GOVERNMENT OF JAMMU AND KASHMIR JAMMU & KASHMIR SERVICES SELECTION BOARD

CPO Chowk Panjtirthi, Jammu/ZamZam Complex Rambagh Srinagar. www.jkssb.nic.in

Notice

Subject: Syllabus for the various posts: regarding.

The Jammu and Kashmir Services Selection Board has issued advertisements for various posts under various Notifications No(s). In this regard, the syllabus for the posts mentioned below is hereby notified, as detailed in **Annexure** "A" to "E" to this notice.

S. No.	Notification No.	Item No.	Department	Name of the post	Syllabus Annexure
1)	01 of 2025	01	Home Department	Driver	"A"
2)	05 of 2020	174	ARI and Training	Printing Down Operator	"B"
3)	05 of 2022	196	DMRRR	Statistical Assistant	"C"
4)	07 of 2020	240	Agriculture Production & Farmer's Welfare	Cameraman	"D"
5)	02 of 2025	02, 03, 04 and 05	Power Development Department	Junior Engineer (Electrical)	"E"

This notice is for information of the concerned candidates.

(Reyaz Ahmad Malik) JKAS
Controller of Examinations
J&K Services Selection Board

Dated: 20-03-2025

No. JKSSB-COE0EXAM(UT)/47/2023-03 (7202120) **Copy to the**:

- 1) Director Information & Fublic Relations, J&K Government with the request to get the said notification published in at least three leading local newspapers of Jammu/Srinagar for three consecutive days.
- 2) Member(s) ALL, J&K Services Selection Board.
- 3) Secretary, J&K Services Selection Board, Jammu.
- 4) Pvt. Secretary to Chairperson, J&K Services Selection Board for the information of Ld. Chairperson.
- 5) In-charge Website, Services Selection Board, Jammu.
- 6) Office record.

Annexure "A"

Marks :-120 Time :- 2.00 Hours

Syllabus for the post of Drivers

Name of Post		Light Motor Vehicle/ Heavy Motor Vehicle	Marks allotted
	Topic	Subtopic	
		Basic Road Rules, driving methods and speed limits	10
		Understanding Signals: 1.Traffic Police hand signals 2.Hand signals while driving 3.Traffic light signals 4.Road map reading	15
		Knowledge of traffic signage's for road safety	10
Driver	Traffic Rules and Signalling	Fitness to drive: 1.First aid kit 2.Good health & Road safety 3.Driving under influence of drugs/liquors	15
		Difficult driving condition: 1.Driving on wet surface 2.Driving in fog 3.Night driving 4.Running on pavement 5.Brake failure 6.Towing	10
		Basic knowledge about provisions of the Motor Vehicle Act	10
		Essential knowledge about vehicle pollution (Do's and Don't's)	10

		Awareness about documents required for driving and offence related 1.Registration 2.Licensing 3.Insurance.	15
Driver	Motor parts and its repair	Identification of major assemblies of vehicle Knowledge of daily and periodic inspection Knowledge of fault diagnosis in tyre and its changing procedure Knowledge of fuel pump, clutch and brake working and their air bleeding procedure Lubrication grades used in vehicle for engine, transmission, differential, suspension Knowledge about servicing schedule and service centres location Knowledge of different starting methods Knowledge of dash board's symbols	25

Annexure "B"

SYLLABUS FOR WRITTEN TEST FOR THE POST OF PRINTING DOWN OPERATOR:

1. Introduction To Printing Technology:

History, Ingredients of Printing (Image carriers, Printing Inks, Printing Substrates), Different printing process and their modern uses, Suitability and limitations of each printing process for various jobs and purpose, Outline of printing production process with basic ideas of current practice in the areas of Prepress, Press and Post Press Operations. Standard Properties, Types and Sizes of the Paper to be used in Modern Printing Presses.

2. **Digital Printing:**

Use of Digital Printing, Basic knowledge of digital printing, Digital Ink-Powder type, Solvent type, Substrate used for digital printing.

3. **Graphic Reproduction:**

Introduction, functions and outline of graphic reproduction, Originals for reproduction, Classification (Line, Halftone, continuous Tone), Characteristics and requirements, Introduction to reproduction photography and photomechanical processes.

- <u>Photographic film Emulsions:</u> Introduction to photographic film and emulsions, types of photographic emulsions and their uses in reproduction photography.
- <u>Contact Photography:</u> Equipment and accessories in contact photography, Preparation of positives from line negative and vice versa. Application of contact photography in reproduction.
- <u>Line Photography:</u> Handling of Camera, Plate Exposing Unit, Exposure and Factorial Governing Exposure Time, Development, Fixing and after treatments, Defects in the negative and their remedies.
- Application of Processed Film: Introduction of photomechanical image carriers for different printing processes, Process of surface plate making for plan graphic printing, equipment and materials used, Use



of process film in duplicating processes.

