

ODISHA PUBLIC SERVICE COMMISSION ADVERTISEMENT NO. 05 OF 2021-22

Recruitment to the posts of Assistant Director in Group-B Service of Odisha Statistics & Economics Service Cadre under Planning and Convergence Department.

WEBSITE: www.opsc.gov.in

Online applications are invited from the prospective candidates through the Proforma application to be made available on the website (https://www.opsc.gov.in). The link for registration/ re-registration & payment of examination fee shall be available from 06.07.2021 to 05.08.2021 (Note: 12.08.2021 is the last date for submission of Registered Online Application) for recruitment to 17 (Seventeen) posts of Assistant Director in Group-B service of O.S. & E.S. cadre under Planning & Convergence Department in the scale of pay of Rs. 47,600/- in Level 11, Cell -1 of Pay Matrix of ORSP Rules, 2017 with usual Dearness and other Allowances as may be sanctioned by the Government of Odisha from time to time.

2. VACANCY POSITION:

As per requisition filed by the Planning & Convergence Department, Government of Odisha, the vacancy position along with reservation thereof is given below:-

Sl. No	Category	No. of Posts
1	2	3
1	UR	09 (04-W)
2	SEBC	Nil
3	SC	02 (01-W)
4	ST	06 (02-W)
•	Total	17(07-W)

Out of the total 17 number of vacancies mentioned above, 01 post is reserved for **Persons with Disabilities (having permanent disability of 40% and more)**. Candidates belonging to PWD category shall be adjusted against the categories to which they belong.

S1. No.	Sub- Category	No. of Posts	
1	2	3	
1.	Person with Disabilities		
	HI- Hearing Impaired/		
	Partially Deaf	01	
	(with suitable hearing aid)		

NOTE: (a) In case of non-availability or availability of insufficient number of eligible women candidate(s) in any particular category, the unfilled vacancies of that category shall be filled up by eligible and suitable male candidate(s) of the same category.

- (b) The exchange of reservation between SC & ST categories will not be considered.
- (c) The number of vacancies to be filled up on the basis of this recruitment is subject to change by the Government without notice, depending upon administrative exigencies of public service at the discretion of the State Government.
- (d) The PWD candidates having a **permanent disability of 40% and more** along with functional classification of **HI** (with suitable aid) are eligible to apply for the post.

3. AGE:

A candidate must have attained the age of 21(twenty-one) years and must not be above the age of 32 (thirty-two) years as on the 1st day of January, 2021 i.e., he/she must have been born not earlier than 2nd January 1989 and not later than 1st January 2000.

Provided that the upper age-limit prescribed above shall be relaxed by 05(five) years for candidates belonging to the categories of Scheduled Castes (S.C.), Scheduled Tribes (S.T.), Women & Ex-Serviceman and by 10 years for Persons with Disabilities whose permanent disability is 40% (Forty percent) and more.

Persons with disabilities belonging to SC/ ST categories are eligible for age relaxation benefit of 15 years.

SAVE AS PROVIDED ABOVE, THE AGE LIMITS PRESCRIBED CAN IN NO CASE BE RELAXED.

The date of birth entered in the High School Certificate or equivalent certificate issued by the concerned Board/Council will only be accepted by the Commission.

4. EDUCATIONAL QUALIFICATION:

A candidate must have at least a Second (2nd) Class Master's Degree in Economics/ Applied Economics/ Statistics/ Applied Statistics from any University or Institution recognized by Government.

5. EXAMINATION FEE:

A candidate is required to pay a non-refundable and non-adjustable fee of Rs. 500/-(Rupees five hundred) only. Candidates belonging to Scheduled Caste and Scheduled Tribe of Odisha and Persons with Disability(whose permanent disability is 40% and more) are exempted from payment of this fee.

The candidates are required to make Online payment of applicable Examination Fee(s) through OPSC portal using Debit Card/Credit Card /Net Banking facilities and other financial instruments enlisted in the Payment Page/Gateway of the Odisha Government Treasury Portal. The fee(s) paid shall neither be refunded under any circumstances nor can be adjusted or held in reserve for any other examination or recruitment.

