

Total No. of Questions : 4]

SEAT No. :

PE1567

[Total No. of Pages : 2

[6505]-1

First Year B.Sc. (Computer Application)

CA-101 - T : PROBLEM SOLVING AND PROGRAMMING IN C

(2024 Credit Pattern) (NEP) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any six of the following.

[6×1=6]

- a) Define Algorithm.
- b) What is use of scanf ()?
- c) Is goto statement conditional statement? T/F.
- d) What is problem?
- e) Write list of function types.
- f) Define Array.
- g) State two methods of parameter passing in function.
- h) Write any two relational operators.

Q2) Attempt any four of the following.

[4×2=8]

- a) Write any syntax of it loop.
- b) Explain putchar () with a example.
- c) Draw flowchart to calculate square of a given number.
- d) Explain following standard library functions:
 - i) Sqrt ()
 - ii) Pow ()
- e) Write any four assignment operators with example.

P.T.O.

Q3) Attempt any two of the following.

[2×4=8]

- a) Write algorithm & draw flowchart to check the given number is prime or not.
- b) Write note on : Bitwise operator.
- c) Write C program to accept array elements & display it.

Q4) Attempt any two of the following.

[2×4=8]

- a) Write C program to calculate factorial of a given number using recursion.
- b) Write note on : Escape sequence character.
- c) Write C program to print odd numbers between 1 to 50.



Total No. of Questions : 4]

SEAT No. :

PE1568

[Total No. of Pages : 2

[6505]-2

F.Y.B.Sc.

COMPUTER APPLICATION

**CA-103-T : Computer Organization & Architecture
(2024 Credit Pattern) (Semester-I)**

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Use of simple calculator is allowed.*

Q1) Answer the following (Any 6).

[6×1=6]

- a) Find the One's (1's) complement of $(101101)_2$.
- b) State the full form of EPROM.
- c) State any two AND laws in Boolean Algebra.
- d) Convert : $(13)_{10} = (?)_2$
- e) Draw the block diagram of a half subtractor.
- f) Which flip-flop is used to build a shift register?
- g) Comment on the output of a J-K Flip-flop for $J = K = 1$ condition.
- h) What do you mean by a Decoder?

Q2) Answer any 4 of the following:

[4×2=8]

- a) State any two types of digital counters.
- b) Prove the following:
$$(A+B) \cdot (A+C) = A + B \cdot C$$
- c) Implement a NOT gate using NAND gate with neat logic diagram and truth-table.
- d) State any two applications of Flip-flops.
- e) What is the role of a Flag Register? List any two flags.

P.T.O.

Q3) Attempt any 2 of the following:

[2×4=8]

- a) State the need of I/O Data transfer. List the popular means of I/O data transfer.
- b) Convert the following:
 - i) $(11011)_2 = (?)_{10}$
 - ii) $(AE54)_{16} = (?)_2$
 - iii) $(231)_{10} = (?)_8$
 - iv) $(714)_8 = (?)_2$
- c) Explain a Full Adder circuit using neat logic diagram and truth table.

Q4) Attempt any 2 of the following:

[2×4=8]

- a) State and prove the De-Morgan's theorems.
- b) Differentiate between synchronous and Asynchronous counters.
- c) Explain 1:4 De-Multiplexer using a neat block diagram and Truth-table.



Total No. of Questions : 3]

SEAT No. :

PE1569

[Total No. of Pages : 2

[6505]-3

First Year B.Sc. (Computer Application)

CA-105-T : DISCRETE MATHEMATICS AND STATISTICS

(2024 Credit Pattern) (Semester-I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Use of non-programmable scientific calculator is allowed.*

Q1) Answer the following questions (any 5)

[5×2=10]

- a) Let $A = \{1, 2, 3, 4, 5\}$, $B = \{1, 2, 5, 6, 7, 8, 9\}$

Find:

- i) $A - B$
- ii) $A \cup B$
- b) Let $f: \mathbb{R} \rightarrow \mathbb{R}$ and $g: \mathbb{R} \rightarrow \mathbb{R}$ be defined as $f(x) = 2x + 1$ and $g(x) = x^2$ find $(f \circ g)(x)$.
- c) How many ways can we arrange the letters in the word 'MATH'.
- d) Write difference between sampling and census.
- e) Let $A = \{a, b, c\}$, find cardinality of power set of A.
- f) Compute range and coefficient of range of given data
7, 5, 12, 9, 8, 21, 14, 16, 25
- g) Define logical connectivity "AND". Write it's truth table.

P.T.O.

Q2) Answer the following questions (Any 2):

[2×5=10]

- a) By using principle of mathematical induction show that

$$1 + 2 + 3 + \dots + n < \frac{1}{8}(2n+1)^2, \quad n \in \mathbb{N}.$$

- b) Represent the following data by Histogram:

Weekly Wages	1-10	10-20	20-30	30-40	40-50	50-60	60-70
Number of Workers	3	5	12	23	31	10	8

- c) There are 4 boys and 2 girls in room no.1 and 5 boys and 3 girls in room no.2. A girl from one of the two rooms laughed loudly. What is the probability that the girl who laughed loudly was from room no.2.
- d) Calculate the standard deviation and coefficient of variation for the following frequency distribution:

X	2	4	6	8	10
Frequency	2	4	14	8	2

Q3) Answer the following questions (Any 1):

[1×10=10]

- a) Obtain the transitive closure of the following relation by using Warshall's Algorithm.

$$R = \{(2,1), (2,3), (3,1), (3,4), (4,1), (4,3)\}$$

- b) i) A random experiment result in an integer outcome between 1 and 10 (both inclusive). Let A be the event that even number occurs and B be the event that a number divisible by 2.

Find:

- 1) $P(A/B)$
- 2) $P(A'/B)$
- 3) $P(A/B')$

- ii) Obtain the regression line y on x from the following data:

$$n = 20, \sum x = 80, \sum 4 = 40, \sum x^2 = 1680, \sum y^2 = 320, \sum xy = 480$$



Total No. of Questions : 4]

SEAT No. :

PE12272

[6505]-11

[Total No. of Pages : 2

F.Y.B.Sc. (Computer Application)

CA-101-T : PROBLEM SOLVING AND PROGRAMMING IN C

(NEP 2024 Pattern) (Semester-I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any six of the following.

[6×1=6]

- a) Draw any two symbols of flowchart with label.
- b) What is use of gets()?
- c) Write increment operator as well as decrement operator.
- d) Write use of break statement.
- e) List steps of problem solving.
- f) Define recursive function.
- g) C is middle level language. TIF.
- h) Write any two types of an array.

Q2) Attempt any four of the following.

[4×2=8]

- a) Write syntax of for loop.
- b) Explain getchar() with a example.
- c) Write an algorithm to check the given number is positive or negative.
- d) Write difference between Italic storage class and automatic storage class.
- e) Explain local variable with a example.

P.T.O.

Q3) Attempt any two of the following.

[2×4=8]

- a) Write algorithm and draw flowchart to check the given number is perfect or not.
- b) Write note on : Enumerated data type.
- c) Write C program for subtraction of two matrices.

Q4) Attempt any two of the following.

[2×4=8]

- a) Write C program to calculate fibonacci series using recursion.
- b) Explain program development life cycle.
- c) Write C program to print even numbers between 1 to 50.



Total No. of Questions : 4]

SEAT No. :

PE12273

[6505]-12

[Total No. of Pages : 2

F.Y.B.Sc. (Computer Application) /B.C.A. (Science)
CA-103-T : COMPUTER ORGANIZATION & ARCHITECTURE
(2024 Credit Pattern) (Semester-I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Use of simple calculator is allowed.*

Q1) Answer the following. (Any 6).

[6×1=6]

- a) State the names of universal gates.
- b) Draw the truth table of Half Adder.
- c) What is the parity of number $(11010101)_2$?
- d) State two examples of sequential circuits.
- e) How D Flip Flop is formed using SR Flip Flop?
- f) Draw a Karnaugh map for 3 variable logic equation.
- g) State the full form of ASCII.
- h) List two features of RISC.

Q2) Attempt any 4 of the following.

[4×2=8]

- a) Implement & draw logic diagram for NOT gate using NAND gate.
- b) State any two applications of flip flop.
- c) How many flip flop are required to build 4 bit counter?
- d) List any two techniques in virtual memory to access the data.
- e) Prove that $A \cdot (\bar{A} + B) = A \cdot B$

P.T.O.

Q3) Attempt any 2 of the following.

[2×4=8]

- a) Explain the J-K flip flop.
- b) Simplify the following expression using Boolean algebra laws
$$Y = \bar{A}\bar{B}\bar{C} + \bar{A}B\bar{C} + A\bar{B}\bar{C} + A\bar{B}C + \bar{A}BC + ABC$$
- c) Explain 4:1 multiplexer using neat block diagram & truth table.

Q4) Attempt any 2 of the following.

[2×4=8]

- a) Write the difference between RISC & CISC processor.
- b) Draw the symbol, Boolean equation & truth table of EX-OR gate.
- c) Convert the following:
 - i) $[A2BC]_{16} = (?)_2$
 - ii) $[752]_8 = (?)_{10}$
 - iii) $(100110)_2 = (?)_8$
 - iv) $(10101101)_2 = (?)_{10}$



Total No. of Questions : 3]

SEAT No. :

PE12274

[6505]-13

[Total No. of Pages : 2

F.Y.B.Sc. (Computer Application)/B.C.A. (Science)
CA-105-T : DISCRETE MATHEMATICS AND STATISTICS
(2024 Credit Pattern) (Semester-I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicates full marks.*
- 3) *Use of Non-programmable scientific calculator is allowed.*

Q1) Answer the following questions. (Any 5).

[5×2=10]

- a) Calculate the arithmetic mean & median of marks scored by a student in 7 subjects given below:

61, 68, 69, 63, 70, 60, 78

- b) Define positive correlation & negative correlation.

- c) Let the sample space $S = \{1, 2, 3, \dots, 10\}$, $A = \{2, 4, 6, 8, 10\}$, $B = \{6, 7, 8, 10\}$ list elements of the sets

i) $A \cup B$

ii) $A' \cap B$

- d) Define:

i) Equivalence relation

ii) Composition of functions

- e) State:

i) Principle of Addition

ii) Principle of Multiplication

- f) Find the number of permutations of the letter's of the word "MICROSOFT".

- g) State Bayes' theorem.

P.T.O.

Q2) Attempt the following questions (Any 2).

