

FEDERAL PUBLIC SERVICE COMMISSION
(Curriculum & Research Wing)

Schemes and Syllabi for Screening/Professional Tests as well as Descriptive Examination
Relating to Posts Advertised under Consolidated Advertisement No. 10/2018

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
1.	174/2018	Statistical Officer (BS-17), Pakistan Bureau of Statistics, Statistics Division, Ministry of Statistics.	Second Class or Grade 'C' Master's Degree or equivalent in Statistics or Economics with Statistics or Mathematics with Statistics or Sociology with Statistics or Commerce with Statistics.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Introduction to Statistics, • Presentation of Data, • Measures of Central Tendency, • Measures of Dispersion, • Index Numbers, • Simple Regression and Correlation, • Time Series Analysis, • Sampling Techniques, • Testing of Hypothesis, • Techniques of Research, • Report writing and presentation, • Basic Arithmetic and I.T Knowledge.
2.	200/2018	Inspector (Tech) (BS-16), Intelligence Bureau.	i. B. Tech. in Electronics or equivalent in relevant subject from Government recognized Institute/ University. ii. Two (2) years post qualification practical experience in the field of Electronics. OR Retired JCOs/Retired Foreman of Corps of Signals with ten (10) years experience in the related field.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II General Intelligence=80 marks Subjective Test Technical Proficiency Test =100 marks Qualifying Standard= 50%	Part-I Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Basic Arithmetic. • Current Affairs. • Pakistan Affairs & Islamic Studies • Everyday/General Science • Basic Computer Operation in MS Office Note : (Equal weightage for each topic at Part-II) For Pre-selected candidates <ul style="list-style-type: none"> • Electrical and Electronic circuits, their application and troubleshooting • Working and troubleshooting of RF Communication System • Telecommunication systems and Telephone exchange • Working of CCTV Systems, Remote Control System and audio/video recording gadgets • Designing of ordinary prototype circuits

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
3.	201/2018	Inspector (BS-16), Anti Narcotics Force, Ministry of Narcotics Control.	i. Second Class or Grade 'C' Bachelor's Degree or equivalent qualification recognized by HEC. ii. Two years post qualification experience in Law Enforcement Agency/ Security Agency.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 marks	Part-I Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> Investigation Chapter of Criminal Procedure Code, Basic knowledge of "Qanun-e-Shahadat Order", 1984 Basic knowledge of Pakistan Penal Code, Basic knowledge of Narcotics Substances Act, 1997 International Conventions and Agreements on Drug Control. Role of United Nations Organization for Drug Control (UNODC) Mandate of Financial Action Task Force (FATF) 2012-2020.
4.	209/2018	Trained Graduate Science Teacher (Male) (BS-16 Plus 25% Special Pay), Education Department, Gilgit Baltistan, Ministry of Kashmir Affairs and Gilgit Baltistan.	Second Class or Grade 'C' B.Sc. Degree with BS.Ed. / B.Ed. or equivalent qualification from a University recognized by the HEC.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II General Science Test = 40 marks Part-III Professional Test = 40 marks	Part-I Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> Heat, Waves & Electricity, Motion & Force, Gravitational Force, Radioactivity, Nature, Properties and States of Matter, Gases, Liquids & Solids. Viruses & Algae Part-III <ul style="list-style-type: none"> Education System in Pakistan, Educational Psychology, Class Room Management and Discipline, Instructional Planning and Teaching Strategies, Students Evaluation and Examination System, Educational Guidance and Counselling.

