UNIVERSITY OF MYSORE

Postgraduate Entrance Examination September-2023

QUESTION PAPER BOOKLET NO.

Entrance Reg. No.						

SUBJECT CODE : 2 5

QUESTION BOOKLET

(Read carefully the instructions given in the Question Booklet)

COURSE : M.Sc. **SUBJECT : Mathematics**

MAXIMUM MARKS : 50 **MAXIMUM TIME : 75 MINUTES**

(Including time for filling O.M.R. Answer sheet)

INSTRUCTIONS TO THE CANDIDATES

1. The sealed question paper booklet containing 50 questions enclosed with O.M.R. Answer Sheet is given to you.
2. Verify whether the given question booklet is of the same subject which you have opted for examination.
3. Open the question paper seal carefully and take out the enclosed O.M.R. Answer Sheet outside the question booklet and fill up the general information in the O.M.R. Answer sheet. If you fail to fill up the details in the form as instructed, you will be personally responsible for consequences arising during evaluating your Answer Sheet.
4. During the examination:
   a) Read each question carefully.
   b) Determine the Most appropriate/correct answer from the four available choices given under each question.
   c) Completely darken the relevant circle against the Question in the O.M.R. Answer Sheet. For example, in the question paper if "C" is correct answer for Question No.8, then darken against Sl. No.8 of O.M.R. Answer Sheet using Blue/Black Ball Point Pen as follows:

   Question No. 8. Ⓐ Ⓑ ● Ⓓ (Only example) (Use Ball Pen only)
5. Rough work should be done only on the blank space provided in the Question Booklet. Rough work should not be done on the O.M.R. Answer Sheet.
6. If more than one circle is darkened for a given question, such answer is treated as wrong and no mark will be given. See the example in the O.M.R. Sheet.
7. The candidate and the Room Supervisor should sign in the O.M.R. Sheet at the specified place.
8. Candidate should return the original O.M.R. Answer Sheet and the university copy to the Room Supervisor after the examination.
9. Candidate can carry the question booklet and the candidate copy of the O.M.R. Sheet.
10. The calculator, pager and mobile phone are not allowed inside the examination hall.
11. If a candidate is found committing malpractice, such a candidate shall not be considered for admission to the course and action against such candidate will be taken as per rules.
12. Candidates have to get qualified in the respective entrance examination by securing a minimum of 8 marks in case of SC/ST/Cat-I Candidates, 9 marks in case of OBC Candidates and 10 marks in case of other Candidates out of 50 marks.

INSTRUCTIONS TO FILL UP THE O.M.R. SHEET

1. There is only one most appropriate/correct answer for each question.
2. For each question, only one circle must be darkened with BLUE or BLACK ball point pen only. Do not try to alter it.
3. Circle should be darkened completely so that the alphabet inside it is not visible.
4. Do not make any unnecessary marks on O.M.R. Sheet.
5. Mention the number of questions answered in the appropriate space provided in the O.M.R. sheet otherwise O.M.R. sheet will not be subjected for evaluation.

ಗಮನಿಸಿ : ಸೂಚನೆಗಳ ಕನ್ನಡ ಆವೃತ್ತಿಯು ಈ ಪುಸ್ತಕದ ಹಿಂಭಾಗದಲ್ಲಿ ಮುದ್ರಿಸಲ್ಪಟ್ಟಿದೆ.

1) Choose the CORRECT statement.

(A) There exists a ring R without identity, but a subring of R has identity

(B) There is a field F with an ideal I such that I is proper subset of F and $I \neq \{0\}$

(C) Every finite commutative ring with identity is an integral domain

(D) There is a subring of $\mathbb{Z}$ which is not an ideal of $\mathbb{Z}$, where $\mathbb{Z}$ is the ring of integers under usual addition and multiplication.

2) If $n > 1$ and γ is the circle centered at a with radius r, then the value of the integral $\int_\gamma \frac{dz}{(z-a)^n}$ is

(A) $2\pi i$

(B) $2\pi n$

(C) 1

(D) 0

3) One endpoint of a diameter of a sphere is (2, 1, 0). If the center of the sphere is (3, 0, –2), then the other endpoint of that diameter is

(A) (5, 1, –2)

(B) (4, –1, –4)

(C) (1, –1, –2)

(D) $\left(\frac{5}{2}, \frac{1}{2}, -1\right)$

4) For $\alpha = (x_1, x_2)$, $\beta = (y_1, y_2)$ in the vector space $\mathbb{R}^2$, define the inner product $< \alpha, \beta >$ as