[2×5=10]

- a) If p : The examinations are approaching, q : Students study hard, give a verbal statement for each of the following.

i) $p \wedge \sim q$

ii) $p \leftrightarrow q$

iii) $\sim p \rightarrow q$

iv) $p \vee q$

v) $\sim q \rightarrow \sim p$

- b) In a class of 200 students who appeared in a certain examination, 35 students failed in MHT-CET, 40 in AIEEE, 40 in IIT entrance, 20 failed in MHT-CET and AIEEE, 17 in AIEEE and IIT entrance, 15 in MHT-CET and IIT entrance and 5 failed in all three examinations.

Find how many students:

- i) did not fail in any examination

- ii) failed in AIEEE or IIT entrance

- c) Find the Q_1 and Q_3 for the following distribution

Class	0-15	15-30	30-45	45-60	60-75	75-90	90-105
Fi	8	26	30	45	20	17	4

- d) Find mode from the following data:

Size of farm in hectares	0-20	20-40	40-60	60-80	80-100	100-120
Number of farms	12	28	16	05	03	01

Q3) Answer the following questions (Any 1).

[1×10=10]

- a) i) Let $f: \mathbb{R} \rightarrow \mathbb{R}$ be defined by $f(x) = 3x - 4$. Show that f is bijective hence f^{-1} exists further to find a formula that defines the inverse function f^{-1} .

- ii) Use Warshall's algorithm, to find the transitive closure of the relation $R = \{ (1, 2), (2, 3), (3, 4), (2, 1) \}$ on $A = \{1, 2, 3, 4\}$.

- b) From the following information, calculate the regression equation of x on y and y on x .

$$\Sigma x = 30, \Sigma x^2 = 220, \Sigma y = 40, \Sigma y^2 = 340, \Sigma xy = 214, n = 5.$$



Total No. of Questions : 4]

SEAT No. :

[Total No. of Pages : 2

PE12275

[6505]-14

F.Y. B.C.A. (Science)

ENGLISH

AEC-101-ENG : Professional Communication Skills

(2024 CBCS Pattern) (Semester-I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicates full marks.*

Q1) Answer the following questions. (Do as directed) (Attempt any 5 out of 7).[5]

- a) The nuts vendor blew out his flare. (Identify subject, verb and object)
- b) This method are helpful in determining the exact process of filtration. (Identify the error and rewrite it correctly)
- c) My scissors _____ been stolen. (Supply a verb in agreement with its subject)
- d) The boys _____ table tennis. (play : continuous) fill in the blanks by using appropriate form of the verb in brackets.
- e) Write the synonym of 'diligent'.
- f) Write the antonym of 'amicable'.
- g) We will light the bonfire the moment it gets dark.
 - i) of low weight
 - ii) set on fire

(Choose the meaning of the word that best fits the sentence)

Q2) Write short notes on the following in 100 words. (2 out of 3)

[8]

- a) Prefixes and suffixes.
- b) Speaking strategies for an effective speaker.
- c) Interview techniques.

P.T.O.

Q3) Answer any 1 out of 2 in about 150 words. [7]

- a) Gaurav asks Jessica for her opinion on parents taking decisions regarding their children's career.
- b) Discuss the strategies that will help you to become a good presenter.

Q4) Answer any 1 out of 2 in about 200 words. [10]

- a) Attempt a group discussion on the topic 'Social Media' Boon or Bane.
- b) Define presentation skills. Discuss different kinds of presentations used in professional environment.



Total No. of Questions : 4]

SEAT No. :

PE12276

[Total No. of Pages : 4

[6505]-15

First Year B.A./B.Com.

MATHEMATICS

**OE-101 MTS : Basic Mathematics-I
(2024 Pattern) (Semester-I) (Open Elective)**

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Figures to the right indicate full marks.*

Q1) Attempt any five of the following. **[5]**

- a) Find least common multiple (L.C.M.) of 10 and 15.
- b) Find the square root of 324.
- c) Find the fourth proportional of 6, 8, 10.
- d) Find the arithmetic mean of 44, 50, 54, 60, 62.
- e) Find the geometric mean of 16 and 9.
- f) Define : Selling price.
- g) Find x if $4 : 5 :: 8 : x$

Q2) a) Attempt any one of the following. **[5]**

- i) Find square root of 1521.
- ii) Find the Highest Common Factor (H.C.F.) of three numbers 72, 240 and 196.

b) Attempt any one of the following. **[5]**

- i) Find the cube root of 13824.
- ii) Find the value of $\sqrt{283 + \sqrt{23 + \sqrt{169}}}$.

P.T.O.

Q3) a) Attempt any one of the following. **[5]**

- i) Two numbers are in the ratio 7 : 8 and their sum is 195. Find the numbers.
- ii) If sugar costs Rs. 40 per kg, how many tonnes can be bought for Rs. 48,000?

b) Attempt any one of the following. **[5]**

- i) In a school, there are 12% girls. If 5 boys and 15 girls are newly admitted to the school, the percentage of girls becomes 15. What is the total strength of the school?
- ii) The average salary of 40 employees in a company 'A' is Rs. 50,000 and the average salary of 60 employees in company 'B' is 55,000 then find the average salary of employees in companies 'A' and 'B'.

Q4) Attempt any one of the following. **[5]**

- a) Goods worth Rs. 6,000 are purchased. What should be the selling price to earn of 12%.
- b) A piano is sold for Rs. 42,500 at a loss of 15%. For how much should it have been sold to earn a profit of 15%.



Total No. of Questions : 4]

PE12276

[6505]-15

First Year B.A./B.Com.

MATHEMATICS

OE-101 MTS : Basic Mathematics-I

(2024 Pattern) (Semester-I) (Open Elective)

(मराठी रूपांतर)

वेळ : 2 तास/

/एकूण गुण : 30

- सूचना :- 1) सर्व प्रश्न सोडविणे आवश्यक आहेत.
2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.

प्र.1) खालीलपैकी कोणतेही पाच प्रश्न सोडवा.

[5]

- अ) 10 आणि 15 यांचा ल.सा.वि शोधा.
- ब) 324 या संख्येचे वर्गमूल शोधा.
- क) 6, 8, 10 यांचे चौथे प्रमाणपद शोधा.
- ड) 44, 50, 54, 60 व 62 या संख्येचा अंकगणितीय मध्य शोधा.
- इ) 16 व 9 या संख्येचा भूमितीय मध्य शोधा.
- फ) व्याख्या लिहा : विक्री किंमत
- य) जर $4 : 5 :: 8 : x$ असेल तर x ची किंमत शोधा.

प्र.2) अ) खालीलपैकी कोणताही एक प्रश्न सोडवा.

[5]

- i) 1521 या संख्येचे वर्गमूल शोधा.
- ii) 72, 240 व 196 या तीन संख्यांचा म.सा.वि. शोधा.

ब) खालीलपैकी कोणताही एक प्रश्न सोडवा.

[5]

- i) 13824 या संख्येचे घनमूल शोधा.
- ii) किंमत शोधा : $\sqrt{283 + \sqrt{23 + \sqrt{169}}}$.

प्र.3) अ) खालीलपैकी कोणताही एक प्रश्न सोडवा. [5]

- i) दोन संख्यांचे गुणोत्तर 7 : 8 असून जर त्यांची बेरीज 195 असेल तर त्या संख्या शोधा.
- ii) जर साखरेची किंमत प्रती किलो 40 रुपये असेल तर 48,000 रुपयांमध्ये किती टन साखर खरेदी करता येईल?

ब) खालीलपैकी कोणताही एक प्रश्न सोडवा. [5]

- i) एका शाळेमध्ये 12% मुली आहेत. जर 5 मुले व 15 मुली नव्याने शाळेत प्रवेश घेतात तर मुलींचे प्रमाण 15% होते. तर शाळेतील एकुण विद्यार्थी संख्या किती?
- ii) कंपनी 'A' मधील 40 कर्मचाऱ्यांचा सरासरी पगार रू. 50,000 आहे आणि कंपनी 'B' मधील 60 कर्मचाऱ्यांचा सरासरी पगार रू 55,000 आहे. तर दोन्ही कंपन्यांमधील एकुण कर्मचाऱ्यांचा एकत्रित सरासरी पगार शोधा.

प्र.4) खालीलपैकी कोणताही एक प्रश्न सोडवा. [5]

- अ) रू 6,000 किंमतीचा माल खरेदी केला. 12% नफा मिळविण्यासाठी विक्री किंमत किती असावी?
- ब) एक पियानो रू 42,500 ला 15% तोट्याने विकला गेला. तर 15% नफा मिळविण्यासाठी तो किती रुपयांना विकायला हवा होता?



Total No. of Questions : 4]

SEAT No. :

PE12277

[6505]-16

[Total No. of Pages : 2

First Year B.A.

PSYCHOLOGY

**OE-101-PSY : Psychology of Adjustment and Stress (Open Elective)
(2024 Credit Pattern) (Semester - I)**

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) All questions are compulsory.**
- 2) The numbers to the right of the question indicate full mark.**

Q1) Answer the following question in 20 words each. (Any Five) [5]

- a) Define stress.
- b) Define psychology.
- c) What is Adjustment
- d) What is positive change?
- e) What is Negative change?
- f) What is striking out at others?
- g) What is Humor?

Q2) Answer the short notes following question in 100 words each (Any two) [8]

- a) Seeking Help
- b) Using Relaxation procedures
- c) Frustration

Q3) Answer the following question in 150 words each (Any one) [7]

- a) Explain the nature of psychology.
- b) Explain the giving up.

Q4) Answer the following question in 200 words each (Any one) [10]

- a) Define conflict explain the causes of conflict.
- b) Explain the Improving self control.



P.T.O.

Total No. of Questions : 4]

PE12277

[6505]-16

First Year B.A.

PSYCHOLOGY

OE-101-PSY : Psychology of Adjustment and Stress (Open Elective)

(2024 Credit Pattern) (Semester - I)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) सर्व प्रश्न सोडविणे आवश्यक आहेत.
 - 2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
 - 3) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.

प्र.1) खालील प्रश्नांची उत्तरे 20 शब्दांत लिहा. (कोणतेही पाच) [5]

- अ) ताणाची व्याख्या लिहा.
- ब) मानसशास्त्राची व्याख्या लिहा.
- क) समायोजन म्हणजे काय?
- ड) सकारात्मक बदल म्हणजे काय?
- इ) नकारात्मक बदल म्हणजे काय?
- फ) इतरावर प्रहार/हल्ला करणे म्हणजे काय?
- य) विनोद म्हणजे काय?

