

INTEGRAL COACH FACTORY

Selection to the post of Assistant Executive Engineer (Gr-B) in Level 8 of VII PC scales (Pre-revised scale of PB -2, Rs 9300-34800 + 4800 GP) through LDCE selection – Engineering Department

PAPER-II

Time: 3hours

Max Marks: 150

Date: 18.05.2017

General Instructions:

1. Answers shall be written in the Answer booklet only
2. Employees name shall not be written anywhere in the answer booklet except in the fly leaf
3. Candidates are allowed to take question booklet with them
4. **Candidates are allowed only calculators.**
5. **Answers to multiple choice questions shall be written in capital letter like A,B,C,D only.**

Section – I

Note: Choose the correct answer for questions from 1 to 10 and state TRUE/FALSE for questions from 11 to 20. Answer all the questions from 1 to 20. Each question carries 1M.

(20x1= 20M)

1. The family of deceased railway employee can retain Railway accommodation after the death of employee for a period of
 - A. 2 months
 - B. 4 months
 - C. 6 months
 - D. None of the above
2. Maternity leave is granted to female employee who is
 - A. Married
 - B. Unmarried
 - C. Both
 - D. None of the above
3. How much %ge of total marks are allotted for testing the professional ability in selections for questions on official language policy and official language rules
 - A. Minimum 10%
 - B. 10%
 - C. Maximum 10%
 - D. None of the above
4. How many years age relaxation is permissible in case of SC & ST
 - A. 3
 - B. 4
 - C. 5
 - D. 6
5. Substitute bungalow peons can be appointed by
 - A. Any JAG officer
 - B. CPO
 - C. DRM
 - D. GM

6. Which among the following statements correctly represents the provision of rule 3 (1) (ii) of the Railway Service (conduct) Rules regarding devotion of duty
- | | |
|---|---|
| A. Every railway servant shall | C. Every railway servant shall not at all times |
| B. Every railway servant shall at all times | D. Every railway servant |
7. Indian railway institute of civil engineering is situated at
- | | |
|-------------|-----------------|
| A. Pune | C. Secunderabad |
| B. Vadodara | D. Nasik |
8. The total casual leave admissible to railway servants who are eligible to avail all public holidays or workshop paid holidays in a calendar year is
- | | |
|------------|------------|
| A. 12 days | C. 8 days |
| B. 15 days | D. 11 days |
9. As per factory act, 'Child' means a person who has not completed the age of
- | | |
|---------------------|----------------------|
| A. 15 th | C. 18 th |
| B. 16 th | D. None of the above |
10. No woman shall be employed in any factory except between the hours of
- | | |
|-----------------------|-----------------------|
| A. 06:00 to 19:00 hrs | C. 10:00 to 18:00 hrs |
| B. 09:00 to 17:00 hrs | D. None of the above |

State True (T) or False (F)

11. Casual labour with temporary status are entitled to get 4 sets of PTO till their absorption.
12. Reduction in pay will affect a railway servant's position in the seniority list
13. No joining time is allowed in case of temporary transfer for a period not exceeding 180 days.
14. Incentive payment shall be given only for higher qualifications acquired after induction into service and not for possession of higher qualification at entry stage.
15. An employee may officiate on adhoc basis for six weeks without passing 'Trade test'.
16. Legally divorced sister is not a 'dependant relative'.
17. Sports quota appointments, if not fulfilled in a year, can be carried forward to next year.
18. If a person is compulsorily retired as a measure of penalty under DAR, he will not be given pension.
19. Inquiry is not required to be held in case of DAR proceedings for SF-11.
20. Supplementary estimate is prepared for any work which ought to have been included in the first instance.

21. Write brief notes on any three of the following **(3x10 = 30M)**
- Methods of recruitment of Group C& D staff in Railways
 - Termination of service on account of inefficiency due to failure to conform to the requisite standard of physical fitness
 - LAP
 - SBF
 - Briefly describe any 5 sub major heads under revenue expenditure
 - PB and LAW
 - Project ID as generated in IRPSM- Mention the significance and meaning of each digit.
 - Define "WORK PLACE" as defined in Railway service (conduct) rules under clause of prohibition of sexual harassment of working women.