6. METHOD OF SELECTION:

- (a) The Competitive Examination for recruitment to the posts of Assistant Director shall comprise of a **Written Examination & a**Viva Voce Test.
- (b) The Written Examination shall comprise of four subjects i.e. General English & General Knowledge papers which shall be of 2 hours duration each and Statistics & Economics papers which shall be of 3 hours duration each.
- (c) The maximum marks for Written Examination are, thus 800. The Viva Voce test shall carry 100 marks.
- (d) The **question papers** in General English, General Knowledge, Statistics & Economics shall be **subjective** in nature.
- (e) The subjects of examination and the maximum marks for each subject along with details thereof is appended at Annexure- 'A'.
- (f) The questions in the **Economics & Statistics** papers (except General English and General Knowledge) shall be from the **syllabus** as appended at **Annexure-'B'**.
- (g) In the posts where the number of vacancies is upto O2 (Two), the number of candidates to be called for interview may be O5 (Five), where the number of vacancies exceeds O2, the number of candidates to be called for interview may be the twice the number of vacancies.
- (h) The Commission shall prepare a list of selected candidates arranged in order of merit equal to the number of advertised vacancies on the basis of the marks secured in the written examination and viva voce test.
- (i) If two or more candidates obtain equal marks, the order of merit shall be determined in accordance with the highest marks in aggregate secured by such candidate in the written examination. Should the marks secured by them in the written examination be equal, the order of merit shall be determined in accordance with the highest marks secured in any Master's Degree Examination.

7. PLACE OF EXAMINATION:

The Written Examination will be held at Cuttack. It may also be held at Bhubaneswar/Balasore/Berhampur/Sambalpur depending on the number of candidates from the respective zones.

The candidates are to mention their choice of Examination Zone at appropriate place in the Online Application Form.

8. OTHER ELIGIBILITY CONDITIONS:

- (i) The candidate must be a citizen of India;
- (ii) The candidate should be able to speak ,read & write Odia and must have:-
 - (a) passed the M.E. School Examination conducted by the Board of Secondary Education or equivalent examination or any higher examination conducted by the competent authority with Odia as a language subject, or
 - (b) had Odia as medium of examination in non-language subject at the matriculation or equivalent examination which they have passed (to be specified by the Headmaster of the concerned High School recognized by the Board of Secondary Education), or
 - (c) Passed in Odia as a language subject in the final examination of Class -VII or above (to be certified by the Headmaster or Principal of the concerned Secondary School recognized by the Board of Secondary Education or by any other competent authority), or
 - (d) Passed the test in Odia of M.E Standard conducted by any District Inspector of Schools in the State of Odisha.
- (iii) A candidate, who has more than one spouse living will not be eligible for appointment unless the State Government has exempted his/her case from operation of this limitation for any good and sufficient reasons;
- (iv) Government servants, whether temporary or permanent, are eligible to apply provided that they possess the requisite qualification and are within the prescribed age-limit as provided under Para 3 & 4 of the Advertisement. They must submit **No Objection Certificate** issued by the competent authority during document verification.
- (v) If a candidate has at any time, been debarred for a certain period/chance(s) by the Odisha Public Service Commission or other State Public Service Commission or U.P.S.C. from appearing at any examination/ Viva Voce test, he/she will not be eligible for such recruitment for that specified period/chance(s);
- (vi) Only those candidates, who are within the prescribed age limit and fulfil the requisite qualification etc. by the closing date of submission of online application will be considered eligible;

(vii) A candidate who claims change in his/her name after having passed the High School Certificate Examination or equivalent Examination, is required to furnish copy of publication of the changed name in the local leading daily newspaper as well as copy of notification in the Gazette in support of his /her change of name.

9. IMPORTANT POINTS

- (i) Online Applications submitted to the OPSC, if found to be incomplete in any respect are liable to rejection without entertaining any correspondence with the applications on that score;
- (ii) Admission to Examination /Viva Voce Test will be provisional. If on verification at any stage before or after the Viva-Voce Test, it is found that a candidate does not fulfil all the eligibility conditions, his/her candidature shall be liable to rejection. Decision of the Commission in regard to the eligibility or otherwise of a candidate shall be final;
- (iii) This advertisement should not be construed as binding on the Government to make appointment;
- (iv) Concession meant for **S.Cs. & S.Ts.** by birth are admissible to the Schedule Castes & Schedule Tribes of Odisha only.
- (v) Community /Caste status once mentioned by the candidates under the appropriate box of the online application form will be treated as final and the same shall not be changed subsequently under any circumstances.
- (vi) Any misrepresentation or suppression of information by the candidate in the Online Application, will result in cancellation of his/her candidature or penalty, as decided by the Commission be imposed on the candidate.

