2
 - (d) 1

शून्येत्तर परिमेय संख्याओं के समूह में जहाँ कि द्विशः संक्रिया * को $a*b=\frac{ab}{2}$ से बताया गया है, 4 का व्युत्क्रम है :

- $(a) \quad \frac{1}{4}$
- (b) $\frac{1}{2}$

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(3)

$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 1 & 5 & 4 \end{pmatrix}$$
 is

(a)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 2 & 1 & 5 & 4 \end{pmatrix}$$

(b)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 5 & 2 & 4 \end{pmatrix}$$

(c)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 2 & 5 & 4 \end{pmatrix}$$

$$\begin{pmatrix}
1 & 2 & 3 & 4 & 5 \\
3 & 1 & 2 & 4 & 5
\end{pmatrix}$$

क्रमचय
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 1 & 5 & 4 \end{pmatrix}$$
 का व्युत्क्रम है:

(a)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 2 & 1 & 5 & 4 \end{pmatrix}$$

(b)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 5 & 2 & 4 \end{pmatrix}$$

(c)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 2 & 5 & 4 \end{pmatrix}$$

(d)
$$\begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 2 & 4 & 5 \end{pmatrix}$$

(v) If AB = 0 and $BA \neq 0$ for two matrices A and B then :

(a)
$$A \neq 0, B \neq 0$$

(b)
$$A = 0, B = 0$$

(c)
$$B = 0$$

(d)
$$A = 0$$

यदि दो आव्यूह A और B के लिए AB = 0 और $BA \neq 0$ है, तब :

