1 SEM TDC PSCH (CBCS) C 1

2 0 2 1

(Held in January/February, 2022)

POLITICAL SCIENCE

(Core)

Paper : C–1

(Understanding Political Theory)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks
for the questions

1. Answer the following as directed :　　1×8=8

   (a) Who wrote the book, *The Discourse?*

   (b) Adam Smith was an exponent of classical liberalism.

   　　　　　(Write True or False)

   (c) Mention any one of the functions of welfare state.

   (d) In which year was the word 'feminism' included in English dictionary?

　　　　　　　　　　　(Turn Over)

(e) Write one of the demerits of Marxist feminism.

(f) "The state is an association of families and villages for the sake of attaining a perfect and self-sufficient existence." Who said this?

(g) In which year was Magna Carta signed?

(h) Mention one of the limitations of 'the Elitist theory of democracy'.

2. Write on the following **within 150 words** each : 4×4=16

(a) Limitations of behavioural approach

(b) Principles of classical liberalism

(c) Significance of radical feminism

(d) Means for success of democracy

Answer the following **within 500 words** each :

3. What is political theory? Discuss the evolution of political theory. 4+8=12

Or

Critically examine the normative approach of the study of political theory. 12

4. Critically discuss John Rawls' theory of justice. 11

Or

Discuss and criticise the basic principles of Marxism. 11

(*Continued*)

5. What is feminism? Discuss the growth of feminist movement in the West. 3+8=11

Or

What is post-modernism? Discuss the difference between modernism and post-modernism. 3+8=11

6. Define citizenship. Explain the different methods of acquiring citizenship. 4+7=11

Or

What is State? Discuss the causes for the decline of State. 3+8=11

7. Critically discuss the pluralist theory of democracy. 11

Or

What is political participation? Give your suggestions for increasing political participation. 4+7=11

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1 SEM TDC PSCH (CBCS) C 2

2021

(Held in January/February, 2022)

POLITICAL SCIENCE

(Core)

Paper : C-2

(Constitutional Government and Democracy in India)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following as directed : 1×8=8

   (a) Which right was described by Dr. B. R. Ambedkar as 'the heart and soul of the Constitution'?

   (b) From which Constitution, the Constituent Assembly borrowed the scheme of Indian Federation?

(Turn Over)

(c) Mention one occassion for which a Joint Session of the Parliament is held.

(d) What is the minimum age limit to become the Vice President of India?

(e) The age of retirement of the Judges of the High Court is 60/62/65 years.

(Choose the correct answer)

(f) Who can act as the President in the absence of the President and the Vice President of India?

(g) The Union List contains _____ Subjects.

(Fill in the blank)

(h) How many seats are reserved for women in Panchayats by 73rd Amendment of the Constitution of India?

2. Answer the following (within **150 words** each) :

4×4=16

(a) Briefly discuss about the basic structure of the Constitution of India.

(b) Write a note on the power of 'Judicial Review' of the Supreme Court of India.

(c) Point out the major areas of Centre-State tensions in India.

(d) Mention four characteristics of the 73rd Constitutional Amendment Act.

3. Discuss the major provisions of the Government of India Act, 1935.   11

Or

Whether the Preamble is a part of the Constitution? Discuss the significance of the Preamble of the Constitution of India. 1+10=11

4. How is the Prime Minister of India appointed? Discuss the powers and functions of the Prime Minister of India.

2+9=11

Or

Discuss about the election procedure of the President of India. Why is indirect process adopted for his/her election?   8+3=11

5. What do you mean by Public Interest Litigation? Discuss its nature in India. 5+6=11

Or

Discuss the composition, powers and functions of the Supreme Court of India.   11

6. Explain the administrative and legislative relations between the Union and the State Governments in India.   11

Or

Discuss the federal characteristics of the Constitution of India. Why is Indian federalism regarded as quasi-federal?   7+4=11

7. What are the various recommendations of Balwant Rai Mehta Committee? Explain.   12

Or

Discuss the powers and functions of Guwahati Municipal Corporation.   12

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1 SEM TDC EDNH (CBCS) C 1

2 0 2 1

(Held in January/February, 2022)

EDUCATION

(Core)

Paper : C–1

(Philosophical Foundation of Education)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following questions :   1×8=8

   (a) "Aim of education is making life in harmony with nature." Who said this?

   (b) Write a feature of non-formal education.

   (c) From which word is the word 'philosophy' derived?