$< \alpha, \beta > = x_1y_1 - x_2y_1 - x_1y_1 + 4x_2y_2$

If the two vectors (c, d) and $(-d, c)$ are orthogonal, then

(A) $d = \pm c$

(B) $d = c = 0$

(C) $d = \frac{1}{2}\left(-3 \pm \sqrt{13}\right)c$

(D) $d = \frac{1}{2}\left(3 \pm \sqrt{13}\right)c$

5) If $x_n = (a^n + b^n)^{\frac{1}{n}}$, where $a > 0$ and $b > 0$. Then $\lim_{n\to\infty} x_n$ is

(A) ∞ (B) 1

(C) $\max\{a, b\}$ (D) $\min\{a, b\}$

6) If $f(x, y, z) = x - 3y^2 + z$, then the line integral of f along the straight line segment joining (0, 0, 0) and (0, 1, 0)

(A) 1 (B) $\frac{\sqrt{3}}{2}$

(C) $\sqrt{3}$ (D) –1

7) If $z = x + iy$ is a complex number, let $u(z) = 3xy^2 - x^3$. The harmonic conjugate $v(z)$ for u in $\mathbb{C}$ that obeys $v(0) = 1$ is

(A) $v(z) = -\,3x^2y + y^3 + 1$

(B) $v(z) = -\,3x^2y + y^2 + 1$

(C) $v(z) = -\,3xy^2 + y^2 + 1$

(D) $v(z) = -\,3xy^2 + y^3 + 1$

8) Let $y_0, y_1, \ldots\ldots\ldots, y_n$ denote the set of values of y and $\Delta y_k = y_{k+1} - y_k$ denote the forward difference. If $\Delta^k = \Delta(\Delta^{k-1})$, the $\Delta^3 y_0$ is

(A) $y_3 - y_2 + y_1 - y_0$

(B) $3y_3 - 2y_2 + 2y_1 - 3y_0$

(C) $y_3 - 3y_2 + 3y_1 - y_0$

(D) $y_3 - 3y_2 - 3y_1 + y_0$

9) Choose the WRONG statement about any sequence $\{a_n\}$ of positive numbers.

(A) If $\sum_{n=1}^{\infty} a_n$ diverges then $\sum_{n=1}^{\infty} \frac{a_n}{1+a_n}$ must also diverge

(B) If $\sum_{n=1}^{\infty} \sqrt{a_n}$ converges, then $\sum_{n=1}^{\infty} a_n$ must also converge

(C) If $\sum_{n=1}^{\infty} a_n$ converges, then $\sum_{n=1}^{\infty} \frac{\sqrt{a_n}}{n}$ must converge

(D) If $\sum_{n=1}^{\infty} \sqrt{a_n}$ converges, then $\sum_{n=1}^{\infty} n^2 a_n$ must also converge

10) Let (Q, +) denote the group of rational numbers under addition. If $\mathbb{Z}$ is the group of integers under addition, then

(A) $\frac{Q}{Z}$ is finite

(B) Every element of $\frac{Q}{Z}$ is of finite order

(C) $\frac{Q}{Z}$ is cyclic

(D) All the above

11) Choose the WRONG statement among the following :

(A) If f is continuous on $[a, b]$, then f is Riemann integrable

(B) If f is a bounded positive function on $[a, b]$, then f is Riemann integrable

(C) If f is monotonic on $[a, b]$ then f is Riemann integrable

(D) If f Riemann integrable on $[a, b]$, then $|f|$ is also Riemann integrable

12) The remainder obtained when 639! (factorial of 639) is divided by 641 is

(A) 2 (B) 1

(C) 639 (D) 640

13) Which of the following can be the direction cosines of a line?

(A) $\frac{1}{3}, \frac{1}{3}, \frac{1}{3}$ (B) $\frac{1}{2}, 0, \frac{\sqrt{3}}{2}$

(C) $\frac{1}{\sqrt{2}}, \frac{3}{2}, 0$ (D) All of the above

14) Which of the following is a correct argument to tell that the group of real numbers under addition $(\mathbb{R}, +)$ is not isomorphic to group of non-zero real numbers under multiplication $(\mathbb{R}^*, \times)$?

