UNIVERSITY OF MYSORE

Ph.D. Entrance Examination, Oct. - 2017

SUBJECT CODE : 2 8

QUESTION BOOKLET NO. 01873

Entrance Reg. No.						

QUESTION BOOKLET

(Read carefully the instructions given in the Question Booklet)

SUBJECT : STATISTICS

MAXIMUM MARKS : 100 **MAXIMUM TIME : THREE HOURS**

(Including initial 10 minutes for filling O.M.R. Answer sheet)

INSTRUCTIONS TO THE CANDIDATES

1. The sealed questions 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 of alphabet and signs as instructed, you will be personally responsible for consequences arising during scoring of 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.**

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 stray marks on O.M.R. Sheet.

ಗಮನಿಸಿ : ಸೂಚನೆಗಳ ಕನ್ನಡ ಆವೃತ್ತಿಯು ಈ ಪುಸ್ತಕದ ಹಿಂಭಾಗದಲ್ಲಿ ಮುದ್ರಿಸಲ್ಪಟ್ಟಿದೆ.

SEAL

SEAL

PART-A

[50×1=50]

1. For any two independent events A and B associated with an experiment :

(A) $P(A \mid B) + P(A \mid B^c) = 1$ (B) $P(A \mid B) + P(A \mid B^c) = P(A)$

(C) $P(A) = P(B)$ (D) $P(A \mid B) + P(A \mid B^c) = 2P(A)$

2. Let X_1 and X_2 be two independent binomial random variables. The distribution of conditional probability of $X_1 = k$ given $X_1 + X_2 = x$ is :

(A) Poisson distribution (B) Negative binomial distribution

(C) Hypergeometric distribution (D) Normal distribution

3. $\{A_n\}$ be a sequence of independent events and A be a set of points common to infinite number of events $A_1, A_2, \ldots\ldots, A_n, \ldots\ldots$ with $\sum_{n=1}^{\infty} P(A_n) = \infty$, then

(A) $P(A) = 1$ (B) $P(A) = 0$

(C) P(A) does not exist (D) $P(A^C) = 1$

4. Let the distribution function of a random variable be

$$F(x) = \left\{ 0 \text{ if } x < \frac{1}{2} \text{ and } \left(1 - \frac{1}{2^{n+1}}\right) \text{ if } n + \frac{1}{2} \le x < n + \frac{3}{2},\ n = 0,1,2,\ldots \right\}$$

The support of $F(x)$ is

(A) Set of integers 0, 1, 2, 3, ... (B) $\frac{1}{2}, \frac{3}{2}, \frac{5}{2}, \ldots\ldots$

(C) $0, \frac{1}{2}, \frac{3}{4}, \frac{7}{8}, \ldots\ldots$ (D) 1, 3, 5, ...

5. If Y_n is $AN(n, 2n)$, then ________ is also $AN(n, 2n)$

(A) $\frac{n-1}{n} Y_n$ (B) $(n-1) Y_n$

(C) $\frac{\sqrt{n}-1}{\sqrt{n}} Y_n$ (D) $(n-1)^2 Y_n$

6. Let X_k ($k = 1, 2, \ldots\ldots n$) be independent random variables with zero means and variances σ_k^2. The sequence $\bar{X}_n \to 0$ almost surely if

(A) $\frac{\sum_1^{\infty} \sigma_k^2}{k^2} < \infty$ (B) $\frac{\sum_1^{\infty} \sigma_k^2}{k} < \infty$

(C) $\frac{\sum_1^{n} \sigma_k^2}{n} < \infty$, finite n (D) $\sum_1^{\infty} \sigma_k^2$ is finite

7. If X has Poisson distribution with P(X = 1) = P(X = 2), then variance of the distribution will be

(A) 0
(B) $\sqrt{2}$
(C) 2
(D) 4

8. The distribution of the sample mean is same as that of each random sample unit implies that the distribution can be

(A) Exponential
(B) Normal
(C) Discrete distribution on a non-negative integers
(D) Cauchy

9. If random variable X has probability generating function $P_X(t)$. The probability generating function of 2X is

(A) $P_X(t^2)$
(B) $P_X(t)$
(C) $P_X(1-t)$
(D) $P_X(t^3)$

10. Let $X_1, X_2, \ldots\ldots, X_n$ be i.i.d. random variables with finite mean μ. Then $\frac{(X_1+X_2+\ldots..+X_n)}{n} \xrightarrow{P} \mu$. This is because