(Turn Over)

(d) "Philosophy is the doctrine or science of knowledge." Who made this statement?

(e) What are the different schools of Indian philosophy?

(f) Who is the author of *Yoga Darshana*?

(g) Write a feature of Western philosophy.

(h) Mention two types of co-curricular activities.

2. Write short notes on the following : 4×5=20

(a) Function of education for development of skills

(b) Philosophy and the role of teacher

(c) Basic tenets of Vedanta philosophy

(d) Naturalism and aim of education

(e) Child-centered curriculum

3. What are the different functions of education? Discuss briefly how education helps in the development of human values. 5+5=10

4. Explain the meaning of philosophy of education. Discuss briefly the role of philosophy in education. 4+6=10

5. What are the Four Noble Truths according to Buddhism? Mention the Eightfold Path of Buddhist philosophy. 4+6=10

Or

What are the main Yoga Sutras of Patanjali? Write briefly about the educational implication of Yoga. 5+5=10

6. What is idealism? Discuss the basic principle of idealism. 4+7=11

7. Discuss the general principles of curriculum construction. Explain the necessity or utility of co-curricular activities. 6+5=11

Or

Explain the different kinds of curriculum based on various philosophy. 11

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1 SEM TDC EDNH (CBCS) C 2

2 0 2 1

(Held in January/February, 2022)

EDUCATION

(Core)

Paper : C–2

(Sociological Foundation of Education)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Answer the following questions :   1×8=8

    (a) Who is known as the father of educational sociology?

    (b) Mention any one feature of conflict theory.

    (c) "Socialisation is the process in which the individual learns to comfort to the norms of the society." Who said this statement?

(d) Mention any one factor of cultural change.

(e) Where was the word 'Human Resource Development' used for the first time?

(f) Write any one type of social inequality in Indian society.

(g) Write any one characteristic of democracy.

(h) Write the name of an autocratic ruler.

2. Write short notes on the following :   4×5=20

(a) Concept of conflict theory

(b) Necessity of national integration

(c) Social inequalities in Indian society

(d) Role of education in inculcating democratic values

(e) Factors of social change

3. What is consensus theory of educational sociology? Write the merits and demerits of consensus theory.   2+4+4=10

4. What is meant by socialization? Discuss the different processes of socialization.   3+8=11

Or

What is meant by internationalization? Discuss the role of education in internationalization.   3+8=11

5. What is meant by social change? Discuss the characteristics of social change.   2+8=10

Or

What is meant by economic development? Discuss the various economic and non-economic factors of economic development.   2+8=10

6. What is social disadvantage? Discuss the various types of social disadvantages in Indian society.   3+8=11

Or

What is women education? Discuss the problems of women education in India.   3+8=11

7. Explain the concept of secularism. Describe the role of education in secular society like India.   3+7=10

Or

Explain the concept of totalitarianism. Describe the nature of education in totalitarian society.   3+7=10

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1 SEM TDC ENGH (CBCS) C 1

2021

(Held in January/February, 2022)

ENGLISH

(Core)

Paper : C–1

(Indian Classical Literature)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—I

(Classical Sanskrit Drama)

1. Answer any *one* of the following : 5

   (a) Write a short note on the role of the 'ring' in *Abhijnana Shakuntalam*.

   (b) Write a short note on the curse of sage Durvasa on Shakuntala.

   (c) Make a character sketch of Madhavya as the court jester.

2. Answer any *one* of the following : 15

   (a) Discuss how Nature is portrayed in *Abhijnana Shakuntalam.*

   (b) Make a critical assessment of Shakuntala's character.

   (c) Discuss how Shakuntala is offered farewell by all at sage Kanva's hermitage on her way to the King's palace.

UNIT—II

(Selections from Epic Sanskrit Literature)

3. Answer any *one* of the following : 5

   (a) Narrate briefly what happens in *The Sequel to Dicing.*

   (b) Give a description of the game of dice on the basis of your reading of *The Dicing.*

   (c) Analyse the significance of Draupadi's questions on the basis of your reading of the prescribed texts.

Or

Write how Lord Krishna tried to persuade Karna to join the Pandavas.

4. Answer any *one* of the following : 15

   (a) Bring out the significance of the Dicing episode in relation to the main plot of the epic, *Mahabharata.*

   (b) Discuss the roles played by Lord Krishna and Shakuni in *The Dicing* and in *The Sequel to Dicing* from your reading of the text.