(a)
$$A \neq 0, B \neq 0$$

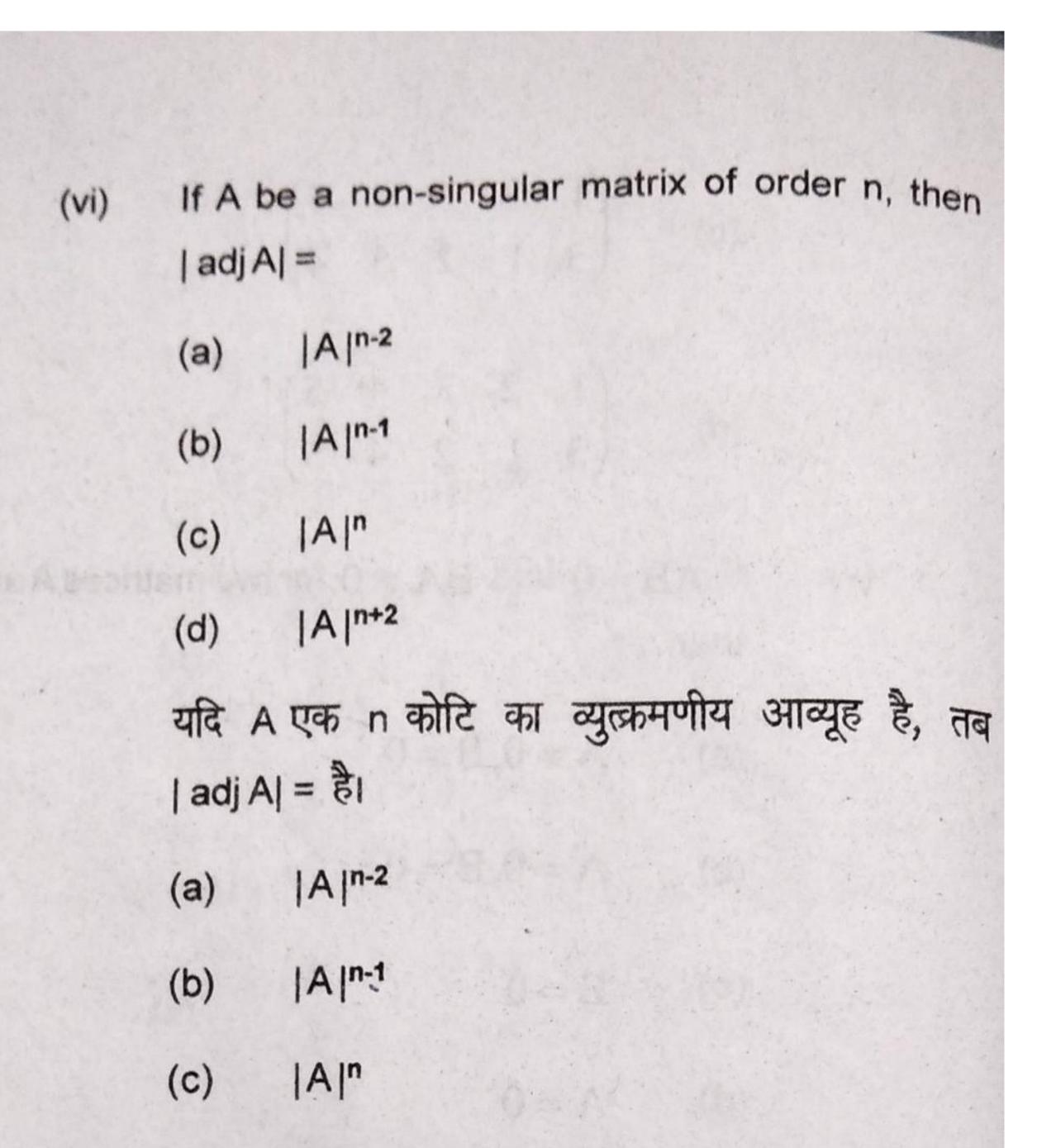
(b)
$$A = 0, B = 0$$

(c)
$$B=0$$

(d)
$$A = 0$$

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(5)



(vii) Series
$$\sum_{n=1}^{\infty} \left(\frac{n+1}{n^p}\right)$$
, $p > 0$:

- (a) is divergent for $p \ge 2$
- (b) is divergent for p > 2
- (c) is convergent for $p \ge 2$
- (d) is convergent for p > 2

1404-1/1800 (6)

ब्रेजी
$$\sum_{n=1}^{\infty} \left(\frac{n+1}{n^p}\right)$$
 p > 0 :

- (a) p≥2 के लिए अपसारी है
- (b) p>2 के लिए अपसारी है
- (c) p≥2 के लिए अभिसारित है
- (d) p>2 के लिए अभिसारित है
- (viii) On the interval [-1, 1], f(x) is such that f'(x) = 0 for the function $f(x) = x^2 + |x| + 2$. The values of x are:
 - (a) $\frac{1}{2}, -\frac{1}{2}$
 - (b) $\frac{1}{3}, -\frac{1}{2}$
 - (c) $\frac{1}{4}, -\frac{1}{3}$
 - (d) $\frac{2}{3}, -\frac{1}{3}$

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(7)

(a)
$$\frac{1}{2}$$
, $-\frac{1}{2}$

(b)
$$\frac{1}{3}, -\frac{1}{2}$$

(c)
$$\frac{1}{4}, -\frac{1}{3}$$

(d)
$$\frac{2}{3}, -\frac{1}{3}$$

(ix) The eccentricity of the hyperbola $16x^2 - 9y^2 = 576$ is:

(b)
$$\frac{3}{2}$$

$$(c) \frac{5}{3}$$

$$\frac{9}{5}$$

अतिपरवलय 16x² - 9y² = 576 की उत्केन्द्रता है :

- (a) 2
- (b) $\frac{3}{2}$
- (c) $\frac{5}{3}$
- $(d) \quad \frac{9}{5}$
- (x) If two lines $\frac{x+3}{-3} = \frac{y-1}{1} = \frac{z-5}{5}$ and

 $\frac{x+1}{-1} = \frac{y-k}{2} = \frac{z-5}{5}$ are co-planar, then value of k is :

- (a) 1
- (b) 2
- (c) 3
- (d) 4

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(9)

यदि दो रेखाएं
$$\frac{x+3}{-3} = \frac{y-1}{1} = \frac{z-5}{5}$$
 और

$$\frac{x+1}{-1} = \frac{y-k}{2} = \frac{z-5}{5}$$
 सह-तलीय हैं, तब k का मान

意:

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Section - A

(खण्ड-क)

2. (a)

In a class of 25 students, 12 have taken Mathematics, 8 have taken Mathematics but not Biology. Find the number of Students who have taken Mathematics and Biology and those who have taken Biology but not Mathematics.

विद्यार्थियों की कक्षा में, 12 ने गणित लिया है, 8 ने गणित लिया है, लेकिन जीवविज्ञान नहीं ली है। उन विद्यार्थियों की संख्या निकालिए जिन्होंने गणित तथा जीवविज्ञान लिया है तथा उनकी जिन्होंने जीवविज्ञान लिया है लेकिन गणित नहीं लिया है।

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(10)

(b) Prove that

सिद्ध कीजिए:

- (i) A countable union of sets is countable समुच्चयों का एक गणनीय संघ गणनीय होता है
- (ii) Any infinite subset of a countable set is countable

एक गणनीय समुच्चय का कोई अपरिमित उपसमुच्चय गणनीय होता है

3. (a) Prove the following:

निम्न को सिद्ध कीजिए:

(i) If R_1 and R_2 are equivalence relations in a set A, then $R_1 \cap R_2$ is also an equivalence relation.