प्र.2) खालील टिपा/प्रश्नांची उत्तरे 100 शब्दांत लिहा. (कोणतेही दोन) [8]

- अ) मदत मागणे
- ब) विश्रांती प्रक्रिया उपयोजन/उपयोग
- क) वैफल्य/निराशा

प्र.3) खालील प्रश्नांची उत्तरे 150 शब्दांत लिहा. (कोणताही एक) [7]

- अ) मानसशास्त्राचे स्वरूप स्पष्ट करा.
- ब) 'आशा सोडणे' संकल्पना स्पष्ट करा.

प्र.4) खालील प्रश्नांची उत्तरे 200 शब्दांत लिहा. (कोणताही एक) [10]

- अ) संघर्षाची व्याख्या लिहा. संघर्षाची कारणे स्पष्ट करा.
- ब) स्व-नियंत्रण सुधारणा स्पष्ट करा.



Total No. of Questions : 4]

SEAT No. :

PE12278

[Total No. of Pages : 1

[6505]-17

F.Y.B.A.

MARATHI (मराठी)

OE-H-101-MAR : व्यक्तिमत्त्व विकास आणि भाषा
(2024 Pattern) (Semester - I)(Open Elective)

वेळ : 2 तास/

/एकूण गुण : 30

- सूचना : 1) सर्व प्रश्न सोडविणे आवश्यक आहेत.
2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.

प्र.1) खालीलपैकी कोणत्याही पाच प्रश्नांची उत्तरे 20 शब्दांत लिहा. [5]

- अ) व्यक्तिमत्त्व विकास म्हणजे काय?
- ब) व्यक्तिमत्त्व विकासाचे पैलू थोडक्यात सांगा.
- क) 'व्यक्ती तितक्या प्रवृत्ती' असे का म्हटले जाते?
- ड) 'मातृभाषा ही हृदयाची भाषा आहे' असे वर्डस्वर्थने का म्हटले आहे?
- इ) व्यक्तिमत्त्व विकासात कोणकोणत्या घटकांचा समावेश होतो?
- फ) व्यक्तिमत्त्व विकासाच्या अभ्यासातून काय साधले जाते?
- य) व्यक्तित्व आणि व्यक्तिमत्त्व यातील फरक सांगा.

प्र.2) खालील कोणतेही दोन टिपा 100 शब्दांत लिहा. [8]

- अ) मानसिक विकासात भाषेचे स्थान
- ब) व्यक्ति आणि समाज सहसंबंध स्पष्ट करा.
- क) व्यक्तिमत्त्व विकास आणि आरोग्य

प्र.3) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर 150 शब्दांत लिहा. [7]

- अ) व्यक्तिमत्त्व विकासात देहबोलीचे महत्त्व विशद करा.
- ब) भाषेचा व्यक्तिमत्त्व विकासावर होणारा परिणाम सांगा.

प्र.4) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर 200 शब्दांत लिहा. [10]

- अ) व्यक्तिमत्त्व विकासाचे मुख्य प्रकार सांगा.
- ब) व्यक्तिमत्त्व विकासात शाळा/महाविद्यालयाचे योगदान स्पष्ट करा.



Total No. of Questions : 3]

SEAT No. :

PE12279

[Total No. of Pages : 2

[6505]-18

F.Y. B.A.

HINDI (हिंदी)

OE-H-103-HIN : हिंदी कविता और कहानी
(2024 Pattern) (Semester - I) (Open elective)

समय : 2 घंटे/

/पूर्णांक : 30

सूचनाएँ : 1) सभी प्रश्न अनिवार्य हैं।
2) दाहिनी ओर लिखे अंक प्रश्न के पूर्णांक हैं।

प्र.1) निम्नलिखित में से किन्हीं दो प्रश्नों के उत्तर लिखिए।

[12]

- अ) 'यह हाथ' कविता का भावार्थ लिखिए।
- ब) 'घर की चौखट से बाहर' कविता में कवयित्री ने स्त्री जीवन के किस यथार्थ को प्रस्तुत किया है?
- क) कवि निराला ने 'सखि वसंत आया' कविता में प्रकृति-प्रेम की भावना किस प्रकार व्यक्त की है?
- ड) 'बात बोलेगी' कविता से कवि ने क्या संदेश दिया है?

प्र.2) निम्नलिखित में से किन्हीं दो प्रश्नों के उत्तर लिखिए।

[12]

- अ) 'उसने कहा था' कहानी का सारांश लिखिए।
- ब) 'सवा शेर गेहूँ' कहानी में चित्रित समस्या बताइए।
- क) 'बयान' कहानी की नायिका आधुनिकता और परंपरा के बीच किस प्रकार संतुलन बनाये रखती है?
- ड) 'हंसिका फिर कभी न आयी' कहानी की कथावस्तु लिखिए।

P.T.O.

अ) नीम ब) आम
क) बरगद ड) पीपल

अ) निराशा का ब) राष्ट्र निर्माण और एकता का
क) प्रकृति-सौंदर्य का ड) आत्म-निंदा का

अ) कुछ कविताएँ ब) एक फूल की चाह
क) परिमल ड) दीवार में दरवाजा

अ) उच्च वर्ग ब) निम्न वर्ग
क) मध्यम वर्ग ड) राजघराने के

अ) बोलना ब) आत्मकथा
क) किसी घटना का वक्तव्य ड) आदेश

अ) देशभक्ति ब) प्रेम और त्याग
क) हास्य और व्यंग्य ड) सामाजिक



Total No. of Questions : 4]

SEAT No. :

PE-12280

[Total No. of Pages : 4

[6505]-19

F.Y. B.A.

ECONOMICS

OE-101-ECO : Indian Economic Policy - I

(2024 Pattern) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions in 20 words each (Any five) : [5]

- a) What is a Developing Economy?
- b) Explain the concept of monetary policy?
- c) What is a per capita income?
- d) What are the three major sectors of the Economy?
- e) Which sector is know as the Backbone of the Indian Economy?
- f) What is Globalization?

Q2) Answer the following questions in 100 words each (Any two) : [8]

- a) Explain the concept of Primary sector?
- b) Explain the concept of Human Development Index?
- c) Explain the role of the industrial sector in Economic Development?

Q3) Answer the following questions in 150 words each (Any one) : [7]

- a) Explain the quantitive tools of Monetary Policy?
- b) Explain the contribution of the Agricultural sector to economic development?

P.T.O.

Q4) Answer the following questions in 200 words each (Any one) : [10]

- a) Explain the characteristics of the Indian Economy as a developing Economy?
- b) Explain the features of the Industrial Policy of 1991?



Total No. of Questions : 4]

PE-12280

[6505]-19
F.Y. B.A.
ECONOMICS
OE-101-ECO : Indian Economics Policy - I
(2024 Pattern) (Semester - I)
(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना : 1) सर्व प्रश्न सोडविणे आवश्यक आहे.
2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
3) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.

-
- प्रश्न 1) खालील प्रश्नांची उत्तरे प्रत्येकी 20 शब्दांत लिहा. (कोणतेही पाच) [5]
- अ) विकसनशील अर्थव्यवस्था म्हणजे काय ?
ब) चलनविषयक धोरणाची संकल्पना स्पष्ट करा ?
क) दरडोई उत्पन्न म्हणजे काय ?
ड) अर्थव्यवस्थेतील प्रमुख तीन क्षेत्रे कोणती ?
इ) भारतीय अर्थव्यवस्थेचा कणा कोणत्या क्षेत्राला म्हणतात ?
फ) जागतिकीकरण म्हणजे काय ?
- प्रश्न 2) खालील प्रश्नांची उत्तरे प्रत्येकी 100 शब्दांत लिहा. (कोणतेही दोन) [8]
- अ) प्राथमिक क्षेत्र हि संकल्पना स्पष्ट करा ?
ब) मानवी विकास निर्देशांक संकल्पना स्पष्ट करा ?
क) आर्थिक विकासात औद्योगिक क्षेत्राची भूमिका स्पष्ट करा ?
- प्रश्न 3) खालील प्रश्नांची उत्तरे प्रत्येकी 150 शब्दांत लिहा. (कोणतेही एक) [7]
- अ) चलन विषयक धोरणाची संख्यात्मक साधने स्पष्ट करा ?
ब) आर्थिक विकासात कृषी क्षेत्राचे योगदान स्पष्ट करा ?

प्रश्न 4) खालील प्रश्नांची उत्तरे प्रत्येकी 200 शब्दांत लिहा. (कोणतेही एक)

[10]

- अ) विकसनशील अर्थव्यवस्था म्हणून भारतीय अर्थव्यवस्थेची वैशिष्ट्ये स्पष्ट करा ?
- ब) 1991 च्या नविन आर्थिक धोरणाची वैशिष्ट्ये सांगा ?



Total No. of Questions : 4]

SEAT No. :

PE-12281

[Total No. of Pages : 2

[6505]-20

F.Y. B.A.

EDUCATION

OE-101-EDU : Basics in Education - I

(NEP 2024 Pattern) (Semester - I) (Open Elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Write answer of any One question in 100 words : [5]

- a) Explain the characteristics of education process.
- b) Explain the concept of Education in details.

Q2) Write answer of any One question in 200 words : [10]

- a) Explain the difference between formal education and non formal education.
- b) Explain the social importance of education.

Q3) Write answer of any One question in 200 words. [10]

- a) Explain the importance of informal education.
- b) Explain the individual importance of education.

Q4) Write short notes (Any One) : [5]

- a) Meaning of education.
- b) Limitation of formal education.



P.T.O.

Total No. of Questions : 4]

PE-12281

[6505]-20

F.Y. B.A.

EDUCATION

OE-101-EDU : Basics in Education - I

(NEP 2024 Pattern) (Semester - I) (Open Elective)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना : 1) सर्व प्रश्न सोडविणे आवश्यक आहे.
2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.

-
- प्रश्न 1) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर 100 शब्दांत लिहा. [5]
अ) शिक्षण प्रक्रीयेची वैशिष्ट्ये स्पष्ट करा.
ब) शिक्षणाची संकल्पना सविस्तर स्पष्ट करा.
- प्रश्न 2) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर 200 शब्दांत लिहा. [10]
अ) औपचारिक शिक्षण आणि अनौपचारिक शिक्षण यातील फरक स्पष्ट करा.
ब) शिक्षणाचे सामाजिक महत्व सविस्तर स्पष्ट करा.
- प्रश्न 3) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर 200 शब्दांत लिहा. [10]
अ) सहज शिक्षणाचे महत्व स्पष्ट करा.
ब) शिक्षणाचे वैयक्तिक महत्व स्पष्ट करा.
- प्रश्न 4) टिपा लिहा. (कोणतेही एक) [5]
अ) शिक्षणाचा अर्थ.
ब) औपचारिक शिक्षणाच्या मर्यादा.