   (c) Discuss the situation that led to the Dicing and the consequence of the same which ultimately led to the Kurukshetra war.

UNIT—III

(Sanskrit Drama)

5. Answer any *one* of the following : 5

   (a) Write a short note on the title of *Mrcchakatika.*

   (b) Attempt a brief character sketch of Vasantasena.

   (c) Briefly discuss *Mrcchakatika* as a 'Prakarana', a 'play of invention'.

6. Answer any *one* of the following : 15

   (a) Discuss how the playwright depicts the state of contemporary society in *Mrcchakatika.*

(b) Discuss the major issues that Sudraka deals with in *Mrcchakatika*.

(c) Critically analyse the character of Charudatta.

UNIT—IV

(Classical Assamese Drama)

7. Write on any *one* of the following :   5

(a) Language of Ankiya Naat

(b) Narada in *Parijata Harana*

(c) Ankiya Naats of Sankardeva

8. Answer any *one* of the following :   15

(a) Critically analyse the role played by Lord Krishna in *Parijata Harana*.

(b) Discuss the role of the Sutradhara in an Ankiya Naat with special reference to *Parijata Harana*.

(c) Discuss the women characters as depicted in *Parijata Harana*.

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1 SEM TDC ENGH (CBCS) C 2

2 0 2 1

(Held in January/February, 2022)

ENGLISH

(Core)

Paper : C-2

(European Classical Literature)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—I

1. Answer any *one* of the following :   15

   (a) In *The Iliad,* Achilles' motivation to action is pride and honour. Do you agree? Give a reasoned answer.

   (b) *The Iliad* offers an extended reflection on the nature of war itself. The text seems both fascinated and horrified by war and all that it entails. Discuss *The Iliad* in the light of this statement.

(Turn Over)

(c) Discuss the significance of the death of Patroclus.

2. Answer briefly any *one* of the following : 5

(a) Comment on the shield of Achilles.

(b) Write a brief note on the epic conventions used by Homer in Book I of *The Iliad*.

(c) Discuss, in brief, Homer as the 'author' of *The Iliad*.

UNIT—II

3. Answer any *one* of the following : 15

(a) What does Sophocles' play, *Antigone* say about the different gender roles assigned to men and women in ancient Greek city-state? In what ways do some of the characters either exemplify or upset those roles?

(b) Evaluate death in Sophocles' *Antigone*.

(c) Discuss the nature of the conflict between Antigone and Creon.

4. Answer briefly any *one* of the following : 5

(a) Comment on the role of the chorus in *Antigone*.

(b) How does pride allow men to create laws that substitute for divine principles in Sophocles' *Antigone?*

(c) What does the play, *Antigone* say about absolute power?

UNIT—III

5. Answer any *one* of the following : 15

(a) In the seduction of Phaedria in *The Pot of Gold*, the questions of consent and offence are often overlooked. Do you agree? What does it say about the Roman society?

(b) Comment on Plautus' portrayal of slaves and servants in *The Pot of Gold*.

(c) Discuss the significance of the title of Plautus' *The Pot of Gold*.

6. Answer briefly any *one* of the following : 5

(a) Give a character sketch of Megadorus.

(b) Describe briefly Lar Familiaris' prologue in *The Pot of Gold*.

(c) What role does Staphyla play in *The Pot of Gold?*

UNIT—IV

7. Answer any *one* of the following :   15

   (a) Ovid's story of Procne, Philomela and Tereus is a horrific tale of rape and revenge. Elaborate.

   (b) The transformation at the end of Ovid's tales is always accompanied by violence. Examine the statement with special reference to the tale of Philomela (Book VI).

   (c) What are Horace's views on satire and its moral content as stated in *Satires I. IV*? Discuss.

8. Answer briefly any *one* of the following :   5

   (a) Comment on Philomela as a victim of censorship.

   (b) Comment on the theme of cannibalism in the tale of Philomela.

   (c) Comment briefly on Horace's views on poetry in *Satires I. IV*.

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1 SEM TDC HISH (CBCS) C 1

2 0 2 1

(Held in January/February, 2022)

HISTORY

(Core)

Paper : C–1

(History of India—I)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following questions in *one* word or in *one* sentence each :   1×8=8

   (a)   Who was the author of *Indica*?

   (b)   Who coined the term 'Subaltern'?

   (c)   Who coined the term 'Paleolithic'?

   (d)   Where is Rana Ghundai located?

   (e)   How has the Kanishkapur culture been named?