यदि R_1 तथा R_2 समुच्चय A में तुल्यता सम्बन्ध है, तब $R_1 \cap R_2$ भी एक तुल्यता सम्बन्ध है।

(ii) Let f: X → Y be a function. If relation R in X given by R = {(a, b): f(a) = f(b)}, then R is an equivalence relation.

मान लीजिए कि $f: X \to Y$ एक फलन है। यदि X में $R = \{(a, b): f(a) = f(b)\}$ द्वारा प्रदत्त एक सम्बन्ध दिया जाता है, तब R एक तुल्यता सम्बन्ध है।

(b) If $n \ge 2$ be collection of all even permutations of $\{1, 2,, n\}$ then prove that it forms a sub-group

of order $\frac{|n|}{2}$ of the symmetric group S_n .

यदि $n \ge 2$ के लिए $\{1, 2,, n\}$ के सभी सम क्रमचयों का संग्रह है, तब सिद्ध कीजिए कि यह समित समूह S_n

का $\frac{n}{2}$ कोटि का एक उपसमूह बनाता है।

Section - B

(खण्ड-ख)

4. (a) (i) Show that the product of two unitary matrices is a unitary matrix.

दिखाइये कि दो एकात्मक आव्यूहों के गुणन एक एकात्मक आव्यूह होता है।

(ii) Prove that inverse of an orthogonal matrix is orthogonal.

सिद्ध कीजिए कि एक लम्बकोणीय आव्यूह का व्युत्क्रम लम्बकोणीय होता है।

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(12)

(b) Find rank of the following matrix:

निम्न आव्यूह का रैंक निकालिए:

$$A = \begin{bmatrix} 2 & 3 & -1 & -1 \\ 1 & -1 & -2 & -4 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}$$

5. (a) Determine graphically the maximum and minimum values of objective function

$$z = 3x + 9y$$

Subject to the constraints: x + 3y ≤ 60

 $x + y \ge 10$

 $x \leq y$

 $x \geq 0, y \geq 0$

आलेखीय विधि द्वारा उद्देश्य फलन z = 3x + 9y का अधिकतम और न्यूनतम मान निम्न अवरोधों के अन्तर्गत

$$x + y \ge 10$$

$$x \leq y$$

$$x \geq 0, y \geq 0$$

(b) Using the Simplex method, ,maximize the objective function
$$z=12x_1+6x_2+4x_3$$

Subject to constraints:
$$4x_1 + 2x_2 + x_3 \le 60$$

$$2x_1 + 3x_2 + 3x_3 \le 50$$

$$x_1 + 3x_2 + x_3 \le 45$$

$$x_1 \ge 0, x_2 \ge 0, x_3 \ge 0$$

सिम्पलेक्स विधि द्वारा उद्देश्य फलन $z=12x_1+6x_2+4x_3$ का अधिकतम मान निम्न अवरोधों के अन्तर्गत निकालिए :

$$4x_1 + 2x_2 + x_3 \le 60$$

$$2x_1 + 3x_2 + 3x_3 \le 50$$

$$x_1 + 3x_2 + x_3 \le 45$$

$$x_1 \ge 0, x_2 \ge 0, x_3 \ge 0$$

Section - C

(खण्ड-ग)

6. (a) Prove that every convergent sequence is bounded but converse is not true.

सिद्ध कीजिए कि प्रत्येक अभिसारित अनुक्रम परिबद्ध होते हैं किन्तु इसका उल्टा सत्य नहीं है।

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(14)

(b) Test the convergence of the serie	(b)	Test the	convergence	of the	series
---------------------------------------	-----	----------	-------------	--------	--------

$$\sum_{n=1}^{\infty} \sqrt{\frac{n-1}{n^3+1}} x^n, x > 0.$$

श्रेणी
$$\sum_{n=1}^{\infty}\sqrt{\frac{n-1}{n^3+1}}x^n$$
 , $x>0$ के अभिसारी होने की जाँच कीजिए।

7. (a) Simplify:

सरल कीजिए:

(i)
$$(1+i)^{18}$$

(ii)
$$(-\sqrt{3} + 3i)^{31}$$

(b) Prove the following:

निम्न को सिद्ध कीजिएः

- (i) $\cosh(x + y) = \cosh x \cosh y + \sinh x \sinh y$
- (ii) $\sinh(x y) = \sinh x \cdot \cosh y \cosh x \cdot \sinh y$

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(15)

$$f(x) = \begin{cases} 2x+1, & \text{if } x \le 1 \\ ax^2 + b, & \text{if } 1 < x < 3 \\ 5x + 2a, & \text{if } x \ge 3 \end{cases}$$

अचरों a और b के मान निकालिए ताकि नीचे परिभाषित फलन f हर जगह सतत हो :

$$f(x) = \begin{cases} 2x + 1, & \text{यदि } x \le 1 \\ ax^2 + b, & \text{यदि } 1 < x < 3 \\ 5x + 2a, & \text{यदि } x \ge 3 \end{cases}$$

(b) Draw the graph of the function y = |x-1| + |x-2| in the interval [0, 3] and discuss the differentiability of the function in this interval.

अन्तराल [0, 3] में फलन y = |x-1| + |x-2| का आरेख खींचे और इस अंतराल में फलन के अवकलनीयता की चर्चा कीजिए।

Section - D

(खण्ड-घ)

9. (a) Find the equation of hyperbola if (i) foci are $(0,\pm 12)$ and length of latus rectum is 36, (ii) foci

are
$$(0,\pm 3)$$
 and vertices are $\left(0,\pm \frac{\sqrt{11}}{2}\right)$.

अतिपरवलय का समीकरण निकालिए यदि (i) नाभियां $(0,\pm 12)$ और नाभिलम्ब जीवा की लम्बाई 36 है,

(ii) नाभियां
$$(0,\pm 3)$$
 पर हैं और शीर्ष $\left(0,\pm \frac{\sqrt{11}}{2}\right)$ पर हैं।

(b) Find the equation of the circle which passes through the point (2, -2) and centre of the circle $x^2 + y^2 - 6x - 8y = 11$ and whose centre lies on the line x + y = 2.

बिन्दु (2, -2) और वृत्त $x^2 + y^2 - 6x - 8y = 11$ के केन्द्र से होकर जाने वाले उस वृत्त का समीकरण ज्ञात कीजिए जिसका केन्द्र रेखा x + y = 2 पर स्थित है।

$$\frac{x-1}{2} = \frac{y-2}{3} = \frac{z-3}{-3}$$
 and

$$\frac{x+3}{-1} = \frac{y-5}{8} = \frac{z-1}{4}$$

रेखा युग्म
$$\frac{x-1}{2} = \frac{y-2}{3} = \frac{z-3}{-3}$$
 और

$$\frac{x+3}{-1} = \frac{y-5}{8} = \frac{z-1}{4}$$
 के मध्य कोण ज्ञात कीजिए।

(b) Find the equation of the plane through the points (1, 0, -1) and (3, 2, 2) and parallel to the line

$$\frac{x-1}{1} = \frac{y-1}{-2} = \frac{z-2}{3}$$

बिन्दुओं (1, 0, -1) और (3, 2, 2) से होकर जाने वाले तथा रेखा $\frac{x-1}{1} = \frac{y-1}{-2} = \frac{z-2}{3}$ के समान्तर समतल का समीकरण ज्ञात कीजिए।

2407-1

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Printed Pages: 8

Degree (Part-I) (Vocational) Examination, 2020

(Subsidiary)

ENGLISH

[Paper : First]

(Language and Literature)

[PPU-D-I (V) (Sub) ENG]

Time: Three Hours]

[Maximum Marks: 100]

Note: Attempt all questions.

- 1. Explain the following lines with reference to the context:
 - (a) Drive my dead thoughts over the universe

 Like wither'd leaves to quicken a new birth!

 And, by the incantation of this verse,

Scatter, as from an unextinguish'd hearth

Ashes and sparks, my words among mankind!

Be through my lips to unawaken'd earth

2407-1/2400

(1)

The trumpet of a prophecy! O Wind,

If Winter comes, can Spring be far behind?

OR

Away! away! for I will fly to thee,

Not charioted by Bacchus and his pards,

But on the viewless wings of Poesy,

Though the dull brain perplexes and retards:

Already with thee! tender is the night,

And haply the Queen-Moon is on her
throne,

Cluster'd around by all her starry Fays;

(b) And the Giant's heart melted as he looked out.