10. CERTIFICATES AND DOCUMENTS TO BE ATTACHED:

The candidates who shall qualify in the written examination are required to download the hard copy of online application and submit the same during document verification. They are required to submit the true copies of the documents along including originals as mentioned below along with their application form. The candidates are required to mention on the copy of each document "submitted by me" and put their signature & date on the same.

- (i) H.S.C. or equivalent certificate in support of declaration of age issued by the concerned Board/Council;
- (ii) Master's Degree certificate in Economics/ Applied Economics / Statistics / Applied Statistics in respect of educational qualification prescribed for the recruitment.
- (iii) Mark-lists in support of all the aforesaid examinations (i.e., H.S.C. to Master's Degree) passed including fail marks, if any, issued by the concerned Board/Council/University;

NOTE 1:

- (a) Candidates who have not been awarded percentage of marks, but only "GRADE MARKS", should, along with their applications, produce the conversion certificate from the concerned University indicating the actual equivalent percentage of marks and the conversion formula failing which, their applications are liable to be rejected.
- (b) Candidate has to upload his/ her H.S.C. Certificate in support of his age and his Master's Degree Certificate.
- (iv) Two recent passport size photographs (unsigned & unattested) which has been uploaded with online application.
- (v) Caste Certificate by birth in support of claim as S.C / S.T.
- (vi) Required Odia Test pass certificate from the competent authority.
- (vii) Permanent disability Certificate (indicating percentage of disability i.e. 40% or more) issued by the concerned Medical Board wherever applicable;
- (viii) Discharge Certificates issued by the Commanding Officer of the Unit last served. Ex-Servicemen must submit an affidavit undertaking that he has not been appointed against any civil post after retirement from military service, wherever applicable;
- (ix) No objection Certificate issued by the competent authority.
- (x) Any proof of Identity.

NOTE-2:

- (i) Candidates claiming to be belonging to S.C./S.T. category of Odisha, by birth are required to submit copy of the relevant Caste Certificate issued by the competent authority in the prescribed form.
- (ii) Women candidates belonging to S.C./S.T. are required to submit Caste Certificates by birth showing "daughter of". Caste Certificates by virtue of marriage (i.e., showing "wife of") are not acceptable and liable to rejection.
- (iii) The competent authorities are: District Magistrate/ Collector or Additional District Magistrate or Sub-divisional Magistrate/ Sub-Collectors or Executive Magistrates or Revenue Officers, not below the rank of Tahasildar/ Additional Tahasildar of Government of Odisha;

Post Graduate Degree Certificate, Caste Certificate, Odia Test Pass Certificate, Disability Certificate of Persons with Disabilities (indicating % of permanent disability), Discharge certificate of Ex-servicemen must have been issued by the competent authority within the last date fixed for submission of online application form.

11. GROUNDS OF REJECTION OF APPLICATION:

Applications of candidates will be rejected by the Commission on any of the following grounds:-

- (a) In-complete online application form.
- (b) Non-submission of hard copy of online application form at the time of verification of original documents.
- (c) Not signing Declaration (full signature) in the hard copy of online application form.
- (d) Not coming within the age limit as mentioned in Para 3 of Advertisement (Overage relaxation shall not be allowed to P.W.D. candidates with less than 40% permanent disability/ temporary disability).
- (e) Not having requisite qualification as provided under Para 4 of Advertisement.
- (f) Not furnishing copies of certificates/documents as provided under Para 10 of Advertisement.
- (g) Not passing Odia test (M.E. standard) /not furnishing Odia test pass evidence as prescribed under Para-8 (ii) of the advertisement.
- (h) Non-payment of examination fee, (wherever applicable), as provided under Para 5 of Advertisement.
- (i) Submission of wrong information/ false information about qualification/ Age/ O.T. Pass evidence/ Category status (SC/ ST/ Women/ PWD/ Ex-Servicemen etc.
- (i) Suppression of facts / information about eligibility, if any.
- (k) Any other ground as per the decision of the Commission.

NB: Application /candidature of a candidate shall be rejected at any stage of recruitment process, when discrepancy is noticed/ detected.