(A) Khinchini's WLLN holds
(B) Kolmogorov's SLLN holds
(C) CLT holds
(D) Chebyshev's WLLN holds

11. Which of following statement is not true

(A) Lebesgue measure is a σ-finite measure
(B) If $\{A_n\}$ is a monotonic sequence then its limit always exists
(C) If Lindeberg-Feller condition is not satisfied then central limit theorem doesn't hold.
(D) If Lyapunov condition for CLT holds then Lindeberg-Feller condition for CLT holds

12. Let X be a random variable with mean μ and variance σ^2. Let $k > 0$ be a constant. Then which of the following is correct?

(A) $P(|X-\mu| < k\sigma) > 1 + (1/k)$
(B) $P(|X-\mu| < k\sigma) > 1 - (1/k)^2$
(C) $P(|X-\mu| < k\sigma) > 1 + (1/k)^2$
(D) $P(|X-\mu| < k\sigma) > 2$

13. If $f(x|\beta)=\frac{1}{2\beta}e^{-|x|/\beta}, \beta>0$. $E(X^2)$ is

(A) β^2
(B) β
(C) $2\beta^2$
(D) $\sqrt{\beta}$

14. If X has pmf $P_X(x) = \binom{r+x-1}{x} p^r q^x$, $x = 0, 1, 2, ...$ then the mgf of X is

(A) $\left(\dfrac{q}{1-pe^t}\right)^r$ (B) $\left(\dfrac{q}{1-pe^t}\right)$

(C) $\left(\dfrac{q}{1-pe^t}\right)^x$ (D) $\left(\dfrac{p}{1-qe^t}\right)^r$

15. Suppose X_n, X are random variables such that X_n converges in distribution to X and $(-1)^n X_n$ also converges in distribution to X. Then
(A) X must have a symmetric distribution
(B) X must be 0
(C) X must have skewed distribution
(D) X^2 must be constant

16. Assume that $X \sim B(n, p)$ for some $n \geq 1$ and $0 < p < 1$ and $Y \sim$ Poisson (λ) for some $\lambda > 0$. Suppose E(X) = E(Y) then
(A) V(X) = V(Y)
(B) V(X) < V(Y)
(C) V(Y) < V(X)
(D) V(X) may be larger or smaller depending on the values of n, p and λ

17. If a distribution has moment generating function $M_X(t) = (2 - e^t)^{-3}$ then the distribution is
(A) Geometric distribution (B) Hypergeometric distribution
(C) Binomial distribution (D) Negative binomial distribution

18. If $X_1, X_2, ..., X_{25}$ is a random sample from a normal population with mean 0 and variance 1, then $T = \dfrac{7}{18}\left[\dfrac{\sum_{i=1}^{18} X_i^2}{\sum_{i=19}^{25} X_i^2}\right]$ is F-variate with parameters.
(A) (18, 25) (B) (25, 7)
(C) (18, 7) (D) (7, 18)

19. The distribution of sample maximum $X_{(n)}$ of n order statistics $X_{(1)}, X_{(2)}, ..., X_{(n)}$ is :
(A) $F^n(x)$ (B) $nF^n(x)$
(C) $nf(x)$ (D) $f^n(x)$

20. Identify the correct statement

(A) Almost sure convergence implies convergence in probability

(B) Convergence in distribution always implies convergence in probability

(C) Convergence in probability implies convergence in r-th mean

(D) Weak law of large number implies strong law of large numbers

21. Let $\{X_n\}$ be a sequence of random variables with

$P(X_n = n) = \frac{1}{2} n^{-\lambda} = P(X_n = -n)$, $P(X_n = 0) = 1 - n^{-\lambda}$. Then SLLN holds if

(A) $\lambda > 1$ (B) $\lambda \leq 1$

(C) $\lambda \geq 1$ (D) $\lambda < 1$

22. Let $X_1, X_2, \ldots\ldots, X_n$ be a sample from $U(\theta, \theta + 1)$, then following is sufficient for θ.

(A) Sample mean

(B) $X_{(n)}$ where $X_{(n)}$ is the maximum observation in the sample

(C) $X_{(1)}$ where $X_{(1)}$ is the minimum observation in the sample

(D) $(X_{(1)}, X_{(n)})$ where $X_{(1)}, X_{(n)}$ are the minimum and the maximum observations in the sample