Total No. of Questions : 4]

SEAT No. :

PE-12282

[Total No. of Pages : 4

[6505]-21

F.Y. B.A.

HISTORY

OE-101-HIS : Glimpses of Modern India - I
(2024 Pattern) (Semester - I) (Open Elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.

Q1) Answer any Five of the following in about 20 words each : [5]

- a) What was the main objective of the British education policy in India?
- b) Name the viceroy during the Revolt of 1857.
- c) Who was known as the "Father of Indian Renaissance"?
- d) What is meant by the term "Divide and Rule"?
- e) Who established the Ramakrishna Mission?
- f) Name two early reformers of Maharashtra.
- g) What is meant by Nationalism?

Q2) Write short note on any Two of the following in about 100 words : [8]

- a) Lord Macaulay's Educational Policy.
- b) Contribution of Swami Vivekananda.
- c) The Indian Renaissance.

Q3) Write the answer of any One of the following in about 150 words : [7]

- a) Explain the socio-religious reform movement's of 19th century India.
- b) Describe the main causes of the decline of Indian Industries under British rule.

P.T.O.

Q4) Write the answer of any One of the following in about 200 words : [10]

- a) Evaluate the role of reform movement's in the awakening of Modern India.
- b) Discuss the role of Lokmany Tilak in the National movement.



Total No. of Questions : 4]

PE-12282

[6505]-21

F.Y. B.A.

HISTORY

OE-101-HIS : Glimpses of Modern India - I
(2024 Pattern) (Semester - I) (Open Elective)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना : 1) सर्व प्रश्न आवश्यक आहेत.
2) उजवीकडील अंक पूर्ण गुण दर्शवितात.

-
- प्रश्न 1) खालीलपैकी कोणत्याही पाच प्रश्नांची उत्तरे 20 शब्दांत लिहा. [5]
- अ) भारतातील ब्रिटिश शिक्षण धोरणाचे प्रमुख उद्दिष्ट काय होते?
ब) 1857 च्या उठावाच्या वेळी व्हाईसरॉय कोण होते?
क) 'भारतीय पुनरुज्जिवनाचे जनक' म्हणून कोण ओळखले जातात.
ड) "फोडा आणि राज्य करा" या संकल्पनेचा अर्थ काय?
इ) रामकृष्ण मिशनची स्थापना कोणी केली?
फ) महाराष्ट्रातील दोन प्रारंभीच्या समाजसुधारकांची नावे लिहा.
य) 'राष्ट्रवाद' म्हणजे काय?
- प्रश्न 2) खालीलपैकी कोणत्याही दोन टीपा 100 शब्दांत लिहा. [8]
- अ) मेकॉले यांचे शिक्षणविषयक धोरण
ब) स्वामी विवेकानंद यांचे योगदान
क) भारतीय पुनरुज्जिवन
- प्रश्न 3) कोणत्याही एका प्रश्नाचे उत्तर 150 शब्दांत लिहा. [7]
- अ) 19 व्या शतकातील भारतीय सामाजिक धार्मिक सुधारणा चळवळ स्पष्ट करा.
ब) ब्रिटिश राजवटीतील भारतीय उद्योगधंद्याच्या व्हासाच्या प्रमुख कारणांचे वर्णन करा.

प्रश्न 4) कोणत्याही एका प्रश्नांचे उत्तर 200 शब्दांत लिहा.

[10]

- अ) आधुनिक भारताच्या जागृतीमधील सुधारणा चळवळीचे मूल्यमापन करा.
- ब) लोकमान्य टिळक यांचे राष्ट्रीय चळवळीतील योगदान यावर चर्चा करा.



Total No. of Questions : 4]

SEAT No. :

PE-12283

[Total No. of Pages : 4

[6505]-22

F.Y. B.Com./F.Y.B.Sc./F.Y.B.C.A./F.Y.B.Sc. (CA) (Open Elective)

POLITICAL SCIENCE

OE-101-POL : Good Citizenship

(2024 Pattern) (NEP 2020) (CBCS) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.

Q1) Write answers to any Five of the following questions (in 20 words each) : [5]

- a) What is the accepted citizenship?
- b) What is the political participation?
- c) Define the meaning of sustainable development.
- d) How many fundamental Duties are mentioned in the Indian constitution?
- e) What is an Ideal citizen?
- f) Which country follows the system of dual citizenship?
- g) What is the citizenship revoked?

Q2) Write short notes on any Two of the following (in 50 words) : [8]

- a) Challenges of climate change.
- b) Sustainable development goals.
- c) Online privacy.

Q3) Answer any One of the following questions (in 150 words) : [7]

- a) Explain the meaning and characteristics of citizenship.
- b) Explain the measures to establish gender equality.

P.T.O.

Q4) Answer any One of the following questions (in 200 words) : [10]

- a) Describe the challenges faced by the environments.
- b) Discuss the amendments to the Indian citizenship acts.



Total No. of Questions : 4]

PE-12283

[6505]-22

F.Y. B.Com./F.Y.B.Sc./F.Y.B.C.A./F.Y.B.Sc. (CA) (Open Elective)

POLITICAL SCIENCE

OE-101-POL : Good Citizenship

(2024 Pattern) (NEP 2020) (CBCS) (Semester - I)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना : 1) सर्व प्रश्न आवश्यक आहेत.
2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
3) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.

-
- प्रश्न 1) खालीलपैकी कोणत्याही पाच प्रश्नांचे उत्तरे लिहा. (20 शब्दांत) [5]
- अ) स्वीकृत नागरिकत्व म्हणजे काय?
ब) राजकीय सहभाग म्हणजे काय?
क) शाश्वत विकासाचा अर्थ लिहा.
ड) भारतीय संविधानामध्ये किती मुलभूत कर्तव्ये दिलेली आहेत.
इ) आदर्श नागरिक म्हणजे काय?
फ) कोणत्या देशांमध्ये दुहेरी नागरिकत्वाची पद्धत आहे.
य) नागरिकत्व कोणत्या कारणाने रद्द होते.
- प्रश्न 2) खालीलपैकी कोणत्याही दोन टीपा लिहा. (50 शब्दांत) [8]
- अ) हवामान बदलाचे आव्हाने
ब) शाश्वत विकासाचे उद्दीष्टे
क) ऑनलाईन गोपनीयता
- प्रश्न 3) खालीलपैकी कोणत्याही एका प्रश्नांचे उत्तर लिहा. (150 शब्दांत) [7]
- अ) नागरिकत्वाचा अर्थ सांगून वैशिष्ट्ये स्पष्ट करा.
ब) लिंग समानता प्रस्थापित करण्यासाठीची उपाययोजना स्पष्ट करा.

प्रश्न 4) खालीलपैकी कोणत्याही एका प्रश्नांचे उत्तर लिहा. (200 शब्दांत)

[10]

अ) पर्यावरणापुढील आव्हाने विशद करा.

ब) भारतीय नागरिकत्व कायदा दुरुस्ती यावर भाष्य करा.



Total No. of Questions : 4]

SEAT No. :

PE12284

[6505]-23

[Total No. of Pages : 2

F.Y. B.Com./B.Sc./B.Sc.(CA)/B.A.

PUBLIC ADMINISTRATION

OE-101-PUB : Good Citizenship

(2024 Pattern) (Semester - I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Write answers to any five of the following questions. (In 20 words) **[5]**

- a) What is the responsible citizenship?
- b) Write the ethical challenges of Artificial Intelligence (AI).
- c) What is the sustainable development?
- d) What is the adult Franchise?
- e) Explain the meaning of democracy?
- f) What is the natural disaster?
- g) What are the two activities that conserve the environment?

Q2) Write the short notes on any two of the following. (100 words) **[8]**

- a) Pollution
- b) Cyber security
- c) Social-responsibility

Q3) Answer the any one of the following questions. (150 words) **[7]**

- a) Explain the meaning and characteristics of responsible citizenship.
- b) Write the consequences of fake news?

Q4) Answer the any one of the following questions. (200 words) **[10]**

- a) Explain the role of civil Education in promoting good citizen.
- b) Explain the role of citizens and government in sustainable development in detail.



P.T.O.

Total No. of Questions : 4]

PE12284

[6505]-23

F.Y. B.Com./B.Sc./B.Sc.(CA)/B.A.

PUBLIC ADMINISTRATION

OE-101-PUB : Good Citizenship

(2024 Pattern) (Semester - I)(Open elective)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) सर्व प्रश्न सोडविणे आवश्यक आहेत.
 - 2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
 - 3) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.

प्र.1) खालीलपैकी कोणत्याही पाच प्रश्नांची उत्तरे लिहा. (20 शब्दांत) [5]

- अ) जबाबदार नागरिकत्व म्हणजे काय?
- ब) कृत्रिम बुद्धिमत्ता (AI) चे नैतिक आव्हान लिहा.
- क) शाश्वत विकास म्हणजे काय?
- ड) प्रौढ मताधिकार म्हणजे काय?
- इ) लोकशाहीचा अर्थ स्पष्ट करा.
- फ) नैसर्गिक आपत्ती म्हणजे काय?
- य) पर्यावरण संवर्धन करणारे दोन उपक्रम लिहा.

प्र.2) खालीलपैकी कोणत्याही दोन टिपा लिहा. (100 शब्दांत) [8]

- अ) प्रदूषण
- ब) सायबर सुरक्षा
- क) सामाजिक जबाबदारी

प्र.3) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर लिहा. (150 शब्दांत) [7]

- अ) जबाबदार नागरिकत्वाचा अर्थ सांगून वैशिष्ट्ये स्पष्ट करा.
- ब) बनावट बातमीचे परिणाम लिहा.

प्र.4) खालीलपैकी कोणत्याही एका प्रश्नाचे उत्तर लिहा. (200 शब्दांत) [10]

- अ) जागृत नागरिकांच्या संवर्धनात नागरी शिक्षणाची भूमिका स्पष्ट करा.
- ब) शाश्वत विकासामध्ये नागरिकांची व शासनाची भूमिका सविस्तर स्पष्ट करा.



Total No. of Questions :4]

SEAT No. :

[Total No. of Pages : 2

PE12285

[6505]-24

F.Y.B.A.

