

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. 01/2020

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/Experience for the Posts	Test Specification	Topics of Syllabi
1.	1/2020	Assistant Secretary (BS-16), in Different Ministries/ Divisions/ Departments	Private 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.	<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) Note: Computer literacy means proficiency in M.S Office (M.S Word, Power Point & Excel).	35 Marks 35 Marks 10 Marks 10 Marks 10 Marks
2.	2/2020	Assistant Secretary (BS-16), National Accountability Bureau.	Private i. Second Class or Grade 'C' Bachelor's degree (14-years education) from HEC recognized Institution. ii. Minimum shorthand speed: 100 w.p.m and typing speed: 50 w.p.m. iii. Certification in Computer operations.	<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
3.	3/2020	Accountant (BS-16), Staff Welfare Organization, Establishment Division.	Second Class or Grade 'C' Master's/ Bachelor's (04 years duration) degree in Business Administration (Finance) or Commerce or Statistics or Economics or Mathematics or Banking or Accounting or Finance or equivalent qualification from a University recognized by the HEC. OR Second Class or Grade 'C' Bachelor's degree with ICMA one year post graduate Certificate or CA (Foundation) or ACCA (Knowledge level qualified) from a University/ Institute recognized by the HEC.	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"> • Accounting Principles & Procedures, • Scrutiny of Records for Audit Purposes • Journal, Ledger & Cash Book, • Preparation of Annual Budget, • Financial Planning and Cost Accounting • Heads of Accounts, Re-appropriation of Funds and Supplementary Grants • Settlement of Audit Objections. • Public Procurement Rules, 2004 • Basic Mathematics (Average, Ratio etc.) • Basic IT Knowledge

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4.	5/2020	Computer Instructor (BS-17), Staff Welfare Organization, Establishment Division.	Second Class or Grade 'C' Master's degree in Computer Science or Information Technology or Software Engineering.	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"> • Computer Hardware & Software, , • Data Communication & Networking, • C/C++ Language, • Visual Basic, • Relational Database Management System (RDBMS), • Operating System Unix/Linux • Oracle/PLSQL, • Teaching Techniques and Strategies
5.	10/2020	Computer Operator/ Network Administrator (BS-16), Ministry of Industries & Production.	i. Second Class or Grade 'C' Bachelor's Degree in Computer Science from a recognized University. OR Second Class or Grade 'C' Bachelor's Degree with Economics/ Statistics/ Mathematics from a recognized University with one year Diploma in Computer Science from a Recognized Institute. ii. Two (2) years post qualification experience in the field of Data Processing and Local Area Networking.	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"> • Computer Hardware & Software, • Basic Concepts and Classification of Networks, • Reliable data transfer and TCP, • Network Layer • LAN Technologies, • Data Communication & Networking, • Relational Database Management System (RDBMS), • Operating System Unix/Linux • Oracle/PLSQL.
6.	12/2020	Statistical Officer/ Research Officer (BS-17), Federal Board of Revenue, Revenue Division.	Second Class or Grade 'C' Master's degree or equivalent qualifications in Economics/ Statistics/ Business Administration.	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"> • Composition of National Economy • Fiscal and monitoring Policies • Taxation structure of the Country Sources of Revenues/Tax and Non-Tax Revenue • National Accounts (GDP, GNP etc.) • Measures of Dispersion (Mean, Median, Mode) • Analysis of Variation (Mean Deviation, Standard Deviation, Variance) • Test Statistics (T, F and Chi-square) • Projection Techniques

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7.	13/2020	Translator (BS-16), Ministry of Commerce.	i. Graduate. ii. Three (3) years post qualification experience in Government organizations in translation from English to Urdu and vice versa.	Subjective Test= 100 Marks Qualifying Threshold = 40 Marks	<ul style="list-style-type: none"> • Translation of 3 short paragraphs from English to Urdu =3X15=45 Marks • Translation of 3 short paragraphs from Urdu to English =3X15=45 Marks • Translation of Urdu Sentences into English =5X2=10 Marks
8.	14/2020	Drug Inspector (BS-17), District Health Department ICT, Islamabad, Ministry of National Health Services, Regulations & Coordination.	Bachelor's Degree in pharmacy.	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"> • Physical Pharmacy, • Clinical Pharmacy, • Industrial Pharmacy, • Hospital Pharmacy, • Pharmaceutical Biochemistry, • Pharmaceutical Microbiology, • Pharmaceutical Quality Control & Quality Management • Application of Computer in Pharmacy.
9.	16/2020	Assistant Director (BS-17) National Accountability Bureau.	At least second Division Master's Degree or 16 years education in Criminology/ Law/ Business Administration/ Economics/ Computer Sciences/ Defence and Strategic Studies from HEC recognized institution/ university. OR B.E/ B.Sc./ 16-years education in Civil/ Electrical/ Mechanical from HEC recognized institution/ university.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II General Intelligence/ Professional Test=80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring. Part-II <ul style="list-style-type: none"> ▪ Basic Arithmetic <ul style="list-style-type: none"> – Algebra – Ratios – Percentages – Arithmetic Means ▪ Current Affairs. <ul style="list-style-type: none"> – Issues/Challenges at National and International Level during the last 2 years ▪ Pakistan Affairs & Islamic Studies <ul style="list-style-type: none"> – Basic Level knowledge ▪ National Accountability Ordinance, 1999 Note : (Equal weightage for each topic at Part-II)

