Question Bank of S & T Departmental Exam

CENTRAL RAILWAY **PUNE DIVISION**

देवेन्द्र कुमार शर्मा
महाप्रबंधक
Devendra Kumar Sharma
General Manager

मध्य रेल, छत्रपति शिवाजी महाराज टर्मिनस,
मुंबई - 400 001
CENTRAL RAILWAY
CHHATRAPATI SHIVAJI MAHARAJ TERMINUS
MUMBAI - 400 001

दिनांक : 31.12.2018

संदेश

मुझे यह जानकार अत्यंत प्रसन्नता हो रही है कि मध्य रेल के पुणे मंडल द्वारा कर्मचारियों की जानकारी एवं लाभ हेतु विभिन्न पुस्तिकाएं जैसे- **'स्थापना प्रश्न-मंच'** (Establishment Question Bank), नवनियुक्त कर्मचारियों को रेल संबंधी प्राथमिक नियमों की जानकारी हेतु **'स्वागत पुस्तिका'**, सेवानिवृत्त कर्मचारियों के लिए **'निपटारा पुस्तिका'** एवं **'वरीयता सूची'** को प्रकाशित किया जा रहा है। साथ ही, यह पुस्तिकाएँ एवं अन्य सुविधाएं 'railkarmikseva' App एवं 'www.railkmarmikseva.in' पोर्टल पर उपलब्ध कराना पुणे मंडल का Digital India की ओर एक सराहनीय कदम है।

रेल प्रशासन अपने कर्मचारियों के हितों को लेकर सदैव तत्पर रहा है। इन पुस्तिकाओं के माध्यम से नव-नियुक्त कर्मचारी, कार्यरत कर्मचारी एवं सेवानिवृत्त कर्मचारी भी लाभान्वित होंगे। मुझे आशा है कि कर्मचारियों के हित में किए जा रहे इन कार्यों का सभी क्षेत्रों में लाभ मिलेगा।

उक्त पुस्तिकाओं के सफल प्रकाशन के लिए मैं पुणे मंडल का हार्दिक अभिनंदन करता हूं।

31.12.2018

(देवेन्द्र कुमार शर्मा)
महाप्रबंधक

☎ (O) 54000 ☎ +91-22-2262 1230, Fax (O) +91-22-2262-4555 email : gm@cr.railnet.gov.in

सत्यमेव जयते

भारत सरकार / Government of India
रेल मंत्रालय / Ministry of Railways
मध्य रेल / Central Railway

एन. स्वामिनाथन आय. आर. पी. एस.
प्रधान मुख्य कार्मिक अधिकारी
N. Swaminathan I.R.P.S.
Principal Chief Personnel Officer

प्रधान कार्यालय / Headquarters' Office,
कार्मिक विभाग / Personnel Department
मुंबई छ.शि.ट / Mumbai CST 400 001

संदेश

कार्मिक विभाग, पुणे मंडल निरंतर कर्मचारियों के हित में विभिन्न योजनाओं के माध्यम से प्रयासरत रहा है। इसी कड़ी में 'स्थापना प्रश्न-संच' का प्रकाशन पुणे मंडल द्वारा किया जा रहा है। यह प्रश्न संच कर्मचारियों को विभागीय परीक्षा के अध्ययन के लिये काफी सहायक होगा।

किसी भी संगठन में पदार्पण करने के पश्चात प्रत्येक कर्मचारी को उस संगठन द्वारा दी जाने वाली सुविधा एवं संगठन के नियमों की संपूर्ण जानकारी होना अत्यंत आवश्यक है। कर्मचारियों की इस आवश्यकता को देखते हुए पुणे मंडल द्वारा नव-नियुक्त कर्मचारियों के लिए 'स्वागत पुस्तिका' का प्रकाशन किया जा रहा है उसी तरह कार्यरत कर्मचारियों की 'वरीयता सूची' एवं सेवानिवृत्त कर्मचारियों की जानकारी एवं उपयोग हेतु 'निपटारा पुस्तिका' का प्रकाशन भी किया जा रहा है।

'स्वागत पुस्तिका'एवं 'निपटारा पुस्तिका' के माध्यम से नव-नियुक्त कर्मचारी एवं सेवानिवृत्त कर्मचारियों को रेल सेवा के नियमों तथा कर्मचारियों को सेवानिवृत्ति के पश्चात प्रदान की जाने वाली सुविधाओं की जानकारी मिल सकेगी जिसका वे भविष्य में लाभ उठा सकेंगे।

पुस्तिकाओं में शामिल जानकारी रेलवे बोर्ड/मध्य रेल मुख्यालय द्वारा समय-समय पर जारी की गई अधिसूचनाओं, परिपत्रों और नियमों पर आधारित हैं।

पुस्तिका प्रकाशन के लिए मैं मंडल रेल प्रबंधक तथा कार्मिक विभाग, पुणे को हार्दिक शुभकामनाएं देता हूं।

(एन. स्वामिनाथन)
प्रधान मुख्य कार्मिक अधिकारी
मध्य रेल, मुंबई छशिमट

मिलिंद देऊस्कर (आईआरएसएस)
मंडल रेल प्रबंधक

MILIND DEOUSKAR (IRSS)
Divisional Railway Manager

सत्यमेव जयते

मंडल रेल प्रबंधक कार्यालय
पुणे मंडल, मध्य रेलवे, पुणे 411 001.
Office of the Divisional Railway Manager
Pune Division, Central Railway, Pune - 411 001.
Tel (BSNL) : 020 - 26137400 || Rly : 55000

संदेश

पुणे मंडल का कार्मिक विभाग सदैव ही अपनी विविधतापूर्ण कार्य - शैली से हर क्षेत्र में अग्रणी रहा है। पुणे मंडल में नव-नियुक्त कर्मचारी, कार्यरत एवं सेवानिवृत्त कर्मचारियों के हितों को ध्यान में रख कर बनाई गई 'स्वागत पुस्तिका' 'सेटलमेंट पुस्तिका', 'वरीयता सूची' एवं 'अस्थापना प्रश्न-संच'का प्रकाशन कार्मिक शाखा की एक और उपलब्धि है।

इन पुस्तिकाओं को 'railkarmikseva' App एवं 'www.railkarmikseva.in' पोर्टल पर भी उपलब्ध कराया गया है।

मेरा मानना है कि रेल प्रशासन में रेलों के सुरक्षित संचालन का जितना महत्व है उतना ही महत्व इस संचालन के लिए प्रत्यक्ष एवं अप्रत्यक्ष रूप से कर्मचारियों के हितों के संबंध में आवश्यक और उपयोगी जानकारी को सहजता से उपलब्ध कराना भी है ।

इस कार्य को पूर्ण करके महाप्रबंधक महोदय के कर-कमलों से इस पुस्तिका का विमोचन करने के लिए कार्मिक विभाग के सभी अधिकारी एवं कर्मचारियों को मैं हार्दिक बधाई देता हूं।

हार्दिक शुभकामनाओं सहित ।

(मिलिन्द देऊस्कर)

प्रफुल्ल चन्द्रा (भा.रे.वि.इं.से.)
अपर मंडल रेल प्रबंधक

PRAFULLA CHANDRA (IRSEE)
Additional Divisional Railway Manager

सत्यमेव जयते

मंडल रेल प्रबंधक कार्यालय
पुणे मंडल, मध्य रेलवे, पुणे 411 001.
Office of the Divisional Railway Manager
Pune Division, Central Railway, Pune - 411 001.
Tel (BSNL) : 020 - 26141100 | Rly : 55002

संदेश

किसी भी संगठन के लिए उसका मानव संसाधन ही उसकी सबसे बडी संपत्ति होती है। मुझे प्रसन्नता है कि पुणे मंडल की कार्मिक शाखा द्वारा एक नई पहल करते हुए सेवारत एवं सेवानिवृत्त कर्मचारियों के हित में 'अस्थापना प्रश्न संच', 'स्वागत पुस्तिका' 'सेटलमेंट पुस्तिका' एवं 'वरीयता सूची' का प्रकाशन किया जा रहा है।

डिजिटल इंडिया अभियान तथा कागज रहित कार्यालय की संकल्पना को लागू करने के लिए सभी पुस्तिकाएँ कार्मिक विभाग द्वारा विकसित किए गए 'railkarmikseva' App एवं 'www.railkmarmikseva.in' पोर्टल पर उपलब्ध कराने के यशस्वी कार्य के लिए मैं कार्मिक विभाग के सभी अधिकारी एवं कर्मचारियों की सराहना करता हूं एवं हार्दिक शुभकामनाएँ देता हूं।

31/12/18
(प्रफुल्ल चंद्रा)
अपर मंडल रेल प्रबंधक, पुणे

भारत सरकार/Government of India
रेल मंत्रालय/Ministry of Railways

डॉ. शिंदे तुशाबा, आय.आर.पी.एस.
वरिष्ठ मंडल कार्मिक अधिकारी

Dr. Shinde Tushaba, I.R.P.S
Sr. Divisional Personnel Officer

मध्य रेल कार्यालय
पुणे मंडल

Central Railway Office
Pune Division

मनोगत

श्री देवेंद्र कुमार शर्मा जी, महाप्रबंधक महोदय द्वारा वार्षिक निरीक्षण के दौरान नव-नियुक्त कर्मचारियों के लिये 'स्वागत पुस्तिका', 'स्थापना प्रश्न-संच', 'सेटलमेंट पुस्तिका' एवं 'वरीयता सूची' का विमोचन करने के लिए आपको सौंपने का हमें सौभाग्य मिला है इसलिए हम महाप्रबंधक महोदय के अत्यंत आभारी है॥