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5.	217/2018	Assistant Private Secretary (BS-16), Naval Headquarters, Ministry of Defence.	i. Second Class or Grade 'C' Bachelor's degree from a University recognized by HEC. ii. Minimum shorthand speed: 100 w.p.m. and typing speed: 50 w.p.m. iii. Must be computer literate. Note: Computer literacy means proficiency in M.S Office (M.S Word, Power Point & Excel).	<ul style="list-style-type: none"> • Typing Test with minimum Speed of 50 W.P.M • Shorthand Test with minimum Speed of 100 W.P.M • Computer Literacy Test: <ul style="list-style-type: none"> i Microsoft Word (Typing, Formatting) ii Microsoft Excel (Typing, Graph, Calculations) iii Microsoft Power Point (Typing, Formatting, Inserting Objects) 	35 Marks 35 Marks 10 Marks 10 Marks 10 Marks
6.	230/2018	Research Officer (BS-17), ARDE, Ministry of Defence Production.	Bachelor's Degree of Engineering in Electronics.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • <u>Introduction to Computing</u>: History and evolution of computers, central processing unit, data storage, input/output devices, multimedia, operating systems, programming languages, networking, the internet, system analyses and design, management information system, electronic commerce, security and privacy issues, ethical issues and the computing profession, • <u>Transistors</u>: types, calculations of voltages and currents in simple transistor circuits. • <u>Amplifier & Oscillators</u>: Working and classification of amplifiers, Class A and Class B Amplifiers, Feedback Amplifiers, Types of Feedback, RC Oscillators. • <u>Integrated Circuits</u>: OP Amps, timers, flip flop, converters, filters. • <u>Telecommunications</u>: EM theory, antennas, antenna gain, free space loss, fading. Modulations (AM, FM, PM, PWM, Delta, FSK, ASK, PSK), Error correction, Demodulation, Detectors, Transmitter, Receivers.

Schemes and Syllabi for Written Examination (Descriptive) for All Posts in BS-18 & BS-19 included in Consolidated Advertisement No. 10/2018

PAPER-I: ENGLISH

Max Marks: 100

Time Allowed: 3 Hours

- (i) **English Essay-50 Marks:** Candidates will be required to write an Essay in English comprising **1500 words** from a set of **six given topics**. Candidates are expected to reflect comprehensive and research based knowledge on a selected topic. Candidate's articulation, expression and technical approach to the style of English Essay writing will be examined.

- (ii) **English (Composition and Précis)-50 Marks:**

The examination will test the candidate's abilities to handle Précis Writing, Reading Comprehension, Sentence Structuring, Translation, Grammar and Vocabulary, etc.

Précis Writing (10 marks): A selected passage with an orientation of generic understanding and enough flexibility for compression shall be given for précising and suggesting an appropriate title.

Reading Comprehension (10 marks)

A selected passage that is rich in substance but not very technical or discipline-specific shall be given, followed by five questions, each carrying 2 marks.

Grammar and Vocabulary (10 marks): Correct usage of Tense, Articles, Prepositions, Conjunctions, Punctuation, Phrasal Verbs, Synonyms and Antonyms etc.

Sentence Correction (5 marks): Ten sentences shall be given each having a clear structural flaw in terms of grammar or punctuation. The candidates shall be asked to rewrite them with really needed correction only, without marking unnecessary alterations. No two or more sentences should have exactly the same problem, and 2-3 sentences shall be based on correction of punctuation marks.

Grouping of Words (5 marks): A random list of ten words of moderate standard (neither very easy nor utterly unfamiliar) shall be given, to be grouped by the candidates in pairs of those having similar or opposite meaning, as may be clearly directed in the question.

Pairs of Words (5 marks): Five pairs shall be given of seemingly similar words with different meanings, generally confused in communication, for bringing out the difference in meaning of any five of them by first explaining them in parenthesis and then using them in sentences.

Translation (5 marks): Ten short Urdu sentences involving structural composition, significant terms and figurative/idiomatic expressions shall be given, to be accurately translated in English.

SUGGESTED READINGS

Sr. No.	Title	Author
1.	English Grammar in Use	Raymond Murphy (Cambridge University Press)
2.	Practical English Usage	M. Swan (Oxford University Press)
3.	The Little, Brown Handbook	H. Ramsey Flower & Jane Aaron (The Little, Brown & Co; Harper Collins)
4.	A University English Grammar	R. Quirk & S. Greenbaum (ELBS; Longmans)
5.	Write Better, Speak Better	Readers Digest Association
6.	Modern English in Action	Henry Christ (D.C. Heath & Co.)
7.	Exploring the World of English	Syed Saadat Ali Shah

