B.A./B.Sc. 1ˢᵗ Semester (Batch 2023-26) (CBGS)

ECONOMICS (Micro Economics)

Time Allowed—3 Hours]   [Maximum Marks—100

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. (a) Critically examine welfare definition of economics.

    (b) What are the basic economic problems faced by an economy ?

2. What is an Indifference curve ? Discuss consumer equilibrium with the help of Indifference curve analysis.

SECTION—B

3. Explain the concept of returns to scale. What are the types of returns to scale ?

4. What are the different concepts related to costs ? Explain the shape of long run average cost curve according to traditional theory.

SECTION—C

5. What is perfect competition ? What are its characteristics ? How is price of a commodity determined under perfect competition ?

6. What is meant by monopoly ? Discuss the short run and long run equilibrium of firm under monopoly.

SECTION—D

7. Critically examine the Ricardian theory of rent.

8. (a) Critically examine Hawley's risk theory of profit.

   (b) Explain briefly loanable funds theory of interest.

(Punjabi Version)

ਨੋਟ :— ਹਰੇਕ ਭਾਗ ਵਿੱਚੋਂ ਘੱਟੋ-ਘੱਟ **ਇੱਕ** ਪ੍ਰਸ਼ਨ ਦੀ ਚੋਣ ਕਰਦੇ ਹੋਏ, ਕੁੱਲ **ਪੰਜ** ਪ੍ਰਸ਼ਨ ਕਰੋ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਸਾਰੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਅੰਕ ਬਰਾਬਰ ਹਨ।

ਭਾਗ—ੳ

1. (ੳ) ਅਰਥਸ਼ਾਸਤਰ ਦੀ ਕਲਿਆਣਕਾਰੀ ਪਰਿਭਾਸ਼ਾ ਦੀ ਆਲੋਚਨਾਤਮਕ ਜਾਂਚ ਕਰੋ।

   (ਅ) ਕਿਸੇ ਆਰਥਿਕਤਾ ਨੂੰ ਕਿਹੜੀਆਂ ਬੁਨਿਆਦੀ ਆਰਥਿਕ ਸਮੱਸਿਆਵਾਂ ਦਾ ਸਾਹਮਣਾ ਕਰਨਾ ਪੈਂਦਾ ਹੈ ?

2. ਉਦਾਸੀਨਤਾ ਵਕਰ ਕੀ ਹੈ ? ਉਦਾਸੀਨਤਾ ਵਕਰ ਵਿਸ਼ਲੇਸ਼ਣ ਦੀ ਮਦਦ ਨਾਲ ਖਪਤਕਾਰ ਸੰਤੁਲਨ ਦੀ ਚਰਚਾ ਕਰੋ।

ਭਾਗ—ਅ

3. ਸਕੇਲ 'ਤੇ ਪ੍ਰਤੀਫਲ ਦੀ ਧਾਰਨਾ ਦੀ ਵਿਆਖਿਆ ਕਰੋ। ਸਕੇਲ 'ਤੇ ਪ੍ਰਤੀਫਲ ਦੀਆਂ ਕਿਸਮਾਂ ਕੀ ਹਨ ?

4. ਲਾਗਤਾਂ ਨਾਲ ਸੰਬੰਧਿਤ ਵੱਖ-ਵੱਖ ਧਾਰਨਾਵਾਂ ਕੀ ਹਨ ? ਰਵਾਇਤੀ ਸਿਧਾਂਤ ਦੇ ਅਨੁਸਾਰ ਲੰਮੇ ਸਮੇਂ ਦੀ ਔਸਤ ਲਾਗਤ ਵਕਰ ਦੇ ਆਕਾਰ ਦੀ ਵਿਆਖਿਆ ਕਰੋ।

ਭਾਗ—ੲ

5. ਸੰਪੂਰਨ ਮੁਕਾਬਲਾ ਕੀ ਹੈ ? ਇਸ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਕੀ ਹਨ ? ਸੰਪੂਰਨ ਮੁਕਾਬਲੇ ਦੇ ਤਹਿਤ ਕਿਸੇ ਵਸਤੂ ਦੀ ਕੀਮਤ ਕਿਵੇਂ ਨਿਰਧਾਰਤ ਕੀਤੀ ਜਾਂਦੀ ਹੈ ?