ENGLISH

**OE-H-101-ENG: Mass Communication Through English-I
(NEP 2024 Pattern) (Semester-I) (Open elective)**

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any five of the following in one sentence each.

[5]

- a) Define the term 'mass communication'.
- b) Who are the 'gatekeepers' in mass communication?
- c) What is encoding in mass communication?
- d) State the elements of an article.
- e) What is an editorial?
- f) What is a primary goal of an editorial?
- g) List various types of mannuals.

Q2) Write short notes on any two of the following in about 100 words each. **[8]**

- a) Discuss the elements of mass communication.
- b) Explain the behavioural effects of mass communication.
- c) What are the three functions of 'gatekeeper' in mass communication.

P.T.O.

Q3) Attempt any one of the following in about 150 words. **[7]**

- a) Write a newspaper report on 'heavy rainfall' in your area.
- b) Prepare an effective advertisement for a newly launched laptop.

Q4) Attempt any one of the following in about 200 words. **[10]**

- a) Explain the concept of 'mass communication' with examples.
- b) What are the points to be kept in mind while writing editorials?



Total No. of Questions :4]

SEAT No. :

PE12286

[6505]-25

[Total No. of Pages :2

F.Y. B.Com.

OE101 COM-T: FINANCIAL ACCOUNTING-I

(2024 Credit Pattern) (Semester- I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) Question No. 1 and 4 are Compulsory.
- 2) Attempt any one Question from Question No. 2 to 3.
- 3) Figures to the right indicate full marks.
- 4) Use of simple calculator is allowed.

Q1) Fill in the Blanks:

[6]

- a) Accounting is the language of _____
 - i) Business
 - ii) Science
 - iii) Technology
 - iv) Mathematics
- b) The System of double entry book-keeping is based on _____ Concept.
 - i) Entity
 - ii) Dual Aspect
 - iii) Going concern
 - iv) Cost
- c) Sundry Creditors are the _____ of the business
 - i) Liabilities
 - ii) Income
 - iii) Assets
 - iv) Expenses
- d) Excess of income over expense is _____
 - i) Deficit
 - ii) Profit
 - iii) Loss
 - iv) Financial Statement
- e) The Accounting equation is, Capital + Liabilities = _____
 - i) Assets
 - ii) Profit
 - iii) Purchase
 - iv) Sales
- f) All cash transactions are recorded in the _____
 - i) Sales Book
 - ii) Purchase Book
 - iii) Sales Return Book
 - iv) Cash Book

P.T.O.

Q2) What is Accounting? Explain its functions and objectives. [12]

Q3) What are 'Accounting Concepts'? Explain in brief the following concepts: [12]

- a) Entity
- b) Money Measurement
- c) Going Concern

Q4) Amit Traders started a business with the following transactions in the month April 2025. [12]

- 1st April : Started business with Rs. 5,00,000 in Cash
- 2nd April : Cash Deposited into Bank of India Rs. 2,00,000
- 5th April : Purchased furniture worth Rs. 1,00,000 from Mayur Ltd., on credit
- 7th April : Cash sales made for Rs. 8,000
- 15th April : Money withdrawn from Bank of India for office use Rs. 20,000
- 28th April : Paid Rent Rs. 10,000 in cash

Pass necessary Journal Entries in the books of Amit Traders.



Total No. of Questions : 3]

SEAT No. :

PE12969

[Total No. of Pages : 2

[6505]-26

F.Y.B.Com. (CA)

**OE-102CA : PRINCIPLES AND PRACTICE OF MANAGEMENT
(NEP 2024 Credit Pattern) (Semester - I)(Open elective)**

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) A) Multiple Choice Questions:

[5×1=5]

- a) The Human Relations Theory is linked with:
 - i) Maslow
 - ii) McGregor
 - iii) Elton Mayo
 - iv) Herzberg
- b) Which function involves grouping activities and assigning tasks?
 - i) Planning
 - ii) Organizing
 - iii) Staffing
 - iv) Directing
- c) Decentralization refers to:
 - i) Concentration of authority
 - ii) Delegation of authority at all levels
 - iii) Central control system
 - iv) None of the above
- d) “Management is getting things done through others” who said this?
 - i) Henry Fayol
 - ii) Koontz & O'Donnell
 - iii) Mary Parker Follett
 - iv) Peter Drucker
- e) In motivation, Herzberg is known for:
 - i) X and Y Theory
 - ii) Two-Factor Theory
 - iii) Hierarchy of Needs
 - iv) Goal setting theory

P.T.O.

B) Match the following:

[5×1=5]

GROUP (A)

GROUP (B)

- | | |
|----------------------------|--|
| a) Planning | i) Human Relations Theory |
| b) Elton Mayo | ii) Inspiring employees to work better |
| c) Delegation of Authority | iii) Forecasting future actions |
| d) Henry Fayol | iv) 14 Principles of Management |
| e) Motivation | v) Transfer of power to subordinates |

Q2) Solve. (any 1 out of 2)

[1×10=10]

- a) What is Management? Explain its features.
- b) Describe Henry Fayol's contribution to managerial thoughts.

Q3) Write short notes. (Any 2 out of 4)

[2×5=10]

- a) Universality of Management
- b) Management vs. Administration
- c) Functions of Management
- d) Importance of Planning



Total No. of Questions :5]

SEAT No. :

PE12287

[6505]-27

[Total No. of Pages :2

F.Y. B.Com.

OE-102 COM-T : INCOME TAX ACT-I

(2024 Credit Pattern) (Semester- I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) Question No. 1 is Compulsory.***
- 2) Attempt any Two Questions from Question No. 2 to 5.***

Q1) Fill in the Blanks:

[6]

- a) Income Tax is a _____ tax.
- b) There are _____ heads of income under the Income Tax Act.
- c) Agricultural income is _____ from tax.
- d) The residential status of an assessee is determined for _____ year.
- e) PAN Stands for _____.
- f) The due date to file the Income Tax Return of an Individual is _____.

Q2) Answer the following

[4×3=12]

Define the following term:

- a) Person
- b) Income
- c) Previous Year
- d) Assessment Year

Q3) Answer the following

[1×12=12]

Explain in detail the concept of Residential Status under the Income Tax Act, 1961. How is the residential status of an individual determined?

Q4) Answer the following

[1×12=12]

Explain in detail the provisions regarding the filing of Income Tax Returns under the Income Tax Act, 1961. Discuss the various forms of Returns.

P.T.O.

Q5) Solve the following

[2×6=12]

- a) From the following particulars of Mr. Rakesh for the financial year 2024-2025, compute his Total Income for the Assessment Year 2025-2026.

Income from Salary	5,40,000
Income from House Property	1,20,000
Short term Capital Gain	25,000
Income from other Sources	10,000
Public Provident Fund	60,000

- b) Mr. Ramesh, an Indian Citizen, left India for the first time on 1st October 2022 for employment in the USA. He visited India in the following years:

Financial Year	Period of Stay in India
2023-2024	150 Days
2024-2025	100 Days

Determine the residential status for the Assessment Year 2025-2026



Total No. of Questions :4]

SEAT No. :

PE12288

[6505]-28

[Total No. of Pages :1

F.Y. B.Com.

OE-103-COM-T : GOODS AND SERVICES TAX-I

(2024 Pattern) (Semester- I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) **Question No. 1 is Compulsory.**
- 2) **Attempt any Two Questions from Question No. 2 to 4.**
- 3) **Figures to the right indicate full marks.**
- 4) **Answer should be precise and to the point.**

Q1) Fill in the Blanks:

[6×1=6]

- a) GST stands for _____
- b) GST was Implemented in India on _____
- c) The full form of IGST is _____
- d) The maximum GST rate in India is _____
- e) GST is levied on the _____ of goods and services.
- f) The GST Council is headed by the _____

Q2) Explain the meaning, objectives and features of GST?

[12]

Q3) Explain the Types of GST and its Structure in India?

[12]

Q4) Short Notes (Any 2 out of 4)

[12]

- a) Limitations or challenges of GST.
- b) Impact of GST on Indian Economy.
- c) Compulsory registration
- d) GST council



Total No. of Questions : 4]

SEAT No. :

PE12289

[6505]-29

[Total No. of Pages : 4

F.Y. B.Com.

OE-105-COM-T : FUNDAMENTALS OF MARKETING - I
(2024 NEP Pattern) (Semester - I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Question No. 1 is compulsory.*
- 2) *Attempt any two questions question No. 2 to 4.*
- 3) *Figures to the right indicate full marks.*

Q1) Fill in the Blanks. [6]

- a) Marketing is mainly concerned with identifying and satisfying _____.
 - i) Industrial Growth
 - ii) Human Needs
 - iii) Legal Requirements
- b) The _____ mix includes advertising and personal selling.
 - i) Promotion
 - ii) Place
 - iii) 4P's
- c) The element of marketing mix that deals with deciding the amount charged for a product is called _____.
 - i) Product Mix
 - ii) Price Mix
 - iii) Promotion Mix
- d) _____ is the ability to handle people successfully.
 - i) Marketing
 - ii) Advertising
 - iii) Salesmanship
- e) A basic quality required for a successful salesman is _____.
 - i) Indiscipline
 - ii) Good Communication Skills
 - iii) Avoiding Customers
- f) The Marketing channels bridge the gap between _____ and final consumers.
 - i) Producers
 - ii) Wholesales
 - iii) Retailers

P.T.O.

Q2) Explain the meaning, functions and importance of Marketing. **[12]**

Q3) Define market Segmentation? Write the bases of market Segmentation. **[12]**

Q4) Explain the features and scope of salesmanship. **[12]**



Total No. of Questions : 4]

PE12289

[6505]-29

F.Y. B.Com.

OE-105-COM-T : FUNDAMENTALS OF MARKETING - I
(2024 NEP Pattern) (Semester - I)(Open elective)
(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) प्रश्न क्रं. 1 सोडविणे अनिवार्य आहेत.
 - 2) प्रश्न क्रं. 2 ते प्रश्न क्रं. 4 मधील कोणतेही दोन प्रश्न सोडवा.
 - 3) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
 - 4) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.

प्र.1) रिकाम्या जागा भरा.