हमारे प्रधान मुख्य कार्मिक अधिकारी श्री एन. स्वामिनाथन सर हर समय हमें मार्ग दर्शन करते हैं। इस कार्य के लिए भी उन्होंने हमें मार्गदर्शन एवं प्रेरणा दी है। इसलिये कार्मिक विभाग की तरफ से सर का हम आभार व्यक्त करते हैं।

साथ में श्री मिलिन्द देऊस्कर, मंडल रेल प्रबंधक का मार्गदर्शन हमारे लिए सदैव प्रेरणादायी होता है। इन पुस्तिकाओं के प्रकाशन में भी उनका अमुल्य मार्गदर्शन एवं सहयोग मिला है। इसके लिये हम मंडल रेल प्रबंधक के आभारी है।

अपर मंडल रेल प्रबंधक का मार्गदर्शन पुस्तिकाएँ पूर्ण करने में बहुमूल्य रहा। इसके लिये हम अपर मंडल रेल प्रबंधक के भी हम कृतज्ञ है।

'स्थापना प्रश्न-संच' के प्रकाशन में श्री यू. सी. बोडके, मंडल कार्मिक अधिकारी, 'वरीयता सूची' के प्रकाशन में श्री एस. वी. ठाकूर, सहायक कार्मिक अधिकारी, 'स्वागत पुस्तिका' एवं 'सेटलमेंट पुस्तिका' के प्रकाशन में श्री सुनिल ठाकूर एवं श्री रमेश अय्यर, सहायक कार्मिक अधिकारी का विशेष योगदान प्रशंसनीय है।

इन पुस्तिकाओं के प्रकाशन के लिए श्री विश्वामित्र वरिष्ठ राजभाषा अधिकारी का अमूल्य योगदान रहा है जिसके लिए उनके प्रति भी हम आभार व्यक्त करते हैं।

कार्मिक विभाग के सभी कर्मचारियों के प्रत्यक्ष या अप्रत्यक्ष दिये गये योगदान के लिए मैं आभारी हूँ।

यह सभी पुस्तिकाएं **'railkarmikseva'** App एवं **'www.railkmarmikseva.in'** पोर्टल भी उपलब्ध कराई गई है जिससे इन पुस्तिकाओं का उपयोग संपूर्ण रेल के कर्मचारी कर सकते हैं।

धन्यवाद,

डॉ. शिंदे तुशाबा
वरिष्ठ मंडल कार्मिक अधिकारी, पुणे

Signalling

1	□े□ीय रेलवे मा □स□ना□लंग तथा टे□लकॉम □वभाग के □मुख _____ है। ____ is the head of Signal and Telecom department in the Zonal Railway. **PCSTE**
2	एम ए सी एल एस (म□टि आ□पे□ट कलर लाइट □स□नल) □टॉप □स□नल मा □यूनतम □□यता_____ आव□यक है | The maximum visibility required to MACLS (Multi aspect color light signal) stop signal is _____. **200 meter**
3	जब □ेन कॉ□लंग ऑन □स□नल पर पर □र□सव होती है, तो □ेन क□ गा□त _____ होनी चा□हए । When the train is received on Calling On signal, the speed should be _____. **10 KMPH.**
4	टंग और □टॉक रेल के बीच _____ गैप होने पर पॉइंट फे□ल होना चा□हए | Point should fail with a gap of _____ in between tongue and stock rails. **5 mm.**
5	या□त्र □लाक इं□□मट्ट फे□ल होता है तो □ेन □लाक से□शन मा _____क□ सहायता से जा सकती है | If block instrument fails, train can go in block section with the help of _____. **PLCT**
6	□टेशन पर अ□धकतम गा□त 150 Kmph है | यह _____ □टै□डड क□ इंटरलॉ□कंग है | Maximum speed at station is 150 Kmph. The interlocking is of _____ standard. **III(R)**
7	एल ई डी □स□न□स के □लए _____ वो□टेज क□ आव□यकता होती है | The voltage required for LED signals is _____ **110V AC**
8	आई पी एस के □लए उपयोग होने वाल□ वी आर एल ए बैटरा□ज क□ कै□पे□सट□ _____ म□मापी जाती है | The capacity of VRLA batteries used in IPS are measured in _____. **AH**
9	भारत मा पुश बटन टोकन लेस □लॉ□स _____ वक□शॉप मा □नमा□ा □कया जाता है |

	Push button token less blocks are manufactured in India by _____ workshop. **Podanur**
10	पॉइंट मशीन के □लए 230 वो□ट एसी क□ आव□यकता होती है | Voltage required for point machine to operate is 230V AC. **False**
11	या□द आटोमे□टक □स□नल □े□ मा □ाईवर को □स□नल □मलता है तो उसे □कने क□ ज□रत नह□ होती है | If a driver encounters Red signal in automatic signal territory he will not stop the train. **False**
12	पॉइंट मशीन □वारा पॉइंट को लॉक, हो□ड, □डटे□ट व सेट □कया जाता है | Point machine holds, detects, locks and sets the points. **True**
13	पॉइंट के सेट होने पर □लोज □िवच मा 3 एम एम से □यादा गैप नह□ होना चा□हए | In set condition, maximum gap in closed switch should not be more than 3mm. **True**
14	या□द लाइन □िलयर न □लया हो तो एडवांस □टाट□ ऑफ नह□ होगा | If line clear is not taken, then advance starter cannot be taken off. **True**
15	□ेन वाहन क□ उप□ि□थ□त का पता लगाने के □लए □ैक स□क□ट का इ□तेमाल □कया जाता है | Track circuit is used to detect presence of train vehicle over it. **True**
16	□स□नल ब□ब के □लए 12 वो□ट डी सी क□ आव□यकता होती है | Signal bulb requires 12V DC to glow. **False**
17	जब □लाक □टेशन मा □ेन □वेश कर जाये, उसके बाद भी एडवांस □टाट□ पुनः □दया जा सकता है | When the train is entered in block section, the advance starter can be taken off (lowered) again. **False**
18	स□व□ से □न□कासन एक छोट□ शा□ित है | Removal from service is a minor penalty. **False**
19	बैल बीट □मि□संग होना एक सामा□य फे□लयर है, जो क□ केबल के टूटने/डैमेज होने से हो सकता है | Bell beat missing is general failure of Block instrument which may

	occur during cable cut/damage. **True**
20	□स□नल □लक होने पर, उससे जुड़े □स□नल (पीछे वाला) लाल आ□पे□ट अव□था मा आ जाते है । In case of Signal blanking, the associated (following) signal goes back to restrictive (Red) aspect. **True**
21	□ड□टट □स□नल का नामक आ□पे□ट पीला होता है । The normal aspect of distant signal is yellow. **True**
22	आई पी एस मा लगे सज □ोटे□शन □डवाइस आग से बचने का काय करते है । Surge protection devices in IPS are used to protect any damage from Fire. **False**
23	वी आर एल ए बैटर□ज से सामा□यतः ए□सड □यू□स □नकलते है । Acid fumes are generally released from VRLA batteries. **False**
24	□ट□ल □ल□पर□ का इ□तेमाल □क सा□क□ट □े□ मा करंट के ला□केज से बचने के □लए □क्या जाता है । Steel sleepers are used in track circuited area to avoid leakage of currents. **False**
25	कमरे मा धुआँ या आग का पता लगाने के □लए □यूज अलामा □स□टम का उपयोग □क्या जाता है । Fuse alarm system is used to detect any smoke or fire in rooms. **False**
26	आईपीएस का एसएमआर पैनल बैटर□ बक को चाजा करने के □लए लगभग 110 □हो□ट एसी आउटपुट देता है । The SMR panel of IPS gives AC output of approximately 110V to charge the battery bank. **False**
27	एमएसडीएसी □वारा □क सा□क□टंग को पानी यु□त □े□ / मडी (□मी यु□त) □े□□ के □लए इ□तेमाल □क्या जा सकता है । Track circuiting by MSDAC can be used for water logged / muddy areas. **True**
28	□लॉक खंड मा □कसी भी वाहन का पता लगाने के □लए बीपीएसी (□लॉक □ू□हंग ए□सल काउंटर) का उपयोग □क्या जाता है । BPACs (Block proving axle counters) are used to detect any left out vehicle in the block section. **True**