6. ਏਕਾਧਿਕਾਰ ਤੋਂ ਕੀ ਭਾਵ ਹੈ ? ਏਕਾਧਿਕਾਰ ਅਧੀਨ ਫਰਮ ਦੇ ਥੋੜ੍ਹੇ ਸਮੇਂ ਅਤੇ ਲੰਮੇ ਸਮੇਂ ਦੇ ਸੰਤੁਲਨ ਦੀ ਚਰਚਾ ਕਰੋ।

ਭਾਗ—ਸ

7. ਲਗਾਨ ਦੇ ਰਿਕਾਰਡੀਅਨ ਸਿਧਾਂਤ ਦੀ ਆਲੋਚਨਾਤਮਕ ਜਾਂਚ ਕਰੋ।

8. (ੳ) ਹਾਵਲੇ ਦੇ ਲਾਭ ਦੇ ਜੋਖਮ ਸਿਧਾਂਤ ਦੀ ਆਲੋਚਨਾਤਮਕ ਜਾਂਚ ਕਰੋ।

   (ਅ) ਵਿਆਜ ਦੇ ਕਰਜ਼ਯੋਗ ਫੰਡਾਂ ਦੇ ਸਿਧਾਂਤ ਦੀ ਸੰਖੇਪ ਵਿਆਖਿਆ ਕਰੋ।

(Hindi Version)

नोट :— प्रत्येक भाग में से कम से कम **एक** प्रश्न का चयन करते हुए, कुल **पाँच** प्रश्न करें। पांचवा प्रश्न किसी भी भाग में से किया जा सकता है। सभी प्रश्नों के समान अंक हैं।

भाग—क

1. (क) अर्थशास्त्र की कल्याणकारी परिभाषा का आलोचनात्मक परीक्षण करें।

   (ख) किसी अर्थव्यवस्था के सामने आने वाली बुनियादी आर्थिक समस्याएँ क्या हैं ?

2. उदासीनता वक्र क्या है ? उदासीनता वक्र विश्लेषण की सहायता से उपभोक्ता संतुलन पर चर्चा करें।

भाग—ख

3. पैमाने पर प्रतिफल की अवधारणा को समझाइये। पैमाने पर रिटर्न के प्रकार क्या हैं ?

4. लागत से संबंधित विभिन्न अवधारणाएं क्या हैं ? पारंपरिक सिद्धांत के अनुसार दीर्घकालीन औसत लागत वक्र के आकार की व्याख्या करें।

भाग—ग

5. पूर्ण प्रतियोगिता क्या है ? इसकी विशेषताएँ क्या हैं ? पूर्ण प्रतियोगिता के तहत वस्तु की कीमत कैसे निर्धारित की जाती है ?

6. एकाधिकार से क्या तात्पर्य है ? एकाधिकार के तहत फर्म के अल्पकालिक और दीर्घकालिक संतुलन पर चर्चा करें।

भाग—घ

7. लगान के रिकार्डियन सिद्धांत का आलोचनात्मक परीक्षण करें।

8. (क) हॉले के लाभ के जोखिम सिद्धांत का आलोचनात्मक परीक्षण करें।

(ख) ब्याज के ऋणयोग्य निधि सिद्धांत को संक्षेप में समझाएं।

B.A./B.Sc. 1ˢᵗ Semester (Batch 2023-26) (CBGS)

MATHEMATICS (Algebra)

Paper—I

Time Allowed—3 Hours]   [Maximum Marks—100

Note :—Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. (a) Examine the consistency of the following equations and if consistent, find the complete solution :

   $x - y + 2z = 4$

   $3x + y + 4z = 6$

   $x + y + z = 1$

   (b) Prove that every skew-symmetric matrix of odd order has rank less than its order.

2. (a) Prove that system of vector $x = (1, 5, 2)$; $y = (0, 0, 1)$; $z = (1, 1, 0)$ of $V_3(R)$ is L.I.