PAPER-II: PROFESSIONAL**Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-202/2018-R
Particulars of post	Chief Statistical Officer (BS-18), Pakistan Bureau of Statistics, Statistics Division, Ministry of Statistics.
Minimum Qualification & Experience:	<p>i. Second Class or Grade 'C' Master's Degree in Statistics or Economics with Statistics or Mathematics with Statistics or Sociology with Statistics or Commerce with Statistics.</p> <p>ii. Five (5) years post qualification professional experience in the required field in Government/ Semi-Government/ Banks, Public/ Private Organizations relaxable by one year for 1st Class Master's Degree holders.</p>

Part-I: 50 Marks

(Human Resource, Financial Management,
Quality Management and Information Technology)

I. Human Resource and Financial Management

Definition, Significance and Scope of Human Resource Management; Organization—Types of Organization, Theory of Organization, Principles of Organization, Organization of the Federal and Provincial Governments, Public Sector Enterprises; Approaches to Human Resource Management. Personnel Administration—Tools of Personnel Management: Selection, Training, Promotion, Compensation, Discipline; Communication, Communication Channels and Principles of Public Relations; Human Behaviour and Organizations Administration.—Elements of Financial Administration, Performance Programmed Budgeting, Capital Budget, Principles of Budgeting, Auditing and Accounting.

II. Basic Concept of Quality Management

ISO-9000, ISO-13000, other certifications regarding quality measurement; management, management for Results, Setting Performance Goals and Targets; Job Analysis: Job Description, Job Specification, Performance Evaluation;

III. Information Technology and MS Office

Fundamentals of Computer: CPU, Memory Devices, Types of Computers, Characteristics of Computer and related material; Application Software: Microsoft Word, Microsoft Power Point, Microsoft Excel; Search Engines, Web Design, Email, Internet Surfing, Social Networking (Facebook, Twitter, etc); General Introduction to Virus and Antivirus utilities; Programming Languages

Part-II (Statistics): 50 Marks**I. Probability Distributions**

Discrete and continuous Probability Distributions. Properties, applications of Binomial, Poisson, Hyper-geometric, Normal Distribution and its properties, Standard Normal Curve, Normal approximation to Binomial and Poisson distribution.

II. Regression Analysis & Correlation Analysis

Concepts of Regression and Correlation and their application, Simple and Multiple Linear Regression (upto three variables), Estimation of the Parameters, Method of least

square, Inference regarding regression parameters. Correlation, Correlation Coefficient, Properties of Correlation Coefficient, Inference regarding correlation coefficient, Partial Correlation and Multiple Correlation (upto three variables).

III. Sampling & Sampling Distributions

Population and Sample, Advantages of Sampling, Sampling Design, Probability & Non-Probability Sampling techniques. Brief Concepts of Simple Random, Stratified, Systematic, Cluster, Multiple and Multistage Sampling. Purposive, Quota Sampling, Convenience & Accidental Sampling. Sampling with and without replacement, Application of Central Limit Theorem in Sampling, Sampling Distribution of Mean, difference between two Means, Proportion, difference between two Proportion and Variance.

IV. Statistical Inferences

Estimation: Point Estimation, Properties of a good Estimator. Interval Estimation. Interval Estimation of Population mean. Large and small sample confidence intervals for Population Mean. Hypothesis Testing: Types of errors. Hypothesis Testing for Population Mean. Inferences for Two Population Means. Inferences for the Mean of Two Normal Populations using Independent Samples (variances are assumed Equal). Inference for Two Populations Mean using Paired Samples. Inferences for Population Proportions. Confidence Intervals and hypothesis Testing for Population Proportion. Inferences for Two Populations Proportions using Independent Samples, Estimation of sample size. Analysis of categorized data. Goodness of fit tests. Contingency tables. Test of independence in contingency tables.

V. Design of Experiments

One-way and Two-way Analysis of Variance, Design of Experiments, Concepts of Treatment, Replication, Blocking, Experimental Units and Experimental Error, Basic Principles of Design of Experiments, Description, Layout and Statistical Analysis of Completely Randomized Design (CRD), Randomized Complete Block Design (RCBD), Multiple Comparison tests (LSD test).