29	केबल □ट □सर (लोकेटर) का उपयोग पांईट फे□लयर के दौरान □टाक तथा टंग रेल क□ बीच क□ दूर□ नापने के □लए □कया जाता है । Cable route tracers (locators) are used to detect the gap between stock and tongue rail during point failures. **False**
30	सामा□य तौर पर, □वचा□लत संक्ेत □ े□ म दो संक्ेत□ के बीच क□ दूर□ लगभग 2 □कलोमीटरहोती है। In general, the distance between two signals in automatic signaling territory is approximately 2 kms. **False**
31	रे□ट□फाइस का उपयोग ____ क□वट□ करने के □लए □कया जाता है (क) डीसी से एसी, (ख) एसी से डीसी, (ग) उ□च वो□टेज से कम वो□टेज, (घ) कम वो□टेज से उ□च वो□टेज । Rectifiers are used to convert: (a) DC to AC, **(b) AC to DC,** (c) High voltage to low voltage, (d) Low voltage to high voltage.
32	धातु □बजल□ के अ□छे कंड□टर ह □य□क (क) उनमे मु□त इले□□ॉन होते ह□। (ख) इनमे परमाणु लाईटल□ पै□ड होते ह□। (ग) उनक□ उ□च □पघलन □बंदु होती है । (घ) उपरो□त सभी । Metals are good conductors of electricity because: **(a) they contain free electrons,** (b) the atoms are lightly packed, (c) they have high melting point (d) All of the above
33	पुणे □डवीजन म कौन से □लॉक इं□□म□ □था□पत नह□ है? (क) □न□स बॉल टोकन (ख) एफ एम डायडो □कार का, (ग) पोदनुर □कार का (घ) एस जी ई □कार का Which of the block instrument is not installed in Pune division? (a)Neale's Ball token, **(b) FM Daido type,** (c) Podanur type, (d) SGE type.
34	इनमे से कौन डीसी □ैक स□कट से संबं□धत नह□ है । (क) कं□यु□नट□ बॉड, (ख) □युट□2 / □युट□2 □रले, (ग) □लुड जॉईट / □लाक जॉईट, (घ) जीएलएसआर कंडेनसर Which is not related to DC track circuit - (a) Continuity bond, (b) QTA2/QT2 relays, (c) Glued joint/block joint, **(d) GLSR condenser**
35	इनमे से कौन आंत□रक □गयर क□ □ेणी के अंतगत आता है (क) कंट□ग ईन □रले (ख) □स□नल लप डी ई एल / (ग) □ैक □रले (घ) आईपीएस का □वतरण पैनल Which comes under category of Indoor gears:

	(a) Cutting in relays (b) Signal lamps/LEDs, (c) Track relays**, (d) Distribution panel of IPS**
36	□न□नलि□खत मा से कौन सा □टेशन पुणे मंडल के अंतगत्र आता है ? (क) लोनावाला, (ख) दाड, (ग) कुर्दुवाडी, (घ) बारामती Which station comes under Pune Division - (a) Lonavala, (b) Daund, (c) Kurduvadi, **(d) Baramati**
37	□ॉड गेज मा िवच के टो (अंगूठे) पर ओप□नंग जब िवच ओपन हो तो □कतना एम एम होना चाह□ए । (क) 260, (ख) 115, (ग) 160, (घ) 220 The opening at the toe of the switch in mm in the case of an open switch in broad gauge is _____ (a) 260, **(b) 115,** (c) 160 (d) 220
38	भारतीय रेलवे □स□वल इंजी□नय□रंग सं□थान (आई.आर.आई.सी.ई.एन.) कहां िथत है ? (क) ना□शक, (ख) मुंबई, (ग) □सकंदराबाद , (घ) पुणे Where is Indian Railway Institute of Civil Engineering (IRICEN) located (a) Nasik, (b) Mumbai, (c) Secunderabad **(d) Pune**
39	पॉईट टे□टंग मे ऑब□□□शन करंट का□ रा□ ------ होती है ? (क) □मल□ ए□पीअर, (ख) माय□ो ए□पीअर (ग) □कलो ए□पीअर, (घ) ए□पीअर The obstruction current in point testing is generally in range of _____ a) mili-amperes b) micro-amperes c) Kilo-amperes **d) Amperes**
40	फोर आसपे□ट □सगनल मे आसपे□टस् को उपर से □नचे के □म मे जमाए । (क) लाल, हरा, पीला, पीला, (ख) हरा, लाल, पीला, पीला (ग) पीला, हरा, पीला, लाल (घ) हरा, पीला, पीला, लाल The display of aspects in a four aspect signal from top to bottom is a) Red, Green, Yellow, Yellow b) Green, Red, Yellow, Yellow **c) Yellow, Green, Yellow, Red** d) Green, Yellow, Yellow, Red
41	आउटपुट □ायर का□ ो□णी के अंतगत्र कौन सा उपकरण आता है? (क) □स□नल □ुप, (ख) □यूज □वफलता अलाम□□स□टम, (ग) पैनल और □क्र है□डल बॉ□स (घ) एलईडी □स□नल Which of the equipment's comes under category of outdoor gears? a) Signal Group b) Fuse failure alarm system c) Panel and crank

	handle box **d) LED Signal.**
42	कौन सा स्टेशन टर्मिनल नहीं है । (क) बारामती, (ख) कोल्हापुर, (ग) सातारा, (घ) फलटण Which one is not the terminal station- a) Baramati b) Kolhapur **c) Satara** d) Phaltan
43	पी.टी.ओ. के 4 सेट निम्नलिखित में से किसे मिलते है? (क) सभी समूह, (ख) समूह "क" और "ख" अधिकारी केवल , (ग) समूह "क", "ख" और "ग" कर्मचारी केवल , (घ) उपरोक्त में से कोई नहीं 4 sets of PTO are admissible to **a) All groups** b) Group "A" & "B' Officers only. c) Group "A" , "B" & "C" only d) None of these
44	सौर मॉड्यूल का उपयोग सूर्य की प्रकाश ऊर्जा (photons) के माध्यम से बिजली उत्पन्न करना है | **सही** Solar modules use light energy (photons) from the sun to generate electricity. (True/False) **Answer - True**
45	मेंटेनेंस फ्री RDSO प्रकार की अर्थिंग हमेशा 1 ओह्म्स के नीचे होना चाहिए | **सही** Maintenance free RDSO type earthing must always be less than 1 ohms. (True/False) **Answer - True**
46	धरती एक आदर्श equipotential सतह की तरह काम करती है, जो की बिजली चमकने (lightening) के दौरान current के प्रवाह को धरती में सम्मिलित कराने में मदद करती है | **सही** Earth act as ideal equipotential surface, therefore used to divert flow of current to earth during lightening. (True/False) **Answer - True**
47	हिंदी में प्राप्त पत्रों का उत्तर हिंदी में देना अनिवार्य है | **सही** The letters issued in Hindi are required to be compulsorily replied in Hindi language. (True/False) **Answer - True**
48	हिंदी भाषा को राजभाषा का दर्जा प्राप्त है | **सही** Hindi language has been given official status of Rajbhasha. (True/False) **Answer - True**
49	मैटरनिटी छुट्टी (Maternity leave) 120 दिनों के लिए ली जा सकती है और इसे मेडिकल सर्टिफिकेट देकर 2 साल तक बढाया जा सकता है |

	गलत Maternity leave can be taken for 120 days and can be extended up to 2 years with medical certificate. (True/False) **Answer - False**
50	पेटरनिटी छुट्टी (Paternity leave) एक बार में 15 दिनों की अवधि के लिए 6 महीने में 2 बार ली जा सकती है | **(गलत)** Paternity leave can be taken in a span of 15 days for 2 times in 6 months duration. (True/False) **Answer - False**
51	LAP के संचय के लिए अधिकतम सीमा .... दिन है| Maximum limit for accumulation of LAP is_____ days. **Answer - 120 days**
52	सेवा से बर्खास्तगी सामान्यतया रेलवे प्रशासन या सरकार के अंतर्गत भविष्य के रोजगार के लिए अयोग्यता के रूप में माना जा सकता है | **गलत** Dismissal from service shall ordinarily be treated as disqualification for future employment under the Government or Railway Administration. **Answer – False**
53	SF-5 is Memorandum of charge for Imposing minor penalties (True/False) **Answer – False**
54	रिमूवल एक मेजर (major) पेनल्टी है | **सही** Removal is a major penalty. (True/False) **Answer - True**
55	राष्ट्रपति द्वारा दिए किसी आदेश के लिए, कोई भी अपील उसके खिलाफ नहीं की जा सकती | **सही** If any order is made by the President, no appeal can be made against it. (True/False) **Answer - True**
56	संविधान की आठवीं अनुसूची में .... (20/22/24) भाषाओं को शामिल किया गया है| There are ________ numbers of languages included in eighth schedule of constitution. (20/22/24) **Answer - 22**
57	स्कूल अकाउंट पर जारी किये पास, सुविधा पास के अंतर्गत आते है | **गलत** Privilege Passes includes passes issued on School account. (True/False) **Answer - False**

58	□क्सी को जार□ □क्या चेक पास, सु□व्धा पास के खाते से काटे जाते है | **गलत** Whenever cheque pass is issued to individuals, it is debited from privilege pass. (True/False) **Answer – False**
59	□शास□नक कायाल्ाय□ मा काम कर रहे Ministerial कमच्ाा□रय□ को HOER □नयमो के ..... (Intermittent/Essentially Intermittent/Continuous) □ेणी म□ रखा गया है | Ministerial staff working in administrative offices comes under_____ category of HOER rules. (Intermittent/Essentially Intermittent/Continuous) **Answer - Intermittent**
60	आक□मक अवकाश एक □वशेष □कार क□ छु□ी है | **गलत** Casual Leave is special type of Leave. (T/F) **Answer – False**
61	Which one is not used as component in D.C track circuit- a) QT2 Track relay b) Continuity bond c) B-Type choke d) Alpha bond □न□न□ल□खत म□ कौन डीके सा□क्ट □ैक .सी. घटक के □प म□ उपयोग नहं□ □क्या जाता - क) QT2 □ैक □रले ख) □नरंतर (Continuity) बांड ग) B-□कार चोक घ) अ□फा बॉ□ड **Answer – d) Alpha bond**
62	ऑ□डयो आवृ□ित (□ □वा□ी) □ैक सा□क्ट इ□तेमाल □क्या जा सकता - क) ए.सी. □व□युतीकृत से□शन म□ ख) डी.सी. □व□युतीकृत से□शन म□ ग) गैर □व□युतीकृत से□शन म□ घ) ऊपर के सभी जगह□ पर Audio Frequency Track Circuits can be used in a) AC electrified b) DC electrified c) Non- electrified sections d) all of the above **Answer – d) all of the above**
63	पॉइंट मशीन मा, ऑ□स□कसन करंट नामल्ा वा□क्ग करंट से _____ □यादा होता है | क) 2 times ख) 0.5 times ग) 100 times घ) 4 times In point machines, Obstruction current shall not be more than _____ of normal working current. a) 2 times b) 0.5 times c) 100 times d) 4 times **Answer – a) 2 times**
64	पॉइंट मशीन□ का नो□मनल ऑपरे□टंग वो□टेज आमतौर पर □कतना रहता है- क) 110 वो□टAC ख) 110 वो□टDC ग) 110वो□टAC/DC घ) इनमे से कोई नहं□ The point machine (IRS/Siemens) are generally rated for nominal operating voltage of – a)110 VAC b) 110 VDC c) 110VAC/DC d) none of the above **Answer – b) 110 V DC**