   (b) Find the rank of AB, A + B when :

   $$A = \begin{bmatrix} 1 & 1 & -1 \\ 2 & -3 & 4 \\ 3 & -2 & 3 \end{bmatrix}, B = \begin{bmatrix} -1 & -2 & -1 \\ 6 & 12 & 6 \\ 5 & 10 & 5 \end{bmatrix}$$

SECTION—B

3. Verify Cayley Hamilton theorem for the matrix

$$A = \begin{bmatrix} 0 & 0 & 1 \\ 1 & 2 & 0 \\ 2 & -1 & 0 \end{bmatrix}.$$ Hence find A^{-1}.

4. Find the characteristic roots and their corresponding characteristic vectors for the matrix $\begin{bmatrix} 2 & 1 & 1 \\ 1 & 2 & 1 \\ 0 & 0 & 1 \end{bmatrix}.$

SECTION—C

5. (a) Reduce the following quadratic forms to sum of the squares by linear transformation :

$$2x^2 + 9y^2 + 6z^2 + 8xy + 8yz + 6zx.$$

   (b) Explain semi-definite and indefinite matrix.

6. (a) Reduce the diagonal matrix by congruent transformations :

$$A = \begin{bmatrix} 1 & 2 & -1 \\ -6 & 0 & 9 \\ -1 & 3 & -4 \end{bmatrix}$$

   (b) Explain congruence of skew-symmetric matrices with example.

SECTION—D

7. (a) Explain Ferrari's method of solving a biquadratic equation.

   (b) Use Descartes's method to solve :

   $$x^4 - 10x^2 - 20x - 16 = 0.$$

8. (a) Use Cardan's method to solve :

   $$x^3 - 3x^2 - 10x + 24 = 0.$$

   (b) Reduce the equation $2x^3 - 3x^2 + 10x - 4 = 0$ to the form $Z^3 + 3Hz + G = 0$ where H and G are the constants.

B.A./B.Sc. 1ˢᵗ Semester (Batch 2023-26) (CBGS)

MATHEMATICS

(Calculus and Trigonometry)

Paper—II

Time Allowed—3 Hours]   [Maximum Marks—75

Note :—Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. (a) Solve $\dfrac{7x+5}{x-3} < 2$.

   (b) State and prove Archimedean Property of Real Numbers.

   (c) Prove that the Union of two bounded sets is a bounded set. What about its converse ? Justify your answer.   5,5,5

2. (a) Show that $\lim\limits_{x \to 0} \cos\dfrac{1}{x}$ does not exist.

   (b) Examine the continuity of the function

   $$f(x) = \begin{cases} \dfrac{3|x|+x^2}{3x} & ; \quad x \neq 0 \\ 1 & ; \quad x = 0 \end{cases} \text{ at } x = 0.$$

   In case of discontinuity, state the kind of discontinuity.

   (c) Let $f(x) = \begin{cases} 2x+1 & ; \quad 0 \leq x \leq 1 \\ 2+x & ; \quad 1 < x \leq 2 \end{cases}$ and

   $$g(x) = \begin{cases} x^2 & ; \quad 0 \leq x \leq 3 \\ 3x-1 & ; \quad 3 < x \leq 5 \end{cases}.$$

   Find all points of discontinuity of gof in [0, 2].

   5,5,5

SECTION—B

3. (a) Differentiate $\sin^{-1}(\tanh x^2)$ w.r.t x^2.

   (b) Prove that

   $$\frac{d^n}{dx^n}\left(\frac{\log x}{x}\right) = \frac{(-1)^n n!}{x^{n+1}}\left[\log x - 1 - \frac{1}{2} - \frac{1}{3}..... - \frac{1}{n}\right].$$

   (c) If $y = \left(x + \sqrt{1+x^2}\right)^m$, find $y_n(0)$.

   3,6,6

4. (a) State and Prove Taylor's Theorem (With Lagrange's Form of Remainder).

(b) Obtain the first three non-zero terms in the Maclaurin's formula for the function $\tan^{-1} x$.

(c) Find the values of a and b so that

$$\lim_{x \to 0} \frac{x(1 - a\cos x) + b\sin x}{x^3}$$ exists and is equal to $\frac{1}{3}$.

6,4,5

SECTION—C

5. (a) State and Prove De Moivre's theorem for integral index.

(b) Solve $(1 + x)^n = (1 - x)^n$.

(c) If $\tan\dfrac{x}{2} = \tanh\dfrac{x}{2}$, prove that $\cos x \cosh x = 1$.