(A) $(\mathbb{R}^*, \times)$ has a non-trivial finite subgroup, while $(\mathbb{R}, +)$ does not

(B) If $\varphi : (\mathbb{R}^*, \times) \rightarrow (\mathbb{R}, +)$ is a homomorphism, then $\phi(1) = 0$ and $\varphi(r) = \varphi(r \times 1) = \varphi(r) \times \varphi(1) = 0$. Hence φ is not one-one and cannot be isomorphism.

(C) $(\mathbb{R}, +)$ is cyclic, while $(\mathbb{R}^*, \times)$ is not

(D) None of the above

15) The function $f(z) = \overline{z}$ is differentiable

(A) at nowhere in the complex plane

(B) at everywhere in the complex plane

(C) only at the origin

(D) only in the lower half plane (i.e. $Im(z) < 0$)

16) What is the Laplace transform of $f(t)$, where $f(t)=\begin{cases} t & \text{if } 0 \le t \le 2 \\ 2 & \text{if } t > 2 \end{cases}$

(A) $\dfrac{1-e^{a}}{s^{2}}$ (B) $\dfrac{1-e^{2a}}{s^{2}}$

(C) $\dfrac{1-e^{a}}{s}$ (D) $\dfrac{1-e^{2a}}{s}$

17) Which of the following polynomials is irreducible over $\mathbb{Z}_7$?

(A) $x^2 - 5$ (B) $x^2 + 5$

(C) $x^{13} - 2$ (D) $x^{19} - 5$

18) If S_6 denotes permutation group on set of 6 symbols, then the number of 2 – cycles in S_6 is

(A) 12 (B) 15

(C) 6 (D) 30

19) Identify the WRONG statement among the following :

(A) Gradient is defined only for scalar valued function

(B) Curl of a function is a vector valued function

(C) Gradient of divergence of a vector valued function is a scalar valued function

(D) Divergence of gradient of a scalar valued function is again a scalar valued function

20) Let the matrix of a linear transformation $T : \mathbb{R}^3 \to \mathbb{R}^3$ with respect to standard bases be $\begin{pmatrix} 1 & 0 & 3 \\ 0 & 2 & 1 \\ 2 & 1 & -1 \end{pmatrix}$. Then which of the following is true?

(A) Nullity of T = 0 (B) Nullity of T = 1

(C) Rank of T = 2 (D) Rank of T = 1

21) Let G be a cyclic group of order $n > 2$ with identity e. Then which of the following is TRUE about $f(x) = x^d - e$?

(A) $f(x)$ has at least one solution $x \neq e$ whenever $gcd(d, n) > 1$

(B) $f(x)$ has exactly d solutions for all d, $1 < d \leq n$

(C) $f(x)$ has at least one solution $x \neq e$ if $gcd(d, n) = 1$

(D) $f(x)$ has exactly $\phi(d)$ solutions for all d, $1 < d \leq n$

22) Let $f : \mathbb{R} \to \mathbb{R}$ be a function on set of real numbers. Fix $x_0 \in \mathbb{R}$. consider the statement "Given any $e > 0$, there exists a $\delta > 0$ such that whenever $|x - x_0| < \delta$, $|f(x) - f(x_0)| < e$."

Negation of the above statement is :

(A) For any $e > 0$ there exists a $\delta > 0$ such that whenever $|x - x_0| < \delta$, $|f(x) - f(x_0)| \geq e$.

(B) There exists an $e > 0$ such that for all $\delta > 0$, whenever $|x - x_0| < \delta$, $|f(x) - f(x_0)| \geq e$.

(C) There exists an $e > 0$ such that for every $\delta > 0$, there exists an x with $|x - x_0| < \delta$ and $|f(x) - f(x_0)| \geq e$.

(D) There exists an $e > 0$ and a $\delta > 0$ such that for some x, with $|x - x_0| < \delta$, we have $|f(x) - f(x_0)| \geq e$.

23) Which of the following functions $f : \mathbb{R} \to \mathbb{R}$ is increasing on $\mathbb{R}$?

(A) $f(x) = \frac{x^3}{3} + \frac{x^2}{2} + x + 1$

(B) $f(x) = \frac{x^3}{3} + \frac{x^2}{2} + \frac{x}{8} + 1$

(C) $f(x) = \frac{x^3}{3} + \frac{x^2}{2} - x + 1$

(D) $f(x) = \frac{x^3}{3} + \frac{x^2}{2} - \frac{x}{8} + 1$

24) Which of the following two points lie on the same side of the plane $2x + y + 5z - 4 = 0$?