[6]

- अ) विपणनाचे मुख्य लक्ष ओळखणे आणि पूर्ण करणे यावर असते.
 - i) औद्योगिक वाढ
 - ii) मानवी गरजा
 - iii) कायदेशीर आवश्यकता
- ब) मिश्रणात जाहिरात आणि वैयक्तिक विक्री समाविष्ट आहे.
 - i) जाहिरात
 - ii) जागा
 - iii) 4P's
- क) मार्केटिंग मिश्र मधील उत्पादनाची किंमत ठरवण्याशी संबंधित घटकास म्हणतात.
 - i) उत्पादन मिश्र
 - ii) किंमत मिश्र
 - iii) प्रमोशन मिश्र
- ड) म्हणजे लोकांना यशस्वीरित्या हाताळण्याची क्षमता.
 - i) विपणन
 - ii) जाहिरात
 - iii) विक्री कला
- इ) यशस्वी विक्रेत्यास आवश्यक असलेली एक मूलभूत गुणवत्ता म्हणजे
 - i) गैरशिस्त
 - ii) उत्तम संवादकौशल्य
 - iii) ग्राहकांना टाळणे
- फ) विपणन मार्गातील आणि अंतिम ग्राहकांमधील अंतर कमी करतात.
 - i) उत्पादक
 - ii) घाऊक विक्रेता
 - iii) किरकोळ विक्रेता

प्र.2) विपणनाचे अर्थ, कार्ये आणि महत्त्व स्पष्ट करा. [12]

प्र.3) बाजार विभागणी म्हणजे काय? बाजार विभागणीचे आधार स्पष्ट करा. [12]

प्र.4) विक्रयकलेची वैशिष्ट्ये आणि व्याप्ती स्पष्ट करा. [12]



Total No. of Questions : 4]

SEAT No. :

PE12290

[Total No. of Pages : 4

[6505]-30

F.Y.B.Com./B.A./B.Sc.

OE-106-Com-T: BUSINESS ENVIRONMENT - I

Commerce & Management

Commerce

Humanities and Science & Technology

Business Practices

(2024 Pattern) (Semester - I) (Open Elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Question No. 1 is compulsory.*
- 2) *Attempt any Two Questions from Question No.2 to 4.*
- 3) *Figures to the right indicate full marks.*

Q1) Fill in the Blanks.

[6]

- i) The external environment that includes political, economic, social factors is known as_____.
 - a) Micro Environment
 - b) Macro Environment
 - c) Cultural Environment
- ii) Stand Up India mainly supports entrepreneurs belonging to_____.
 - a) SC/ST and Women
 - b) NRIs
 - c) Government employees
- iii) The seven pillars of NITI Aayog emphasize growth through_____.
 - a) Centralised planning
 - b) Cooperative federalism
 - c) Trade barriers

P.T.O.

- iv) The authority investigating serious corporate frauds is ____ .
- a) SFIO
 - b) MCA
 - c) RBI
- v) RBI is responsible for ____ .
- a) Product marketing
 - b) Issuing currency and monetary policy
 - c) Foreign tourism
- vi) PDOT under Skill India focuses on preparing candidates for ____.
- a) Domestic labour
 - b) Overseas employment
 - c) Agricultural business

Q2) Explain the features influencing Business Environment. **[12]**

Q3) Discuss the need for entrepreneurship in India. **[12]**

Q4) Explain the powers and functions of SEBI. **[12]**



Total No. of Questions : 4]

PE12290

[6505]-30

F.Y.B.Com./B.A./B.Sc.

OE-106-Com-T: BUSINESS ENVIRONMENT - I

Commerce & Management

Commerce

Humanities and Science & Technology

Business Practices

(2024 Pattern) (Semester - I) (Open Elective)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) प्रश्न क्रं.1 सोडविणे अनिवार्य आहेत.
 - 2) प्रश्न क्रं. 2 ते प्रश्न क्रं. 4 मधील कोणतेही दोन प्रश्न सोडवा.
 - 3) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
 - 4) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.
-

प्र.1) रिकाम्या जागा भरा.

[6]

- i) राजकीय, आर्थिक, सामाजिक घटकांचा समावेश असणारे बाह्य पर्यावरण म्हणून ओळखले जाते.
 - अ) सूक्ष्म पर्यावरण
 - ब) समग्र पर्यावरण
 - क) सांस्कृतिक पर्यावरण
- ii) स्टँड अप इंडिया प्रामुख्याने उद्योजकांना सहाय्य करते.
 - अ) SC/ST आणि महिला
 - ब) NRI
 - क) सरकारी कर्मचारी
- iii) नीती आयोगाचे सात स्तंभ द्वारे विकासावर भर देतात.
 - अ) केंद्रीकृत नियोजन
 - ब) सहकारी संघराज्य
 - क) व्यापार अडथळे
- iv) गंभीर कॉर्पोरेट फसवणुकीची चौकशी करणारी प्राधिकरण संस्था आहे.
 - अ) SFIO
 - ब) MCA
 - क) RBI

v) RBI ची जबाबदारी ही आहे.

अ) उत्पादनाचे विपणन

ब) चलन जारी करणे आणि चलनविषयक धोरण

क) परदेशी पर्यटन

vi) स्किल इंडिया अंतर्गत PDOT चे मुख्य उद्दिष्ट उमेदवारांना साठी तयार करणे आहे.

अ) देशांतर्गत कामगार बाजार

ब) परदेशी रोजगार

क) कृषी व्यवसाय

प्र.2) व्यवसाय पर्यावरणावर परिणाम करणारी वैशिष्ट्ये स्पष्ट करा. [12]

प्र.3) भारतामध्ये उद्योजकतेची आवश्यकता स्पष्ट करा. [12]

प्र.4) सेबीचे अधिकार आणि कार्ये स्पष्ट करा. [12]

* * *

Total No. of Questions : 4]

SEAT No. :

PE12291

[Total No. of Pages : 4

[6505]-31

F.Y.B.Com./B.A./B.Sc.

BUSINESS ADMINISTRATION

OE-108-COM-T : Financial Literacy - I

(2024 Pattern) (Semester - I) (Paper-I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Question No. 1 is compulsory.*
- 2) *Attempt any Two Questions from Question No.2 to 4*
- 3) *Figures to the right indicate full marks.*

Q1) Fill in the Blanks

[6]

- a) Financial literacy helps in achieving _____ stability & security.
 - i) Ability to read & write
 - ii) Understanding & managing money effectively
 - iii) Knowing different languages.
- b) The main objective of financial literacy is _____.
 - i) To Increase problem in finance.
 - ii) To make informed financial decisions.
 - iii) To spend more money.
- c) NEFT stands for _____.
 - i) National Electronic Funds transfer
 - ii) National Exchange Finance transaction
 - iii) National Economic Fund transfer
- d) Digital payment are made using _____.
 - i) Cash
 - ii) Internet and Electronic
 - iii) Cheques

P.T.O.

- e) According to the 50-30-20 rule, 20% of income should be used for _____.
 - i) Wants
 - ii) Needs
 - iii) Savings
- f) Credit cards & Debit cards are examples of _____ payment methods.
 - i) Traditional
 - ii) Cash
 - iii) Digital

Q2) Explain the challenges faced in the Indian retail sector while using digital payments. **[12]**

Q3) What is financial Literacy? Explain the various types of financial Literacy. **[12]**

Q4) Write a Short Note (any Two). **[12]**

- a) Debit Card
- b) Functions of financial Literacy
- c) Modern Digital payment Trends
- d) Pillars of financial Literacy.

* * *

Total No. of Questions : 4]

PE12291

[6505]-31

F.Y.B.Com./B.A./B.Sc.

BUSINESS ADMINISTRATION

OE-108-COM-T : Financial Literacy - I

(2024 Pattern) (Semester - I) (Paper-I)(Open elective)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) प्रश्न क्रं. 1 सोडविणे आवश्यक आहे.
 - 2) प्रश्न क्रं. 2 ते 4 यापैकी कोणतेही 2 प्रश्न सोडवा.
 - 3) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.

प्र.1) रिकाम्या जागा भरा.

[6]

- अ) आर्थिक साक्षरता, स्थिरता आणि सुरक्षितता प्राप्त करण्यास मदत करते.
 - i) वाचन आणि लिखाणाची क्षमता,
 - ii) पैशाचे प्रभावीपणे आकलन आणि व्यवस्थापन
 - iii) वेगवेगळ्या भाषा जाणून घेणे
- ब) आर्थिक साक्षरतेचा मुख्य उद्देश म्हणजे
 - i) वित्तीय समस्या वाढणे
 - ii) माहितीपूर्ण आर्थिक निर्णय घेणे
 - iii) जास्त पैसे खर्च करणे
- क) NEFT चा पूर्ण अर्थ
 - i) National Electronic Funds transfer
 - ii) National Exchange Finance transaction
 - iii) National Economic Fund transfer
- ड) डिजिटल पेमेंट्स/देयक वापरून केले जातात.
 - i) रोख
 - ii) इंटरनेट आणि इलेक्ट्रॉनिक उपकरणे
 - iii) धनादेश
- इ) 50-30-20 नियमानुसार, उत्पन्नाच्या 20% रक्कम साठी वापरली पाहिजे.
 - i) इच्छा
 - ii) गरज
 - iii) बचत

फ) क्रेडिट कार्ड आणि डेबिट कार्ड ही देयक पद्धतीची उदाहरणे आहेत.

i) पारंपरिक

ii) रोख

iii) डिजिटल

प्र.2) भारतीय किरकोळ क्षेत्रामध्ये डिजिटल देयक/पेमेंट प्रणाली वापरताना येणाऱ्या अडचणी स्पष्ट करा. [12]

प्र.3) आर्थिक साक्षरता म्हणजे काय? आर्थिक साक्षरतेचे विविध प्रकार समवजावून सांगा. [12]

प्र.4) टिपा लिहा. (कोणतेही दोन) [12]

अ) डेबिट कार्ड

ब) आर्थिक साक्षरतेचे कार्ये

क) आधुनिक डिजिटल पेमेंटचे/देयकाचे प्रवाह

ड) आर्थिक साक्षरतेचे स्तंभ

* * *

Total No. of Questions : 4]

SEAT No. :

PE12292

[Total No. of Pages : 2

[6505]-32

F.Y.B.Com.

BANKING AND FINANCE

OE-110-COM-T : Indian Banking Systems - I
(2024 Credit Pattern) (Semester- I)(Open elective)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Question No.1 is Compulsory.*
- 2) *Attempt any Two Questions from Question No.2 to 4.*
- 3) *Figures to the right indicate full marks.*

Q1) Fill in the Blanks.

[6]

- a) _____ were banks nationalized in India in the year 1969.
- b) The Banking Regulation Act passed on_____.
- c) _____ deposits gives highest rate of interest.
- d) The validity of the cheque is _____ months.
- e) E- banking is also know as _____.
- f) UPI means _____.

Q2) Explain the functions of Reserve Bank of India.