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10.	17/2020	Accountant (BS-16), National Accountability Bureau.	<p>i. Second Class or Grade 'C' Bachelor's Degree in Commerce from any recognized University.</p> <p>ii. Two (2) years post academic qualification experience in the relevant field.</p>	<p>Objective Type Test (MCQ)</p> <p>Part-I English = 20 marks</p> <p>Part-II Professional Test=80 marks</p>	<p>Part-I Grammar Usage, Sentence Structuring.</p> <p>Part-II</p> <ul style="list-style-type: none"> • Accounting Principles & Procedures, • Scrutiny of Records for Audit Purposes • Journal, Ledger & Cash Book, • Preparation of Annual Budget, • Financial Planning and Cost Accounting • Heads of Accounts, Re-appropriation of Funds and Supplementary Grants • Settlement of Audit Objections. • Public Procurement Rules, 2004 • Basic Mathematics (Average, Ratio etc.) • Basic IT Knowledge
11.	18/2020	Assistant Executive Engineer (Civil) (BS-17), Pak. PWD, Ministry of Housing and Works.	Bachelor's Degree in Civil Engineering from a recognized University.	<p>Objective Type Test (MCQ)</p> <p>Part-I English = 20 marks</p> <p>Part-II Professional Test=80 marks</p>	<p>Part-I Vocabulary, Grammar Usage, Sentence Structuring</p> <p>Part-II</p> <ul style="list-style-type: none"> • Building material & Building Construction, • Surveying & Levelling, • Hydraulic & Hydrology, • Concrete Technology & R.C.C Structure Design, • Construction Management, • Structural Design Applications, • Sewerage and Sewage Treatment, • Engineering Materials, • Reinforced Concrete, • Ground improvement,

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/Experience for the Posts	Test Specification	Topics of Syllabi
12.	19/2020	Assistant Director (Networking) (BS-17), Anti Narcotics Force, Ministry of Narcotics Control.	i. Second Class or Grade 'C' Master's Degree in Computer Science/IT or equivalent qualification recognized by HEC. ii. Two (2) years post qualification experience in Networking.	Objective Type Test (MCQ) <u>Part-I</u> English = 20 marks <u>Part-II</u> Professional Test=80 marks	<u>Part-I</u> Vocabulary, Grammar usage, Sentence Structure. <u>Part-II</u> <ul style="list-style-type: none"> • Knowledge of different Operating Systems as Windows, Linux, Mac etc. • Networks Devices, • Network IP Addressing, • Network Routing, • Network Securities, • Network Switching, • Network Management, • Troubleshooting of LAN/WAN, • Network Services, • Network Firewalls.
13.	20/2020	Junior Scientific Officer (BS-17), Naval Headquarters, Ministry of Defence.	Bachelor's Degree in Engineering in Electronics/ Chemical/ Electrical. OR i. Second Class or Grade 'C' Master's Degree in Physics/ Chemistry/ Textile Chemistry/ Metallurgy. ii. In case of Metallurgy knowledge of Ferrous and Non Ferrous materials and modern special technique. iii. In case of Textile Chemistry two (2) years post qualification experience in Textile Chemistry.	Objective Type Test (MCQ) <u>Part-I</u> English = 20 marks <u>Part-II</u> General Science Test=80 marks	<u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring. <u>Part-II</u> <ul style="list-style-type: none"> • Matter and its Properties • Atomic Structure • Compounds and Bonding • Chemical Reactions • Aqueous Solutions • Acids and Bases • Phases of Matter • Organic Molecules • Organic Products (Polymers, Oil, Soaps, Paints, Varnishes and Detergents) • Radioactivity and its Applications • Ferrous and Non Ferrous materials • Instrumentation (UV/Visible, FTIR, GC, HPLC, XRF, XRD, Pollution (Water and Air))