5,5,5

6. (a) Prove that $\tan\left(i\log\dfrac{a - ib}{a + ib}\right) = \dfrac{2ab}{a^2 - b^2}$.

(b) If $A + iB = C\tan(x + iy)$, show that

$$\tan 2x = \frac{2CA}{C^2 - A^2 - B^2} \text{ and } \tanh 2y = \frac{2CB}{C^2 + A^2 + B^2}.$$

(c) Solve the equation

$$\tan^{-1}(e^{ix}) - \tan^{-1}(e^{-ix}) = \tan^{-1}\left(\frac{i}{\sqrt{2}}\right).$$

5,6,4

SECTION—D

7. (a) If log log$(x + iy) = p + iq$, show that

$$y = x \tan(\tan q. \log(\sqrt{x^2 + y^2})).$$

(b) Prove that :

$$\sin^8\theta = \frac{1}{128}[\cos 8\theta - 8\cos 6\theta + 28\cos 4\theta - 56\cos 2\theta + 35]$$

(c) Show that :

$$\frac{\sin\theta + \sin 3\theta + \sin 5\theta + ... \text{ n terms}}{\cos\theta + \cos 3\theta + \cos 5\theta + ... \text{ n terms}} = \tan n\theta$$

where θ is not an integral multiple of π.

5,5,5

8. (a) Sum to n terms the series

$$\cos\theta\cos\theta + \cos^3\theta\cos 3\theta + \cos^5\theta\cos 5\theta + ...$$

(b) Sum the series

$$\frac{7}{1.3.5} + \frac{19}{5.7.9} + \frac{31}{9.11.13} + ...$$

7,8

B.A./B.Sc. 1ˢᵗ Semester (Batch 2023-26) (CBGS)

QUANTITATIVE TECHNIQUES

(Quantitative Techniques—I)

Time Allowed—3 Hours] [Maximum Marks—100

Note :—Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. (i) Solve $\dfrac{2}{x} + \dfrac{3}{y} = 18$, $\dfrac{4}{x} + \dfrac{9}{y} = 48$.

   (ii) Solve the equation :

   $$(x + 1)(x + 2)(x + 3)(x + 4) = 120.$$

   (iii) Find equilibrium price and quantity, given that

   demand $D = 50 - \dfrac{1}{2}p^2$ and supply, $S = \dfrac{1}{2}p + \dfrac{5}{2}p^2$.

   7+7+6

2. (i) Find sum of 12 terms of an AP, where n^{th} term is $5n + 2$.

   (ii) Sum up the following series, $1 - \dfrac{2}{3} + \dfrac{4}{9} - \dfrac{8}{27} + \ldots$

   upto 12 terms.

(iii) If a, b, c, d are in G.P., show that :

$$\frac{1}{a^2 + b^2}, \frac{1}{b^2 + c^2}, \frac{1}{c^2 + d^2} \dots\dots$$

are in G. P.   6+7+7

SECTION—B

3. (i) Explain the concepts of permutations and combinations.

(ii) Find the equation of straight line passing through the points (3, 5) and (4, 7).

(iii) From the following data find linear demand curve :

Price per liter (Milk)	Demand in Liters
Rs. 1	100
Rs. 2	50
Rs. 3	0

7+7+6

4. (i) Define Set. Explain various types of Sets.

(ii) Explain Union, Intersection, difference and symmetric difference of Sets with the help of Venn diagrams.

10+10

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SECTION—C

5. (i) Explain the concepts of constant and variable.

   (ii) Define function, explain various types of function.

   (iii) Evaluate $\underset{x \to 1}{\text{Limit}} \dfrac{x^3 - 1}{x^2 - 1}$. $6+7+7$

6. (i) Show that $f(x) = \dfrac{e^{1/x} - 1}{e^{1/x} + 1}$ is discontinuous at $x = 0$.

   (ii) Find the derivative of e^x by first principle method.

   $10+10$

SECTION—D

7. (i) Find derivative of $\dfrac{x + e^x}{1 + \log x}$ w.r.t. x.

   (ii) Find $\dfrac{dy}{dx}$ if $y = \log \left[x + \sqrt{x^2 + a^2} \right]$.