[12]

Q3) Explain the role of private banks in Economic Development.

[12]

Q4) Explain the Problems of co- operative banks in India.

[12]

*** * ***

P.T.O.

Total No. of Questions : 4]

PE12292

[6505]-32

F.Y.B.Com.

BANKING AND FINANCE

**OE-110-COM-T : Indian Banking Systems- I
(2024 Credit Pattern) (Semester- I)**

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) प्रश्न क्रमांक 1 अनिवार्य आहे.
 - 2) प्रश्न क्रमांक 2 ते 4 यापैकी कोणतेही 2 प्रश्न सोडविणे.
 - 3) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
 - 4) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.
-

प्र.1) रिकाम्या जागा भरा.

[6]

- अ) सन 1969 भारतात बँकांचे राष्ट्रीयीकरण झाले.
- ब) बँकिंग नियमन कायदा मध्ये पास झाला.
- क) ठेवी सर्वात जास्त व्याजदर मिळवून देतात.
- ड) धनादेशाची वैधता कालावधी महिने असते.
- इ) ई-बँकिंगला असेही म्हणतात.
- फ) यू. पी. आय म्हणजे

प्र.2) रिझर्व्ह बँक ऑफ इंडियाची कार्ये स्पष्ट करा.

[12]

प्र.3) आर्थिक विकासात खाजगी बँकांची भूमिका स्पष्ट करा.

[12]

प्र.4) भारतातील सहकारी बँकांच्या समस्या स्पष्ट करा.

[12]

* * *

Total No. of Questions : 4]

SEAT No. :

PE12293

[6505]-33

[Total No. of Pages : 4

F.Y. B.Sc./B.A./B.Com./B.C.A. (Science)

ENVIRONMENTAL SCIENCE

VEC-101-T : Environmental Education - I

(2024 Credit Pattern) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right side indicate full marks.*
- 3) *Illustrate your answers with neat & diagram wherever necessary.*

Q1) Solve any five MCQ from the following.

[5]

- a) The earliest humans lived mainly as -
 - i) Farmers
 - ii) Industrial workers
 - iii) Hunter gatherers
 - iv) Traders
- b) What is a natural resource?
 - i) Man made material
 - ii) Material obtained from nature used to meet human needs
 - iii) Artificial product
 - iv) Technological invention
- c) Which of the following scales refers to small, local environmental processes?
 - i) Micro scale
 - ii) Meso scale
 - iii) Synoptic scale
 - iv) Planetary scale
- d) Biodiversity refers to -
 - i) The number of species only
 - ii) Variety of living organisms
 - iii) Genetic variation within humans
 - iv) Only endangered species
- e) The origin of agriculture marked the beginning of -
 - i) Nomadic lifestyle
 - ii) Permanent settlements
 - iii) Industrial society
 - iv) Iron age
- f) Which of the following is a biotic resource?
 - i) Coal
 - ii) Water
 - iii) Forest
 - iv) Minerals
- g) Which of the following is an example of global environmental issues?
 - i) Local air pollution
 - ii) Urban heat is land
 - iii) Global climate change
 - iv) Acid rain

P.T.O.

- Q2) a)** Solve any two of the following. **[5]**
- i) Explain how population growth has influenced natural resource exploitation.
 - ii) Explain the different levels and types of biodiversity.
 - iii) Explain different types of pollution with their effects.
- b)** Solve the following. **[3]**
- Differentiate between local, regional and global environmental issues with examples.
- Q3) a)** Solve any Two of the following. **[5]**
- i) Explain classification of natural resources.
 - ii) What are the biodiversity hotspots? Mention any two biodiversity hotspots in India.
 - iii) Explain the concept of sustainable development.
- b)** Solve the following. **[4]**
- Discuss the impacts of the industrial revolution on the environment?
- Q4)** Solve any four of the following. **[8]**
- a) Write definition of in-situ conservation with example.
 - b) What is transboundary air pollution?
 - c) Explain the importance of microbes as a natural resource.
 - d) What is ecocentric perspectives?
 - e) Write note on ozone layer depletion.



Total No. of Questions : 4]

PE12293

[6505]-33

F.Y. B.Sc./B.A./B.Com./B.C.A. (Science)

ENVIRONMENTAL SCIENCE

VEC-101-T : Environmental Education - I

(2024 Credit Pattern) (Semester - I)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना :-
- 1) सर्व प्रश्न सोडविणे अनिवार्य आहे.
 - 2) उजवीकडील अंक प्रश्नांचे पूर्ण गुण दर्शवितात.
 - 3) तुमचे उत्तर नीटनेटके आणि आवश्यक तिथे आकृतीने स्पष्ट करा.
 - 4) संदर्भासाठी मूळ इंग्रजी प्रश्नपत्रिका पहावी.

प्र.1) खालीलपैकी कोणतेही पाच बहुपर्यायी प्रश्न सोडवा.

[5]

- अ) प्रारंभीचे मानव मुख्यत्वे कशा स्वरूपात राहत होते ?
- i) शेतकरी
 - ii) औद्योगिक कामगार
 - iii) शिकारी संकलक
 - iv) व्यापारी
- ब) नैसर्गिक संसाधन म्हणजे काय ?
- i) मानवनिर्मित पदार्थ
 - ii) मानवी गरजा पूर्ण करण्यासाठी निसर्गातून मिळणारा पदार्थ
 - iii) कृत्रिमरित्या तयार केलेला पदार्थ
 - iv) तांत्रिक शोध
- क) खालीलपैकी कोणता स्तर लहान, स्थानिक पर्यावरणीय प्रक्रियांना सूचित करतो ?
- i) सुक्ष्म स्तर
 - ii) मध्य स्तर
 - iii) समग्र स्तर
 - iv) ग्रहस्तरीय स्तर
- ड) जैवविविधता म्हणजे
- i) फक्त प्रजातींची संख्या
 - ii) सजीवांमधील विविधता
 - iii) फक्त मानवांमधील जनुकीय विविधता
 - iv) फक्त संकटग्रस्त प्रजाती
- इ) शेतीच्या उत्पत्तीमुळे कोणत्या प्रकारच्या जीवनाची सुरुवात झाली ?
- i) भटकंती जीवनशैली
 - ii) स्थायी वस्ती
 - iii) औद्योगिक समाज
 - iv) लोहयुग
- फ) खालीलपैकी कोणते जैविक संसाधन आहे ?
- i) कोळसा
 - ii) पाणी
 - iii) जंगल
 - iv) खनिजे
- य) खालीलपैकी कोणती जागतिक पर्यावरणीय समस्या आहे ?
- i) स्थानिक वायु प्रदूषण
 - ii) शहरी उष्ण बेट प्रभाव
 - iii) जागतिक हवामान बदल
 - iv) आम्लवृष्टी

प्र.2) अ) खालीलपैकी कोणतेही 2 प्रश्न सोडवा. [5]

- i) लोकसंख्या वाढीमुळे नैसर्गिक संसाधनांच्या शोषणावर कसा परिणाम झाला ते स्पष्ट करा.
- ii) जैवविविधतेची विविध पातळी आणि प्रकार समजावून सांगा.
- iii) प्रदूषणाचे विविध प्रकार व त्यांचे परिणाम स्पष्ट करा.

ब) खालील प्रश्न सोडवा. [3]

योग्य उदाहरणांसह स्थानिक, प्रादेशिक आणि जागतिक पर्यावरणीय समस्यांमधील फरक स्पष्ट करा.

प्र.3) अ) खालीलपैकी कोणतेही 2 प्रश्न सोडवा. [5]

- i) नैसर्गिक साधनसंपत्ती चे वर्गीकरण समजावून सांगा.
- ii) जैवविविधतेचे हॉटस्पॉट म्हणजे काय? भारतातील दोन जैवविविधतेचे हॉटस्पॉट नमुद करा.
- iii) शाश्वत विकासाची संकल्पना स्पष्ट करा.

ब) खालील प्रश्न सोडवा. [4]

औद्योगिक क्रांतीचा पर्यावरणावर झालेला परिणाम स्पष्ट करा.

प्र.4) खालीलपैकी कोणतेही चार प्रश्न सोडवा. [8]

- अ) इन-सिटू संरक्षण याची व्याख्या लिहा व उदाहरण द्या.
- ब) सीमापार वायुप्रदूषण म्हणजे काय?
- क) सुक्ष्मजीव हे नैसर्गिक साधनसंपत्ती म्हणुन किती महत्त्वाचे आहेत?
- ड) पर्यावरण केंद्रित दृष्टीकोन म्हणजे काय?
- इ) ओझोन स्तराचा न्हास यावर टिप लिहा.



Total No. of Questions : 4]

SEAT No. :

PE-12294

[Total No. of Pages : 4

[6505]-34

F.Y. B.A.

INDIAN KNOWLEDGE SYSTEM (Generic)

**IKS-101-HIS : History of Knowledge Production in India
(2024 Credit Pattern) (Semester - I)**

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions in 20 words (any 5) : [5]

- a) Who is the father of Yoga?
- b) In which district of Maharashtra the Verul caves are located?
- c) Who has contributed to Indian Astronomy?
- d) In which language was the earliest Buddhist literature written?
- e) Name any two universities in ancient India.
- f) What philosophy did Charvaka Preach?
- g) Who composed the text on Sanskrit grammar known as the 'Ashtadhyayi'?

Q2) Write short notes in 100 words (any 2) : [8]

- a) Aryabhatta
- b) Scientific approach
- c) Rigveda

Q3) Answer the following questions in 150 words (any 1) : [7]

- a) Explain the teachings of Jainism.
- b) Give a brief account of the Persian language in India.

P.T.O.

Q4) Answer the following questions in 200 words (any 1) :

[10]

- a) Explain the nature and importance of Indian Knowledge System (IKS) in your own words.
- b) Explain in brief the ancient Indian Education System.



Total No. of Questions : 4]

PE-12294

[6505]-34

F.Y. B.A.

INDIAN KNOWLEDGE SYSTEM (Generic)

IKS-101-HIS : History of Knowledge Production in India

(2024 Credit Pattern) (Semester - I)

(मराठी रूपांतर)

वेळ : 2 तास]

[एकूण गुण : 30

- सूचना : 1) सर्व प्रश्न आवश्यक आहेत.
2) उजवीकडील अंक पूर्ण गुण दर्शवितात.