12. HOW TO APPLY:

- (a) Candidates must go through the details of this Advertisement available in the Website of OPSC before filling up online application form.
- (b) Candidates must apply online through the concerned Website of the OPSC http://opsc.gov.in. Applications received through any other mode would not be accepted and summarily rejected.

- (c) Before filling up the online application form, the candidates must go through detailed instructions available at OPSC portal.
- (d) The online application form is automated and system driven and will guide the candidate seamlessly in filling the application. The requisite options shall be enabled and information shall be asked as per data furnished by the candidate. Before filling up the information, ensure that accurate information is fed, for edit option is limited & on confirmation there is no scope for further edit even if wrongful entry has been made while filling up application.
- (e) Candidates are requested to upload the scanned image of latest passport size photograph along with scanned image of his/her full signature and scanned image of Left-hand Thumb Impression (LTI) in the online application form. Uploaded photograph, Specimen (full) signature and LTI must be clearly identifiable / visible, otherwise the application of the candidate is liable to be rejected by the Commission and no representation from the candidate will be entertained.
- (f) Candidates should keep at least two copies of latest passport size photograph which is uploaded to the online application form for future use
- (g) On successful submission of the online Registration, a unique "Permanent Public Service Account Number (PPSAN)" will be assigned to the applicant. Candidates are required to take a printout of the finally submitted online Registration/Re-registration and finally submitted Online Application forms and put his/ her signature under the declaration for submission to OPSC along with copies of requisite certificate & documents as and when asked.
- (h) The candidates are advised to submit the Online Application Form well in advance without waiting for the closing date to avoid last hour rush.
- (i) Certificate of Admission to the written examination to the eligible candidates will be uploaded in the Website of the OPSC prior to the date of written examination which will be published in the Website of the Commission and Newspapers. The candidates are required to download their Admission Certificate from the Website of the Commission and produce the same at the Examination centre for admission to the written examination. No separate correspondence will be made on this score.
- (j) "Intimation letters" to candidates for document verification & interview and "Attestation form" & "Bio-data form" shall be uploaded in the website of OPSC prior to the date of Document Verification/ Interview.
- (k) Any complaint on the conduct of examination must be sent to the Grievance Wing of the Commission by e-Mail (opsc@nic.in) within 05 (Five) days of completion of the examination.

13. FACILITATION COUNTER:

To resolve any Technical problem faced in filling up of online Registration/Re-registration and Application forms, candidate may contact OPSC Technical Support over Telephone No. 0671-2304707 between 10.30 A.M. to 1.30 P.M. & 2.00 P.M. to 5.00 P.M. on any Odisha Government working days.

In case of any guidance/information on this advertisement & recruitment, candidates may go through the FAQ available in the website of the Commission or contact the O.P.S.C. Facilitation Counter over TelephoneNo.0671-2304141/2305611 &Extn.-205 on any working day between 10.30 A.M. to 1.30 P.M. & 2.00 P.M. to 5.00 P.M.

The candidates are required to visit the website of the Commission at https://opsc.gov.in for detailed information about important notices, rejection of applications, the date & time of Written Examination /Document Verification/ Interview and also keep track of publication of various notices to the effect in the leading local daily newspapers for information.

CLOSING DATES

- (A) ONLINE REGISTRATION / RE-REGISTRATION AND ONLINE PAYMENT OF EXAMINATION FEES SHALL BE AVAILABLE IN THE WEBSITE FROM 06.07.2021 TO TILL 05.08.2021 (11:59 P.M).
- (B) SUBMISSION OF ONLINE REGISTERED APPLCATIONS CAN BE DONE IN THE WEBSITE FROM 06.07.2021 TO TILL 12.08.2021 (11.59 P.M).

NB: - THE ONLINE APPLICATIONS, IF FOUND DEFECTIVE IN ANY RESPECT IS LIABLE TO BE SUMMARILY REJECTED.

