

Question Booklet No.

Question Booklet Series :

A

AUAT — 2024
2-Year M. Sc. in Statistics (P14)
(TEST BASED ON MCQ)

Full Marks : 100

Duration : 2 Hours

Roll No. of the Candidate : _____

Date of Examination : _____

Name of Examination Centre : _____

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IMPORTANT INSTRUCTIONS

Candidates should read the below instructions carefully and follow them accordingly.

1. The Question Booklet has paper seal pasted on it. Please do **NOT** open the Question Booklet until you are asked to do so by the Invigilator.
2. The candidates must check immediately after breaking the seal that the Question Booklet contains **100 Multiple Choice Questions** in two parts (Part—I and Part—II).
3. Answer of questions of Part—I and Part—II both will have to be given on the **OMR Answer Sheet** provided for this purpose. Fill up the necessary fields that are intended for you by writing and/or shading appropriately. Otherwise the **OMR Answer Sheet cannot** be evaluated and will liable to be rejected. Question numbers progress from **1** to **100** continuously with alternative answers being shown as [A], [B], [C] and [D] for each question. Record your response by completely darkening the corresponding bubble. While responding, you should consider the best alternative answer and shade only one bubble with **black/blue ball point pen only**. For each correct response you will be awarded **1** mark. There will be negative marking for wrong responses. For each wrong response, **-0.25** mark will be awarded. Multiple responses against one **MCQ** will be treated as a wrong response.
4. On leaving the examination hall, candidates must submit the **OMR Answer Sheet**. They are allowed to keep the Question Booklet with them.
5. **OMR Answer Sheet** will be processed by electronic means. Any untoward/irrelevant remarks, folding or putting stray notes on the answer sheet, any damage to the answer sheet will lead to the rejection of the same and the sole liability shall remain with the candidate.
6. Rough Work may be done at the end of the Question Booklet.
7. No candidate will be allowed to leave the examination hall before completion of the examination.
8. Use of any Electronic device like Mobile, Programmable Calculator etc. is strictly prohibited.

DO NOT OPEN THE SEAL UNTIL INSTRUCTED TO DO SO

PART—I
(Core Subject)

1. Neyman Pearson Lemma provides always
[A] an unbiased test
[B] a minimax test
[C] a most powerful test
[D] None of the above
2. It is observed that 50% of the emails that we receive in Gmail are spam emails. Someone has developed a software which can detect 99% of the spam emails correctly, however, the probability that a non-spam Email is detected as a spam email by the software is 5%. Assume that an email is detected as spam by the software, then find the probability that it is not a spam email. (Answer should be correct up to three decimal places, error range : 0.005)
[A] 0.178
[B] 0.782
[C] 0.048
[D] 0.091
3. Let X_1, X_2, X_3 and X_4 be independently and identically distributed $N(\mu, \sigma^2)$ random variables.
Define $Y = \frac{X_4 - X_2}{X_3 - X_1}$ and find the value of $\frac{P(Y > 1)}{P(Y < -1)}$.
[A] 1
[B] 0.3
[C] 2
[D] 0.5
4. The characteristic equation of a matrix A is $t^2 - t - 1 = 0$, then
[A] A^{-1} exists but cannot be determined from the data
[B] A^{-1} does not exist
[C] $A^{-1} = A - 1$
[D] $A^{-1} = A + 1$
5. Which of the following statements is **correct** for a positively skewed distribution?
[A] Third Quartile (Q_3) - Median < Median - Third Quartile (Q_1)
[B] Third Quartile (Q_3) - Median = Median - Third Quartile (Q_1)
[C] Third Quartile (Q_3) - Median > Median - Third Quartile (Q_1)
[D] None of the above
6. Arithmetic Mean is _____ affected by extreme values.
[A] not
[B] highly
[C] less
[D] Nothing can be said
7. Which of the following is **not** a basic principle of experimental design?
[A] Randomization
[B] Local control
[C] Replication
[D] Confounding