   (iii) Differentiate $(1 + x)^x$ w.r.t. x. $6+7+7$

8. (i) Find elasticity of demand, given the demand function $p = \dfrac{10}{3 + q}$ when $q = 9$ and $q = 0$.

   (ii) Demand Curve is given as $p = \dfrac{50 - x}{5}$, find MR at output $= x$. Also find MR when $x = 0$ and $x = 25$. $10+10$

Exam. Code : 121201
Subject Code : 4000

B.A./B.Sc. 1st Semester (Batch 2023-26) (CBGS)

DRUG ABUSE : PROBLEM, MANAGEMENT AND PREVENTION

Time Allowed—3 Hours]　　　　[Maximum Marks—50

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Discuss meaning, nature and extent of Drug Abuse in India and Punjab.

2. Elaborate the consequences of Drug Abuse on Individual and family.

SECTION—B

3. What do you mean by Social Management ? Discuss family and group therapy in detail.

4. What is Psychiatric Management ? Explain in detail Behaviour and Cognitive Therapy.

SECTION—C

5. Discuss the role of teacher in prevention of drug abuse.

6. Active Scrutiny and Supervision of family helps in prevention of drug abuse. Explain how ?

SECTION—D

7. Write a descriptive note on major features and amendments of NDPS Act 1985.

8. Explain how Campaigns against Drug Abuse help in prevention of drug abuse.

(Punjabi Version)

ਨੋਟ :— ਹਰੇਕ ਭਾਗ ਵਿੱਚੋਂ ਘੱਟੋ-ਘੱਟ **ਇੱਕ** ਪ੍ਰਸ਼ਨ ਦੀ ਚੋਣ ਕਰਦੇ ਹੋਏ, ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰੋ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਸਾਰੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਅੰਕ ਬਰਾਬਰ ਹਨ।

ਭਾਗ—ੳ

1. ਭਾਰਤ ਅਤੇ ਪੰਜਾਬ ਵਿੱਚ ਨਸ਼ੀਲੇ ਪਦਾਰਥਾਂ ਦੀ ਦੁਰਵਰਤੋਂ ਦੇ ਅਰਥ, ਪ੍ਰਕਿਰਤੀ ਅਤੇ ਫੈਲਾਓ ਬਾਰੇ ਚਰਚਾ ਕਰੋ।

2. ਵਿਅਕਤੀਗਤ ਅਤੇ ਪਰਿਵਾਰ 'ਤੇ ਨਸ਼ੀਲੇ ਪਦਾਰਥਾਂ ਦੀ ਦੁਰਵਰਤੋਂ ਦੇ ਨਤੀਜਿਆਂ ਨੂੰ ਵਿਸਤ੍ਰਿਤ ਕਰੋ।

ਭਾਗ—ਅ

3. ਸਮਾਜਿਕ ਪ੍ਰਬੰਧਨ ਤੋਂ ਤੁਹਾਡਾ ਕੀ ਭਾਵ ਹੈ ? ਪਰਿਵਾਰ ਅਤੇ ਸਮੂਹ ਥੈਰੇਪੀ ਬਾਰੇ ਵਿਸਥਾਰ ਵਿੱਚ ਚਰਚਾ ਕਰੋ।

4. ਮਨੋਵਿਗਿਆਨਕ ਪ੍ਰਬੰਧਨ ਕੀ ਹੈ ? ਵਿਵਹਾਰ ਅਤੇ ਬੋਧਾਤਮਕ ਥੈਰੇਪੀ ਨੂੰ ਵਿਸਥਾਰ ਵਿੱਚ ਸਮਝਾਓ।

ਭਾਗ—ੲ

5. ਨਸ਼ਾਖੋਰੀ ਦੀ ਰੋਕਥਾਮ ਵਿੱਚ ਅਧਿਆਪਕ ਦੀ ਭੂਮਿਕਾ ਬਾਰੇ ਚਰਚਾ ਕਰੋ।

6. ਪਰਿਵਾਰ ਦੀ ਦੇਖਭਾਲ ਅਤੇ ਨਿਗਰਾਨੀ ਨਸ਼ੀਲੇ ਪਦਾਰਥਾਂ ਦੀ ਦੁਰਵਰਤੋਂ ਨੂੰ ਰੋਕਣ ਵਿੱਚ ਮਦਦ ਕਰਦੀ ਹੈ। ਸਮਝਾਓ ਕਿਵੇਂ ?