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/Experience for the Posts	Test Specification	Topics of Syllabi
14.	21/2020	Librarian (Female)(BS-17) Federal Government Educational Institution (Cantts/ Garrisons) Directorate, Ministry of Defence.	Second Class or Grade 'C' Master's Degree in Library Science/ Information Science. OR Graduate with Diploma in Library Science from a University. OR Bachelor of Library Science plus five (5) years post qualification professional experience in BS-16; otherwise, eight (8) years post qualification experience if not in BS-16. OR Second Class or Grade 'C' Master's Degree in the relevant subject with Diploma in Library Science or Bachelor of Library Science.	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"> • Information Sources and Services • Cataloguing: Theory and Practice • Procurement and Maintenance of Library Books • Library Automation/Information Storage & Retrieval • Research Methods & Techniques for Librarians • Public Records, Rare Material & their Conservation • Management of Serials Publications • Rules & Procedure regarding Write Off the Library Losses
15.	22/2020	Lady Welfare Officer (BS-16) , Naval Headquarters, Ministry of Defence.	i. Second Class or Grade 'C' Bachelor's Degree with Sociology/ Social Work/ Anthropology. ii. Two (2) years post qualification experience in Social Welfare matters.	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"> • Community Organization and Development, • Social Research & Statistics, • Organizational Behaviour and Human Resources, • Social Welfare Policy and Administration, • Methods of Counselling & Guidance Services • Project Preparation and Financial Planning • Monitoring Methodology, Evaluation, Cost-benefit Analysis and Implementation

Schemes and Syllabi for Written Examination (Descriptive) for All Posts in BS-18 & BS-19 included in Consolidated Advertisement No. 01/2020

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.4-4/2020-R
Particulars of post	Director/ Principal Meteorologist (BS-19), Pakistan Meteorological Department, Cabinet Secretariat (Aviation Division).
Minimum Qualification & Experience:	<p>Ph.D in Meteorology/ Seismology/ Hydro-Meteorology/ Hydrology/ Geophysics/ Geology/ Geography/ Physical Chemistry/ Physics/ Mathematics/ Environment/ Space Science/ Agriculture Meteorology/ Computer Science or equivalent in the field of Meteorology from a University recognized by HEC with eight (08) years post qualification experience in BPS-17 and above.</p> <p style="text-align: center;">OR</p> <p>M. Phil in one of the above subjects from a university recognized by HEC with ten (10) years post qualification experience in BPS-17 or above in the field of Meteorology.</p> <p style="text-align: center;">OR</p> <p>i Second Class or Grade 'C' Master's Degree in one of the above subjects or equivalent in the field of Meteorology from a university recognized by HEC with twelve (12) years post qualification experience in BPS-17 and above.</p> <p>ii Graduation with Physics or Mathematics from a university recognized by HEC.</p>

Part-I: 25 Marks (MCQ)

- 25 MCQ Questions on Part-II.

Part-II: (Meteorology) 75 Marks (Descriptive)

The Composition and Structure of Earth's Atmosphere, Hydrostatic Equation and its Applications, The Clausius-Clapeyron Equation, The Poisson's Equation, Adiabatic Processes, Parcel Concepts, Stability in the Atmosphere, Moisture in the Atmosphere, Skew-T Log-P Diagram, Solar and Terrestrial Radiation, The Greenhouse Effect, Energy Balance at the Earth's Surface, Net Radiation, Free and Forced Convection, Temperature Inversions.

Cloud Formation, Cloud Classification, Precipitation Processes, Forms of Precipitation, Thunderstorms, Tornadoes, Hurricanes, Tropical Cyclones, Cyclones and Anti-Cyclones, Pressure Gradient Force, Coriolis Force, Friction, Geostrophic Wind, Gradient Wind, Thermal Wind, Land-Sea and Mountain- Valley Breezes, Chinook and Katabatic Winds, Jet Streams, Air Masses, Weather Fronts, Meteorological Satellites, Interpretation of Weather Satellite Imagery, Automatic Weather Stations, Weather Maps, Weather Symbols, Weather Forecasting.

The Earth's Atmosphere, Stratospheric Ozone Depletion, Energy and Radiation, Sun Angle and Seasons, Solar Radiation in the Atmosphere, Radiation Balances, Energy and Temperature, Daily Temperature Variations, Global Temperature Controls, Atmospheric Optics, Atmospheric Humidity, Cooling Processes, Condensation, Lifting Mechanisms, Static Stability, Inversions, Cloud Droplets Atmospheric Pressure, Horizontal Flow Aloft, Rotating Motion, Surface Flows, Tropical Hadley Circulation, General Circulation, Thermal Winds, Thermally Direct Circulations, Down slope Winds, Polar Front Theory, Surface and Upper Air Weather Charts, Radar Meteorology, Biodiversity and Climate Change.

Winter and Summer Rain Process, Monsoon, Floods and Drought, Meteorological Instruments (Thermometer, Barometer, Anemometer, Wing Vane, Radiometer, Sunshine Recorder etc.), Fog Formation, Impact of Fog on Crop Production.

SUGGESTED READINGS

Sr. No.	Title	Author
1.	An Introduction to Atmospheric Physics	Andrews D G
2.	An Introduction to Atmospheric Thermodynamics	Tsonis A A
3.	Meteorology Today	Donald A C
4.	Essentials of Meteorology	Macintosh D H & Thom S A
5.	Atmosphere weather and climate	Barry R
6.	Climate change causes effects and solutions by Atmospheric change	John T H
7.	Monsoon	Bin Wang