

South Eastern Railway

Office of the  
Sr. Divl. Personnel Officer,  
Chakradharpur.

No: SER/P-CKP/Con/210/JE/IAQ/Elect(Genl)/08/2024

Date: 03.02.2025

To,  
The DEE(G)/CKP(I-C),  
S.E.Railway,

**Sub:** Publication of **Final Answer Key** in connection with written examination for promotion to the post **JE** in Pay Band **Rs. 9300-34800/-** plus Grade Pay **Rs.4200/-** (Level-6 in 7<sup>th</sup> CPC) against **25% IAQ** of **Electrical General Department/ CKP Division** held on **10.01.2025 (Friday)** from **11:00 Hrs**

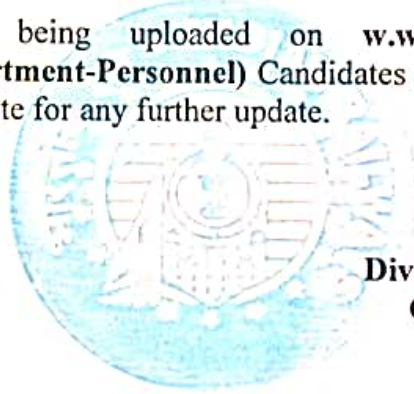
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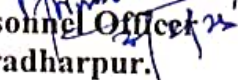
The written examination for promotion to the post **JE** in Pay Band **Rs. 9300-34800/-** plus Grade Pay **Rs.4200/-** (Level-6 in 7<sup>th</sup> CPC) against **25% IAQ** of **Electrical General Department/ CKP Division** held on **10.01.2025 (Friday)** from **11:00 Hrs**.

In this regard, **few** questions were challenged by the candidates. After re-examining/scrutinizing the answer Key by question setter, few changes have been made to the answer key.

NOTE: This is also being uploaded on [www.ser.indianrailways.gov.in](http://www.ser.indianrailways.gov.in). **(Chakradharpur Division, Department-Personnel)** Candidates may be informed accordingly. Candidates have to check the website for any further update.

Encl: Final Answer Key.



  
Divl. Personnel Officer  
Chakradharpur.



Electric Loco Shed  
TATANAGAR

31/12/24



दक्षिण पूर्व रेलवे  
South Eastern Railway



ISO 9001:2015 & 14001:2015  
Certified Shed

कार्यालय / Office of the  
वरिष्ठ मंडल विद्युत इंजी (टी.आर.एस.) / टाटानगर  
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No. RS/TATA/JE/IAQ/Elect(Genl)Ans.Key/Spl./2025  
To  
Sr.DPO/CKP  
S.E.Railway

Date 01.01.2025

Ref: SER/P-CKP/Con/210/JE/IAQ/Elect(Genl)/07/2024 dated- 30.01.2025

In the question paper for the exam conducted on 10.01.2025, Q.No 37,75,89,98 was missed out due to typographical error and Q.No.39 all option are errors due to typographical error right answer is 30000 KVA or 30 MVA, Appropriate decision may be taken in this regard. The answer keys are furnished below.

Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q. No.	Answer
1	A	23	B	45	A	67	A	89	B
2	B	24	A	46	B	68	D	90	D
3	B	25	C	47	A	69	B	91	C
4	D	26	A	48	C	70	D	92	A
5	A	27	D	49	D	71	B	93	B
6	D	28	A	50	B	72	C	94	A
7	B	29	A	51	B	73	B	95	A
8	A	30	A	52	C	74	D	96	A
9	A	31	B	53	A	75	C	97	B
10	B	32	C	54	D	76	B	98	B
11	B	33	C	55	C	77	C	99	D
12	A	34	A	56	D	78	B	100	A
13	B	35	C	57	B	79	C	101	A
14	C	36	B	58	B	80	C	102	C
15	B	37	B	59	A	81	C	103	A
16	A	38	A	60	C	82	C	104	A
17	B	39	X	61	A	83	A	105	A
18	D	40	A	62	D	84	C	106	A
19	B	41	B	63	C	85	D	107	C
20	A	42	B	64	A	86	A	108	A
21	B	43	A	65	B	87	C	109	B
22	A	44	A	66	A	88	C	110	A

Note:- Q.No.- 06 Right answer (option- D) updated Rating with supporting document.  
Q.No.- 09 Right answer option-A (As per I.E Rule1956)  
Q.No.- 44 Right answer (option-A) with supporting document.  
Q.No.- 94 Right answer(option-A) is right answer with supporting document.  
Q.No.- 105 (option A & D)

This is for your information and necessary action.