8. In Mumbai, it is observed that the probability of selecting a smoker or a male is $7/10$. Also it is found that the probability of finding a male smoker is $2/5$ and a male, if a smoker is already selected is $2/3$. The probability of selecting a non smoker, if a male is first selected is
- [A] $1/5$
 [B] $2/5$
 [C] $3/5$
 [D] $4/5$
9. Let I be the identity transformation of the finite dimensional vector space V , then the nullity of I is
- [A] $\dim(V)$
 [B] 0
 [C] 1
 [D] $\dim(V) - 1$
10. The 11th term of the sequence 1, 3, 9, 27, ... is
- [A] 2^8
 [B] 2^{10}
 [C] 3^8
 [D] 3^{10}
11. In a large company manufacturing computers, it is noted that 80% of their computers are equipped with a Pen drive, 95% with a CD drive, and 75% with both. Determine the probability that a randomly selected computer from the company is equipped either with a Pen drive or a CD drive but not both. (Answer should be correct up to three decimal places, error range : 0.005)
- [A] 0.25
 [B] 0.75
 [C] 0.19
 [D] 0.01
12. Which one of the following can be used both as a parametric test as well as a non parametric test?
- [A] F -test
 [B] z -test
 [C] t -test
 [D] Chi-square test
13. Suppose there are 11 boxes numbered 1, 2, ..., 11 and 10 identical balls placed one each in the boxes 1 to 10. In one operation a ball is chosen at random and placed in the empty box. Find the probability that the 5th box will remain empty after four such operations. (Answer should be correct up to three decimal places, error range : 0.005)
- [A] 0.31
 [B] 0.12
 [C] 0.02
 [D] 0.09
14. For which of the following distributions mean and variance are equal?
- [A] Negative Binomial Distribution
 [B] Binomial Distribution
 [C] Normal Distribution
 [D] Poisson Distribution
15. Suppose $X \sim \text{Uniform}(a, b)$. Then $E(X)$ and $V(X)$ are respectively
- [A] $\frac{a}{2}$ and $\frac{(b)^2}{12}$
 [B] $\frac{a+b}{2}$ and $\frac{(b-a)^2}{12}$
 [C] $\frac{a-b}{2}$ and $\frac{(b-a)^4}{6}$
 [D] $\frac{a+b}{2}$ and $\frac{(b-a)^2}{6}$

16. The number of linearly independent eigenvectors of

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 2 & 2 & 0 & 0 \\ 0 & 0 & 3 & 0 \\ 0 & 0 & 5 & 5 \end{pmatrix}$$

is

- [A] 4
[B] 3
[C] 1
[D] 2

17. The minimal polynomial of

$$\begin{pmatrix} 2 & 1 & 0 & 0 \\ 0 & 2 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 5 \end{pmatrix}$$

is

- [A] $(x - 2)$
[B] $(x - 2)(x - 5)$
[C] $(x - 2)^3(x - 5)$
[D] $(x - 2)^2(x - 5)$

18. Consider the C.D.F. $F(x)$ of the random variable X . Let M be the mode of the distribution

$$F(x) = 1 - e^{-x} - xe^{-x}, \text{ if } 0 < x < \infty, \\ = 0, \text{ otherwise}$$

Find the value of $F(M)$.

- [A] 0.2642
[B] 0.1591
[C] 0.6710
[D] 0.1131

19. Suppose $X_i \sim \text{Binomial}(l, p)$ independent for each i . The distribution of

$$\sum_{i=1}^n X_i^2$$

- [A] $\text{Binomial}(l, p)$
[B] $\text{Binomial}(n, p)$
[C] $\text{Poisson}(n)$
[D] $\text{Poisson}(l)$

20. A committee of 6 persons is to be formed from a group of 7 men and 4 women. What is the probability that the committee will have exactly two women?

