

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. 07/2021

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/Experience for the Posts	Test Specification	Topics of Syllabi
1.	124/2021	Pharmacist (BS-17), Pakistan Navy, Ministry of Defence (Defence Division).	Second Class or Grade 'C' 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 1. Physical Pharmacy, 2. Clinical Pharmacy, 3. Industrial Pharmacy, 4. Hospital Pharmacy, 5. Pharmaceutics Chemistry, 6. Pharmaceutical Biochemistry, 7. Pharmaceutical Microbiology, 8. Pharmaceutical Quality Control & Quality Management, 9. Application of Computer in Pharmacy.
2.	125/2021	Librarian (Female) (BS-16), Federal Government Educational Institutions (Cantts/ Garrisons) Directorate, Ministry of Defence	Second Class or Grade 'C' Bachelor's Degree 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 Grammar Usage, Sentence Structure. Part-II 1. Introduction to Library & Information Science 2. Information Sources and Services 3. Classification: Theory and Practice 4. Cataloguing: Theory and Practice 5. Management of libraries & Information Centres 6. Research Methods & Techniques for Librarians 7. Public Records, Rare Material & their Conservation 8. Management of Serials Publications 9. Rules & Procedure of Write off the Library Losses
3.	129/2021	Assistant Director (Law) (BS-17) Anti Narcotics Force, Ministry of Narcotics Control	i. LLB or equivalent qualification recognized by HEC ii. Two (2) years post qualification practice/ experience of work in the lower courts.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring. Part-II 1. Criminal Procedure Code, 1898 Section 154, 2. Pakistan Penal Code, 3. Anti Narcotics Force Act, 1997, 4. Control of Narcotic Substances Act, 1997, 5. International Cooperation on Narcotics Control 6. Mutual Legal Assistance

Schemes and Syllabi for Written Examination (Descriptive) for All Posts in BS-18 & BS-19 included in Consolidated Advertisement No. 07/2021

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.4-126/2021-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

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

Case No.	F.4-127/2021-R
Particulars of post	Vice Principal (Female) (BS-18), Federal Directorate of Education, Ministry of Federal Education & Professional Training.
Minimum Qualification & Experience:	<p>i) Second Class or Grade 'C' Master's Degree/ Bachelor's degree (04 years duration) with Second Class or Grade 'C' M.Ed/ B.Ed (Hons) or equivalent qualification from a University recognized by HEC. Requirement of M.Ed/ B.Ed (Hons) is exempted from those having Master's/ M.Phil/ Ph.D degree in Education.</p> <p>ii) Five (5) years post qualification experience in Teaching and Administration in a recognized Educational Institution.</p>

Part-I: (MCQ) 25 Marks

- 25 MCQ Questions on Part-II & Part-III.

Part-II: 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-III (Professional) (Subjective) : 25 Marks

- I. Development of Curriculum and Instructional Material**
 - Elements of Curriculum.
 - Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives, Taxonomies of Educational Objectives, Selection of Content, Development of Curricular Materials.
- II. Process of Teaching and Teaching Strategies**
 - Process of Classroom Communication
 - Factors affecting Classroom Communication
 - Barriers to Classroom Communications
 - Use of Instructional Materials and Media
- III. Educational Assessment and Evaluation**
 - Concept of Classroom Assessment and Evaluation
 - Distinction between Assessment, Evaluation and Measurement
 - Approaches to Evaluation: Formative Evaluation; Summative Evaluation
 - Types of Test: Essay Type; Objective Type: Multiple Choice, True-False Items, Matching Type; Principles of Construction of these Test
 - Characteristics of a Good Test: Validity, Reliability, Objectivity, Usability
- IV. Research Methods in Education**
 - Research Instruments: Questionnaire: Interview; Test; Observation; Rating Scale
 - Research Proposal and Report Writing.

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.	Research in Education	JW Best
6.	Integrating Education Technology into Teaching	Roblyer
7.	Curriculum Development	S. M. Shahid
8.	Educational Measurement and Evaluation	S. M. Shahid
9.	Educational Administration	S. M. Shahid

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

Case No.	F.4-128/2021-R
Particulars of post	Paediatric Surgeon (BS-18), National Institute of Rehabilitation Medicine, Ministry of National Health Services, Regulations & Coordination.
Minimum Qualification & Experience:	i. MBBS or equivalent qualification recognized by PM & DC. ii. PM&DC Level-III qualification in the related speciality with 02 years post qualification experience in the relevant field. OR PM&DC Level II (a) or Level II (b) in the related speciality with 04 years post qualification experience in the relevant field.

Part-I: (MCQ)**25 Marks**

25 MCQ Questions on Part-II & Part-III.

Part-II: (Qualification Based) (Descriptive)**50 Marks**Core courses of **MBBS Degree****Part-III: (Professional) (Descriptive)****25 Marks**Core courses of Level-II qualification in **Paeds Surgery**.