EAST CENTRAL RAILWAY

Office of the
General Manager(P)
Hajipur

L.N.- ECR/HRD/Mech/Supervisors Training Centrel/SPJ
Divisional Railway Manager (P)
E.C. Railway, DNR, MGS, DHN, SEE & SPJ.

Date.16.05.2016

Sub :- Filling up of posts in instructors in Supervisors Training Centre, Samastipur.
Ref :- 1. Principal/ Supervisors's Training Centre, SPJ L.N/Note No.-M/STC/ Establishment /Staff dt. 02.11.2015 & 21.03.2016
2. This office letter of even number dt. 24.02.2016

On the subject matter, option for filling up the vacant post at Supervisors Training Centre, Samastipur had been called vide Ref-1 with the stipulation mentioned in the letter.

It has been observed that except clerical category, sufficient members of optees for the post of Instructor has not been received by this office so far.

Taking into account of Principal/STC/SPJ's views and with the consultation of the competent Authority, now it has been decided that Application is being invited from the SSE(C&W) for Sr. Instructor & SSE(C&W)/Diesel/ Workshop for Sr. Lecturer of East Central Railway to fill up the following ex-cadre posts in Supervisor Training Centre, Samastipur on tenure basis :-

S.N.	Category	Grade	No. Of Posts	Essential Conditions/Eligiblity Criteria
1	**Sr. Instructor (C&W)**	9300-34800 + 4600(GP)	3	Minimum 3 years
2	**Sr. Lecturer**	9300-34800 + 4600(GP)	2	Minimum 3 years

Educational Qualification for instructor :-

(i) Essential – Diploma in Mechanical/Electrical Engg.
(ii) Preferential- Degree in Mechanical/Electrical Engg.
(iii) Essential Experience- Minimum 3 years experience as supervisor in Railways.

Desirable :-

A. He should have good command in reading, writing and speaking Hindi and English language.
B. He should have working knowledge of Computer.

Other Service condition for instructor only :-

(i) Instructors who have already repatriated from other training school may apply again only after a reasonable gap of at least three year. (RBE No.-10/2010)

(contd.------)

(ii) Willing applicants should be of upto 52 years of age & below as on date of notification. (Auth Rly. Bd's L.No:E(MPP)96/1/31 dated-15.10.96)

(iii) Tenure- Maximum tenure for the post will be 08 (05+03) years and the minimum tenure should 03 years. The above directives are applicable to both the gazette and non-gazetted Principal Instructors. (RBE No-127/2001)

(iv) Candidates will have to undergo the preliminary screening/class room test and the candidates who found suitable will be called for the written test. Those who qualify in the written test will be called for viva-voce test only based on the records of service and ACR's/APAR's. (RBE No-154/2005)

(v) Selected candidates will be eligible for training allowance @ 15% (RBE No-21/2003)

Candidates should submit their application in the proforma enclosed through proper channel i.e. DRM(P) addressed to General Manager (P)/ECR/Hajipur. The last date of submission of application is 16.06.2016 in their respective Divisional level. The application should reach GM(P)/ECR/HJP office on 23.06.2016 in a bunch through special messenger. The application received after due date will not be entertained. The application should be forwarded to this office duly verified the service particulars of the applicants by the section in- charge and countersigned by the controlling officers.

Remember that the above posts are ex-cadre posts and are completely temporary and time period and the lien and seniority of the candidates during the period of ex-cadre will be maintained in their parent cadre. Please take this notification among the candidates through wide publication.

Syllabus & Proforma for Application for the above said post is hereby attached as annexure.