- [A] 0.158
[B] 0.889
[C] 0.455
[D] 0.965

21. Criteria to check a point estimator to be good is/are

- [A] consistency
[B] unbiasedness
[C] efficiency
[D] All of the above

22. Suppose a dice is tossed 120 times and the following results are obtained :

Number in the top most face	1	2	3	4	5	6
Frequency	30	25	18	10	22	15

Suppose it is given that the tabular value of Chi-square is 11.7. Then the dice is

- [A] unbiased
[B] biased
[C] More information needed
[D] None of the above

23. The exponential distribution is characterized by

- [A] loss of memory property
- [B] new better than used property
- [C] constant hazard property
- [D] non monotone hazard property

24. Sample survey involves the following :

- (i) Sampling unit
- (ii) Size of samples
- (iii) Type of universe
- (iv) Source list
- (v) Sampling procedure

Which one of the following sequences is **correct**?

- [A] (i), (ii), (iii), (iv), (v)
- [B] (iii), (i), (iv), (ii), (v)
- [C] (iii), (iv), (i), (ii), (v)
- [D] (iii), (v), (i), (iv), (ii)

25. Which of the following is **not true** for Horvitz Thomson estimator?

- [A] It is used for unequal probability sampling
- [B] It is used strictly for sampling with replacement
- [C] It is used both for sampling with and without replacement
- [D] It is an unbiased estimator of the population parameter for the population total

26. If the regression coefficients $b_{xy} = 0.25$ and $b_{yx} = 0.64$, then correlation coefficient is

- [A] 0.16
- [B] 0.89
- [C] 0.40
- [D] 0.30

27. Suppose a random number N is chosen between 1, 2, ..., 20 with $P(N = n) = C * 0.2 * (0.8)^n$ for $n = 1, 2, \dots, 20$. If it is given that the chosen number is divisible by 4, compute the probability that the number is either divisible by 3 or 5. (Answer should be correct up to three decimal places, error range : 0.005)

- [A] 0.9920
- [B] 0.3302
- [C] 0.5137
- [D] 0.1170

28. If A and B are invertible square matrices of size $n \times n$, then which of the following statement is **not true**?

- [A] $\det(A + B) = \det(A) + \det(B)$
- [B] $\det(AB) = \det(A) \det(B)$
- [C] $\det(kA) = k^n \det(A)$
- [D] All of the above

29. If $P(A) = 3/7$, $P(B) = 9/13$ and $P(A \cap B) = 4/13$. Find $P(A|B)$.

- [A] $4/7$
- [B] $4/9$
- [C] $5/9$
- [D] $2/9$

30. The distribution of test statistic used in sign test is

- [A] Poisson
- [B] Normal
- [C] Gamma
- [D] Binomial

31. Consider the following statements :

S1: Sum of the two singular $n \times n$ matrices may be non-singular.

S2: Sum of the two non-singular $n \times n$ matrices may be singular.

Which of the following statements is **correct**?

- [A] S1 and S2 are both true
- [B] S1 is true, S2 is false
- [C] S2 is true, S1 is false
- [D] S1 and S2 both are false

32. Sum of the eigenvalues of the matrix

$$\begin{pmatrix} 2 & 0 & 0 & -1 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 3 & 0 \\ -1 & 0 & 0 & 4 \end{pmatrix} \text{ is}$$

- [A] -10
- [B] 24
- [C] 22
- [D] 10

33. The radius of convergence of the power series $\sum a_n x^n$ is R and k be a positive integer. Then the radius of convergence of the power series

$$\sum a_n x^{kn} \text{ is}$$

- [A] R/k
- [B] R
- [C] Not depend on k
- [D] $R^{1/k}$

34. A is 5×5 matrix, all of whose entries are 1, then

- [A] A is not diagonalizable
- [B] A is idempotent
- [C] A is nilpotent
- [D] the minimal polynomial and the characteristics polynomial of A are not equal