23. A statistic $T(x)$ is ancillary if

(A) If $E[T(x)] = \theta$, where θ is the parameter

(B) If $E[T(x)]$ = constant

(C) If distribution of $T(x)$ does not depend on θ

(D) If $T(x)$ is sufficient for the parameter

24. Which of the following test is NOT a test for location?

(A) Median test (B) Kolmogorov-Smirnov test

(C) Run test (D) Mann-Whitney test

25. 95% confidence interval for population mean under SRSWOR(N, n) is

(A) $\left(\bar{y} - 2.24\sqrt{\frac{N-n}{nN}}S, \bar{y} + 2.24\sqrt{\frac{N-n}{nN}}S\right)$

(B) $\left(\bar{y} - 1.96\sqrt{\frac{N-n}{nN}}S, \bar{y} + 1.96\sqrt{\frac{N-n}{nN}}S\right)$

(C) $\left(\bar{y} - 2.58\sqrt{\frac{N-n}{nN}}S, \bar{y} + 2.58\sqrt{\frac{N-n}{nN}}S\right)$

(D) $\left(\bar{y} - 1.96\sqrt{\frac{N-n}{N-1}}S, \bar{y} + 1.96\sqrt{\frac{N-n}{N-1}}S\right)$

26. Which of the following statements is true in case of unbiased test?
(A) Power of the test is less than or equal to the level of significance
(B) Power of the test is at least the level of significance
(C) Power is always greater than the level of significance
(D) Power is always less than the level of significance

27. The rejection criterion of likelihood ratio test of level α for testing equality of two normal populations with unknown and equal variances for two sided composite alternative hypothesis is :

(A) $(\bar{x}-\bar{y}) \geq (\mu_1-\mu_2)+t_{m+n-2,\alpha} S_p \sqrt{\frac{1}{m}+\frac{1}{n}}$

(B) $(\bar{x}-\bar{y}) \geq (\mu_1-\mu_2)+t_{m+n-2,\frac{\alpha}{2}} S_p \sqrt{\frac{1}{m}+\frac{1}{n}}$

(C) $|\bar{x}-\bar{y}| \geq (\mu_1-\mu_2)+t_{m+n-2,\alpha} S_p \sqrt{\frac{1}{m}+\frac{1}{n}}$

(D) $|\bar{x}-\bar{y}| \geq (\mu_1-\mu_2)+t_{m+n-2,\frac{\alpha}{2}} S_p \sqrt{\frac{1}{m}+\frac{1}{n}}$

28. If t_n is an unbiased estimator of $g(\theta)$, then

(A) $\text{Var}(t_n) \leq \frac{(g'(\theta))^2}{nI(\theta)}$
(B) $\text{Var}(t_n) = \frac{(g(\theta))^2}{nI(\theta)}$

(C) $\text{Var}(t_n) \geq \frac{g(\theta)}{nI(\theta)}$
(D) $\text{Var}(t_n) \geq \frac{(g'(\theta))^2}{nI(\theta)}$

29. If $X_1, \ldots\ldots, X_n$ is a random sample from $N(\theta, 1)$, then UMVUE of θ^2 is

(A) $\bar{X}^2-\frac{1}{n}$
(B) $\bar{X}^2+\frac{1}{n}$

(C) $\bar{X}^2$
(D) $\frac{\bar{X}^2}{n}$

30. Let $X_1, X_2, \ldots\ldots, X_n$ be a random sample from $N(\mu, \sigma^2)$. To test the hypothesis $H_0: \sigma^2 \geq \sigma_0^2$ against $H_1: \sigma^2 < \sigma_0^2$, $\mu \in R$, the test

$$\varphi(x)=\begin{cases} 1, & \text{if } \Sigma(x_i-\bar{x})^2 < k \\ 0, & \text{if } \Sigma(x_i-\bar{x})^2 > k \end{cases}$$ is