'How selfish I have been!' he said;'now I know why the Spring would not come here. I will put that poor little boy on the top of the tree, and then I will knock down the wall, and my garden shall be the children's playground forever and ever.'

He was really very sorry for what he had done.

On some evenings, seated at his desk in the corner of the big empty shed, the postmaster too would call up memories of his own home, of his mother and his sister, of those for whom in his exile his heart was sad, — memories which were always haunting him, but which he could not talk about with the men of the factory, though he found himself naturally recalling them aloud in the presence of the simple little girl. And so it came about that the girl would allude to his people as mother, brother, and sister, as if she had known them all her life. In fact, she had a complete picture of each one of them painted in her little heart.

(c) But mercy is above this sceptred sway;

It is enthronèd in the hearts of kings,

'It is an attribute to God himself;

And earthly power doth then show likest God's

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When mercy seasons justice. Therefore, Jew,
Though justice be thy plea, consider this,
That, in the course of justice, none of us
Should see salvation: we do pray for mercy;

OR

Mark you this, Bassanio,

The devil can cite Scripture for his purpose.

An evil soul producing holy witness

Is like a villain with a smiling cheek,

A goodly apple rotten at the heart.

Oh, what a goodly outside falsehood hath!

2. Write a critical appreciation of the poem "Ode to a Nightingale".

OR

Comment on Hopkin's attitude to divinity with reference to the poem "God's Grandeur".

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3. Critically appreciate Tagore's story "The Postmaster".

OR

What is the philosophy of life expressed in the essay "Life's Philosophy"?

Comment on the Theme of the play The Merchant of Venice.

OR

Discuss the dramatic and symbolic significance of the lottery of the Casket.

5. Write a précis of the following paragraph :

My early approach to life's problems had been more or less scientific, with something of the easy optimism of the science of the nineteenth and early twentieth century. A secure and comfortable existence and the energy and self-confidence I possessed increased that feeling of optimism. A kind of vague humanism appealed to me.

Religion, as I saw it practised, and accepted even by

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thinking minds, whether it was Hinduism or Islam or Buddhism or Christianity, did not attract me. It seemed to be closely associated with superstitious practices and dogmatic beliefs, and behind it lay a method of approach to life's problems which was certainly not that of science. There was an element magic about it, an uncritical credulousness, a reliance on the supernatural.

Yet it was obvious that religion had supplied some deeply felt inner need of human nature, and that the vast majority of people all over the world could not do without some form of religious belief. It had produced many fine types of men and women, as well as bigoted, narrow-minded, cruel tyrants. It had given a set of values to human life, and though some of these values had no application today, or were even harmful, others were still the foundation of morality and ethics.

In the wider sense of the word, religion dealt with the uncharted regions of human experience, uncharted, that is, by the scientific positive knowledge of the day. In a sense it might be considered an extension of the known

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and charted region, though the methods of science and religion were utterly unlike each other, and to a large extent they had to deal with different kinds of media. It was obvious that there was a vast unknown region all around us, and science, with its magnificent achievements, knew little enough about it, though it was making tentative approaches in that direction. Probably also, the normal methods of science, its dealings with the visible world and the processes of life, were not wholly adapted to the physical, the artistic, the spiritual, and other elements of the invisible world. Life does not consist entirely of what we see and hear and feel, the visible world which is undergoing change in time and space; it is continually touching an invisible world of other, and possibly more stable or equally changeable elements, and no thinking person can ignore this invisible world.

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Printed Pages: 8

Degree (Part-I) (Vocational) Examination, 2020

(Composition)

HINDI

[PPU-D-I(V) (COMP)-HIN(100M)]

527

Time: Three Hours]

[Maximum Marks: 100

नोट : परीक्षार्थी यथासंभव अपने शब्दों में ही उत्तर दें। सभी प्रश्न अनिवार्य हैं। निर्देशानुसार प्रश्नों के उत्तर दीजिए।

- 1. निम्नलिखित प्रश्नों में से **किन्हीं तीन** प्रश्नों के उत्तर दीजिए। [12×3=36]
 - (क) विद्यापित के काव्य सौन्दर्य का वर्णन कीजिए।
 - (ख) कबीर की कविता के महत्व पर विचार कीजिए।
 - (ग) रसखान के काव्य के केन्द्रीय भाव को स्पष्ट कीजिए।

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(1)

- (घ) मैथिलीशरण गुप्त अथवा रामधारी सिंह दिनकर के काव्य में अभिव्यक्त राष्ट्रीय चेतना पर प्रकाश डालिए।
- (ड) 'अखबारी विज्ञापन' अथवा 'बुधिया' का सारांश लिखिए।
- निम्नलिखित अवतरणों में से किन्हीं तीन की सप्रसंग व्याख्या कीजिए :
 - (क) ऊधो मोहिं ब्रज बिसरत नाहीं !