   (f)   Who was the Director of the Archaeological Survey of India during 1921–22?

(Turn Over)

(g) What is the meaning of Mohenjo-daro?

(h) How many Mahajanapadas were there in 6th century BC?

2. Write short notes on the following (any *three*) :

4×3=12

(a) 'The Jatakas'

(b) Classification of Indian Paleolithic Age

(c) Kayatha Culture

(d) Rise of Magadha

(e) Ajivika Sect

3. Discuss the importance of Ashokan Rock Edicts as the source of ancient Indian history. 12

Or

Discuss the importance of ancient literature as the source for the study of history.

4. Give a brief account of the spread of the Mesolithic culture in different parts of India. 12

Or

Briefly discuss the development of rock art in India.

5. Discuss briefly about the development and features of the Mehrgarh Civilization. 12

Or

Discuss the limitations of the Chalcolithic culture.

6. Discuss briefly about the socio-political conditions of the Harappan Civilization. 12

Or

What were the causes of the decline of the Harappan Civilization?

7. What were the causes and consequences of Alexander's invasion of India? 12

Or

Write briefly about the economic condition of the Sangam Age.

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1 SEM TDC HISH (CBCS) C 2

2021

(Held in January/February, 2022)

HISTORY

(Core)

Paper : C–2

(Social Formations and Cultural Patterns of Ancient World)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following in *one* word or in *one* sentence each : 1×8=8

   (a) Name the term to denote the 'Great Apes'.

   (b) What was the Aurignacian culture?

   (c) Who was the author of *The Origins of Human Society*?

   (d) Who called himself as the king of the four quarters of the earth?

(*Turn Over*)

(e) Which period of Greece was known as the Helladic period?

(f) Who were Helots?

(g) Which civilization flourished in the island of Crete?

(h) Who were Ionians in Greece?

2. Write short notes on any *three* of the following : 4×3=12

(a) The beginning of nomadic pastoralism

(b) Shang economy

(c) Irrigation system in ancient Greece

(d) Greek history writing

3. Discuss the cultural evolution of hominids in the Paleolithic period. 12

Or

Write the factors that led to the introduction of agriculture in Europe and Africa.

4. Describe the circumstances leading to the growth of Akkadian empire or civilization. 12

Or

Discuss the growth of science and architecture in the Mesopotamia civilization.

(Continued)

5. What are the characteristics of the Minoan civilization? Why did the Minoan civilization decline? 6+6=12

Or

Discuss the debate on advent of iron. 12

6. Describe the slavery in Sparta. 12

Or

Give an account of urbanization in ancient Greece.

7. Make an estimate on the contributions of the Greek scientists and philosophers towards the human civilization. 12

Or

Discuss the concept of citizenship in ancient Greece.

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1 SEM TDC HISH (CBCS) C 2

1 SEM TDC ECOH (CBCS) C 1

2 0 2 1

(Held in January/February, 2022)

ECONOMICS

(Core)

Paper : C–1

(Introductory Microeconomics)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Answer the following as directed :   1×8=8

   (a) Which of the following statements is
   not correct?

      (i) Scarcity is the cause of all
      economic problems.

      (ii) Market mechanism can solve all
      economic problems.

(Turn Over)

(iii) Consumer is sovereign in a socialist economy.

(iv) In economics, all the problems are microeconomic in nature.

(Choose the appropriate answer)

(b) Define opportunity sets.

(c) The income effect on the demand for an inferior good is negative.

(State True or False)

(d) Mention any one use of the income elasticity of demand.

(e) In case of Giffen goods, income and substitution effects

(i) work in the same direction

(ii) work in the opposite direction

(iii) move in uncertain direction

(iv) can't be said

(Choose the appropriate answer)

(f) What is marginal rate of substitution?

(g) Under monopoly, supply curve has

(i) a positive slope

(ii) a negative slope

(iii) a slope $= 0$

(iv) None of the above

(Choose the appropriate answer)

(h) To whom profit is a reward for inventing products and production techniques and for coordinating functions of entrepreneurs under dynamic conditions?