65	एल.ई.डी (LED) □स□नल का नामक्ष ऑपरे□टंग वो□टेज रहता है- क) 110 वो□टAC ख) 110 वो□टDC ग) 230वो□टAC घ) इनमे से कोई नह□ Normal operating/working voltage of LED signal unit is / are ---------- a) 110 volt AC b) 110 volt DC c) 230 AC d) None **Answer – a) 110 V AC**
66	एल - है रहता □कतना लगभग कं□स □पशन करंट का □स□न□स डी.ई. Amperes ख (Mili-amperes ग(Micro-amperes घ(Kilo amperes The current consumption of LED aspect signals is generally in – Amperes b) Mili-amperes c) Micro-amperes d) Kilo amperes **Answer – b) Mili-amperes**
67	बैट□रय□ के से□स)cells क□ (□मता बताई जा सकती है ____x____ से | The capacity of cells (batteries) is expressed in terms of ____x____. **Answer – Ampere x Hour (AXH)**
68	जब पॉइंट म□य □थि□त मा हो पोजीशन मेड" कॉ□टे□□स □टे□शन तथा कं□ोल तब , "(हुए बने)म□रहने चा□हए) |सह□(गलत/ When point is in mid position, then all control and detection contacts must be in "made position" in Point machine. (True/False) **Answer - False**
69	मशीन □वारा चा□लत पॉइंट के ऑ□स□कसन टे□ट मा 5mm टे□ट पी□ से - पॉइंट लॉक नह□ होगा ख जायेगा हो □लिप □लच □□ □शन (ग) □टे□शन कॉ□टे□□स मेक नह□ होगे घ) ऊपर के सभी During obstruction test of machine operated point with 5mm test piece ---------- a) Point shall not lock b) Friction clutch shall slip c) Detection contacts shall not make d) all of the above **Answer – d) All of the above**
70	जब पॉइंट नामक्ष मा सेट तथा लॉ□ड हो तब	है होते मेक कांटे□ट _____ ND&NC ख (NC&RC ग (RD&RC घनह□ भी कोई (When point set and locked in normal _____contact make a) ND&NC b) NC&RC c) RD&RC d) None of the above **Answer – d) None of the above**
71	□न□न□ल□खत मा से कौन पॉइंट मशीन के □ांस□मशन असब्ल□ का □ह□सा नह□ है - मु□य □गयर □रम ख□लच □□ □शन (ग□ड□क कं□ोल (घ □लाइ□स □टे□शन (Which one of the following is not part of transmission assembly in point machines- Main Gear Rim b) Friction clutch c) Detection slides d) Control disc **Answer – c) Detection slides**
72	एस) ई.जी.SGE) □लॉक इं□□मट्ट उपयोग □क्या जाता है - केवल गैर-□व□युतीकृत से□शन मा

	ख केवल (व युतीकृत से शन मा ग (गैर-व युतीकृत तथा व युतीकृत दोन मा घ दोन (गैर-व युतीकृत तथा व युतीकृत कुछ मॉड फकेशन के साथ SGE type Block instrument can be used in a) Only in Non-RE b) Only in RE c) Both in Non-RE and RE d) Both in Non-RE as well as in RE with some modifications **Answer – d) Both in Non-RE as well as in RE with some modifications**
73	कोई लॉक इं मह अगर है यह मतलब इसका तो है मा वंडीशन "लो ड लाइन") | है मा से शन लॉक ेन क्रसह(गलत/ When any block instrument is at Line closed condition that means train is in block section. (True/False) **Answer - False**
74	आ खर को स नल "ऑन का लंग" टॉप स नल या एडवांस टाट और होम स नल के नीचे लगाया जा सकता है) |सह(गलत/ "Calling On" signal can be placed below last stop signal or advance starter and Home signals. (True/False) **Answer - False**
75	डाटा लोगस को मानव वफलताओं ुट्टय/जैसे क ाईवर वारा पा ड स नल" "डजर एटका पता लगाने के लए उपयोग नह क्रया जा सकता) |सह(गलत/ Data loggers could not be used for detecting the human failures/errors such as drivers "signal passing at danger" (SPAD). (True/False) **Answer - False**
76	भारतीय रेल मा ॉड गेज क्रया योग लए के (बीजी)जाने वाला गेज डायमान है - 1610mm ख (1762mm ग (1000mm घ (1676mm The gauge dimension used for broad gauge (BG) in Indian railways is- 1610mm b) 1762mm c) 1000mm d) 1676mm **Answer – d) 1676 mm**
77	वग 1मी तांबे के तार क करंट)carrying क जाने ले (मता सामा यतः होती है - 1 to 2 A ख (2.5 to 3 KA ग (2.5 से 3 A घ(1 to 2 KA The current carrying capacity of single strand 1 square mm copper wire is approximately- 1 to 2 A b) 2.5 to 3 KA c) 2.5 to 3 A d) 1 to 2 KA **Answer – c) 2.5 to 3 A**
78	आईपीएस स टम मा इ वट 1-आउटपुट वफल होने पर वचा लत प से इ वट2- पर आ जाता है) |सह (गलत/ In IPS system Inverter-2 will be automatically connected to the load, when Inverter-1 output is failed. (T/F) **Answer - True**
79	पूर तरह चा ड लड एसड सेल क पे सा फक े वट हाइ ोमीटर मा देखने पर

	| है □मलती _____ 1180 ख (1200±5 ग (1210±5 घ (1240±5 Specific gravity of the fully-charged Lead Acid cell is _____ in terms of Hydrometer reading. 1180 b) 1200±5 c) 1210±5 d) 1240±5 **Answer – c) 1210±5**
80	केच साइ□डंग | है बचाता को..... साइ□डंग □लप तथा है बचाता को..... Catch siding protects ..... and Slip siding protects ..... □स□नि□लंग □लान| है जाता □दया अनुमोदन □वारा .....टेबल □सले□शन तथा टेबल लॉ□कंग , Signalling Plans (IP), Locking Tables (LT) and Selection Tables are approved by ..... **Answer - CSTE**
82	NNCR है..... जब है होती □ाप यह तथा ..... NNCR is .....and drops when .....
83	फुट□लेट इं□पे□शन का□ सेडूल अवा□ध JE के □लए तथा .....SSE के □लए | है ..... Periodicity of footplate inspection by JE is ..... and by SSE is ..... **Answer – Once in a month, once in three months**
84	□पेशल □लास लेवल □ा□संग गे□स के TVU□s होना □यादा से ..... चा□हए | For special class LC gates the TVU's are said to be more than ..... **Answer - 50000**
85	ओपन □वच के | है होता ..... □ला□यरा□स का बीच के रेल □टॉक तथा toe Minimum clearance between toe of open switch and stock rail is ..... **Answer – 115 mm**
86	एक ले अ□धक से एक □लए के आउट-ZDUCR relays हो सकती है) |सह□(गलत/ There may be more than one ZDUCR relays for one layout. (True/False) **Answer - False**
87	□ॉल□ सो□सन □ैक सा□क□ट का मु□य उ□े□य □ाल□ □हा□न का□ वजह से डीप के □पांतरण को प□सेस म□करने से रोकने के □लए होता है (गलत/सह□) | Main purpose of trolley suppression track circuit is to prevent the conversion of pulses from the dip caused by trolley wheel. (True/False) **Answer - True**
88	लगाये गए ए□सल काउंटर मा□ □□परेटर□ □रसेट)Preparatory reset ..... (| है सकता जा □क्या उपयोग मा□से□शन मेन लाइन ख तथा □टाट□ एडवांस (IBS के बीच ग तथा इं□□मट□ □लॉक (BPAC घ(ऊपर के सभी जगह□ पर Preparatory reset can be used in case of the _____sections provided with axle counters. a) Main line b) Section between Advance starter and IBS c) Block Instrument and BPAC d) all of these. **Answer – d) all of these**
89	सौर मॉ□यूल का उपयोग सूया□ का□ □काश ऊजा□)photons) के मा□यम से □बजल□