 हंस सुता को सुन्दर कगरी अरु कुंजन की छांही।

 वै सुरभी, वै बच्छ दोहनी, खरिक दुहावन जाहीं।

 ग्वालबाल मिलि करत कुलाहल नाचत गहि गहि बाहीं।
 - (ख) मन पछितै हैं अवसर बीते।

 दुरलभ देह पाइ हरिपद भजु, करम, बचन अरु हीते।।

 सहसबाहु दसबदन आपि नृप बचे न काल बलीते।

 हम-हम करि धन-धाम सँवारे, अंत चले उठि रीते।।
- (ग) निहं पराग निहं मधुर मधु, निहं विकास इहिं काल। अली कली ही सौं बँध्यो, आगे कौन हवाल।। 7401-1/2400

- (घ) जिस समाज में रात-दिन मेहनत करने वालों की हालत उनकी हालत से कुछ बहुत अच्छी न थी, और किसानों के मुकाबले में वे लोग जो किसानों की दुर्बलताओं से लाभ उठाना जानते थे, कहीं ज्यादा संपन्न थे, वहाँ इस तरह की मनोवृत्ति का पैदा हो जाना कोई अचरज की बात न थी।
- (ङ) वह उन महिलाओं में नहीं है जो पित के हल्केपन को, उसके बंगले, कार, वैभव आदि के प्रसंग रख रखकर, भारी कर सकती है। उसकी गणना न उसमें हो सकती है जिनके यातना मंदिर के द्वार पर स्वयं धर्म्म कठोर और सजग पहरेदार है, और न उनमें, जिनके उद्भ्रान्त मस्तकों पर समाज की नंगी तलवार लटकती रहती है।
- 3. निम्नलिखित में से किसी एक पर निबन्ध लिखिए: [15]
 - (क) छात्र जीवन में अनुशासन का महत्व
 - (ख) नयी शिक्षा नीति
 - (ग) साहित्य और समाज का संबंध
- 4. निम्नलिखित प्रश्नों में से किन्हीं तीन के उत्तर दीजिए:

[5×3=15]

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(3)

(45)	निम्नि	खित के दो-दो पर्यायवाची लिखिए:
	(i)	नदी
	(ii)	पुष्प
	(iii)	अमृत
	(iv)	आँख
	(v)	आकाश
(ख)	निम्नलि	खित प्रत्ययों से एक-एक शब्द बनाइए:
	(i)	अनीय
	(ii)	आई
	(iii)	इक
	(iv)	पन
	(v)	आवट
(ग) निम्नलिखित शब्दों का लिंग निर्धारण कीजिए :		
	(i)	परीक्षा
	(ii)	पक्षी
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- (॥) समीर
- (iv) निगाह
- (v) यात्रा
- (घ) अपने महाविद्यालय में कम्प्यूटर और इंटरनेट की सुविधा उपलब्ध कराने के लिए प्रधानाचार्य महोदय को एक पत्र लिखिए।
- 5. निम्नलिखित वस्तुनिष्ठ प्रश्नों के उत्तर लिखिए : [1×10=10]
 - (क) विद्यापित की एक रचना का नाम लिखिए।
 - (ख) सूर काव्य की भाषा क्या है ?
 - (ग) 'विनय पत्रिका' किसकी रचना है ?
 - (घ) 'कान्ह भये बस बाँसुरी के' पंक्ति के रचियता कौन हैं ?
 - (ङ) बिहारी किसके दरबारी कवि थे ?
 - (च) 'कबीर' को वाणी का डिक्टेटर किसने कहा है ?
 - (छ) 'साकेत' किसकी रचना है ?

- (ज) दिनकर की दो रचनाओं के नाम लिखिए।
- (झ) हरिशंकर परसाई की किसी व्यंग्य रचना का नाम लिखिए।
- (ञ) रामवृक्ष बेनीपुरी द्वारा रचित 'बुधिया' किस विधा की रचना है ?

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