D.A- As above

(Alok Srivastava)
APO/M&E
For General Manager(P)

Copy to :- 1. CME/ECR/HJP.
2. Principal/Supervisor's Training Centre, Samastipur.
3. CWM (CRW)/HRT.
4. CWM/WS/SPJ.
5. APO/MPP/ECR/HJP (for uploading on website)

For General Manager(P)

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Proposed syllabus for Sr. Instructor (C&W) ~~workshop~~

SYLLABUS FOR INSTRUCTOR C&W

1. Coaching stock (BG&MG)

a. Different type of coaching stock and design features
b. Prescribed life of different types of coaching stock
c. P.O.H. and maintenance schedules.
d. Rejectable defects and repair procedures.
e. Codes of PCVs and OCVs.
f. High speed coaches essential parameters.
g. Comfort features, Riding Index, affect of riding index. Passenger amenities for different classes of coaches.
h. Mid on generation/End of generation and himself generating types of passenger coaches.
i. Coach in effective figures, targets allotted by Rly. Board.
j. Use of oxychloride floodring composition in passenger coach floor, method of laying and maintenance.
k. Effect of corrosion on coaches. Procedures adopted the prevent corrosion.
l. Different type of bogies used on coaches, their design features.
m. Wheels, its constructional features, type profile, defects of wheels and axles, consideration of wheel, diameters while changing wheel sets of a coach.
n. Coach failures.
o. LHB coaches, maintenance requirement of LHB coaches. Functioning of controlled discharge toilets and brake system of LHB coaches.
p. Modifications done on the coaches, crashworthiness modifications.

2. **Wagon Stock (BG & MG)**

a. Different types of wagons and their design features, IRS, BOXT, BOXN, CRT and development of highspeed freight stock.
b. Prescribed life of wagon.
c. POH and maintenance schedules.
d. Rejectable defects and repair procedures.
e. Different codes of freight stock and departmental stock
f. Wagon in affective percentage figures, targets, laid by Rly. Board.
g. Natural control TXR working at different wagon depots on the Railway, time allowed for hilling, chargeable, rejectable defects and penalty.
h. Different types of bogies used on goods stock. Their design, speeds permissible.
i. Wheels.
j. ROH of the wagons, periodicity of ROH, maintenance in ROH

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3 a Alteration and modification: list of alterations and modifications.

b Antipilferage devices adopted on coaches and wagon fittings to check theft of fittings. List of fittings on which APD is to be done.

4. Vacuum brake construction details and functioning. Different types of vacuum cylinders, release valves, their overhauling and periodicity, rubber fittings, method of testing of AVD of passenger and goods trains, balance vacuum test.

Passenger alarm system, Inspection of Passenger alarm system, overhauling and maintenance of the components.

Slack adjuster description and maintenance, its utility in brake gear adjustment.

D.A. valves, their construction, function and maintenance schedules, empty load box, description and maintenance.

5. **Air Brakes:-** Description, advantage and maintenance, schedule, trouble shooting. Functions of Distributor valves, component of brake rigging, mechanical advantage and its affect on braking distance. Bogie mounted brake system. Continuity tests, requirement and procedure of conducting continuity test.

6. (a). Lubrication of bearing on plane bearing stock. Its principles and application for plane bearing stock, preparation of roll packing, proper method of re-packing and oiling and their periodicity. Hot and warm boxes their attention prevention and reporting.
(b). Roller bearing, different types of roller bearing used on rolling stocks. Their construction details maintenance schedule, inspection of roller bearing and their failure.

7. Yardstick for BG and MG, carriage and wagon maintenance staff.

8. Standard layout and facilities required C&W depots.

9. **Suspensions:-** Different type of suspensions , their importance in giving better comfort to passengers and safety riding index sock absorbers description functions , method of testing , their used on Railway coaches.

10. **Draw and buffing gear** different type of screw coupling and couplers, enhanced couplers, centre buffer coupler, modifications, problems and remedial majors.

11. **ODC:-** Over dimensional consigmental , maximum moving dimensions , classification of ODC, precaution taken for each class of ODC procedure of reporting of an over dimensional consignment for obtaining permission for its movement.

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13. **Budget:-** Control different demands, preparation of budget

15. **Stores and material management :-**

(a) Proper storing of oils, paints, rubber fitting, non pherous store, bearings etc.
(b) Inventory control
(c) Impressed store and monthly review.
(d) Procedure for checking records of consumable stores, tools and plants by officers, inspectors and depot in charge etc.

14. **General and subsidiary rules: -**

System of the train operation, signals etc.

15. **Duties of C&W supervisors:-**

(a) Duties of C&W supervisors on site of accident.

(b) Collecting correct measurements of rolling stock, track signal in order to find correct reasons of the accidents.