4. Printing Design:

Types of originals for illustration and their reproduction: Line and continuous tone copies in colour and black and white.

 Requirement of Art work or originals for reproduction: Treatment of Photographs, Photomechanical transfer materials and their uses, Black and White Photographic Prints; Masking, scaling, cropping, retouching, use of air-brush.

<u>Colour elements:</u> Colour theory terms used to describe colour, warm and cold colours, hue, shade, tint, Choice and effective use of colours, colours harmony, colour contrast, and colour values. Primary

Colours, Secondary Colours, Tertiary Colours, Process Colours.

Layout Preparation: Materials, tools, equipments and techniques used in the preparation of layout and art work, Preparation of the layout, analysis of briefs, stages and house style. Dummy, Its uses and preparation, Basic geometric shapes, disposition of elements and space, principles of symmetrical and asymmetrical arrangements, distinction between geometric and optical centres,

<u>Typographic Design:</u> Methods of preparing a design and its various stages, for different classes of work, Art work preparation for different classes of work in relation to different Printing processes,

Paper and Ink, etc.

5. Process Planning and film assembly:

Layout and planning for film assembly, Layout and planning information, the layout factors, related to Paper ,Machine, Plate Size, Plate Clamp Allowance, Paper Grip Allowance, arrangement of individual images of varying Sizes, Areas of Critical Register, Ink distribution over the sheet, Preparing the layout: Sheet base and centre reference lines, Planning imposing scheme: The imposition, imposition terms, heads, foot fore-edges, backs, gutters, tails, folios, perfecting, imposing rules, upright and oblong, Methods of Printing book-work: Sheet-work, work and turn, work and tumble, back margin allowance for sewing, Saddle stitching, Side stitching, Perfect binding etc, Book work margins.

 Image Register systems: Page layout scheme including bleeds, trims and folds, Step and repeat, Negative /Positive film Assembly, Inspection of films for assembly, Attaching tints on line negatives, Film assembly for multi colour printing.

6. Reproduction Technology:

Originals for reproduction, Requirements of originals reproduction, Classification of originals, their characteristics and suitability for reproduction, Copy preparation for reproduction: Scaling, Cropping.

 <u>Processing chemicals:</u> Developer, Kinds, Ingredients used in developers and their functions, Stop bath, Fixer, Reducer and Intensifiers.

7. Image Carriers Technology:

Introduction to image carrier for different Printing Processes, details of image carriers for Offset, Silk Screen and Digital process, its Suitability and Limitation. Photographic intermediates (Negative/Positives) Kinds Characteristics, and requirements.

- Offset plate making: Introduction to offset Plate processes. Materials
 for offset Plates-merits, Limitation and Suitability, Offset plate making,
 Materials equipment and Accessories, Plate Grains, Graining and
 anodizing, Introduction to various Plate making process, Pre- sensitize
 (PS) Plate, Paper Plate etc, Removal and addition work on plate, Plate
 troubles and their remedies.
- Image setting Systems: Classification of Image Setting Systems, Suitability & limitation of different image setting systems, Basic components of modern image setter and their functions, Input devices-work Station, High end Scanners, Digital Pen, Output Devices-Image Setter, Large Format Inkjet Printer, Film Processor, Storage Systems- Latest auto backup devices.
- <u>Digital Imaging:</u> Imposition and workflow software, Raster Image Processor (RIP), File extension for digital imaging e.g TIFF, EPS, JPEG, Bitmap, Output, quality Control. Grey scale, Register marks, Register Punch, Colour Patches, Quality control aids. The star target, Dot gain scale, Sensitivity guide, Colour control bar, Green bar, Plate punching, Reflection densitometer, Trouble shooting,
- <u>C.T.P.:</u> Computer to Plate system, Types of CTP and Plate, Details working process of CTP. Image setter, Plate setter and Chemicals used in CTP preparation.

8. Computer Application:

Components of the computer, Block diagram of computer, types of monitors and other peripherals, Input and output devices, types of

4 97

software, system software, application.

 Operating System: What is operating system, multiprogramming, time sharing and multi tasking, Command of DOS, UNIX, LINUX, Windows environment menus of dialogue boxes, concepts of ICON, Function of Programming documents, Introduction of internet, Role of computers in printing.