	उ□प□न करना है जो □क - क) फोटोइलेि□□क इफ़े□ट है ख) फोटोवोि□टक इफ़े□ट है ग) दोन□ क) तथा ख) घनह□ दोन□ (Solar modules use light energy (photons) from the sun to generate electricity through the a) Photoelectric effect b) Photovoltaic effect c) Both a) and b) d) None of a) and b) **Answer – b) Photovoltaic effect**
90	□बजल□ के सबसे मौ□लक कानून/□ल ओ□म कानून/□ल (Ohm's law) या R=VI है जिसमे R - □□तरोध, V - वो□टेज तथा I - करंट/□वाह है | (सह□/गलत) The most fundamental law in electricity is Ohm's law or R=VI (where R is resistance, V is voltage and I is current). (True/False) **Answer – False**
91	धरती एक आदश equipotential सतह क□ तरह काम करती है, जो क□ □बजल□ चमकने (lightening) के दौरान current के □वाह को धरती म□स□मा□लत कराने म□ मदद करती है | (सह□/गलत) Earth act as ideal equipotential surface, therefore used to divert flow of current to earth during lightening. (True/False) **Answer – True**
92	म□य रेलवे के पुणे मंडल का मु□यालय □मरज मा □□तथ है | (सह□/गलत) The Headquarter office of Pune division is located at Miraj. (True/False) **Answer – False**
93	□यूटन दुसरे □नयम के □हसाब से, *m* - वजन, a - गा□त तथा *F* - बल के बीच स□ब□ध है ..... According to Newton's second law of motion, the relationship between an object's mass *m*, its acceleration a, and the applied force *F* is ..... **Answer – ma**
94	सु□ीम कोट भारत क□ सव□□म □यायलय है | (सह□/गलत) Supreme court is Apex court of India. (True/False) **Answer – True**
95	भारत क□ राजधानी नई □द□ल□ को यू□नयन टे□रटर□ का दजा □□त है | (सह□/गलत) New Delhi, the capital of India is Union territory. (True/False) **Answer – True**
96	महारा□□ रा□य क□ राजधानी ..... है| **Answer - Mumbai** ..... is the capital of state of Mahrashtra.
97	महाबले□वर जो □क एक मह□वपूण □हल □टेशन है, म□य□देश मा □□तथ है | (सह□/गलत) Mahabaleshwar, one of the important hill station is situated in Madhya Pradesh. (True/False) **Answer – False**

98	पुणे ..... मीन सी लेवल (MSL- mean sea level) पर ि◌तथ है | **Answer – around 559 meters** Pune is situated at ..... above MSL (mean sea level).
99	भारतीय रेलवे के म◌ाय रेल जोन म◌ा .....◌डवीज़न है | Central Railway zone of Indian Railways consists of ..... divisions. **Answer – 5 (five)**
100	भारतीय रेलवे के अंतगत MCM/signal क◌ा पो◌ाट का ◌ेड पे ..... है | The grade pay of MCM/signal post under S&T department of Indian Railways is ..... **Answer – 4200**
101	Voltage का मानक Amperes है | (सह◌ी/गलत) Amperes is the unit of Voltage. (True/False) **Answer – False**
102	भारत से गुजरने वाल◌ रेखा का नाम| (कक्◌ रेखा/ मकर रेखा) Which one of the following passes through India. (Tropic of Cancer/Tropic of Capricorn) **Answer – Tropic of cancer**
103	इ◌ारसेट ..... शहर म◌ा ि◌तथ है | IRISET is located/situated at ..... city. **Answer – Secunderabad**
104	न◌ानल◌ाखत ◌ेटशन◌ म◌ा से कौन सा ◌ेटशन पूव व◌ोटो◌रया ट◌मन्◌ास के ◌प म◌ा जाना जाता था? चचग्◌ेट रेलवे ◌ेटशन मुंबई स◌ल लोकमा◌य ि◌तलक ट◌मन्◌ास छ◌पा◌त ि◌शवाजी ट◌मन्◌ास Which of the following stations was formerly known as Victoria Terminus? Churchgate Railway Station Mumbai Central Lokmanya Tilak Terminus Chhatrapathi Shivaji Terminus **Answer – d) Chhatrapathi Shivaji Terminus**
105	न◌ानल◌ाखत म◌ ककसके ◌ेशासन म◌ा माथेरान ि◌हल ◌ेटशन आता है ? क◌ाकण रेलवे प◌िचम रेलवे म◌ाय रेलवे द◌◌ ण रेलवे Which of the following zones administers the Matheran Hill Railway? Konkan Railways Western Railways Central Railways Southern Railways **Answer – c) Central Railways**
106	च◌ितरंजन लोकोमो◌टव व◌ स रेलवे क◌ मै◌युफै◌चरंग यू◌नट कहा ि◌तथ है ? Where is the Chittaranjan Locomotive Works manufacturing unit of

	Railways situated? Answer – **Chittaranjan, West Bengal**
107	□व□व □□स□ अजंता गुफाए □कस रा□य मा □□तथ है - गुजरात ख) म□य□देश ग) ओ□डशा घ) कोई नह□ The world famous Ajanta Caves are located in which Indian state? Gujarat b) Madhya Pradesh c) Odisha d)None of these **Answer – d) None of these**
108	इंटरनेशनल योग डे कब मनाया जाता है - 18th जून ख) 19th जून ग) 20th जून घ) 21st जून 'International Yoga Day' is celebrated on which date? 18th June 19th June 20th June 21st June **Answer – d) 21st June**
109	क□कण रेलवेज □कन □कन रा□य□ से होकर गुजरता है - महारा□□-कनाट□क-आं□ □देश-के□रल महारा□□-कनाट□क-गोवा-के□रल महारा□□-कनाट□क-के□रल -त□मलनाडु कनाट□क-गोवा-के□रल -त□मलनाडु Through which of the following group of states does the Konkan Railways run? Maharashtra - Karnataka - Andhra Pradesh - Kerala Maharashtra - Karnataka - Goa - Kerala Maharashtra - Karnataka - Kerala - Tamil Nadu Karnataka - Goa - Kerala - Tamil Nadu **Answer – b) Maharashtra - Karnataka - Goa – Kerala**
110	भारतीय रेलवेज का सबसे पूव□□तर □डवीज़न है - □□तनसु□कया ख) लम□डंग ग) रं□गाया घ) का□टहार Which of the following is the eastern-most division of the Indian Railways? Tinsukia b) Lumding c) Rangiya d) Katihar **Answer – a) Tinsukia**
111	मोहनदास करमचंद गाँधी को महा□मा का □खताब □कसने □दया - बाल गंगाधर □□लक ख) मोतीलाल नेह□ ग) जवाहर लाल नेह□ घ) र□ब□□ नाथ टैगोर Mohandas Karamchand Gandhi was called as Mahatma by Bal Gangadhar Tilak Motilal Nehru Jawaharlal Nehru

	Rabindra Nath Tagore **Answer – d) Rabindra Nath Tagore`**

1	रेक्टीफायर किस उपयोग के लिए होते है - डायरेक्ट करंट से आल्टरनेटिंग करंट के लिए आल्टरनेटिंग करंट से डायरेक्ट करंट के लिए हाई वोल्टेज से लो वोल्टेज के लिए लो वोल्टेज से हाई वोल्टेज के लिए Rectifiers are used to convert a) Direct current (DC) to alternating current (AC) **b) Alternating current (AC) to Direct current (DC)** c) high voltage to low voltage d) low voltage to high voltage
2	बिजली के सबसे मौलिक कानून/नियम ओम कानून/नियम (Ohm's law) या V=IR है जिसमे R - प्रतिरोध, V - वोल्टेज तथा I - करंट/धारा है	(सही/गलत) The most fundamental law in electricity is Ohm's law or V=IR (where R is resistance, V is voltage and I is current). **True**
3	ब्लॉक के लिए उपयोग किया गया अर्थ रेजिस्टेंस(कंवेंशनल) _____ से ज्यादा नहीं होना चाहिए | The block earth (conventional) resistance should not be more than _____ 10 Ohms
4	ट्रांसवर्स बांड _____ डिपार्टमेंट द्वारा लगाये जाते है तथा नॉन-इंसुलेटेड रेल की पहचान _____ डिपार्टमेंट द्वारा की जाती है | एस.एंड.टी, इलेक्ट्रिकल ख) एस.एंड.टी, एस.एंड.टी ग (इलेक्ट्रिकल ,एस.एंड.टी घ (इलेक्ट्रिकल ,इलेक्ट्रिकल Transverse Bond is provided by _____ department and identification of non-insulated rail is done by _____ department. a) S&T, Electrical b) S&T, S&T **c) Electrical, S&T** d) Electrical
5	हिंदी भाषा को राजभाषा का दर्जा प्राप्त है	(सही/गलत) Hindi language has been given official status of Rajbhasha. **True**
6	पेटरनिटी छुट्टी (Paternity leave) एक बार में _____ दिनों की अवधि के लिए 6 महीने में _____ बार ली जा सकती है | Paternity leave can be taken in a span of _____ days for _____ times in 6 months duration. **15 दिन, 1 बार, 15 days, 1 times.**
7	LHAP के संचय के लिए अधिकतम सीमा ..... दिन है| 240 days ख) 310 days ग) 300 days घ) No limit Maximum limit for accumulation of LHAP is_____ days. 240 days b) 310 days **c) 300 days** d) No limit
8	नॉन-गजेटेड स्टाफ 3 सेट प्रिविलेज पास के लिए कब योग्य होते है - सर्विस के पहले साल में सर्विस के पांच साल होने के बाद सर्विस के तीन साल होने के बाद सर्विस के एक साल के बाद Non-Gazetted staff is eligible for 3 sets of privilege passes- In the first year of service