Section – II

Note: Choose the correct answer. Each question carries 2 marks. Answer all questions.
(20x2=40M)

- The alignment of new line will be fully staked on ground during
 - Traffic survey
 - Preliminary survey
 - Reconnaissance survey
 - Final location survey
- The minimum radius for vertical curve for Group A route shall be
 - 2000m
 - 3000m
 - 4000m
 - 5000m
- Desirable minimum length of straight line between reverse curves for BG is
 - 0 m
 - 25 m
 - 50 m
 - 100 m
- In a BG route, if the ruling gradient is 1 in 100, maximum gradient permissible in 5⁰ curve is
 - 1 in 80
 - 1 in 100
 - 1 in 125
 - 1 in 150
- Points and crossings are laid with a cant of
 - 1 in 20
 - No cant
 - 1 in 30
 - 1 in 15
- Night foot plate inspection shall be preferably done during
 - 21:00-24:00 hrs
 - 00:00 to 04:00 hrs
 - 04:00-08:00 hrs
 - 18:00 to 06:00 hrs
- Oscillograph run is conducted by attaching the oscillograph car normally with
 - Express train
 - Passenger train
 - Dedicated engine
 - None of the above
- Service life of 90UTS 60kg rail in BG track is
 - 800 GMT
 - 500 GMT
 - 300 GMT
 - None of the above

9. BCM is used for
- | | |
|---------------------------|----------------------------|
| A. Tamping of plain track | C. Deep screening of track |
| B. Laying of track | D. Tamping of Points |
10. 09-3X tamper tamps how many sleeper at a time
- | | |
|------|------|
| A. 1 | C. 3 |
| B. 2 | D. 4 |
11. Performance guarantee will be released after
- | | |
|-------------------------|---|
| A. Awarding of work | C. Completion of the work |
| B. Starting of the work | D. After completion of maintenance period |
12. EMD to be deposited
- | | |
|-------------------------------|------------------------------------|
| A. Along with tender | C. At the time of starting of work |
| B. After awarding of the work | D. Can be deducted from CC bills |
13. Anemometer is used at bridges to find
- | | |
|--------------------------|-----------------------------------|
| A. The velocity of water | C. No of trains passing on bridge |
| B. The wind speed | D. None of the above |
14. Level crossings are opened for inspection of condition of rails, sleepers and fastening
- | | |
|--------------------|-----------------------|
| A. Once in a month | C. Once in a year |
| B. Once in 6 month | D. Never to be opened |
15. How many operations are involved in systematic through packing
- | | |
|------|------|
| A. 5 | C. 7 |
| B. 6 | D. 8 |
16. For a 60kg CMS crossing, how much should be deducted from observed wear to obtain actual wear
- | | |
|--------|----------|
| A. 1mm | C. 2.5mm |
| B. 2mm | D. 3.5mm |
17. In a section having sectional speed of 100kmph, after deep screening, in how many days(min) speed can be relaxed to normal sectional speed with machine packing
- | | |
|------------|------------|
| A. 7 days | C. 14 days |
| B. 10 days | D. 21 days |
18. Rail tensors are used for
- | | |
|-----------------------|-------------------------|
| A. Laying of sleepers | C. Distressing of track |
| B. Laying of rails | D. Cutting of rails |
19. Maximum cant excess is limited to
- | | |
|---------|----------|
| A. 50mm | C. 100mm |
| B. 75mm | D. 165mm |
20. Which of the following works on a passenger running track does not require CRS sanction?
- | | |
|------------------------------|--|
| A. Additions to running line | C. Construction of new ROB |
| B. New temporary station | D. Rail replacement in case of rail breakage |

Section – III

Note: Answer any FOUR questions. Each question carries 15 marks.

1. Write short notes on **(3x5 =15M)**
 - a. Ruling gradient
 - b. Final location survey
 - c. Catch siding
2. List out various operations in sequence of systematic through packing.
3. List out Pre, During and post tamping operations of tamping machines.
4. Briefly describe various provisions of agreement regarding PVC.
5. Briefly describe the points to be seen during inspection of manned Engineering level crossing gate.
6. Briefly describe various operations involved in CTR work through PQRS.
7. Briefly describe the conditions provided in the agreement to deal with variation in quantities with SOP powers of ICF for **(3x5 = 15M)**
 - a. variation in quantities for USSOR items
 - b. variation in quantities for NS items
 - c. Introduction of additional NS item
8. What are the different types of estimates? Briefly explain them.
9. Write short notes on **(3x5 = 15M)**
 - a. Zonal contracts
 - b. Execution of a work through quotation
 - c. SMB

*****END*****