2. Write short notes on any *four* of the following (**within 150 words** each) : 4×4=16

(a) Scope of economics

(b) Markets and competition

(c) Choice between leisure and consumption

(d) Government policies towards competition

(e) Shifts in input demand curves

3. *(a)* *(i)* "Positive economics is divided into descriptive economics and economic theory." Elucidate the statement. 5

(ii) What are the basic problems of an economy? Why do these problems arise? Do all kinds of economics—rich and poor, developed and underdeveloped—face the same basic problems? Discuss. 2+2+3=7

Or

(b) *(i)* What is an economic model? Discuss how you can develop an economic model by taking a suitable example. 2+6=8

(ii) What is a graph? Mention the purposes served by graphs in economics. 1+3=4

4. *(a)* *(i)* What is meant by quantity demanded? Distinguish between changes in quantity demanded and changes in demand. Also mention the properties of demand curves. 2+3+2=7

(ii) Analyse the following cases for a demand curve : 4

(1) If there is a change in the price of a good or a service

(2) If there is a change in income, preferences, or prices of other goods or services

Or

(b) *(i)* Explain why a situation of excess demand will result in an increase in the market. 3

(ii) Define elasticity of demand. Explain why a good with positive price elasticity of demand must violate the law of demand. 2+3=5

(iii) Briefly discuss the concept of deadweight loss. 3

5. *(a)* *(i)* Mention the basic decisions that every household must take. Also discuss the factors influencing the quantity of a given good or service demanded by a single household. 2+5=7

(ii) Discuss the concept of budget constraint with the help of an example. 4

Or

(b) (i) What are consumer preferences? Discuss the assumptions about consumer preferences. 2+3=5

(ii) Define indifference curve. Discuss briefly the properties of an indifference curve. 2+4=6

6. (a) (i) Explain with examples the economies and the diseconomies of scale. How do economies and diseconomies of scale determine the shape of the LAC? 4+3=7

(ii) "Declining marginal product implies that marginal cost will eventually rise with output." Explain the statement with the help of diagrams. 4

Or

(b) (i) What is monopoly? How does the existence of a close substitute affect the monopoly power? What are the sources of monopoly? 2+2+3=7

(ii) Write a brief note on the government policies towards competition. 4

7. (a) Explain the following concepts using suitable diagrams/examples : 2½+2½+3+3=11

(i) Derived demand

(ii) Productivity of an input

(iii) Marginal productivity of labour

(iv) Marginal revenue product

Or

(b) (i) What is land market? Discuss how rent is determined. 2+5=7

(ii) State and explain briefly the marginal productivity theory. 4

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1 SEM TDC ECOH (CBCS) C 2

2021

(Held in January/February, 2022)

ECONOMICS

(Core)

Paper : C–2

(Mathematical Methods for Economics—I)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Choose the correct option :   1×8=8

   (a) $A \cup A' = ?$

      (i) U

      (ii) A

      (iii) A'

      (iv) ϕ

(b) The set of prime numbers is

   (i) {10, 12, 20}

   (ii) {2, 3, 5}

   (iii) {4, 6, 8}

   (iv) None of the above

(c) If $n = 3$, the polynomial function

   $$f(x) = a_0 + a_1 x + a_2 x^2 + a_3 x^3 + \cdots + a_n x^n$$

   will be known as

   (i) constant function

   (ii) linear function

   (iii) quadratic function

   (iv) cubic function

(d) If we take the derivative of total output with respect to labour, we will get

   (i) marginal cost

   (ii) investment

   (iii) marginal revenue

   (iv) marginal productivity of labour

(e) $\dfrac{d}{dx}(5e^{3x}) = ?$

   (i) $3e^{3x}$

   (ii) $5e^{3x}$

   (iii) $15e^{3x}$

   (iv) $15e^x$

(f) Which of the following is equal to $\int_a^b f(x)dx$?

   (i) $\int f(x)dx$

   (ii) $-\int_b^a f(x)dx$

   (iii) $\int_b^a f(x)dx$

   (iv) $e\int_a^b f(x)dx$

(g) The correct answer for

$$\int \left(5x + \frac{2}{x}\right)dx$$

is

(i) $\frac{5}{2}x^2 + \log x + c$

(ii) $\frac{5}{2}x^2 + 2\log x + c$

(iii) $\frac{5}{2}x^2 + 2\log x$

(iv) $x + 2\log x + c$

(h) The correct relationship between AR, MR and elasticity is

(i) $|e_d| = \dfrac{MR}{AR - MR}$

(ii) $|e_d| = \dfrac{AR}{AR - MR}$

(iii) $|e_d| = \dfrac{MR}{MR - AR}$

(iv) $|e_d| = \dfrac{AR}{MR - AR}$

　　　　　　　　　　　　　　　　(Continued)

2. Answer any *four* of the following : 　　4×4=16

(a) Define the following with example :

Null set, Finite set, Equal set, Power set

(b) Evaluate the limit of the following function :

$$\lim_{x \to 5} \frac{x^2 - 2x - 15}{x - 5}$$

(c) Explain the relationship between average cost (AC) and marginal cost (MC) using product rule of differentiation.