	After completion of 5 years of service After completion of 3 years of service After completion of 1 year of service
9	सस्पेंशन के लिए निम्नलिखित में से कौन सा फॉर्म दिया जाता है - SF-1 ख) SF-5 ग) SF-9 घ) SF-11 For suspension the following form is issued- **a) SF-1** b) SF-5 c) SF-9 d) SF-11
10	रिमूवल फ्रॉम सर्विस एक .... पेनल्टी है | Removal from service is a .... penalty. मेजर, Major
11	कमिश्नर ऑफ़ रेलवे सेफ्टी किस मिनिस्ट्री के अंतर्गत आते है - रेलवे ख) सिविल एविएशन ग) सरफेस ट्रांसपोर्टेशन घ) लेबर Commissioner of Railway Safety (CRS) belongs to the ministry of:- a) Railways **b) Civil Aviation** c) Surface Transportation d) Labour
12	भारतीय रेलवे में वर्तमान में........... संख्या में जोन है | Number of zones (at present) in Indian Railways are सतराह, 17
13	एक साल में दो सेट प्रिविलेज पास कम करने की पेनल्टी .... पेनल्टी है | Cutting of two sets of privilege passes in a year comes under .... penalty. माइनर, Minor
14	आकस्मिक अवकाश आकस्मिक/तात्कालिक नहीं लिया जा सकता | (सही/गलत) Casual Leave can't be applied during emergencies/urgencies. **False**
15	QTA2 रिले में कितने फ्रंट तथा बेक कॉन्टैक्ट्स होते है - 1 फ्रंट/1 बेक ख) 2 फ्रंट/1 बेक ग) 1 फ्रंट/2 बेक घ) 2 फ्रंट/2 बेक The Number of front and back contacts in QTA2 relay is:- a) 1F/1B **b) 2F/1B** c) 1F/2B d) 2F/2B
16	ऑडियो फ्रीक्वेंसी ट्रैक सर्किट के लिए ग्लूड जॉइंट्स की आवश्यकता नहीं होती | सही Audio frequency track circuit does not require glued joints. **True**
17	आय.आर.एस () टाइप पॉइंट मशीन का स्ट्रोक होता है - Both a & b d) Stroke can be between 110 mm to 220 mm **143mm** ख) 220 mm ग) क तथा ख दोनों घ) स्ट्रोक 110 mm to 220 mm के बीच में हो सकता है Stroke of IRS type point machine is - **a) 143 mm** b) 220 mm c) Both a & b d) Stroke can be between 110 mm to 220 mm
18	आय.आर.एस पॉइंट मशीन में थ्रो रॉड, डिटेक्शन रॉड तथा लॉक रॉड की संख्या होती है- क**) 1, 2 and 2** ख) 2, 1 and 2 ग) 2, 2 and 1 घ) 2, 2 and 2 Number of throw rod, detection rod and lock rod in IRS type point machine are- **a) 1, 2 and 2** b) 2, 1 and 2 c) 2, 2 and 1 d) 2, 2 and 2
19	एल.ई.डी (LED) सिग्नल का रेटेड (rated) ऑपरेटिंग वोल्टेज तथा पॉवर है- 230V, 15W ख) 110V, 50W ग**) 110 V, 15W** घ) 230V, 50W

	Rated Voltage and Power of an AC LED signal is:- a) 230V, 15W b) 110V, 50W **c) 110 V, 15W** d) 230V, 50W
20	डिपेन्डेड शंट सिग्नल में ऑन आस्पेक्ट नहीं होता है। सही A depended shunt signal has no ON aspect. **True**
21	पुणे डिवीज़न में आय.पी.एस में लगने वाले यूनिट सेल (बैटरी) की सामान्यतः रेटेड कैपेसिटी को लिखिए। Write the general rated capacity of unit cell (battery) installed over Pune division for IPS (Integrated Power System). 2V/300AH or 2V/200AH or 2V/120AH
22	SL-35B ट्रिपल पोल लैम्प्स की रेटिंग है - क**) 12 V/24W, 24W** ख) 12V/24W, 18W ग) 24 V/24W, 24W घ) 24V/12W, 12W Rating of SL-35B triple pole lamps is:- **a) 12 V/24W, 24W** b) 12V/24W, 18W c) 24 V/24W, 24W d) 24V/12W, 12W
23	पॉइंट मशीन के ऑब्स्ट्रक्सन टेस्ट में टेस्ट पीस को _____ के टो (toe) से _____ दूरी पर रखना होता है| For obstruction test of a point, test piece is to be kept at _____ distance from the tow of _____ Tongue rail, 150 mm टंग रेल, 150 मी.मी.
24	जब पॉइंट नार्मल में सेट तथा लॉक्ड हो तब _____ कांटेक्ट मेक होते है। ND&NC ख) NC&RC ग) RD&RC घ) कोई भी नहीं When point set and locked in normal _____contact make a) ND&NC b) NC&RC c) RD&RC **d) None of the above**
25	ट्रैक क्रासिंग में सिग्नलिंग केबल की गहराई 1 मीटर ..... से नीचे होनी चाहिए- गिट्टी लेवल ख) उपरी रेल लेवल से ग) स्लीपर के निचले लेवल से घ (रेल के निचले लेवल से Track crossings of signaling cables are done at a depth of 1meter below _____ a) Ballast Level b) Top Level of Rail c) Bottom Level of Sleeper **d) Bottom Level of Rail**
26	एस.जी.ई. (SGE) टाइप ब्लॉक इंस्ट्रूमेंट सिंगल तथा डबल लाइन दोनों के ब्लॉक सेक्शन के लिए उपयोग में लाये जा सकते है। गलत SGE type Block instrument can be used for both double as well as single line block sections. **False**
27	कोई ब्लॉक इंस्ट्रूमेंट अगर "लाइन क्लियर" कंडीशन में है तो इसका मतलब यह है की ट्रेन ब्लॉक सेक्शन में है। गलत When any block instrument is at Line clear condition that means train is in block section. **False**
28	कालिंग-ऑन सिग्नल सफ़ेद रंग (चंद्रमा की तरह) होता है। गलत Calling –on signal is of lunar white colour.

	False
29	पुणे डिवीज़न मलिंगे डाटालागर ..... कंपनी / उ□ादक □ारा बनाये गए है | The data loggers installed over Pune division are of ..... make company/manufacturer. M/s Efftronics Ltd.
30	□क के क□ासे कलर लाइट सि□ल के □ूनतम आरोपण क□दूरी ..... होना चाहिए | The minimum implantation distance of a colour light signal from the centre of the track should be ..... 2.36 Meter
31	डैडो (Diado) टाइप टोकन लेस □ॉक इं□ीमट रेलवे इले□ि□फाइड ए□रया म□ उपयोग नह□ □कये जा सकते | गलत Diado type token less block instrument cannot be used in RE area. **False**
32	आईपीएस सि□म म□ इ□वट□ ए.सी. डि□ी□ूशन पैनल म□ होता है तथा सी.वी.टी डी.सी.-डी.सी. पैनल म□ होता है | गलत In IPS system, Inverter comes under AC distribution panel whereas CVT comes under DC-DC converter panel. **False**
33	पूरी तरह चा□ लीड एसिड सेल □ क □ेसि□क □विटी हाइ□ोमीटर म□ देखने पर _____ मिलती है | Specific gravity of the fully-charged Lead Acid cell is _____ in terms of Hydrometer reading. **1215 (1210 ± 5)**
34	का□िंग ऑन सि□ल का बटन लाल कलर पर सफ़ेद डॉट होता है | गलत Calling- on signal button is of red colour with white dot. **False**
35	□क स□ि□ट क□ॉवर स□ाई आई.पी.एस के इनमे से □स कॉ□ोनेन□ / मॉडयूल से आती है - रे□ीफायर डी.सी.कनवट□ इ□वट□ □ांसफामर□ The power supply for track Circuits are taken through which of the following Components / modules of the IPS? a) Rectifier b) DC-DC converter c) Inverter **d) Transformer**
36	पैनल पर शंट सि□ल बटन का कलर _____ होता है | पिला The colour of shunt signal button on the panel is _____ **Yellow**
37	आम तौर पर □ास-डी □ेशन नॉन-इंटरलॉ□ड □ेशन होते है | सही Class "D" stations are generally non-interlocked stations. **True**
38	सभी समपार फाटक जो □ क □ेशन लिमिट म□ होते है उ□ह□..... समपार फाटक बोला जाता है | All gates within station limit are called ..... gates. WSL Gate

39	आटोमे□क सि□ल के लाल होने पर भी □ाईवर बिना अथॉ□टी के पास कर सकता है | सही Driver can pass an Automatic signal in red without any authority. **True**
40	एस.एम क□ाहर होने पर कोई भी ऑपरेशन नह□ हो सकता है | गलत When SM key is out, no operation can be done from the panel. **False**
41	मे□सस सेल (स□ा इले□ॉनि□ लिमिटेड) इनमे से □ाी का उ□ादन करने वली कंपनी म□ें एक है - एनालॉग ए□ल काउंटस □ेवल इंटी□ेड पॉवर स□ाई इले□ॉनिक इंटरलॉ□ंग उपकरण एनालॉग तथा डिजिटल ए□ल काउंटस दो□ही M/s CEL (Central Electronics Limited) is one of the manufacturers for: a) Analog Axle Counters only b) Integrated Power Supply c) Electronic Interlocking Equipment **d) Both Analog and Digital Axle Counters**
42	एं□ी-एि□ट सि□ांत □ेट से□ंग टाइप □ले इंटरलॉ□ंग म□ उपयोग □ाया जाता है| गलत Entry-Exit principle is used in route setting type of Relay Interlocking. **False**
43	धरती एक आदश□ Equipotential सतह क□रह काम करती है, जो क□ बिजली चमकने (lightening) के दौरान current के □ाह को धरती म□ ि□लित कराने म□ मदद करती है | सही Earth act as ideal equipotential surface, therefore used to divert flow of current to earth during lightening. **True**
44	□ाी को जारी □ाया □ूटी पास, सुविधा पास के खाते से काटे जाते है | गलत Whenever duty pass is issued to individuals, it is debited from privilege pass. **False**
45	Which one is not used as component in D.C. track circuit- a) QT2 Track relay b) Continuity bond c) B-Type choke **d) All of them** नि□लिखित म□ौन डी.सी .□ेक स□ि□ट के घटक के □ प म□ उपयोग नह□ □ाया जाता - QT2 □ेक रले ख) निरंतर (Continuity) बांड ग) B-□ार चोक घ**)** सभी □ाये जाते है