-
- प्रश्न 1) खालील प्रश्नांची उत्तरे 20 शब्दांत लिहा. (कोणतेही 5) [5]
- अ) योगाचे जनक कोण?
- ब) वेरुळची लेणी महाराष्ट्रातील कोणत्या जिल्ह्यात आहे?
- क) भारतीय खगोलशास्त्रामध्ये कोणा-कोणाचे योगदान आहे?
- ड) प्राचीन बौद्ध साहित्य कोणत्या भाषेत लिहिले आहे?
- इ) प्राचीन भारतातील कोणत्याही दोन विद्यापीठांची नावे सांगा.
- फ) चार्वाक यांनी कोणते तत्वज्ञान सांगितले?
- य) संस्कृत व्याकरणावर आधारित अष्टाध्यायी हा ग्रंथ कोणी लिहिला?
- प्रश्न 2) खालीलपैकी कोणत्याही दोन टीपा 100 शब्दांत लिहा. [8]
- अ) आर्यभट्ट
- ब) वैज्ञानिक दृष्टीकोण
- क) ऋग्वेद
- प्रश्न 3) खालीलपैकी कोणत्याही एका प्रश्नांचे उत्तर 150 शब्दांत लिहा. [7]
- अ) जैन धर्माची शिकवण स्पष्ट करा.
- ब) भारतातील फारसी भाषेचा विकास स्पष्ट करा.

प्रश्न 4) खालीलपैकी कोणत्याही एका प्रश्नांचे उत्तर 200 शब्दांत लिहा.

[10]

अ) भारतीय ज्ञान व्यवस्थेचे स्वरूप व महत्त्व तुमच्या शब्दांत सांगा.

ब) प्राचीन भारतातील शिक्षणपद्धती विषयी थोडक्यात माहिती लिहा.



Total No. of Questions : 5]

SEAT No. :

PE-3443

[Total No. of Pages : 2

[6505]-101

S.Y.B.Sc. (Computer Application)

**CA - 200 - IKS : INDIAN KNOWLEDGE SYSTEM FOR
COMPUTING**

(2024 Credit Pattern)(Semester - III)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *All Questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Draw labeled diagram wherever necessary.*

Q1) Attempt Any five of the following :

[5 × 1 = 5]

- a) The knowledge triangle in IKS consists of:
 - i) Data, Information, Knowledge
 - ii) Teacher, Student, Subject
 - iii) Experience, Experiment, Explanation
 - iv) Knowledge, Action, Realization
- b) Who wrote the Astādhyāyi ?
 - i) Panini
 - ii) Patanjali
 - iii) Aryabhata
 - iv) Chanakya
- c) Which aspect of Sanskrit helps in NLP applications?
 - i) Fixed word order
 - ii) Logical structure and grammar rules
 - iii) Random word formation
 - iv) Lack of syntax
- d) TheKatapayādi system converts:
 - i) Words to numbers
 - ii) Numbers to words
 - iii) Binary to decimal
 - iv) Alphabets to binary
- e) Ancient Indian cryptography was mainly used in:
 - i) Trade
 - ii) Warfare and secret communication
 - iii) Literature only
 - iv) Astrology
- f) The place value system was a unique contribution of:
 - i) Chinese mathematicians
 - ii) Greek philosophers
 - iii) Indian mathematicians
 - iv) Egyptian scientists
- g) Kaprekar's constant is:
 - i) 1729
 - ii) 6174
 - iii) 108
 - iv) 4321

P.T.O.

Q2) Attempt Any four of the following :

[4 × 2 = 8]

- a) Describe the concept of 'Dravya' in IKS.
- b) Explain how time was measured in ancient India.
- c) What is phonetics?
- d) Explain the concept of samasya.
- e) Define steganography
- f) What is the role of Sanskrit in modern computing?

Q3) Attempt Any two of the following :

[2 × 4 = 8]

- a) Describe the contributions of Aryabhata and Brahmagupta to the development of computation.
- b) Explain the salient features of the Indian numeral system.
- c) With an example explain Sūnyabindu system.

Q4) Attempt Any two of the following :

[2 × 4 = 8]

- a) Describe the concept of zero and its significance in mathematical computation.
- b) Explain the concept of *Dravya*, *Guna* and *Karma* in the context of IKS.
- c) Describe the Evolution of India's Intelligence Culture-Kautilya's Discourse on Secret Intelligence in the Arthashastra.

Q5) Attempt Any two of the following :

[2 × 3 = 6]

- a) Write a short note on Kaprekar's constant.
- b) Discuss the role of verbs (*dhātu*) and prefixes (*upasarga*) in Sanskrit sentence construction.
- c) Explain the Indian number system with example.



Total No. of Questions : 4]

SEAT No. :

PE-3444

[Total No. of Pages : 2

[6505]-102

S.Y. B.Sc. (Computer Application)
ELS - 241 - MN : DATA COMMUNICATIONS
(2024 Pattern) (Semester - III)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagram must be drawn wherever necessary.*
- 4) *Use of calculator is allowed.*

Q1) Answer the following (Any five) :

[5 × 1 = 5]

- a) Write full form of CSMA/CA.
- b) What is full duplex communication?
- c) Define baud rate.
- d) What is speed of standard ethernet?
- e) Enlist any two wired transmission medium.
- f) What is LAN?

Q2) Attempt any two :

[2 × 5 = 10]

- a) Explain FSK also draw FSK modulated output wave for following input binary sequence 110010.
- b) Explain following line coding scheme:
 - i) Unipolar - NRZ
 - ii) Return to zero (RZ)
- c) Describe modes of data transmission.

P.T.O.

Q3) Attempt any two :

[2 × 5 = 10]

- a) What is transmission impairments? Explain attenuation, distortion and noise in transmission.
- b) What is Control Access Protocol? Explain Reservation protocol in detail.
- c) What is WAN? Explain point to point WAN and Switched WAN.

Q4) Attempt any four :

[4 × 2.5 = 10]

- a) Write short note on baseband and broadband communication.
- b) Explain need of multiplexing in communication.
- c) Define signal to noise ratio and noise figure.
- d) Write short note on Ring topology.
- e) Write characteristics of data communication.
- f) Write short note on fast ethernet.



Total No. of Questions : 4]

SEAT No. :

PE-3445

[Total No. of Pages : 3

[6505]-103

S.Y. B.Sc.

COMPUTER APPLICATION

CA - 201 - MJ : Data Structures

(2024 Pattern) (NEP) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory
- 2) Neat diagram must be drawn wherever necessary.

Q1) A) Choose the correct options :

[5 × 1 = 5]

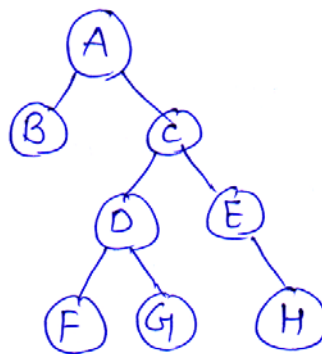
- i) Let $A = \{11, 23, 35, 45, 56, \}$ be the set of integers with base address = 500. What will be the address of third element.
 - a) 502
 - b) 504
 - c) 506
 - d) 508
- ii) _____ is the time complexity to count no. of elements in the linked list.
 - a) $O(1)$
 - b) $O(n)$
 - c) $O(\log n)$
 - d) $O(n^2)$
- iii) What is the outdegree of a node in a directed graph?
 - a) The no. of edges entering the node
 - b) The no. of edges leaving the node
 - c) The total no. of edges in the graph
 - d) The no. of nodes in the graph
- iv) In a circular queue, what happens when the rear pointer reaches the end of the array?
 - a) The queue is full
 - b) The queue is empty
 - c) The rear pointer wraps around to the beginning of the array
 - d) The queue is deleted
- v) Which operation is used to add an element to a stack?
 - a) Pop
 - b) Push
 - c) Peek
 - d) Delete

P.T.O.

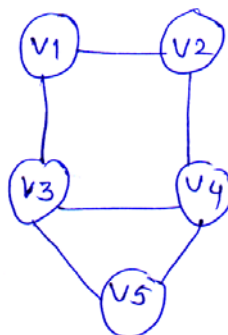
- B) Solve the following : [5 × 1 = 5]
- i) Write a node structure of doubly linked list.
 - ii) List applications of array
 - ii) Write graph representation techniques
 - iv) Define data object
 - v) Comment - "In a min heap, the parent node is always greater than its child nodes"

Q2) Solve any Five of the following [5 × 3 = 15]

- a) What is time complexity? Find the time complexity of following code :
- ```
int sum = 0;
for (int i = 0; i < n ; i ++)
{
 sum += arr [i];
}
```
- b) Explain column - major representation of 2D array with example.
- c) What is singly circular linked list? Write node structure of it.
- d) Write a 'C' function to display alternate node from singly linked list.
- e) Write a difference between stack and queue
- f) Traverse the given binary tree using 3 traversal techniques
- i) Preorder
  - ii) Inorder
  - iii) Postorder



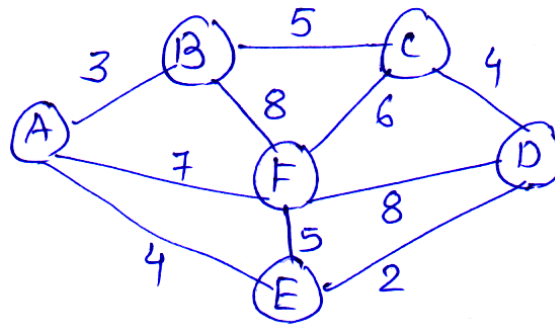
- g) Construct Adjacency matrix & adjacency list for the following graph.



**Q3)** Solve any five of the following :

**[5 × 4 = 20]**

- Write a note on big (O) & big ( $\Omega$ ) notation.
- Compare Linear search & binary search.
- Write a 'C' function to search an element from singly linked list.
- Explain the static representation of stack.
- Write a 'C' function to insert an element in dynamic queue.
- Write a 'C' function to count the leaf nodes from binary search tree.
- Construct minimum spanning tree using prim's algorithm.



**Q4)** Solve any five of the following.

**[5 × 5 = 25]**

- What is data structure? List any 2 advantages of data structure? Explain operations performed on various data structure.
- Sort the following data using merge sort.  
40 30 45 5 12 85 15
- Convert the following infix expression to postfix expression  
 $((A + B) * (C - D)) / (E - F)$
- Explain generalized Linked list with suitable example.
- Explain Depth First Search (DFS) with example.
- Construct Binary search tree step by step for following data.  
10, 25, 18, 3, 1, 7, 15, 6, 30, 40
- Construct AVL tree for the following data.  
78, 21, 14, 11, 97, 85, 74, 63