(c) Classification of accident

(d) Reporting of accidents

(e) Restoration of through traffic, ART, speedy derailment / disposal of effecting rolling stock.

(II) Train partings, cases and measures adopted for prevention.

(III) Coach failures, causes, measures to be adopted for prevention, discomfort caused travelers.

16. **Establishment:-**

(a) Hours of employment regulation act.
(b) Workmen's compensation act
(c) Payment and Wages act.
(d) DAR procedures
(e) Leave, pass and pension rules etc

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Proposed syllabus for Sr. Lecturer

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SYLLABUS

SYLLABUS FOR THE POST OF LECTURER IN STC/GKP

1. Mathematics- Mensuration, Theory of Indices & Legarithms, Surds, Rations & Proportions. Equations (Simultaneous & Quadratic), Progressions & Binomial Theorem, Statisctics, Trigenometrical Ratics & Ratios of Compound angles, Sum & Producer formula, Properties of triangle, Height & Distances, Functions & Limits, Differential co-efficient, Application of differentiation, Integration, Application of Integration.

2. Physics- Measuring Instruments, Thermomemtry, Expansion of solids, Gasses & Liquids. Heat transfer, Relection through a plane surface, Reflection at a sperical surface, Refraction through plane media, Refraction through speerical surface, Optical Instruments, Sounds.

3. Heat Power Engineering- Properties of gasses, Thermodynamic process of perfect gas, Steam, Air Cycles, I.C. Engines and systems, Testing of I.C.engines, Compressors.

4. Chemistry- Matter & Change of state, Laboratory Process, Atomic Theory, Atomic weight Melecular weight & Equivalent weight, Symbol & Chemical Equations, Acids bases & salts, Metals & Non-metals.

5. Industrial Chemistry- Timber, Rubber, Water, Paints, Plastics, Lubricants, Fules, Manufacturing process of metals.

6. Electrical Engineering- Current & Ohm's Law, Simple DC circuits, Net work analysis, Magnetism & Electre- magnetism, Electomagnetic Inductions, D.C.Generator, D.C.Moter, Batteries, Fundamentals of A.C. Single phase A.C.circuit, Three phase A.C.circuit, Transformer.

7. Hydraulics- Introduction & basic concepts, Fluid pressure, Hydrostatics, Buoyancy & Floatanon, Hydro Kinematics, Bemailis Theorem, Flow through orific & Mouth piece, Impact of jets, Water wheels, Impulse tubrine, Reaction turbines, Performance of turbines, Centrifugal pumps, Reciprocating pumps, Perfomance of pumps, Pumping devices.

8. Applied Mechanics- Scalars & Victors, Composition & Resolution of Forces, Equilibrium, Parallel forces & Couplies, Plane motion Newton's Laws of motion, Collision of elastic bodies, Motion of Connected bodies, Work, Power, Energy, Friction, Motion of rotation, Motion along circular path, Simple harmonic motion Simples lifting machine.

9. Engineering Drawing- Drawing Instruments & their uses, Lettering & Printing, Theory of dimensioning, scales, Drawing-Geometrical Constructions, Engineering curves, Principals of projections, ject-ion of points, Lines, Planes & Solids, Section of solids, Inter-section of surfaces, Development of surfaces, Isometric projectio Conversion of isometric views into Orthographic views, Drawing simplication and Conventions, Orthographic view of machine parts

contd. 2

PROFORMA

Photo

Application for selection as instructor for Supervisor Training Centre, SPJ.

Designation and grade for which application is made :-

Designation.....Grade.....Stream.....

1. Name :
2. Father's name :
3. Designation :
4. Grade :
5. Working Place :
6. Date of Birth :
7. Date of Appointment :
8. Date of Appointment on the present regular post :
9. Total service period with break-up of post, GP & Place :
10. Educational Qualification :

    (i) Essential –
    (ii) Preferential-
    (iii) Essential Experience-

11. DAR/SPE/Vig./RPUP Clearance :

Signature of the applicant

Date:
Place:

Signature of the Officer in-charge
(full name & seal of the official)

Verified and certified as correct. The applicant fulfill the eligibility criteria.

Controlling Officer

Personnel branch officer