(A) (1, 2, 1) and (1, 0, –1)

(B) (3, –1, 2) and (–3, –1, 1)

(C) (2, –4, 1) and (1, –2, 1)

(D) (0, 1, 1) and (0, 1, –1)

25) The value of $\sum_{j=0}^{8} (3j + 2)^{18}$ (mod 27) is

(A) 0

(B) 3

(C) 18

(D) 9

26) Let $f(x)$ be bounded function on [0, 1]. Define a sequence $\{a_n\}$ by $a_n = \int_0^1 x^n f(x)dx$. Then the value of $\lim_{n\to\infty} a_n$ is

(A) 1

(B) ∞

(C) 0

(D) $\frac{1}{2}$

27) If $f(x)=\begin{cases} 0 & \text{if } x \text{ is irrational} \\ \dfrac{1}{n} & \text{if } x \text{ is rational} \end{cases}$ is a function defined on $[-a, a]$ $(a > 0)$, then

(A) $U(P, f)=\dfrac{a^2}{2}$ and $L(P, f)=0$

(B) $U(P, f)=\dfrac{a^2}{2}$ and $L(P, f)=\dfrac{-a^2}{2}$

(C) $U(P, f) = a$ and $L(P, f) = -a$

(D) $U(P, f) = a$ and $L(P, f) = 0$

28) If $x > 0$, then

$$\lim_{x\to 0^+}\int_x^1 \log t \, dt$$

(A) Diverges to $-\infty$

(B) Converges to 0

(C) Converges to -1

(D) Converges to 1

29) Let J_n denote the set of all positive divisors of $n > 1$. Let $*$ be the binary operation defined on J_n by $a * b = \text{LCM}(a, b)$. If e_n represents the identity element with respect to $*$, then

(A) $a*\dfrac{105}{a}=e_{105}$ for all $a \in J_{105}$

(B) $a*\dfrac{90}{a}=e_{90}$ for all $a \in J_{90}$

(C) $a*\dfrac{135}{a}=e_{135}$ for all $a \in J_{135}$

(D) $a*\dfrac{84}{a}=e_{84}$ for all $a \in S_{84}$

30) If R is a commutative ring with identity (with $0 \neq 1$), then

(A) R must have at least one unit other than 1 and -1

(B) any element which is not a zero divisor must be a unit

(C) any zero divisor cannot be a unit

(D) set of all units need not form a group under the multiplication operation of ring

31) Which of the following CANNOT be the value (or values) of 'a' if the following differential equation is to be of degree 2?

$$-\left(\frac{d^2y}{dx^2}\right)^{3a} + \left(\frac{d^2y}{dx^2}\right)^2 + \left(\frac{dy}{dx}\right)^3 + y = 0$$

(A) 0 (B) $\frac{1}{3}$

(C) $\frac{2}{3}$ (D) None of the above

32) Which of the following is NOT an exact differential equation?

(A) $2xy\,dx + (1 + x^2)\,dy = 0$

(B) $xe^{xy}\,dx + ye^{xy}\,dy = 0$

(C) $\sin x \cos y\,dx - \cos y \sin x\,dy = 0$

(D) $(3x^4y^2 - x^2)dy + (4x^3y^3 - 2xy)\,dx = 0$

33) For the function $f(x) = x^3 - 2x - 5$, if the root lies in [2, 3], then the first approximation (x_1) of the root is

(A) $\frac{17}{35}$ (B) $\frac{35}{17}$

(C) $\frac{28}{15}$ (D) $\frac{15}{28}$

34) Let the cross ratio of four points x_1, x_2, x_3 and x_4 be m. If w_1, w_2, w_3 and w_4 are the images of x_1, x_2, x_3 and x_4 respectively under the map $w = \frac{2z}{3}$, then the cross ratio of w_1, w_2, w_3 and w_4 is

(A) $\frac{2m}{3}$ (B) $m^{\frac{2}{3}}$

(C) m (D) $\frac{2}{3m}$

35) Which of the following is NOT a linear transformation from $\mathbb{R}^3 \to \mathbb{R}^3$?

(A) $f(x, y, z) = (2x, x + y, 3z)$

(B) $f(x, y, z) = (x + y + 1, 2x + y, 3z + 2y)$

(C) $f(x, y, z) = (2x + z, 0, y)$

(D) $f(x, y, z) = (0, 0, x + y + z)$

36) Let V be a two dimensional vector space of n elements. Let $v \in$ V be a non-zero vector. Then the number of linear transformations f from V to V such that $f(v) = v$ is

(A) n

(B) 1

(C) 0

(D) $n - 1$

37) Which of the following is a solution of the differential equation $\frac{dy}{dx} + \frac{1}{2}xy = 3x$.