(A) LRT test
(B) UMP invariant test
(C) Minimal invariant test
(D) All the above

31. If $P_X(x) = \dfrac{\left(\binom{a}{x}\binom{N-a}{n-x}\right)}{\binom{N}{n}}$. Then MLE of N is

(A) *na/x*

(B) *nx/a*

(C) *n/ax*

(D) *x/an*

32. The null distribution of Wilcoxon-Signed-Rank test statistic is symmetric about

(A) $\frac{n(n+1)}{4}$

(B) $\frac{(n+1)}{4}$

(C) $\frac{n}{4}$

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

33. X ~ N(μ, σ^2) both μ and σ^2 unknown. The rejection region of LR test for testing $\sigma^2 = \sigma_0^2$ against $\sigma^2 > \sigma_0^2$ is

(A) $\frac{s^2}{\sigma_0^2} \le \chi^2_{n-1,1-\frac{\alpha}{2}}$

(B) $\frac{(n-1)s^2}{\sigma_0^2} \ge \chi^2_{n-1,\alpha}$

(C) $\frac{s^2}{\sigma_0^2} \ge \chi^2_{n-1,1-\frac{\alpha}{2}}$

(D) $\frac{(n-1)s^2}{\sigma_0^2} \le \chi^2_{n-1,\alpha}$

34. If the auxiliary variable related to the study variable is available for all the population unit then we go for :

(A) Probability proportional to size sampling

(B) Systematic sampling

(C) Two phase sampling

(D) Two stage sampling

35. If X_1, X_2, ..., X_n is a random sample drawn using simple random sampling without replacement scheme, then an estimator of the standard error of the sample mean is

(A) s/n

(B) $s\left[(1-f)/n\right]^{1/2}$

(C) $\sigma\left[(1-f)/n\right]^{1/2}$

(D) $\frac{Ns}{\sqrt{n}}$

s^2 = Sample variance and σ^2 is the population variance.

36. Horvitz-Thomson estimator can be applied to
(A) Any random sampling scheme (B) Any PPSWR sampling scheme
(C) Any SRSWOR sample (D) Systematic sampling

37. In SRS, bias of the ratio estimator is given by

(A) $\frac{\text{Cov}\left(\hat{\beta},\bar{x}\right)}{\bar{\text{Y}}}$ (B) $\frac{\text{Cov}\left(\hat{\beta},\bar{x}\right)}{\bar{\text{X}}}$

(C) $-\frac{\text{Cov}\left(\hat{\beta},\bar{x}\right)}{\bar{\text{X}}}$ (D) $\frac{\text{Cov}\left(\hat{\beta},\bar{y}\right)}{\bar{\text{X}}}$

38. In the linear model $\text{Y}=\text{X}\beta+\in$, which one of the following is correct :
(A) the parametric function $\lambda'\beta$ is estimable if λ belongs to the column space of X
(B) the parametric function $\lambda'\beta$ is estimable only when X is full rank
(C) least squares estimator of the parametric function $\lambda'\beta$ is biased when X is less than full rank
(D) the least square estimator of the parametric function $\lambda'\beta$ is not unique if X is less than full rank

39. In which of the following cases the BIBD exists :
(A) $v=16$, $b=7$, $r=3$, $k=6$ and $\lambda=1$
(B) $v=15$, $b=8$, $r=3$, $k=6$ and $\lambda=1$
(C) $v=16$, $b=8$, $r=3$, $k=6$ and $\lambda=1$
(D) $v=16$, $b=8$, $r=2$, $k=6$ and $\lambda=1$

40. Youden square design is
(A) Symmetric BIBD (B) BIBD
(C) LSD (D) All the above

41. In a partially confounded factorial design :
(A) The same interaction effect is confounded in different blocks
(B) The different interaction effects are confounded in different blocks
(C) The different interaction effects are confounded in a same block
(D) The main effects are confounded in different blocks

42. If 2^4 factorial experiment is to be conducted in RCBD, then the number of experimental units in each block should be equal to
(A) number of replications (B) number of treatments
(C) 15 (D) 8

43. If X, Y has bivariate normal density with $\mu_x = 10$, $\mu_y = 12$, $\sigma_x^2 = 9, \sigma_y^2 = 9$ and $\rho = 0.6$. Then the conditional density of Y given X $= x$ is
(A) N$(0.8x + 4, 10.24)$
(B) N$(4 + x, 6)$
(C) N$(6 + 0.4x, 3)$
(D) N$(12 + 0.9x, 4)$