35. A set of linear equations is represented by the matrix equation $Ax = b$. The necessary condition for the existence of a solution for this system is

- [A] A must be invertible
- [B] b belongs to the column space of A
- [C] b does not belong to the column space of A
- [D] None of the above

36. The most appropriate average to be used to compute the average rate of growth in population is

- [A] Arithmetic Mean
- [B] Harmonic Mean
- [C] Geometric Mean
- [D] Median

37. The sequence $\left\{ \sin \frac{n\pi}{2} \right\} n = 1, \infty$

- [A] is divergent
- [B] converges to 1
- [C] converges to 0
- [D] None of the above

38. $M : R^4 \rightarrow R^3$, where

$$M = \begin{pmatrix} 1 & 2 & 3 & 1 \\ 1 & 3 & 5 & -2 \\ 3 & 8 & 13 & -3 \end{pmatrix}$$

Then the dimension of kernel of M is

- [A] 2
- [B] 1
- [C] 3
- [D] 4

39. Under frequentist set up, a parameter is

- [A] a random quantity
- [B] always 0
- [C] always 1
- [D] a non-random quantity

40. Suppose $X \sim N(\mu, \sigma^2)$. Then which of the following is **not true**?

- [A] The distribution of X is symmetric and $E(X) = \mu$
- [B] The distribution of X has median at $x = \mu$
- [C] The odd order moments are of odd values
- [D] For the distribution of X , the coefficient of skewness is zero

41. If a hypothesis is rejected at 0.6 level of significance, then

- [A] it will be rejected at any level of significance
- [B] it must be rejected at 0.5 level of significance
- [C] it may be rejected at 0.5 level of significance
- [D] it cannot be rejected at 0.5 level of significance

42. Let A and B be square matrices such that $AB = I$, then zero is an eigenvalue of

- [A] A but not B
- [B] B but not A
- [C] Both A and B
- [D] Neither A nor B

43. If A and B are non-zero square matrices, then $AB = 0$ implies

- [A] A and B are diagonal
- [B] A and B are singular
- [C] B is singular
- [D] A is singular

44. Suppose for a statistical test α and β are the type I and type II errors respectively. Then the power of the test is

- [A] α
- [B] $1 - \alpha$
- [C] $1 - \beta$
- [D] β

45. Which one of the following statistics is unaffected by outliers?

- [A] Mean
- [B] Interquartile range
- [C] Standard deviation
- [D] Range

46. Goodman Kruskal's Gamma measure is used to find the association between

- [A] two nominal attributes
- [B] one ordinal and one nominal attributes
- [C] two ordinal attributes
- [D] None of the above

47. Condition for applying the Central Limit Theorem (CLT) which approximates the sampling distribution (with sample size n) of the mean with a normal distribution is

- [A] $n < 30$
- [B] $n > 30$
- [C] $n = 15$
- [D] $n > 60$

48. Let X be a random variable with M.G.F. given by $M(t) = e^{4t+8t^2}$. Calculate $E(X^2)$.

- [A] 16
- [B] 12
- [C] 32
- [D] 8

49. Let the lifetime of a electric bulb is denoted by a random variable X with p.d.f. $f(x)$. If the mean of the lifetime is M_1 and the median of the lifetime is M_2 , find $\frac{M_2}{M_1}$, where

$$f(x) = \frac{1}{\alpha} e^{-\frac{x}{\alpha}}, \text{ if } 0 < x < \infty, \alpha > 0$$
$$= 0, \text{ otherwise}$$

- [A] 0.7980
- [B] 0.3329
- [C] 0.6931
- [D] 0.3129

50. Suppose $X \sim \text{Binomial}(2m, 1/2)$, then which of the following is **not true**?

- [A] Mean = m
- [B] Median = m
- [C] Mode = $2m$
- [D] Mode = m

51. A hypothesis test is being performed for a process in which a type I error will be costly, but type II error will be relatively inexpensive and unimportant. Which of the following would be the best choice for α in this test?