1	Newton's laws of motion states that for every _____ there is equal and _____ reaction. **Action, opposite**
2	In D.W. Signalling. Signals are operated by _____Transmission. **Wire**
3	Super elevation is necessary for track on a _____path. **Curved**
4	The distance between gauge face of a B.G. track is _____. **5ft6in**
5	_____means the mark at which infringement of fixed _____ Dimension occurs, where two lines cross or _____ One another. **Fouling Mark, Standard, Join**
6	The _____ resistance plays important Role in _____ of a track circuits. **Ballast, Functioning**
7	The minimum clearance between two standards/Rollers in rodding run is _____ meters. **1.8 to 2.2**
8	Ohms law states that whenever a _____is passed through a resistance, there is a _____drop across it. **Current, Voltage**
9	The voltage of a fully Charged _____ cell is _____ volts. **Secondary, 2.2**
10	60 V modules in an IPS system are used to fed _____ as well as external. **Internal, Circuits**
11	Broken wire _____must be carried out once in_____. **Test, A YEAR.**
12	Coil of L/Lock & C/Controller works on either _____ AC. or 12 V_____ . **110 v, D.C**
13	Picking of _____ relay in the point group confirmed that point is _____ Set and lock. **WKR-1, Correctly**
14	Axle counters can be used in place of _____ circuits. **Track**
15	Provision should be made to interlock the last stop signal with the _____Indication. **Line-Clear**
16	TSR in DC Track circuit _____ **0.5 Ohms**
17	Resistance of BPR in SGE, block instrument _____ **77 Ohms**
18	Block overlap in MAUQ _____ **180 meter**
19	In Electrified & Non AC Area trck circuit used. **AFTC**
20	Overhauling of D/L – Block Instrument **7 Years**
21	Key locked in proving Relay

	KLCR
22	Route permissibility checking Relay. **ZDUCR**
23	Electromagnetic Induction. **A.C. Electrified area**
24	Neal's Ball token Instrument. **Safety Catch**
25	Loose & tight locking. **Double wire signalling**
26	_____ means the intersection of road with Railway track at the same Level. **LEVEL X-ING**
27	The signals are placed at_____ Eye level. **DRIVERS**
28	The imprest stores should be used to replace _____gears due to accidents. **DAMAGED**
29	The block overlap in 2Aspect signalling is _____ meters. **400**
30	Creep is the _____ movement of rails in a track. L**ONGITUDNAL**
31	Census of token is done once in **_____** months. **SIX**
32	The material in the depot are_____ once in a year and all tools and plants, forms and stationary once in _____ years **VERIFIED, THREE**
33	All receipts an _____ of stores pending their transfer to their _____ ledgers, should entered in DTR. **ISSUES, APPROPRIATE**
34	Catch and Slip sidings provided for _____ purpose only. **ISOLATION**
35	The Calling on Signal must not be_____ of being worked at the same time as the _____ above. **Capable, Stop signal**
36	The Home Signal must be placed in rear of all_____, if any, on the line to which it_____. **Connections, Rafers**
37	The distance at which the points may be _____ By double wire must not exceed _____Meter. **Worked, 730**
38	In order to maintain_____ For through running, points for trap sidings must not be_____ In the main or through line. **Safety, inserted**
39	Where feasible, point must be _____as to avoid any _____ movement. **Interlocked, Conflicting**
40	The use of the _____ or other apparatus for operation should disconnect the power supply to the motor. **Crank, Emergency**
41	A Control to ensure that_____. last stop signal of the block section

	cannot be taken off at _____ And the same time. **Opposing, One**
42	The last crank in a run of _____ Operating a unit must be an _____ crank. **Rodding, adjusting**
43	An inside lock bar lies_____ below the top of the rail and that the bar doesn't _____ away from the rail. **38mm, Lean**
44	Where D.C. track circuits are _____ the polarity on the rails should be_____.as for as possible. **Adjacent, Opposite**
45	Where two or more block instruments are _____in the same room, they must be fitted with gongs of _____tones. **Located, distinctive**
46	Where more than one earth has been installed, they should be _____ by a distance of not less than _____ from each other. **Separated, 2.5 meter**
47	When _____. On a given sloted signal is put back _____ goes back to 'ON' position. **Slot, Signal**
48	Each_____. must record the time of rectification and his _____ as to the cause of failures. **Maintainer, Remarks**
49	Accumulation of track dust and _____ of burr at an _____ joint should be removed. **Formation, insulated**
50	The distance between the running faces in broad gauge is (a) 1225 mm (b) **1670mm** (c) 1570mm
51	The TGT and TCF lock coils in Neal's ball token works on current (a) **160ma** (b) 175 ma (c) 140 ma
52	Maximum permitted resistance of back contact in DC Relays initially. (a) 0. 05 Ohms (b) **0.03 Ohms** (c) 0.04 Ohms
53	In AC Electrified section, the type of track circuits used are (a) AC Single Rail (b) AC Double Rail (c) **AFTC**
54	In signalling cable the screening factor is (a) 0.5 (b) 0.6 (c) **0.4**
55	The minimum permissible TSR for conventional AC track circuit is (a) **0.15 Ohms** (b) 0.5 Ohms (c) 0.30 Ohms
56	Insulation resistance of a Glued Joint in dry condition when Meggered with 100 Volt Megger (a) 50 M.Ohms (b) 100 M.Ohms (c) **25 M. Ohms**
57	The TGT Code in a Podunur single line Token less block instrument is (a) - + - **(b) - - +** (c) - + +
58	In order to keep the main filament at correct Focal point , 3 pin caps are used in signal bulbs. The pins are kept at degree apart. (a)120 deg,120deg,120deg. (b)**135 deg.,135 deg,90 deg**. (c)120 deg,150deg,90 deg.
59	The overhauling of single line block instrument should be once in (a) 7 Years. (b) 12 Years (c) **10 Years.**
60	The Imprest store shall be kept _____ from other stores and a

	sign board marked Imprest store there. **Separate, Exhibited**
61	Separate requisition shall be _____ For each class of material. **Prepared**
62	No trolley or lorry shall be placed on the line unless it is fitted with **Efficient Hand Brakes**
63	Interlocking frames shall be tested _____ and overhauled at the_____ not exceeding 3 years. **Annually, Interval**
64	Train shunt test must be taken every time a track circuit in _____- It should be taken at parallel _____ of the track also. **Adjusted, Portions**
65	A Railway class 'C' employee gets _____ set of passes after completion of regular _____of Five years. **Three, Service**
66	_____ means the length of track in advance of a stop signal, which must be kept cleat for granting **_____**to approach. **Overlap, Permission**
67	The day and _____aspect of the _____ Light signal are the same. **Night, Colour**
68	A Calling on Signal is a _____ And has no. _____Existence. **Subsidiary, Independent**
69	No Train shall be allowed to leave a _____ station unless line clear has been _____ from the block station in Advance. **Block, Received**
70	How many slides are there in GRS Electrical detector when used with FPL? (2, 3, 4).
71	Signal Maintainer should test the Point with obstruction test gauge. (3mm, 5mm, 10mm).
72	Inside lock bar lies underneath the top of Rail surface. (42mm, 35mm, 38mm).
73	Track locking is provided on the lever. (Signal, Point, Lock).
74	Lever frame overhauling is to be done after. (1Year, 2 Year, 3 Year).
75	Rotary detector is used in signalling. (Single wire, Double wire, CLS).
76	Overhauling of Single Line Token Block Instrument is to be done once in:- (12 year, 7 Year, 10 Year).
77	Distant signal is provided at a distance from home signal. (400 meter, 1000 meter, 1400 meter).
78	Clear aspect of calling on signal is. (White, Yellow, Green).
79	Clearance between leading William stretcher & bottom of stock rail should not be more than. (1.5 mm, 3.25 mm, 5 mm).

80	The two filament of SL-35 'A' are rated as……Volt……watt & ……..Volt……watt.
82	Coil resistance of BPR in SGE block is …….
83	No load current of signal transformer should not be more than……
84	Whenever green aspect bulb is fused in a three aspect colour light stop signal, the signal turns to ……. aspect.
85	For 100 meter length DC track circuit …….. Ohm shelf type track relay is used.
86	Length of lock bar is ……
87	Main colour of calling on signal arm is ……..with ……..colour strip.
88	Relief crank can be used up to ……..degree diversion in Roding run.
89	Roding operated single end point can be operated up to ……meter length.
90	In lever frame, colour of point lever, gate lock lever & lock bar lever is ……., ……. & ……respectively.
91	The distance between the OHE _____and the point rod shall not be less than _____mm. **Mast, 40**
92	Where a number of _____are run together, it is _____to earth each cable separately. **Cables, preferable**
93	The inspector shall carry out _____inspection of all signals by day and _____in both up and down direction once a month over his _____ jurisdiction. **Footplate, night, entire**
94	Creep is the _____ Movement of rails in a track. **longitudinal**
95	Level crossing means _____ of road with railway _____ at the same level. **Intersection, track**
96	The _____ of goods reception line from _____ is considered desirable. **Isolation, siding**
97	Voltage reading at lamp, must be taken each time _____ is replaced. **Lamp**
98	Operation of the track circuit is influenced by the _____ which is dependent on _____ conditions. **Ballast, atmospheric**
99	Shunt being a subsidiary signal _____respective main signals on the same line in the same or _____directions. **Locks, opposite**
100	_____- remains picked up until the operation of G (R) LR when _____ are released to lock route. **GLSR, buttons**
101	The length of direct feeding of signal using a _____ cable shall not exceed _____ mtrs. **Screened, 600**
102	Applied voltage must not be more than the _____ voltage of the length and should not be more than _____volts.