(d) Calculate the value of

$$\int \frac{4x^3 + 2}{(4x^4 + 8x)^5}dx$$

(e) Write a standard first-order linear differential equation with constant coefficient and constant term. What is a homogeneous linear differential equation? Give example.

　　　　　　　　　　　　　　　　(Turn Over)

3. *(a)* *(i)* Given $A = \{4, 5, 6\}$, $B = \{3, 4, 6, 7\}$ and $C = \{2, 3, 6\}$. Verify the distributive law of set operations.   3

(ii) The identity cards of 115 people were examined. Some of them were producing voter ID, some of had passport and some people were having both of them. If 65 people were having passports and 30 people had both, how many people have had voter ID only?   4

(iii) If $A = \{2,3,4,5\}$ and $B = \{a,e,i,o,u\}$, then find $A \times B$ and $B \times A$.   4

Or

(b) *(i)* What are whole numbers and rational numbers? Give example.   4

(ii) If

$A = \{1,3,5\}$, $B = \{2,4,6,8\}$, $C = \{2,5,10\}$,

$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

then verify that $(A \cap B)' = A' \cup B'$.   4

(iii) In case of ordered pair $(a,b) \neq (b,a)$ unless $a = b$. Explain.   3

4. *(a)* *(i)* Draw the graph of the following function :   3

$$Y = |X|$$

(ii) Determine whether the following function is continuous or not at $x = 2$:   4

$$f(x) = x^2 - 4x + 3$$

(iii) The total cost (C) of a firm per day is a function of its daily output (Q) and it is given by $C = 150 + 6Q$. The firm has a capacity limit of 100 units of output per day. What are the domain and range of the cost function?   4

Or

(b) *(i)* Write short notes on 'rational function' and 'exponential function'.   4

(ii) Find the sum of the cubes of the first 9 natural numbers using the appropriate model.   3

(iii) Formulate the appropriate rule, under which the following sequence run :   4

$$\{1, 6, 15, 28, 45, \cdots\}$$

5. (a) (i) Find the derivative of the following function : 3

$$y = \frac{2}{x^2} + 5x^3 - \frac{1}{2}x^2$$

(ii) Calculate elasticity of demand of the following function when price (P) = 10 :

$$D = 720 - 6 \cdot 5\, P$$

Here, D is quantity demanded. Also, comment on the nature of the commodity from the calculated elasticity of demand. 4

(iii) The total cost (TC) function of a firm is given by

$$TC = 200Q - 5Q^2 + 0 \cdot 05Q^3$$

where, Q is quantity produced. Find out the output at which marginal cost (MC) is equal to average cost (AC). 4

Or

(b) (i) Calculate the marginal cost (MC) from the total cost (TC) function

$$TC = 1000 + 6Q + 0 \cdot 5Q^2$$

where, Q is quantity produced. 3

(ii) Given the consumption function

$$C(Y) = 2000 - \frac{6000}{(5+Y)}$$

Find out the marginal propensity to consume (MPC) and marginal propensity to save (MPS), when $Y = 95$. 4

(iii) A monopolist has the following total revenue (TR) and total cost (TC) functions :

$$TR = 30Q - Q^2$$
$$TC = Q^3 - 15Q^2 + 10Q + 100$$

Calculate the profit maximizing output and the maximum profit. 4

6. (a) (i) Calculate the following : 2

$$\int_2^6 (2x^2 + x^3)\, dx$$

(ii) Calculate the saving function from the given marginal propensity to save (MPS) function, provided saving is 0 when income (Y) is 100 : 4

$$MPS = 0 \cdot 8 - \frac{1}{10}Y^{-1/2}$$

(iii) The marginal revenue (MR) and marginal cost (MC) of a firm are given below. Calculate profit of the firm when output (Q) is 4 units : 5

$$MR = 5 - 4Q - 3Q^2$$

$$MC = 3 + 2Q$$

Or

(b) (i) Obtain the consumer's surplus of the following demand function, if the market price (P) is 8 : 5

$$Q = \sqrt{42 - \frac{3}{4}P}$$

(ii) Calculate the producer's surplus from the given supply function when price (P) is 6 : 6

$$Q = -3 + 2P$$

7. (a) (i) Solve the differential equation

$$\frac{dy}{dx} + 2y = 0$$

with initial condition y(0) = 5. 4

(ii) Analyze the following market model for stability : 8

$$Q_d = 10 - 5P$$

$$Q_s = -10 + 5P$$

$$\frac{dP}{dt} = 3(Q_d - Q_s)$$

(Continued)