(A) $y = 6e^{-x^2/4} + c$

(B) $y = 6 + ce^{x^2/4}$

(C) $y = 6e^{x^2/4} + c$

(D) $y = 6 + ce^{-x^2/4}$

38) In which of the following rings, there exists a bijection between set of zero divisors and set of units?

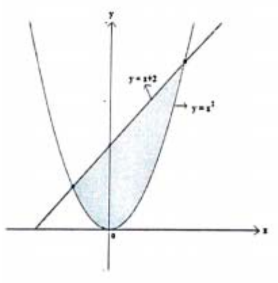
(A) Ring of integers $\mathbb{Z}$

(B) Ring of rational numbers Q

(C) $\mathbb{Z}_{15}$

(D) $\mathbb{Z}_{16}$

39) Which of the following correctly expresses the area of region enclosed by the parabola $y = x^2$ and the line $y = x + 2$?



(A) $\int_{-1}^{2} \int_{\sqrt{y}}^{y-2} dxdy$

(B) $\int_{1}^{4} \int_{-\sqrt{y}}^{\sqrt{y}} dxdy + \int_{0}^{1} \int_{y-2}^{\sqrt{y}} dxdy$

(C) $\int_{0}^{1} \int_{-\sqrt{y}}^{\sqrt{y}} dxdy + \int_{1}^{4} \int_{y-2}^{\sqrt{y}} dxdy$

(D) $\int_{1}^{4} \int_{-\sqrt{y}}^{\sqrt{y}} dxdy + \int_{1}^{4} \int_{x^2}^{x+2} dydx$

40) The radius of curvature of the curve $y = 3x^2 + 2x - 5$ at $x = 1$ is

(A) $\dfrac{(65)^{\frac{3}{2}}}{6}$

(B) $\dfrac{(65)^{\frac{2}{3}}}{6}$

(C) 1

(D) 0

41) If one of the roots of the equation $x^3 - 5x^2 + \dfrac{17x}{2} - 5 = 0$ is 2, then the other roots are

(A) $-\dfrac{3}{2} + \dfrac{i}{2}$ and $-\dfrac{3}{2} - \dfrac{i}{2}$

(B) $\dfrac{3}{2} + \dfrac{i}{2}$ and $\dfrac{3}{2} - \dfrac{i}{2}$

(C) $-\dfrac{1}{2} + \dfrac{3i}{2}$ and $-\dfrac{1}{2} - \dfrac{-3i}{2}$

(D) $\dfrac{1}{2} + \dfrac{i}{2}$ and $\dfrac{3}{2} - \dfrac{i}{2}$

42) Which of the following is NOT a homogeneous function?

(A) $f(x, y, z) = 2x^5y^2z$

(B) $f(x, y, z) = x^3 + 2y^2x + zx^2$

(C) $f(x, y, z) = x\cos\left(\dfrac{y+x}{z+y}\right)$

(D) $f(x) = e^{y/x} z^3 + 2$

43) Let V be a finite dimensional vector space of dimension n over a field F of q elements. Then the number of elements in V is

(A) n^q (B) nq

(C) $n + q$ (D) q^n

44) If A and B are countable sets, then which of the following is uncountable?

(A) $A \cup B$

(B) Cartesian product of A with B

(C) $A \cap B$

(D) Union of power sets of A and B

45) If the population of a country doubles in 50 years, in how many years the population would have exceeded 3 times of the initial, assuming that the rate of increase of population with time is proportional to the population at that time expressed in terms of years. (Use the approximate value of $\dfrac{\log_e 3}{\log_e 2} = 1.585$)

(A) 80 years (B) 60 years

(C) 65 years (D) 75 years

46) The n^{th} derivative of $f(x) = \cos^2(x)$ is

(A) $f^{(n)}(x) = 2^n \cos\left(2x + n\dfrac{\pi}{2}\right)$ (B) $f^{(n)}(x) = 2^{n-1} \cos\left(2x + n\dfrac{\pi}{2}\right)$

(C) $f^{(n)}(x) = 2^{n-1} \cos(2x + n\pi)$ (D) $f^{(n)}(x) = 2^n \cos(2x + n\pi)$

47) Let f be a differentiable function on $\mathbb{R}$. If f has exactly two distinct roots, then

(A) $f'(x)$ also should have exactly two distinct roots

(B) $f'(x)$ should have exactly one distinct roots

(C) $f'(x)$ need not have a root at all

(D) there is such an f, with $f'(x)$ having infinite zeroes

48) If $z = re^{i\theta}$ and $f(z) = u(r, \theta) + iv(r, \theta)$, then which of the following represents the Cauchy-Riemann equations in the polar form?