CUTTACK

DATE - 29.06.2021

ODISHA PUBLIC SERVICE COMMISSION CUTTACK

PLAN OF EXAMINATION

1. The competitive examination for filling up, by direct recruitment, posts of Assistant Director and equivalent posts in Odisha Statistics and Economics Service, Group- 'B', shall comprise of a Written Examination and a Viva Voce Test. The Written Examination shall comprise of four subjects. The subjects of Examination and the maximum marks for each are indicated below: -

2. All subjects are compulsory (One paper in each subject)

S1. No.	Type of test	Subjects	Maximum Marks
(i)	Written Examination	General English	100
(ii)		General Knowledge	100
(iii)		Statistics	300
(iv)		Economics	300
(v)	Viva Voce Test		100

- 3. The maximum marks for **written examination** are, thus **800**. The **viva voce test** shall carry **100** marks.
- 4. The question in General English&General Knowledge papers shall be of such standard as shall be prescribed by the Commission. The question in Statistics and Economics papers shall be of Post-Graduate standard.
- 5. Papers (i) & (ii) shall be of 2 hours duration each and (iii) & (iv) shall be of 3 hours duration each. There is no time limit for viva voce test.
- 6. The questions in the Economics & Statistics papers (except General English and General Knowledge) shall be from the syllabus as at Annexure-B.
- 7. A candidate shall answer the papers in English unless otherwise directed.

SYLLABUS

Economics

Module: -1

Theory of Consumer Behaviour- cardinal utility analysis, theory of demand, Indifference curve analysis, price, Income and substitution effects Slutsky theorem, Revealed Preference theory, Revision of demand theory by Hicks, Consumer's choice under risk and uncertainty, Newman-Morgenstern utility function, duality theory, consumer's surplus.

Module: -2

Production function- short period and long period, forms of production function, Cobb-Douglas, CES production functions and their properties, Laws of Returns, Returns to Scale, duality and cost function, measures of productive efficiency of firms, technical and allocative efficiency, partial versus general equilibrium approach, equilibrium of the farm and industry. Product and Factor Pricing- pricing under different market structures, marginal pricing, Marshallian and Walrasian stability analysis, with incomplete information and moral hazard problems.

Module: -3

Concept of National income and social accounting- measurement of national income, circular flow of income in two, three and four-sector economy, different forms of national income accounting, given national income. Theory of Employment, ;Output, Inflation & Money- the Classical theory of employment and output, Keynes' Psychological law, Keynes theory of employment and output, post-Keynesian developments, Demand-pull and cost-push inflation, the Philip's curve, its policy implications, classical theory of money, quantity theory of money, Friedman's restatement of quantity theory, Keynes' theory of demand for money, Post-Keynesian approaches to demand for money.

Economic growth and Development-concepts of growth and development and their measurement, characteristics of less development countries and obstacles to their development, growth, poverty and income distribution, Classical and neo-classical approach to growth, growth models of Harrod and Domar, Solow, Meade, Joan Robinson, Utilitarian and Welfarist approach to social development, A.K.Sen's critique. Sen's capability approach to economic development, the Human Development Index, Physical Quality of Life Index and Human Poverty Index.

Module: -5

Time series and Index numbers: Components of a time series. Trend-methods of trend fitting, Seasonal components. Measurement of seasonals. Basic ideason auto-regression. First order auto-regressive series.

Indexnumbers- criteria of a good index number. Problems in data collection and construction. Price and cost of living index numbers. Base shifting and splicing, Deflating of index numbers.

Module: -6

International Economics-Gains from international trade, terms of trade,
International trade and economic development, theories of International trade;
Ricardo, Haberier, hecksher-Ohlin. Disequilibrium in Balance of Payments,
mechanism of adjustments, exchange control and multiple exchange rate,
Global agencies dealing with international trade and finance; IMF, World
Bank, WTO, MNCs.

Module: -7

History of Development and Planning- alternative development strategies, goal of self reliance based on import substitution and protection, post-1991 globalization strategies based on stabilization and structural adjustment, fiscal reforms, financial sector reforms, Regional Planning, Planning Commission, National Development Council.

Institutional structure-land reforms in India, technological changes in agriculture, pricing of agricultural input and output, agricultural finance policy, agricultural marketing and warehousing, issues on food security, policy for sustainable agriculture.

Industrial policy reforms, public sector enterprises and their performance, privatization and disinvestment debate, growth and pattern of Industrialization, sources of industrial finance, foreign direct investment, role of foreign capital for direct investment and portfolio investment.

Module: -9

Poverty, unemployment and human development-estimates of inequality and poverty measures in India, unemployment and under-employment, rural development programmes including povertyalleviation programmes, development of social and economic infrastructure. India's human development record in global perspective, India's population policy and development.