ਭਾਗ—ਸ

7. NDPS ਐਕਟ 1985 ਦੀਆਂ ਮੁੱਖ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਅਤੇ ਸੋਧਾਂ 'ਤੇ ਇੱਕ ਵਰਨਣਾਤਮਕ ਨੋਟ ਲਿਖੋ।

8. ਦੱਸੋ ਕਿ ਕਿਵੇਂ ਨਸ਼ੀਲੇ ਪਦਾਰਥਾਂ ਦੀ ਦੁਰਵਰਤੋਂ ਵਿਰੁੱਧ ਮੁਹਿੰਮਾਂ ਨਸ਼ੀਲੇ ਪਦਾਰਥਾਂ ਦੀ ਦੁਰਵਰਤੋਂ ਨੂੰ ਰੋਕਣ ਵਿੱਚ ਮਦਦ ਕਰਦੀਆਂ ਹਨ।

(Hindi Version)

नोट :— प्रत्येक भाग में से कम से कम **एक** प्रश्न का चयन करते हुए, कुल **पाँच** प्रश्न करें। पांचवा प्रश्न किसी भी भाग में से किया जा सकता है। सभी प्रश्नों के समान अंक हैं।

भाग—क

1. भारत और पंजाब में नशीली दबाओं के दुरुपयोग के अर्थ, स्वरूप और फैलाव पर चर्चा करें।

2. व्यक्ति और परिवार पर नशीली दबाओं के दुरुपयोग के परिणामों को विस्तार में बताएं।

भाग—ख

3. सामाजिक प्रबंधन से आपका क्या तात्पर्य हैं ? पारिवारिक एवं समूह चिकित्सा पर विस्तार से चर्चा करें।

4. मनोरंजन प्रबंधन क्या है ? व्यवहार एवं संज्ञानात्मक चिकित्सा को विस्तार से समझाइये।

भाग—ग

5. नशीली दवाओं के दुरुपयोग की रोकथाम में शिक्षक की भूमिका पर चर्चा करें।

6. परिवार के सक्रिय निरिक्षण और देखभाल से नशीली दवाओं के दुरुपयोग की रोकथाम में मदद मिलती है। कैसे समझाओ।

भाग—घ

7. एनडीपीएस अधिनियम 1985 की प्रमुख विशेषताओं और संशोधनों पर एक वर्णनात्मक नोट लिखें।

8. बताएं कि कैसे नशीली दवाओं के दुरुपयोग के खिलाफ अभियान, नशीली दवाओं के दुरुपयोग की रोकथाम में मदद करते हैं ?

B.A./B.Sc. 1ˢᵗ Semester (Batch 2023-26) (CBGS)

ENGLISH (Compulsory)

Paper : ENC–101

Time Allowed—3 Hours]   [Maximum Marks—100

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Attempt all the following problems :

Put in *had better* where suitable. If *had better* is not suitable, use *should* :

(i) When people are driving, they keep their eyes on the road.

(ii) I'm glad you came to see us. You come more often.

(iii) She'll be upset if we don't invite her to the party, so we invite her.

(iv) These biscuits are delicious. You try one.

Make one sentence from **two** :

(v) It will stop raining soon. Then we'll go out.

We'll go ....

(vi) I'll do the shopping. Then I'll come straight back home.

After ....

(vii) It's going to get dark. Let's go home before that.

.... before ....

What is going to happen in these situations ? Use the words in brackets :

(viii) There are a lot of black clouds in the sky.

(rain) It's ....

(ix) It is 8.30. Tom is leaving his house. He has to be at work at 8.45, but the journey takes 30 minutes.

(late) He ....

(x)   There is a hole in the bottom of the boat. A lot of water is coming in through the hole.

(sink) The boat ....

1×20=20

2. Attempt all the following problems :

Read the situations and complete the sentences :

(i) I had arranged to meet Tom in a restaurant. I arrived and waited for him. After 20 minutes I realised that I was in the wrong restaurant.

I, ... for 20 minutes when I ....

.... the wrong restaurant.