[A] 0.10

[B] 0.05

[C] 0.01

[D] 0.50

52. In general line, diagram is used to represent

[A] spatial series data

[B] time series data

[C] Both [A] and [B]

[D] Neither [A] nor [B]

53. Eigenvalues of a real symmetric matrix are always

[A] positive

[B] real and imaginary

[C] negative

[D] real

54. The correlation coefficient is dependent on the change of

[A] scale value only

[B] origin value only

[C] both origin and scale values

[D] neither the origin value nor the scale value

55. Pearson's correlation coefficient measures

[A] cubic relationship between two variables

[B] linear relationship between two variables

[C] curvilinear relationship between two variables

[D] None of the above

56. If there is linear trend present in the population, then which of the following methods is the most efficient sampling technique?

[A] Cluster sampling

[B] Stratified sampling

[C] Systematic sampling

[D] Simple random sampling

57. Suppose $X \sim \text{Exp}(1)$, then $Y = e^{-X}$ will follow :

- [A] Bin(2, 0.5)
- [B] Poisson(0.2)
- [C] Rectangular(0, 1)
- [D] Bin(0, 1)

58. A coin is tossed five times in succession. What is the probability of getting at least four heads?

- [A] 1/2
- [B] 1/16
- [C] 3/4
- [D] 3/16

59. Which of the following is **not** a measure of dispersion?

- [A] Range
- [B] Mean Deviation
- [C] Quartile
- [D] Standard Deviation

60. Suppose the probability of injury on each individual parachute jump is 0.05. Then the greatest lower bound for probability of landing safely on both of two jumps is

- [A] 0.09
- [B] 0.1
- [C] 0.9
- [D] 0.01

61. Consider the following data :

X	-3	-2	-1	0	1	2	3
Y	9	4	1	0	1	4	9

- [A] The Pearson's correlation coefficient between X and Y is 0
- [B] The Pearson's correlation coefficient between X and Y is 1
- [C] The Pearson's correlation coefficient between X and Y is 0.5
- [D] The Pearson's correlation coefficient between X and Y is -0.5

62. I arrive home from a feast and attempt to open my front door with one of the three keys in my pocket. (You may assume that exactly one key will open the door and that if I use it I will be successful.) Find the expected number of tries that I will need if I take the keys at random from my pocket but drop any key that fails onto ground. (Answer should be correct up to three decimal places, error range : 0.005)

- [A] 4
- [B] 3
- [C] 1
- [D] 2

63. Which one of the following plots helps to detect outliers?

- [A] Histogram
- [B] Line Diagram
- [C] Boxplot
- [D] Bar Diagram

64. For a regression model with continuous response, the error should follow the _____ distribution.

- [A] Cauchy
- [B] Double Exponential
- [C] Normal
- [D] Binomial

65. The odds are 2 to 1, that when A and B play tennis, A wins. Suppose A and B play 2 matches. What is the probability that A wins at least 1 match?

- [A] $1/9$
- [B] $3/8$
- [C] 1
- [D] $8/9$

66. For a normally (standard) distributed random variable, the probability that it will lie between -3 to 3 is

- [A] 0.95
- [B] 0.9973
- [C] 0.65
- [D] 0.51

67. For a multivariate normal distribution, the marginals follow

- [A] univariate normal distribution
- [B] any symmetric distribution
- [C] bivariate normal distribution
- [D] None of the above

68. Suppose that $P(A) = 0.25$, $P(B-A) = 0.3$ and $P(C-(A \cup B)) = 0.1$. Determine $P(A \cup B \cup C)$. (Answer should be correct up to three decimal places, error range : 0.005)

- [A] 0.85
- [B] 0.65
- [C] 0.15
- [D] 0.35

69. For perfect correlation, both the regression lines

- [A] will be perpendicular to each other
- [B] will coincide
- [C] makes an angle of $\pi/6$
- [D] makes an angle of $\pi/4$