Or

(b) (i) Solve the differential equation

$$3\frac{dy}{dx} + 6y = 10$$

given y(0) = 4. 4

(ii) Given the demand and supply functions

$$Q_d = a - bP + \beta\frac{dP}{dt} \quad (a, b > 0)$$

$$Q_s = -c + dP (c, d > 0)$$

Obtain the time path of price P_t, assuming that the rate of change of price over time is directly proportional to excess demand. 8

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1 SEM TDC ASMH (CBCS) C 1

2 0 2 1

(Held in January/February, 2022)

ASSAMESE

(Core)

Paper : C–1

(অসমীয়া সাহিত্যৰ বুৰঞ্জী-১)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

১। চমু উত্তৰ লিখাঁ : ১×৮=৮

(ক) ড০ বাণীকান্ত কাকতিয়ে অসমীয়া সাহিত্যৰ বুৰঞ্জীক কেইটা ভাগত ভাগ কৰিছে?

(খ) বদন বৰফুকনৰ গীত কোন শ্ৰেণীৰ মালিতা?

(গ) অসমীয়া লোকগীতসমূহক কেইটা ভাগত ভাগ কৰা হৈছে?

(ঘ) 'চৰ্যাগীতিকোষ' গ্ৰন্থখন কোনে, ক'ৰপৰা উদ্ধাৰ কৰি আনিছিল?

(*Turn Over*)

(ঙ) মাধৱ কন্দলিব পৃষ্ঠপোষক ৰজাজ্জনব নাম কি?

(চ) 'গুণমালা' পুথিখনব লেখকজনব নাম লিখাঁ।

(ছ) চৰিত পুথিসমূহ কোন যুগব সাহিত্য?

(জ) 'হস্তীবিদ্যাৰ্ণৱ', 'ঘোঁৰা-নিদান' আদি কোন শ্রেণীব সাহিত্য?

২। মহেশ্বৰ নেওগে অসমীয়া সাহিত্যব ইতিহাসক কি কি ভাগত ভাগ কৰিছে? তাৰে যি কোনো এটা ভাগব বিষয়ে বিশদ আলোচনা আগবঢ়োৱা।   ৩+১২=১৫

৩। (ক) লোকসাহিত্য কাক বোলে? যি কোনো এক প্রকাৰ লোকসাহিত্যব বিষয়ে বিৱৰি লিখাঁ।   ২+১২=১৪

অথবা

(খ) সাধুকথা আৰু ডাকব বচনসমূহব সাহিত্যিক বিশেষত্ব সম্পৰ্কে আলোচনা কৰাঁ।   ৭+৭=১৪

৪। (ক) মাধৱ কন্দলিব পৰিচয় দাঙি ধৰি তেওঁব সাহিত্যকৃতি সম্পৰ্কে এটা টোকা লিখাঁ।   ৬+৬=১২

অথবা

(খ) 'অসমীয়া সাহিত্যব বুৰঞ্জীত প্রাক্শংকৰী যুগব অৱদান'— শীর্ষক এটি প্রবন্ধ যুগুত কৰাঁ।   ১২

৫। (ক) শংকৰদেৱব চমু পৰিচয় দাঙি ধৰি তেওঁব সাহিত্যিক অৱদানব বিষয়ে বিৱৰি লিখাঁ।   ৫+১০=১৫

অথবা

(খ) অসমীয়া নাট্যসাহিত্যব ইতিহাসত শংকৰী যুগব অৱদানব বিষয়ে এটি আলচ যুগুত কৰাঁ।   ১৫

৬। চমু আলোচনা আগবঢ়োৱা (যি কোনো দুটা) :   ৮×২=১৬

(ক) শংকৰোত্তৰ যুগব অসমীয়া সাহিত্য

(খ) ভট্টদেৱব গদ্যসাহিত্য

(গ) বুৰঞ্জী সাহিত্য

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1 SEM TDC ASMH (CBCS) C 2

2 0 2 1

(Held in January/February, 2022)

ASSAMESE

(Core)

Paper : C–2

(অসমীয়া সাহিত্যৰ বুৰঞ্জী-২)

Full Marks : 80

Pass Marks : 32

Time : 3 hours

The figures in the margin indicate full marks for the questions

১। চমু উত্তৰ দিয়া (যি কোনো আঠোটা) :   ১×৮=৮

(ক) 'অৰুণোদই'ৰ প্রথম সম্পাদক কোন?