Module: -10

Fiscal federalism in India; vertical and horizontal imbalance, assignment of function and sources of revenue, constitutional provision, Finance Commissions, devolution of resources and grants and criteria fortransfer of resources, centrestate financial relations in India; problems of states resources; financial aspects of 73rd and 74th constitutional amendments.

Statistics

Module: - 1

Probability: Random variables, Expectation, Independence, Convergence in probability, Convergence in law, Sequence of random variables, Distribution function, Convergence in distribution, Markov, Chebycheff and Kolmogorov inequalities, Weak and Strong laws of large numbers, Characteristic functions, Inversion and Uniqueness theorems of characteristic functions, Central limit theorem (Lindberg-Levy).

Stochastic process: Markov processes in continuous time: Poisson processes,Birth and Death processes.

Module: - 2

Correlation and Regression analysis: Linear, Partial and multiple Correlation, their properties and applications, Linedar and multiple

Regression Analysis: Assumptions involved, Violations of assumptions andremedies.

Association of attributes: Coefficients of association and their interpretations, Analysis of categorical data.

Analysis of variations in Time series and forecasting, Periodogram and Harmonic Analysis, Serial correlation, Correlogram.

Module: - 3

Sampling Techniques and Design of Experiments: Census versus SampleSurvey, Role of NSS organization, Simple Random Sampling, StratifiedSampling, Systematic Sampling, Ratio and Regression estimates. Principles ofDesign of Experiment, Completely randomized, Randomised block and LatinSquare Designs.

Module: -4

Demography and Vital Statistics: The life table, its constitution and properties, Abridged and UN model life table, Stable and Stationary populations, Differentbirth rates, Total fertility rate, Gross and Net Production Rate, Differentmortality rates, Standardised death rates, Infant mortality and maternalmortality rate, Age at marriage: Hajnals methods, Projection methods-including Logistic curve fitting, Decennial population census in India.

Numerical Analysis: Interpolation formulae (with remainder terms) due to Lagrange, Newton-Gregory, Newton Divided different, Gauss and Striling. Euler-Maclaurin's summation formula. Inverse interpolation. Numerical integration and differentiation. Difference equations of the first order. Linear difference equations with constant coefficients.

Module: -6

Computer Application & Data Processing:

Computer system concepts: Components System components Functions, Central processing unit, Main memory, Bit, Byte, Word, Input/output devices, speeds and memory capacity. Software concepts: Overview of operatingsystems: Types and Functions of operating systems, application software, Batch and time-sharing mode, Overview of existing software Packages onWord processing Flowcharts, and spreadsheets. Basic Algorithm, Fundamentals of Design and Analysis of Algorithm, Basics of Data Structure.Binary representation of integers and real numbers, Logical data element.

Module: -7

Multivariate normal distribution, Hotelling's T-square and Mahalanobis D-square statistics and their applications, Multivariate analytical tools: Clusteranalysis, Discriminant function and discriminant analysis, Principal components and analysis.

Linear programming: Formulation and graphical solution, Simplexmethod, Duality, transportation and assignment problems.

Module: -8

Analysis of variance: Fixed, random and mixed models, Analysis of one way and two way classified data, Multiple comparison procedures, Principles of experimentation, Complete and incomplete block designs, Balanced Incomplete Block design-Intrablock analysis and analysis with recovery of interblockinformation, Construction of Balanced incomplete designs, Lattice designs, Factorial experiments-Analysis with and without confounding (total and partial), Split plot and Strip plot designs, Response surface designs.

Statistical Inference: Sampling and sampling distributions, Problems of estimation-point estimation and interval estimation, Properties of estimators-Unbiasedness, Consistency, Sufficienceand Efficiency, Different methods of estimation, Properties of maximum variance estimator, Minimal sufficiency, Rao-Blackwell theorem, Completeness and bounded completeness, Ancillaries, Confidence Interval-shortest confidence interval. Elements of decision theory and Bayesian inference.

Module: - 10

Testing of Hypothesis: Simple and composite hypotheses: Neyman-Pearson Lemma and its application, Uniformly most powerful test, Unbiased tests, Similar region, Conditional tests, Likelihood ratio tests, Non-parametric tests (One Sample and two sample case): Sign, Median, Run, Wilcoxon signedrank test, Mann-Whitney U-test, Kolmogorov-Smirnov tests, Derivation of mean and variance and applications and their asymptotic properties.

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