70. Suppose X_1, X_2, X_3, X_4, X_5 be 5 independent random variables with $f(x) = 2x$, $0 < x < 1$. Let $X_{(1)}, X_{(2)}, X_{(3)}, X_{(4)}$ and $X_{(5)}$ be the corresponding order statistics. Then $P(X_{(4)} < 1)$ is

- [A] 0.0245
- [B] 0.0156
- [C] 0.0378
- [D] 0.0498

PART—II

(Islamic History and Culture, General English & General Knowledge)

71. Revelation to Prophet Muhammad (PBUH) started with the word 'Iqra' which means
নবী মুহাম্মদ (সা.)-এর কাছে অবতীর্ণ প্রত্যাদেশ শুরু হয়েছে 'ইকরা' শব্দ দিয়ে, যার অর্থ হল
[A] pray
[B] prostrate
[C] read
[D] write
72. Which of the following cities is **not** a sacred city for Muslims?
নিম্নের কোন্ শহরটি মুসলিমদের কাছে পুণ্যস্থান নয়?
[A] Jerusalem
[B] Mecca
[C] Cairo
[D] Medina
73. What does Islam say about acquiring knowledge?
জ্ঞান অর্জনের ব্যাপারে ইসলাম কী বলে?
[A] Obligatory for men only
[B] Obligatory for women only
[C] Obligatory for rich people only
[D] Obligatory for all
74. Which one is **not** part of the five pillars of Islam?
নিচের কোনটি ইসলামের পঞ্চস্তম্ভের মধ্যে অন্তর্ভুক্ত নয়?
[A] Profess Allah as the only God
[B] Pray five times daily
[C] Make a pilgrimage to Mecca
[D] Read the *Qur'an* everyday
75. The divine book revealed to Prophet Muhammad (PBUH) is
নবী মুহাম্মদ (সা.)-এর নিকট অবতীর্ণ ঐশী গ্রন্থের নাম হল
[A] Torah
[B] *Qur'an*
[C] Injeel
[D] Zabur
76. Prophet Muhammad (PBUH) was born in
নবী মুহাম্মদ (সা.)-এর জন্মস্থান হল
[A] Jordan
[B] Jeddah
[C] Mecca
[D] Medina
77. In Islam, legal matters are part of
ইসলামে আইন সংক্রান্ত বিষয়াদি কীসের অন্তর্ভুক্ত?
[A] Fikr
[B] Zikr
[C] Shariah
[D] Taharat
78. Hajj is performed in the month of
যে মাসে হজ পালিত হয়, তা হল
[A] Dhul Qadah
[B] Dhul Hijjah
[C] Shaban
[D] Shawwal
79. Rashidun Caliphate lasted for ____ years.
রাশিদুন খিলাফতের সময়কাল ____ বছর।
[A] 20
[B] 30
[C] 40
[D] 50
80. Who accompanied Prophet Muhammad (PBUH) during migration?
কোন ব্যক্তি হিজরতের সময় নবী মুহাম্মদ (সা.) কে সঙ্গ দিয়েছিলেন?
[A] Abu Hurayra
[B] Hazrat Ali
[C] Khadija
[D] Abu Bakr

81. What are the companions of the Prophet called?

নবীর সাহাবীদের কী বলা হয়?

- [A] Sahabah
- [B] Friends
- [C] Ansar
- [D] None of the above

82. What to say when anyone sneeze?

কেউ হাঁচি দিলে কী বলতে হয়?

- [A] Yarhamukallah
- [B] Ya Allah
- [C] Alhamdulillah
- [D] La Ilaha Illallah

83. What does Salat mean?

সালাত মানে কী?

- [A] Fasting
- [B] Giving to the poor
- [C] Praying
- [D] Pilgrimage

84. What is the meaning of 'Astaghfirullah'?

'আস্তাগফিরুল্লাহ'-এর অর্থ কী?

