

#### GOVERNMENT OF JAMMU AND KASHMIR, SERVICES SELECTION BOARD, Zum Zum Hotel, Rambagh, Srinagar

(www.jkssb.nic.in) NOTICE

It is notified for the information of the candidates who have applied for the posts of:

Item	Advt No.	Deptt.	Post	Cadre
321	06 of 2013	Technical Education Deptt.	Drawing Instructor	Div. Kmr
361	06 of 2013	Technical Education Deptt.	Drawing Instructor	Div Jmu

-that the Board is going to conduct the Objective Type Written Test for the aforementioned in near future. The Syllabus for these posts is appended to this notice at Annexure "A".

Sd/-(S.A Raina), KAS, Secretary, J&K Services Selection Board, Srinagar.

Dated: 04-06-2016

No. SSB//Sel/Secy/2016/18563-71

Copy for information to the:-

1. Principal Secretary to Hon'ble Chief Minister J&K.

- 2. Principal Secretary to the Hon'ble Governor, J & K State.
- 3. Director Information, J&K Government Srinagar with the request to publish the above notification in at least three leading local newspaper of Jammu/Srinagar on three consecutive dates
- 4. Director, Radio Kashmir, Kashmir. He is requested to kindly broadcast the above said notification appropriately.
- 5. Director, Doordarshan Kashmir. He is requested to kindly telecast the above said notification appropriately.
- 6. Sr. Law Officer, J&K S.S.B., Srinagar/ Jammu
- 7. Administrative Officer, Service Selection Board, Jammu/Srinagar.
- 8. Private Secretary to Ld. Chairperson for information of Ld. Chairperson .
- 9. Incharge Website, SSB. He shall upload the notice on the official website

## Annexure "A"

# Syllabus – Written test (Objective Type) for the posts of Drawing Instructor

M.M: 150 Time: 2:30 hrs

A) 30 Marks

Semiconductors, Diode and its application as rectifiers, various types of diodes, Operation of PNP and NPN transistors.

Digital logic gates, Number System,

Basics of measurement, Voltage, current and resistance measurement, Cathode ray oscilloscope-Its construction and block diagram.

Amplitude, frequency and phase modulation.

Introduction to Printed circuit boards

Thyristors and its applications.

Principle of operation and applications of various types of transducers.

B)

### 1. Engineering Drawing.

15 Marks

- 1. Drawing office practice, Lines and Lettering.
- 2. Dimensioning.
- 3. Simple Geometrical Constructions used in Engineering Practice.
- 4. Scale
- 5. Principles of projection.
- 6. Sectional views.
- 7. Isometric views
- 8. Development of surfaces.
- 9. Screw threads and Threaded fasteners.
- 10. Keys and cotters.
- 11. Rivets and Riveted joints.
- 12. Couplings
- 13. Symbols and conventions.
- 14. AUTO CAD

### 2. General Workshop Practice

15 Marks

- 1. Carpentry Shop: Types of wood, functions and use of commonly used hand tools, care, maintenance of tools and safety measures to be observed. Wooden Joints, their relative advantages and uses.
- 2. Fitting Shop: Introduction to fitting shop tools, common materials used in fitting shop, Identification of materials.
- 3. Welding Shop: Introduction to welding and its Importance in engineering practice; Types of welding; common materials that can be welded, Introduction to welding equipment, Electric arc welding, Gas welding, Spot/Seam welding, TIG and MIG welding
- 4. Electric Shop-1: Common electrical materials, electrical safety measures, common electrical appliances.
- 5. Smithy shop: Demonstration and detailed explanation of tools and equipments used. Forging operation in smithy shop. Safety measures to be observed in the smithy shop.

6. Sheet metal shop-1: Introduction to sheet metal shop, use of hand tools and accessories.

C)

Force system, Moment of force, centre of gravity, simple machines, torsion in shafts/ bars, Moment of inertia, Concept of pure/simple bending, bending moment and shear force.

10 Marks

Septic tank, drains and severs, Bathroom and WC, Road geometrics, Sewerage system, chain surveying, timber and wood based products, stone masonry, doors and windows, stair cases

10 Marks

Properties of concrete, transportation of concrete, Analysis of rates, Cross drainage works, Bonds, foundations, flooring, Simple circular curves.

10 Marks

D) 30 Marks

information technology, its concept and scope.

Generation of computer, block diagram of computer, input/output devices.

Introduction to operating system such as MS DOS, windows.

Basics of networking- LAN, MAN, WAN and topologies.

MS-office (MS-word, excel and PowerPoint).

Internet and its applications.

E) 30 Marks

- Basic Electrical Quantities.
   Basic concept of charge, current, voltage, resistance, power, energy and their units Conversion of units of work, power and energy from one form to another
- 2. Ohm's law, resistances in series and parallel. Kirchhoff's laws and their applications in solving electrical network problems. Basic idea about primary and secondary cells
- 3. Introduction to electromagnetism, Magnetic field around a straight current carrying conductor and a solenoid and methods to find its direction, force between two parallel current carrying conductors. Concept of hyteresis, loop and hysteresis loss
- 4. Faraday's Laws of electromagnetic induction. Lenz's law. Fleming's Right and Left Hand Rule
- 5. Difference between a.c and d.c. Concept of alternating current and voltage, equation of instantaneous values, average value, r.m.s value, form factor. Power factor and its practical significance. Advantages of 3 phase over single phase system.
- 6. Basic concept of --- conductors and insulators
- 7. Various Electrical Symbols used in Domestic and Industrial Installation and Power System as per BIS.
- 8. Study of electrical safety measures as mentioned in the Electricity Rules and shock treatment including first aid. Tools, accessories and instruments required for installation, maintenance and repair work Of Electrical equipment. Different types of wire Joints. Types of Domestic Wiring.
- 9. Elementary concept of an electrical machine. Comparison of generator and motor. Types of DC machines. Starter-Need and Purpose. Basic Principle and EMF equation of Transformer. Transformer accessories. Types and uses of Single phase induction Motors. Types of Electrical measuring Instruments and their applications.

- 10. Main resources of energy, conventional and non-conventional. Substation Components. Power Tariff----Types
- 11. Definition: Luminous flux, solid angle, luminous intensity, illumination, luminous efficiency, depreciation factor, coefficient of utilization, space to height ratio, reflection factor, glare, shadow, lux.

Laws of illumination.

Sd/-(S.A Raina), KAS, Secretary, J&K Services Selection Board, Srinagar.