(A) $\frac{\partial u}{\partial r} = \frac{\partial v}{\partial \theta}$ and $\frac{\partial u}{\partial \theta} = -\frac{\partial v}{\partial r}$

(B) $\frac{\partial u}{\partial r} = \frac{1}{r}\frac{\partial v}{\partial \theta}$ and $\frac{\partial u}{\partial \theta} = -\frac{1}{r}\frac{\partial v}{\partial r}$

(C) $\frac{\partial u}{\partial r} = \frac{1}{r}\frac{\partial v}{\partial \theta}$ and $\frac{\partial u}{\partial \theta} = -r\frac{\partial v}{\partial r}$

(D) $\frac{\partial u}{\partial r} = r\frac{\partial v}{\partial \theta}$ and $\frac{\partial u}{\partial \theta} = -\frac{1}{r}\frac{\partial v}{\partial r}$

49) Which of the following is TRUE about the function $f(x, y) = e^x \sin y$ defined on $\mathbb{R}^2$?

(A) $\left(\frac{\partial^2 f}{\partial^2 x} - \frac{\partial^2 f}{\partial^2 y}\right)^2 = 0$

(B) $\left(\frac{\partial f}{\partial x} + \frac{\partial f}{\partial x}\right)^2 = 0$

(C) $\left(\frac{\partial f}{\partial x}\right)^2 + \left(\frac{\partial f}{\partial y}\right)^2 = 0$

(D) $\left(\frac{\partial^2 f}{\partial^2 x} + \frac{\partial^2 f}{\partial^2 y}\right)^2 = 0$

50) Let $x^3 + ax^2 + bx + c$ be a polynomial of degree 3 with roots α, β and γ (none of them is zero) and $a \neq 0$, $b \neq 0$, $c \neq 0$. Then the value of $\frac{1}{\alpha} + \frac{1}{\beta} + \frac{1}{\gamma}$ is

(A) $\frac{-a}{b}$

(B) $\frac{-b}{c}$

(C) $\frac{-c}{b}$

(D) $\frac{-b}{a}$

⌘⌘⌘

Rough Work

ಅಭ್ಯರ್ಥಿಗಳಿಗೆ ಸೂಚನೆಗಳು

1. ಓ.ಎಂ.ಆರ್. ಉತ್ತರ ಹಾಳೆಯ ಜೊತೆಗೆ 50 ಪ್ರಶ್ನೆಗಳನ್ನು ಹೊಂದಿರುವ ಮೊಹರು ಮಾಡಿದ ಪ್ರಶ್ನೆ ಪುಸ್ತಕವನ್ನು ನಿಮಗೆ ನೀಡಲಾಗಿದೆ.
2. ಕೊಟ್ಟಿರುವ ಪ್ರಶ್ನೆ ಪುಸ್ತಕವು, ನೀವು ಪರೀಕ್ಷೆಗೆ ಆಯ್ಕೆ ಮಾಡಿಕೊಂಡಿರುವ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ್ದೇ ಎಂಬುದನ್ನು ಪರಿಶೀಲಿಸಿರಿ.
3. ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯ ಮೊಹರನ್ನು ಜಾಗ್ರತೆಯಿಂದ ತೆರೆಯಿರಿ ಮತ್ತು ಪ್ರಶ್ನೆಪತ್ರಿಕೆಯಿಂದ ಓ.ಎಂ.ಆರ್. ಉತ್ತರ ಹಾಳೆಯನ್ನು ಹೊರಗೆ ತೆಗೆದು, ಓ.ಎಂ.ಆರ್. ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಸಾಮಾನ್ಯ ಮಾಹಿತಿಯನ್ನು ತುಂಬಿರಿ. ಕೊಟ್ಟಿರುವ ಸೂಚನೆಯಂತೆ ನೀವು ನಮೂನೆಯಲ್ಲಿನ ವಿವರಗಳನ್ನು ತುಂಬಲು ವಿಫಲರಾದರೆ, ನಿಮ್ಮ ಉತ್ತರ ಹಾಳೆಯ ಮೌಲ್ಯಮಾಪನ ಸಮಯದಲ್ಲಿ ಉಂಟಾಗುವ ಪರಿಣಾಮಗಳಿಗೆ ವೈಯಕ್ತಿಕವಾಗಿ ನೀವೇ ಜವಾಬ್ದಾರರಾಗಿರುತ್ತೀರಿ.
4. ಪರೀಕ್ಷೆಯ ಸಮಯದಲ್ಲಿ:
   a) ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಯನ್ನು ಜಾಗ್ರತೆಯಿಂದ ಓದಿರಿ.
   b) ಪ್ರತಿ ಪ್ರಶ್ನೆಯ ಕೆಳಗೆ ನೀಡಿರುವ ನಾಲ್ಕು ಲಭ್ಯ ಆಯ್ಕೆಗಳಲ್ಲಿ ಅತ್ಯಂತ ಸರಿಯಾದ/ ಸೂಕ್ತವಾದ ಉತ್ತರವನ್ನು ನಿರ್ಧರಿಸಿ.
   c) ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯಲ್ಲಿನ ಸಂಬಂಧಿಸಿದ ಪ್ರಶ್ನೆಯ ವೃತ್ತಾಕಾರವನ್ನು ಸಂಪೂರ್ಣವಾಗಿ ತುಂಬಿರಿ. ಉದಾಹರಣೆಗೆ, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯಲ್ಲಿ ಪ್ರಶ್ನೆ ಸಂಖ್ಯೆ 8ಕ್ಕೆ "C" ಸರಿಯಾದ ಉತ್ತರವಾಗಿದ್ದರೆ, ನೀಲಿ/ಕಪ್ಪು ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್ ಬಳಸಿ ಓ.ಎಂ.ಆರ್. ಉತ್ತರ ಹಾಳೆಯ ಕ್ರಮ ಸಂಖ್ಯೆ 8ರ ಮುಂದೆ ಈ ಕೆಳಗಿನಂತೆ ತುಂಬಿರಿ:

   ಪ್ರಶ್ನೆ ಸಂಖ್ಯೆ 8. Ⓐ Ⓑ ● Ⓓ (ಉದಾಹರಣೆ ಮಾತ್ರ) (ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್ ಮಾತ್ರ ಉಪಯೋಗಿಸಿ)
5. ಉತ್ತರದ ಪೂರ್ವಸಿದ್ದತೆಯ ಬರವಣಿಗೆಯನ್ನು (ಚಿತ್ತು ಕೆಲಸ) ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಯಲ್ಲಿ ಒದಗಿಸಿದ ಖಾಲಿ ಜಾಗದಲ್ಲಿ ಮಾತ್ರವೇ ಮಾಡಬೇಕು (ಓ.ಎಂ.ಆರ್. ಉತ್ತರ ಹಾಳೆಯಲ್ಲಿ ಮಾಡಬಾರದು).
6. <u>ಒಂದು ನಿರ್ದಿಷ್ಟ ಪ್ರಶ್ನೆಗೆ ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಚು ವೃತ್ತಾಕಾರವನ್ನು ಗುರುತಿಸಲಾಗಿದ್ದರೆ, ಅಂತಹ ಉತ್ತರವನ್ನು ತಪ್ಪು ಎಂದು ಪರಿಗಣಿಸಲಾಗುತ್ತದೆ ಮತ್ತು ಯಾವುದೇ ಅಂಕವನ್ನು ನೀಡಲಾಗುವುದಿಲ್ಲ. ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯಲ್ಲಿನ ಉದಾಹರಣೆ ನೋಡಿ.</u>
7. ಅಭ್ಯರ್ಥಿ ಮತ್ತು ಕೊಠಡಿ ಮೇಲ್ವಿಚಾರಕರು ನಿರ್ದಿಷ್ಟಪಡಿಸಿದ ಸ್ಥಳದಲ್ಲಿ ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯ ಮೇಲೆ ಸಹಿ ಮಾಡಬೇಕು.
8. ಅಭ್ಯರ್ಥಿಯು ಪರೀಕ್ಷೆಯ ನಂತರ ಕೊಠಡಿ ಮೇಲ್ವಿಚಾರಕರಿಗೆ ಮೂಲ ಓ.ಎಂ.ಆರ್. ಉತ್ತರ ಹಾಳೆ ಮತ್ತು ವಿಶ್ವವಿದ್ಯಾನಿಲಯದ ಪ್ರತಿಯನ್ನು ಹಿಂದಿರುಗಿಸಬೇಕು.
9. ಅಭ್ಯರ್ಥಿಯು ಪ್ರಶ್ನೆ ಪುಸ್ತಕವನ್ನು ಮತ್ತು ಓ.ಎಂ.ಆರ್. ಅಭ್ಯರ್ಥಿಯ ಪ್ರತಿಯನ್ನು ತಮ್ಮ ಜೊತೆ ತೆಗೆದುಕೊಂಡು ಹೋಗಬಹುದು.
10. ಕ್ಯಾಲ್ಕುಲೇಟರ್, ಪೇಜರ್ ಮತ್ತು ಮೊಬೈಲ್ ಫೋನ್‌ಗಳನ್ನು ಪರೀಕ್ಷಾ ಕೊಠಡಿಯ ಒಳಗೆ ಅನುಮತಿಸಲಾಗುವುದಿಲ್ಲ.
11. ಅಭ್ಯರ್ಥಿಯು ದುಷ್ಕೃತ್ಯದಲ್ಲಿ ತೊಡಗಿರುವುದು ಕಂಡುಬಂದರೆ, ಅಂತಹ ಅಭ್ಯರ್ಥಿಯನ್ನು ಕೋರ್ಸ್‌ಗೆ ಪರಿಗಣಿಸಲಾಗುವುದಿಲ್ಲ ಮತ್ತು ನಿಯಮಗಳ ಪ್ರಕಾರ ಅಂತಹ ಅಭ್ಯರ್ಥಿಯ ವಿರುದ್ಧ ಕ್ರಮ ಕೈಗೊಳ್ಳಲಾಗುವುದು.
12. ಈ ಪ್ರವೇಶ ಪರೀಕ್ಷೆಯಲ್ಲಿ ಅರ್ಹರಾಗಲು ಒಟ್ಟು 50 ಅಂಕಗಳಲ್ಲಿ SC/ST/Cat-I ಅಭ್ಯರ್ಥಿಗಳು ಕನಿಷ್ಠ 8 ಅಂಕಗಳನ್ನು, OBC ಅಭ್ಯರ್ಥಿಗಳು ಕನಿಷ್ಠ 9 ಅಂಕಗಳನ್ನು ಮತ್ತು ಇನ್ನಿತರ ಅಭ್ಯರ್ಥಿಗಳು ಕನಿಷ್ಠ 10 ಅಂಕಗಳನ್ನು ಪಡೆಯತಕ್ಕದ್ದು.

ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯನ್ನು ತುಂಬಲು ಸೂಚನೆಗಳು

1. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೆ ಒಂದೇ ಒಂದು ಅತ್ಯಂತ ಸೂಕ್ತವಾದ/ಸರಿಯಾದ ಉತ್ತರವಿರುತ್ತದೆ.
2. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಒಂದು ವೃತ್ತವನ್ನು ಮಾತ್ರ ನೀಲಿ ಅಥವಾ ಕಪ್ಪು ಬಾಲ್ ಪಾಯಿಂಟ್ ಪೆನ್‌ನಿಂದ ಮಾತ್ರ ತುಂಬತಕ್ಕದ್ದು. ಉತ್ತರವನ್ನು ಮಾರ್ಪಡಿಸಲು ಪ್ರಯತ್ನಿಸಬೇಡಿ.
3. ವೃತ್ತದೊಳಗಿರುವ ಅಕ್ಷರವು ಕಾಣದಿರುವಂತೆ ವೃತ್ತವನ್ನು ಸಂಪೂರ್ಣವಾಗಿ ತುಂಬುವುದು.
4. ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯಲ್ಲಿ ಯಾವುದೇ ಅನಾವಶ್ಯಕ ಗುರುತುಗಳನ್ನು ಮಾಡಬೇಡಿ.
5. ಉತ್ತರಿಸಿದ ಪ್ರಶ್ನೆಗಳ ಒಟ್ಟು ಸಂಖ್ಯೆಯನ್ನು O.M.R. ಹಾಳೆಯಲ್ಲಿ ನಿಗದಿಪಡಿಸಿರುವ ಜಾಗದಲ್ಲಿ ನಮೂದಿಸತಕ್ಕದ್ದು, ಇಲ್ಲವಾದಲ್ಲಿ O.M.R. ಹಾಳೆಯನ್ನು ಮೌಲ್ಯಮಾಪನಕ್ಕೆ ಪರಿಗಣಿಸುವುದಿಲ್ಲ.

Note : English version of the instructions is printed on the front cover of this booklet.