- [A] I ask Allah for Forgiveness
- [B] We are for Allah
- [C] Accept our prayer
- [D] None of the above

85. What is the first duty to become a Muslim?

মুসলমান হওয়ার প্রথম কর্তব্য কী?

- [A] Salat
- [B] Sawm
- [C] Hajj
- [D] Shahadah

86. Which gates are closed during the month of Ramadan?

রমজান মাসে কোন্ দরজাগুলো বন্ধ থাকে?

- [A] Gates of Hell
- [B] Gates of Heaven
- [C] Gates of Light
- [D] Gates of Mosque

87. What is the Shari'ah?

শরীয়ত কী?

- [A] A religious school
- [B] A native dance
- [C] A style of calligraphy
- [D] A form of Muslim law

88. The Kabah is located in

কাবাঘর _____ তে অবস্থিত।

- [A] Mecca
- [B] Medina
- [C] Istanbul
- [D] Iraq

89. Are women allowed to go to mosques to offer prayers?

মহিলাদের কি মসজিদে নামাজ পড়ার অনুমতি দেওয়া হয়?

- [A] No, women are not allowed in the mosques
- [B] Women can only listen to prayers
- [C] Yes, women can offer prayers in mosques, provided there are separate facilities and provision
- [D] Women can pray in the mosques, standing right beside the men

90. In which language, was the *Holy Qur'an* revealed?

'পবিত্র কুরআন' কোন্ ভাষায় অবতীর্ণ হয়েছিল?

- [A] Arabic
- [B] Greek
- [C] Latin
- [D] Hebrew

91. Fill in the blanks with the appropriate words.

The _____ workers will come forward and protest against the _____ of the organization.

- [A] deprived, issues
- [B] depraved, policies
- [C] derived, interests
- [D] depreciated, management

92. Find the word opposite in meaning to the underlined word.

Rahim's foolishness will drive me to despair.

- [A] Hopefulness
- [B] Desperation
- [C] Destruction
- [D] Repulsed

93. Fill in the blanks with the **correct** alternatives.

The farmer placed his shovel _____ the wall and sat _____ to rest.

- [A] beside, over
- [B] against, down
- [C] by, along
- [D] on, in

94. Identify the synonym of the word 'ABJECT'.

- [A] Outrageous
- [B] Fantastic
- [C] Devastated
- [D] Deplorable

95. Fill in the blank with the appropriate collective noun.

A _____ of cards.

- [A] pile
- [B] bundle
- [C] deck
- [D] bunch

96. In which of the following States, Rawatbhata Nuclear Plant is situated?

রাওয়াতভাটা পারমাণবিক কেন্দ্র নিম্নলিখিত কোন্ রাজ্যে অবস্থিত?

- [A] Rajasthan
- [B] Gujarat
- [C] Madhya Pradesh
- [D] Tamil Nadu

97. Who invented the railway engine?

রেলওয়ে ইঞ্জিন কে আবিষ্কার করেন?

- [A] Charles Babbage
- [B] Isaac Newton
- [C] James Watt
- [D] George Stephenson

98. Who is said to be the father of the Indian Space Programme?

ভারতীয় মহাকাশ কর্মসূচির জনক কাকে বলা হয়?

- [A] Abdul Kalam
- [B] Rakesh Sharma
- [C] Vikram Sarabhai
- [D] Homi Bhabha

99. Which of the following was Indian's first mapping satellite?

নিচের কোনটি ভারতের প্রথম ম্যাপিং স্যাটেলাইট ছিল?

- [A] CARTOSAT-1
- [B] Aryabhata
- [C] Bhaskara-II
- [D] INSAT-1A

100. The super computer 'PARAM' was developed by

সুপার কম্পিউটার 'PARAM' তৈরি করেন

- [A] TATA
- [B] IIT-Kharagpur
- [C] IIT-Kanpur
- [D] C-DAC

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