(ii) Sarah got a job in factory. Five years later the factory closed down.

At the time the factory ...., Sarah ....
there for five years.

Which is correct ?

(iii) We haven't got much time. We <u>must / mustn't</u> hurry.

(iv) We've got plenty of time. We <u>mustn't / don't need</u>
to hurry.

(v) I have to talk to Cary. I <u>must / mustn't</u> remember to call him.

For each situation, write a sentence ending with never ...
before. Use the verb in brackets.

(vi) The man sitting next to you on the plane was very
nervous. It was his first flight.

(fly) He ....

(vii) Somebody sang a song. I didn't know it.

(hear) I ....

(viii) Sam played tennis yesterday. He wasn't very good
at it because it was his first game.

(play) He ....

Put in been or gone

(ix) Hello! I've just .... to the shops. I've bought lots
of things.

(x) Alice isn't here at the moment. She's .... to the
shop to get a newspaper. 1×20=20

SECTION—B

3. (a) Write a paragraph on the Indian Space Program in
the light of its recently launched Chandrayaan III.

10

(b) Attempt the following :

Put the words in the correct order :

(i) serviced / her car / Sarah / once a year / has

Sarah ....

(ii) twelve pounds / have / cleaned / it / my suit / cost / to

....

Write these sentences in another way, beginning in the way shown.

(iii) They asked me some difficult questions at the interview.

I ....

(iv) Amy's colleagues gave her a present when she retired.

Amy ....

Put the verb into correct form :

(v) I can't afford to buy a car. If I (buy) a car, I'd have to borrow the money.   10

4. (a) Write a paragraph on Women Empowerment. 10

(b) Attempt the following :

Write these sentences in another way, beginning in the way shown.

(i) How much will they pay you for your work ?

How much will you ....

(ii) I think they should have offered Tom the job.

I think Tom ....

Rewrite these sentences. Instead of using somebody, they, people etc., write a passive sentence :

(iii) They cancelled all flights because of fog.

All ....

(iv) Somebody accused me of stealing money.

I ....

Write the given sentence in some other form using the underlined word :

(v) It is reported that the building has been badly damaged by the fire.

The building ....

2×5=10

SECTION—C

5. Write an essay on the author's technique in "The Story Teller". 20

6. (a) Write a character sketch of the lady in "The Luncheon".

   (b) Write a character sketch of Iona Potapov.

   10×2=20

SECTION—D

7. (a) How was Grimsdyke's life deeply influenced by the "Power of Women" ?

   (b) In what way is a spendthrift selfish ? 10×2=20

8. What are the different definitions of Democracy proposed in "A Dialogue on Democracy" ? Do they arrive at any final definiton ? 20

B.A./B.Sc. 1ˢᵗ Semester (Batch 2023-26) (CBGS)
COMPUTER SCIENCE
(Computer Fundamental & PC Software)

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. (a) Define Computer. What are the various components of a Computer System ? Explain each one.

    (b) Discuss different types of printers ?   8,7

2. (a) Differentiate between Primary Memory and Secondary Memory. Explain the functional characteristics and storage organization of any one removable data storage device.

    (b) Discuss the input devices : MICR, Vision Input systems, scanner.   7,8

SECTION—B

3. (a) What is the advantage of using Mail-Merge feature of MS-Word ? Write all the steps required to implement Mail-Merge.

(b) Explain the following features along with their usage in MS-Word :

(i) Table formatting

(ii) Templates. 9,6

4. Discuss the following features with their usage in MS-Word :

(i) Page Setup

(ii) Spell Check

(iii) Border & Shading

(iv) Header & Footer. 4,4,4,3

SECTION—C

5. Why MS-PowerPoint is used ? What are the elements of MS-PowerPoint ? Discuss various steps required in the creation of a presentation in MS-PowerPoint. 15

6. Discuss the following features of MS-PowerPoint :

(i) Views

(ii) Slide Show. 7,8

SECTION—D

7. Explain the following features of MS-Excel :

(a) Querying the data

(b) Advance Filters

(c) What-if analysis

(d) Linking different sheets. 4,4,4,3

8. (a) Discuss different functions (any four) on different data with example in MS-Excel.

(b) Write step by step procedure to draw a graph in MS-Excel. 6,9