31-1-25

Sr.DEE/TRS/TATA  
वरिष्ठ मंडल विद्युत इंजिनियर (टी.आर.एस.)  
Sr. Divl. Electrical Engineer (TRS)  
दक्षिण पूर्व रेलवे, टाटानगर  
S. E. Railway / TATANAGAR



## Q No 6 Write Answer

electric kettles operate at 1200 watts to 1500 watts. The specific wattage depends on the brand and the model of the kettle. Different kettle models have different efficiency. The higher the wattage of a kettle, the higher the energy consumption and the higher the boiling efficiency and speed. To decide the kettle's wattage, use patterns, and efficiency influence the overall energy consumption of an electric kettle. Understanding the wattage helps in making a decision when it comes to purchasing the right kettle depending on your needs.

### Energy Consumption of a Kettle?

Above, there are several factors that influence the energy consumption of a kettle. Some of these factors include the usage frequency, the efficiency, and the wattage. An average kettle wattage ranges from 1,200 to 1,500 watts. Some kettles have a wattage of up to 2000W.

Formula for calculating the total energy consumption by your kettle when boiling water.

**Assumption** = Power in Kilowatts x time(hours)

If a kettle has a power rating of 1200 W, it will take approximately 125 seconds to boil water. Therefore, the average energy consumption is 0.04 kWh. This wattage allows you to make informed choices when buying the right kettle for your home.

### Average Costs of Using an Electric Kettle?



11th Railway Question Bank by G.D. Pandey  
(Bank & Answer Electrical Engineer- ALTERNATOR AND RRV)

97. The AC winding/ Main winding of TL/AC coach alternator has \_\_\_\_\_ phase winding

- a) Single
- b) Double
- c) Three
- d) None

Answer - a) Single

Q.No. 44

98. The safety items of TL/AC alternator are [ a ]

- a) Suspension hanger pin with bushes and Cottar Pin
- b) Alternator Suspension arrangement
- c) Alt pully & nut
- d) All the above

Answer - a) Suspension hanger pin with bushes and Cottar Pin

99. NU 311 bearing is [ a ]

- a) Roller bearing
- b) Ball bearing
- c) Both a and b
- d) None

Answer - a) Roller bearing



ANNEXURE '7'

Para 3.17)

**HOURS OF EMPLOYMENT REGULATIONS**

1. Application- Hours of Employment Regulations will apply to all (non-gazetted) railway servants including casual labour and substitutes except those governed by Factories Act, the Mines Act, Minimum wages Act and the merchant shipping act.

2. Classification-Railway servants governed under Hours of employment Regulations are classified as under-

- (i) Intensive;
- (ii) Essentially Intermittent;
- (iii) Excluded ;and
- (iv) Continuous.

2.1 Intensive- The employment of a railway servant is said to be intensive when it has been declared to be so by the prescribed authority on the ground that it is of a strenuous nature involving continued concentration or hard manual labour with little or no period of relaxation.

The work of a railway servant shall be held to be intensive if it is so declared by the Head of the Railway on the ground that it involves sustained and strenuous attention physical exertion--

such that period of rest, inaction or relaxation do not aggregate to 6 hour or more in a cycle of 24 hours, and

Such that, in any shift of 8 hours he does not get periods of inaction, rest or relaxation of at least 1 hour in aggregate.

2.2 Essentially Intermittent-The employment of a railway servant is said to be Essentially Intermittent when it is declared so by the prescribed authority on the ground that the daily hours of duty of the railway servant normally include periods of inaction aggregating 6 hours or more (including at least 1 such period of not less than 1 hour or two such period periods of not less than half an hour each) during which the railway servant may be on duty but is not called upon to display either physical activity or sustained attention.

2.3 Excluded- The employment of a railway servant is said to be Excluded if he belongs to one of the following categories-

- (i) Staff employed in a confidential capacity;
- (ii) Armed guards or other personnel subject to discipline similar to that of the armed police forces;
- (iii) Staff of railway schools imparting technical training or academic education ;
- (iv) Staff classified as supervisory; and
- (v) Such categories of staff of Health and Medical Department as may be specified by the prescribed authority.

3. Main provisions as regards Hours of Employment are as follows:-

The staff governed by Hours of employment Regulations will be employed as per the rostered hours of duty which will in no way exceed the statutory limit of hours of employment . The statutory limit of hours of employment and the rostered hours of duty will be as under:-

**Statutory limit of Hours of employment**

(a) A railway servant whose employment is intensive shall not be employed for more than .... 45 hours a week and he shall be granted each.... week commencing on sunday , a periodical.....

**Rostered hours of duty**

(i) The hours of work shall consist of standard hours of duty as under:-

- (a) 42 hours a week for Intensive
- (b) 48 hours a week for continuous