April

Annexure "C"

SYLLABUS FOR THE POST OF STATISTICAL ASSISTANT

Syllabus for Written test

Marks:-120 Time: - 2.00

Hours

GENERAL KNOWLEDGE AND CURRENT AFFAIRS

15 MARKS

- (i) Indian History with special reference to Freedom struggle
- (ii) Languages & Culture
- (iii) International Organisations- UNO, WHO, WTO, IMF, UNESCO, UNCTAD etc.
- (iv) Important Regional Organizations and Blocs- BRICS, OPEC, ASEAN, SAARC, BIMSTEC, G-20, G-7 etc.
- (v) Sustainable Development Goals
- (vi) Communicale Diseases- cure and prevention
- (vii) NCDC- COVID-19 SOPs, Advisories, Guidelines etc
- (viii) World famous Awards
- (ix) The world of Sports
- (x) Climate & Crops in India
- (xi) Political & Physical divisions of world & India
- (xii) Important Rivers & Lakes in India
- (xiii) Current Events of National and International importance

GENERAL KNOWLEDGE WITH SPECIAL REFERENCE TO UT of J&K 10 Marks

- (i) Popular names of personalities and their achievements/ Contribution (National and International).
- (ii) Weather, Climate, Crops, Means of Transport.
- (iii) J&K History, Economy and Culture
- (iv) Flora and Fauna of J&K
- (v) Rivers and Lakes.
- (vi) Important Tourist Destinations.
- (vii) J&K Panchayati Raj Act, 1989 (as ameneded upto December, 2020), 73rd & 74th Constitutional amendments.
- (viii) J&K Reorganisation Act, 2019

STATISTICAL METHODS & APPLIED STATISTICS

25 MARKS

- (i) Primary and secondary data.
- (ii) Methods of collecting Primary and Secondary Data
- (iii) Preparation of questionaires
- (iv) Tabulation and compilation of Data
- (v) Measures of central Tendency
- (vi) Theory of Probability
- (vii) Correlation and regression- Concept and simple applications.
- (viii) Theory of Attributes- Basic concepts and their applications.

- (ix) Theory of Index Numbers: Tests of Index numbers- Wholesale and consumer price Index numbers.
- (x) Demography-Census, its features and functions.
- (xi) Vital Statistics- Measures of fertility, Crude fertility rates, specific fertility rates, gross and net reproduction rates., Measures of Mortality
- (xii) Interpolation & Extrapolation.

GENERAL ECONOMICS

25 MARKS

- (i) Meaning and scope of Economics; Methodology of Economic Analysis.
- (ii) Utility, Supply, Demand and Elasticity of Demand, Commodity Value, Market.
- (iii) Theory of Consumer Demand and Demand Analysis.
- (iv) Factors of Production and Laws of Production.
- (v) Pricing and Market Structures.
- (vi) Production Theory and Costs.
- (vii) Concept of Economic Growth of Development; Theories of Growth of Development.
- (viii) Determination of National Income.
- (ix) Public Finance; Revenue, Public Expenditure, Public Debt, Deficit Financing.
- (x) Foreign Trade & Balance of payments.
- (xi) Money & Inflation.
- (xii) Banking and Monetary Policy.
- (xiii) Money & Capital Markets.
- (xiv) Agriculture & economic development; Industrialization and economic development.
- (xv) Planning versus Market Economy.
- (xvi) Green Revolution in India, Poverty/ Unemployment, Role of Agriculture.
- (xvii) Economic Reforms in India.

COMPUTER APPLICATIONS

15 MARKS

- (i) Fundamentals of computer sciences,
- (ii) Hardware & Software, Concept of Open Source Technologies
- (iii) Input & Output Devices,
- (iv) Flow Charts and Algorithms
- (v) Operating System:- MS Word, MS Excel, MS Access, MS Power-Pont ,PDF
- (vi) Internet & E-mail
- (vii) Concept of Computer Virus & latest Anti-Virus.
- (viii) Data Communication and Networking
- (ix) Introduction to Database Management

INFORMATION TECHNOLOGY

15

MARKS

- (i) Information concept & Processing
- (ii) Computer Appreciation

- (iii) Elements of Computers Processing System Hardware CPU, Peripherals, Storage Media, Software Definition, Role and Categories Firmware and Human-ware.
- (iv) Computer & Communication.
- (v) Programming Language Classification
- (vi) Information Technology Applications of India
- (vii) Representation of Information.
- (viii) Basic Electronics- Semiconductor Diodes, Operational Amplifiers, Bipolar Junction Transistor etc

MATHEMATICS 15 MARKS

- (i) Set Theory Basic Concepts & Applications.
- (ii) Matrices & Determinants, Simultaneous Linear Equations- Cramer's Rule.
- (iii) Analytical Geometry.
- (iv) Differentiation- Basic Concepts (Addition, Product & Chain Rule)
- (v) Integration-Reduction & Substitution Method.
- (vi) Differential Equations.