SUGGESTED READINGS

S. No.	Title	Author
1.	Human Resource Management	H.T.Graham & Roger Bennett
2.	Management	James A.F.Stoner, R.Eward Freeman, Daniel R.Gilbert Jr.
3.	Understanding Computer: Today and Tomorrow	Deborah Morley, Charles Parker
4.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson
5.	Principles and Procedures of Statistics	Steel, R and Torrie, J.H.
6.	Introduction to Statistical Theory, Part-I & II	Chaudhry, S.M. and Kamal, S.
7.	Fundamentals of Modern Statistical Methods	Wilcox, R.
8.	Statistical Methods	Aggarwal, Y.P.

PAPER-II: PROFESSIONAL**Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-207/2018-R
Particulars of post	Deputy Captain Superintendent (BS-19), Pakistan Marine Academy, Karachi, Ministry of Maritime Affairs.
Minimum Qualification & Experience:	i. Certificate of competency as Master Foreign Going or equivalent Naval qualifications. ii. Two (2) years experience in Training Establishment for sailors or equal number of Sea Service in the Rank.

Part-I: 20 Marks
(Basic Concepts only)

- I. Public Administration
- II. Human Resource Management
- III. Financial Management
- IV. Information Technology and MS Office

Part-II: 80 Marks
(Professional)

- I. Course Contents of Certificate of Competency as **Master Foreign Going Ships**.
- II. Pakistan Merchant Shipping Ordinance, 2001
- III. Mercantile Shipping (Safety Convention Certificate) Rules 1967.
- IV. Port Act 1908 (Relevant Portion)
- V. Lighthouse Act 1927

SUGGESTED READINGS

S. No.	Title	Author
1.	An Introduction to the Public Administration	E.N.Cladden
2.	Human Resource Management	H.T.Graham & Roger Bennett
3.	System of Financial Control and Budgeting, 2006	Published by Finance Division
4.	Understanding Computers: Today and Tomorrow	Deborah Morley, Charles Parker
5.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson
6.	Relevant Rules, Acts, Ordinance and course contents mentioned in Part-II	

PAPER-II: PROFESSIONAL**Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-208/2018-R
Particulars of post	Legislative Translation Officer (BS-18), Ministry of Law and Justice.
Minimum Qualification & Experience:	<ul style="list-style-type: none"> i. Bachelor's Degree in Law and Urdu as an elective subject at Bachelor level from a University/ College recognized by the HEC. ii. Five (5) years post qualification experience of translation from English to Urdu.

Law: 100 Marks

Translation of some selected portions from English to Urdu and Urdu to English from the following Statutes:

- i. The Code of Civil Procedure, 1908
- ii. Pakistan Penal Code, 1860
- iii. Qanun-e-Shahdat Order, 1984
- iv. Criminal Procedure Code, 1898
- v. Civil Courts Ordinance, 1962

SUGGESTED READINGS

S.No.	Title	Author
1.	Pakistan Penal Code, 1860	M. Mahmood
2.	Criminal Procedure Code, 1898	Shaukat Mahmood
3.	Qanun-e-Shahdat Order, 1984	Justice (R) Khalid ur Rahman Khan as adapted from Principles and Digest of the Law of Evidence by M. Monir
4.	The Code of Civil Procedure, 1908	Aamir Raza A. Khan
5.	Civil Courts Ordinance, 1962	Nisar Ahmad Nisar

PAPER-II: PROFESSIONAL**Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-215/2018-R
Particulars of post	Deputy Director (Medical) (BS-18), Federal General Hospital, Chak Shahzad, Islamabad, Ministry of National Health Services, Regulations & Coordination.
Minimum Qualification & Experience:	<ul style="list-style-type: none"> i. MBBS degree recognized by PM&DC. ii. Postgraduate higher diploma in Public Health/ Health Services Administration recognized by PM&DC with three (3) years post graduate experience or postgraduate lower diploma in Public Health/Health Services Administration recognized by PM&DC with five (5) years post graduate experience.

Part-I: (Qualification Based)**50 Marks**Core courses of **MBBS Degree****Part-II: (Professional)****50 Marks**Core courses of Post Graduate Lower Diploma in **Public Health.**