44. Let $d_j^2 = (X_j - \bar{X})' S^{-1} (X_j - \bar{X})$ denotes the generalized squared distance, where $X_1, X_2, \ldots\ldots, X_n$ are sample from multivariate normal distribution. Then
(A) d_j^2 is used to test for constant variance
(B) d_j^2 is used to determine outliers not for testing normality
(C) d_j^2 is used to test for normality but not for detecting outliers
(D) d_j^2 is used to test for normality and to detect outliers

45. Hotelling's T^2 statistic
(A) is invariant under linear transformation
(B) follows chi-square distribution
(C) is used to test equality of population variance covariance matrices
(D) none of the above

46. The following is/are use(s) of Principal Component Analysis
(A) ranking of multidimensional data
(B) outlier detection
(C) only (A) is correct
(D) both (A) and (B) are correct

47. If a closed set C contains only one state j, then state j is called :
(A) Transient state
(B) Persistent state
(C) Absorbing state
(D) Periodic

48. The probability of ultimate extinction of birth and death process when $\lambda > \mu$ is :
(A) 1
(B) λ
(C) μ / λ
(D) 2

49. If $\{X_n, n \geq 0\}$ is a Branching process then the mean $E(X_n)$ of branching process is :
(A) m
(B) m^n
(C) m^{n+1}
(D) n

50. If the transition probability matrix is $\begin{bmatrix} 1/2 & 1/2 \\ 0 & 1 \end{bmatrix}$ then
(A) the Markov chain will terminate in State 1
(B) the Markov chain will terminate in State 2
(C) the Markov chain will terminate in State 1 and State 2
(D) from State 1 it will always go to State 2

PART-B

1. State Lindberg-Feller central limit theorem and obtain Liapunov's central limit theorem as a particular case. **[10]**

2. If $X_{(1)}$, ..., $X_{(n)}$ are order statistics based on a continuous distribution with pdf $f(x)$ and cdf $F(x)$, derive the joint distribution of $X_{(i)}$ and $X_{(j)}$. **[10]**

3. Define a shortest length confidence interval (SLCI). Derive SLCI for μ based on a sample of size n from $N(\mu, \sigma^2)$ distribution, where σ^2 is not known. **[10]**

4. Compare and contrast Tukey's and Scheffe's multiple comparison procedure. **[10]**

5. Derive an appropriate classification procedure in case of several multivariate normal distributions when costs of misclassification are equal. **[10]**

✦✦✦✦

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. ಒಂದು ನಿರ್ದಿಷ್ಟ ಪ್ರಶ್ನೆಗೆ ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಚು ವೃತ್ತಾಕಾರವನ್ನು ಗುರುತಿಸಲಾಗಿದ್ದರೆ, ಅಂತಹ ಉತ್ತರವನ್ನು ತಪ್ಪು ಎಂದು ಪರಿಗಣಿಸಲಾಗುತ್ತದೆ ಮತ್ತು ಯಾವುದೇ ಅಂಕವನ್ನು ನೀಡಲಾಗುವುದಿಲ್ಲ. ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯಲ್ಲಿನ ಉದಾಹರಣೆ ನೋಡಿ.
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 ಇಂತಹ ಅಭ್ಯರ್ಥಿಯ ವಿರುದ್ಧ ಕ್ರಮ ಕೈಗೊಳ್ಳಲಾಗುವುದು.**

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 ಪೆನ್ನಿನಿಂದ ಮಾತ್ರ ತುಂಬತಕ್ಕದ್ದು. ಉತ್ತರವನ್ನು ಮಾರ್ಪಡಿಸಲು ಪ್ರಯತ್ನಿಸಬೇಡಿ.
3. ವೃತ್ತದೊಳಗಿರುವ ಅಕ್ಷರವು ಕಾಣದಿರುವಂತೆ ವೃತ್ತವನ್ನು ಸಂಪೂರ್ಣವಾಗಿ ತುಂಬುವುದು.
4. ಓ.ಎಂ.ಆರ್. ಹಾಳೆಯಲ್ಲಿ ಯಾವುದೇ ಅನಾವಶ್ಯಕ ಗುರುತುಗಳನ್ನು ಮಾಡಬೇಡಿ.

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

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