ANNEXURE "D"

SYLLABUS FOR THE POST OF CAMERAMAN

Total Marks: 120 Time Duration: 02 Hours

- 1) **History of Photography** (From Camera Obscura to DSLR)
- 2) **Basic Photography** (Types of Cameras/Optics/ Anatomy of Camera/Types of Camera Lenses)
- 3) **Photo Aesthetics** (Need for the light in Photography/light characteristic Golden Mean/Rule of third)
- 4) **Basic Photo Lighting Techniques** (Key Light/Fill in Light/Bounce Light Different type of light/High Key/Low Key)
- 5) **Digital Photography** (Components of Digital Camera/Digital Camera lenses/Methods of Storage)
- 6) **Digital Photography Techniques** (Exposure/ISO/Manual Settings/Auto Exposure Modes)
- 7) **Basics of Computers** (Types of Computers/Components of Computers/Output Devices/Photo Editing Software's)
- 8) **Different Types of Photography**: Candid Photography, Environmental Portraits, Men at work, Child Labour, Street Life, Culture, Traditions, Lifestyle, Food, Monuments, Festivals; Photo Sequence, Photo Feature.

Annexure "E"

SYLLABUS FOR THE POST OF JUNIOR ENGINEER (ELECTRICAL)

Total Marks:120 Time: 02 Hours

1. Electric Circuits and Fields:

15 Marks

Basic concepts: Concepts of resistance, inductance, capacitance and various factors effecting them., Circuit laws: ohms law KCL, KVL, node and mesh analysis, resonance, ideal current and voltage sources, Source conversions Thevenin's, Norton's and Superposition and Maximum Power Transfer theorems, Simple Circuit solution using network theorems. Three phase circuits; Ampere's and Biot-Savart's laws; inductance; dielectrics; capacitance.

2. Control Systems:

10 Marks

Basic control system components; block diagrammatic description, reduction of block diagrams. Open loop and closed loop (feedback) systems and stability analysis of these systems.

3. Electrical and Electronic Measurements:

Bridges and potentiometers; PMMC, moving iron, dynamometer and induction type instruments; Extension of range, measurement of voltage, current, power, energy and power factor; instrument transformers; digital voltmeters and multimeters; phase, time and frequency measurement; Q-meters; oscilloscopes. Transducers: measurement of displacement, flow and temperature, Megger. Measurements of active and reactive power, Measurement of Energy.

4. Electronic Devices and Circuits:

10 Marks

Energy bands in silicon, intrinsic and extrinsic silicon. Carrier transport in silicon: diffusion current, drift current, mobility, and resistivity. p-n junction diode, Zener diode, tunnel diode, BJT, JFET, MOS capacitor, MOSFET, LED, avalanche photo diode .Small Signal Equivalent circuits of diodes, BJTs, MOSFETs. Simple diode circuits, clipping, clamping, rectifier. Biasing and bias stability of transistor and FET amplifiers. Single-and multi-stage, tuned voltage, operational, feedback, and power amplifiers. Frequency response of amplifiers. Simple op-amp circuits. Filters. Sinusoidal oscillators; criterion for oscillation; single-transistor and op-amp configurations. Function generators and wave-shaping circuits, 555 Timers IC and its applications. Power supplies.

5. Digital Electronics and Microprocessor:

10 Marks

Number systems: Binary, decimal, octal, hexadecimal, BCD number systems and their conversions, Binary and hexadecimal addition, subtraction multiplication,1's and 2's complement methods of addition/subtraction. Boolean algebra, minimization of Boolean functions; logic gates; digital IC families (DTL, TTL, ECL, MOS, CMOS). Combinatorial circuits: arithmetic circuits, code converters, multiplexers, decoders, PROMs. Sequential circuits: latches and flip-flops, counters and shift-registers. ADCs, DACs. Semiconductor memories. Microprocessor (8085): architecture, instruction set, programming, memory and I/O interfacing. Study of peripheral chips-8251,8155, 8257,8259.

6. Power Electronics and Drives:

10 Marks

Semiconductor power diodes, transistors, thyristors, triacs and MOSFETs - static characteristics and principles of operation; triggering circuits; phase control rectifiers; bridge converters - fully controlled and half controlled; Choppers and Inverters; concepts of adjustable speed dc and ac

7. Electrical Machines:

Single phase transformer - equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformers - connections, parallel operation; autotransformer, Energy conversion principles, Electro-mechanical energy conversion; DC machines-types, windings, generator characteristics, armature reaction and commutation, starting and speed control of motors; three phase induction motors- principles, types, performance characteristics, starting and speed control; single phase induction motors; synchronous machines - performance, regulation and parallel operation of generators, motor starting, characteristics and applications; servo and stepper motors. Braking of DC and AC motors

8. Power Systems:

25 Marks

Basic power generation concepts; transmission line models and performance; cable performance, insulation; corona and radio interference; distribution systems; power factor correction; economic operation; symmetrical components; principles of over-current, differential and distance protection; Generator, feeder, transformer and bus-bar protection, Lightning protection; solid state relays and circuit breakers; Sub-Station Practices, Load frequency control, Tariffs, Earthing. Utilisation of Electrical energy: Illumination, electrical heating and welding, electroplating.