(খ) 'ইয়াণ্ডাবু সন্ধি' কেতিয়া স্বাক্ষৰিত হৈছিল?

(গ) লক্ষ্মীনাথ বেজবৰুৱাৰ এখন ঐতিহাসিক নাটকৰ নাম উল্লেখ কৰা।

(ঘ) 'আৱাহন' আলোচনী কেতিয়া প্রকাশ পায়?

(ঙ) অসমীয়া সাহিত্যত 'সন্ধিক্ষণৰ কবি' বুলি কাক কোৱা হয়?

(চ) প্রথম অসমীয়া চুটিগল্পটো কি?

(ছ) বীৰেন্দ্ৰ কুমাৰ ভট্টাচাৰ্যই কোনখন উপন্যাসৰ বাবে জ্ঞানপীঠ বঁটা লাভ কৰে?

(জ) হেম বৰুৱাৰ 'সাগৰ দেখিছা' কোন শ্ৰেণীৰ সাহিত্য?

(ঝ) 'ওলমি থকা গোলাপী জামুৰ লগ' কাৰ কাব্যগ্ৰন্থ?

(ঞ) নৱকান্ত বৰুৱাৰ এখন শিশু-সাহিত্যৰ নাম লিখাঁ।

২। (ক) আধুনিক অসমীয়া সাহিত্যৰ পটভূমি সম্পৰ্কে এটি আলোচনা আগবঢ়োৱাঁ। ১২

অথবা

(খ) আধুনিক অসমীয়া ভাষা-সাহিত্যৰ প্ৰতিষ্ঠাত মিছনেৰী-সকলৰ ভূমিকা সম্পৰ্কে এটি আলচ যুগুত কৰা।

৩। (ক) 'অৰুণোদই' কাকতৰ বিষয়বস্তুৰ আভাস দি অসমীয়া সাহিত্যলৈ 'অৰুণোদই'ৰ অৱদান সম্পৰ্কে এটি টোকা প্ৰস্তুত কৰা। ৮+৮=১৬

অথবা

(খ) 'অসমীয়া সাহিত্যলৈ হেমচন্দ্ৰ বৰুৱা আৰু গুণাভিৰাম বৰুৱাৰ অৱদান' শীৰ্ষক এটি প্ৰবন্ধ লিখা। ১৬

৪। (ক) অসমীয়া কাব্য-সাহিত্যৰ বিকাশত জোনাকীযুগৰ কবিসকলৰ ভূমিকা সম্পৰ্কে এটি আলোচনা দাঙি ধৰা। ১৫

অথবা

(খ) জোনাকীযুগৰ চুটিগল্পৰ বৈশিষ্ট্য উল্লেখ কৰি এই যুগৰ যি কোনো এগৰাকী গল্পকাৰৰ গল্পৰ বিষয়ে এটি পৰিচয়সূচক টোকা লিখা।

৫। (ক) ৰামধেনুযুগৰ সাহিত্যৰ সাধাৰণ বৈশিষ্ট্যসমূহ উল্লেখ কৰি এটি আলোচনা আগবঢ়োৱাঁ। ১৪

অথবা

(খ) চমু টোকা লিখা (যি কোনো দুটা) : ৭×২=১৪

(১) ৰামধেনুযুগৰ চুটিগল্প

(২) ঔপন্যাসিক যোগেশ দাস

(৩) কবি হীৰেণ ভট্টাচাৰ্য

৬। (ক) আধুনিক অসমীয়া কবিতাৰ বৈশিষ্ট্যসমূহ উল্লেখ কৰি যি কোনো এগৰাকী কবিৰ কবিতাৰ বিষয়ে আলোচনা কৰা। ৭+৮=১৫

অথবা

(খ) সাম্প্ৰতিক কালৰ শিশু-সাহিত্য সম্পৰ্কে এটি পৰিচয়জ্ঞাপক টোকা প্ৰস্তুত কৰা। ১৫

★ ★ ★