	Rated, 10.8
103	_____ lines should be _____ from all connected goods lines and _____ whatever the speed may be. `**Passenger, isolated, siding**
104	GR 1 has a _____ discharged circuit across its coil to prevent its dropping in time of momentary failure of _____ and track circuits. **Condenser, power**
105	In double wire installations point can be operated by _____ transmission using)_____facing point mechanism. **Wire, economical**
106	Minimum horizontal distance from Centre of Track to any structure from 355mm. above Rail level. (a) 7' (b) 7'-6" **(c) 7'-9"** (d) 15'-6"
107	The 'TCF & TGT lock coils in Neal's ball Token works on current **a) 160 ma** (b) 175 ma (c) 152 ma (d) 140 ma.
108	In A.C. Electrified section, the type of Track Circuits used are (a) A.C. Signal Rail (50Hz.) (b) A.C. double rail (50 Hz.) **(c) AFTC**
109	Maximum permitted resistance of back contact in DC. Relays Initially is. (a) . 05 Ohms (**b) . 03 Ohms**. (c) .04 Ohms.
110	In Signaling cable the screening factor in (a) 0.5 **(b) 0.4** (c) 0.7
111	The TGT code in Podnur S/Line Token less block Instt. Is (a) - + - **(b) - - +** (c) - + +
112	Insulation resistance of a Glued Joint in dry condition when meggered with 100 DC. Megger is (a) 50 M Ohms. (b) 100 M Ohms **(c) 25 M Ohms**
113	In order to keep the main filament at correct focal point, 3 Pin caps are used in signal bulbs. The pins are kept at Degree apart. (a) (120d,120d,120d) **(b) (135d, 135d, 90d)** (c) (120d,150d,90d)
114	The Coil resistance of a polarized relay in SGE double line Block Instrument is (a) 277 Ohms. (b) 140 Ohms. **(c) 77 Ohms.**
115	Minimum no. of lamps which should remain lit on the route indicator, for Relay to remain in picked up condition. a) 4 Lamps. (b) 5 Lamps (c) 2 Lamps **(d) 3 Lamps**
116	In D.W. installations point can be operated by_____. transmission using _____ Facing point mechanism. **Wire, Economical**
117	No automatic signal assumes _____ Unless line is clear not only up to the stop signal ahead, but an _____ beyond it. **'off', adequate distance**
118	Creep is the _____ movement of Rails in a track. **Longitudinal**
119	The inspector shall carryout _____ inspection of all signals by day and _____ in both up and down direction ones a month over his _____jurisdiction. **Foot Plate, Night, Entire**
120	_____lines should be _____from all connected goods lines and _____whatever the speed may be.

	Passenger, Isolated, Sidings
121	No train shall be allowed to leave a _____station unless. **Block**
122	_____ has been received from the block stn in_____. **Line Clear, Advance**
123	_____remain picked up until the operation of G(R) LR when Buttons are released to lock route. **GLSR**
124	Operation of the track circuit is influenced by the _____ which is depended on _____conditions. **Ballast, Atmospheric**
125	In double wire installation point can be operated by Wire transmission using _____facing point mechanism. **Ecomical**
126	Voltage reading at lamp, must be taken each time ____ is replaced. **Lamp**
127	The length of direct feeding of signal using a _____ cable shall not exceed _____ meters. **Screened, 600**
128	_____ means the mark at which _____ of join one fixed standard dimensions occurs, where two lines _____ or join one another. **Fouling mark, Infringement, Cross**
129	Shunt being a subsidiary signal _____respective main signals on the same line in the same or _____ directions. **Locks, Opposite**
130	Applied voltage must not be more than the _____ voltage of the length and should not be more than _____volts. **Rated, 10.8**
131	GR 1 has a _____ discharged circuit across its coil to prevent its dropping in time of momentary failure of _____ and track circuits. **Condenser, Power**
132	The 'TCF & TGT lock coils in Neal's ball Token works on current **(a) 160 ma** (b) 175 ma (c) 152 ma (d) 140 ma.
133	In A.C. Electrified section, the type of Track Circuits used are (a) A.C. Signal Rail (50Hz.) (b) A.C. double rail (50 Hz.) **(c) AFTC**
134	Minimum no. of lamps which should remain lit on the route indicator, for Relay to remain in picked up condition. a) 4 Lamps. (b) 5 Lamps (c) 2 Lamps **(d) 3 Lamps**.
135	Maximum permitted resistance of back contact in DC. Relays Initially is. (a) 05 Ohms **(b) 03 Ohms.** (c) .04 Ohms.
136	The minimum permissible TSR for Conventional A.C. circuit is. **(a) 0.15 Ohms**. (b) 0.5 Ohms (c) 0.25 Ohms
137	Insulation resistance of a Glued Joint in dry condition when meggered with 100 DC. Megger is (a) 50 M Ohms. (b) 100 M Ohms (**c) 25 M Ohms**
138	The Coil resistance of a polarized relay in SGE double line Block Instrument is. (a) 277 Ohms. (b) 140 Ohms. **(c) 77 Ohms.**
139	The overhauling of Double line block inst. Should be carried out once in.

	(a) 10 Years. **(b) 7 years**. (C) 12 Years.
140	Minimum horizontal distance from Centre of Track to any structure from 355mm. above Rail level should be. (a) 7" (b) 7'- 6" **c) 7'-9"** d) 15'-6"
141	In order to keep the main filament at correct focal point, 3 pin caps are used in signal bulbs. The pins are kept at Degree apart. (a) (120d, 120d, 120d) **(b) (135d, 135d,90d)** (c) (120d,150d,90d)
142	In IRS & Siemens point machine rotary type locking is provided.
143	Periodicity of RG bulb replacement is 45 days.
144	SGE block working line current is 17mA.
145	In Siemens point group, point operation & detection is separated by W(R)R & W(N)R relays.
	Train shunt resistance for DC track circuit should not be more than 0.15 Ohms.

1	BLOCK BACK IS APPLICABLE IN ..... **D/ L AND S/L BOTH SECTION**
2	SWR OF SPECIAL CLASS STATION IS APPROVED BY ..... **CRS**
3	STATION LIMIT IS SITUATED BETWEEN OUTER MOST..... **SIGNAL OF STATION**
4	THE NAME OF RELAY IN SIGNAL GROUP PROOVES THE CONDITION OF ONE SIGNAL ONE TRAIN IS ..... **GLSR**
5	FORMULA FOR CALCULATING BALLST RESISTANCE IS..... PER KM **Rb=(Vf+Vr)/2(If-IR)**
6	FORMULA FOR CALCULATING RAIL RESISTANCE IS..... PER KM **Rr=2(Vf-Vr)/(If+IR)**
7	VALUE OF TSR FOR DC TRACK CIRCUIT SHALL NOT BE .....THAN 0.5 OHM **LESS**
8	AS THE LENGHT OF TRACK CIRCUIT INCREASES VALUE OF BALLST RESISTANCE..... **DECREASE**
9	THE RELATION BETWEEN BALLAST RESITANCE AND TSR IS ..... **INVERSALY PROPORTIONAL TO EACH OTHER**
10	NORMAL ASPECT OF CALLING ON SIGNAL IS ..... **BLANK**
11	TO ATTEND THE FAILURE OF BLOCK INSTRUMENT ..... IS NECESSARY **DISCONNECTION MEMO**
12	CURRENCY OF DCN ..... **90 DAYS**
13	HQ OF CCRS IS AT ..... **LUCKNOW**
14	CCRS IS RELATED WITH .....DEPARTMENT **CIVIL AVIATION**
15	MAXIMUM LENGTH OF DC TRACK CIRCUIT IN BLOCK SECTION WITH PSC/WOODEN SLEEPER WITH USING QTA2 RELAY----- **450 METER**
16	MINIMUM ENERSISAITON OF QBAT REALY IS LIMITED TO ..... **122% RATED PICKUP VALUE**
17	MAX ENERSISAITON OF QBAT REALY IS PERMITTED UP TO ..... **235% RATED PICKUP VALUE**
18	..... % OF CONDUCTOR ARE KEPT SPARE AT STATION BEFORE LAST POINT OF STATION **20%**
19	..... % OF CONDUCTOR ARE KEPT SPARE AT STATION AFTER LAST POINT OF STATION **10%**
20	THE DISTANCE BETWEEN LSS OF OPPOSITE DIRECTION AND INNER DISTANT SIGNAL . ..... **1180 METER**

21	D/ DISTANT SIGNAL IS PROVIDED IF SECTION SPEED IS ..... **120KMPH OR MORE**
22	SANCTION OF CATCH SIDING OR SLIP SIDING IS GIVEN BY..... **RAIWAY BOARD**
23	SLIP SIDING PROTECT ..... **BLOCK SECTION**
24	IN SGE BLOCK WHEN BLOCK HANDLE IS TURNED FROM LB TO TOL ..... POLARITY GOES ON LINE **POSITIVE**
25	IN SGE BLOCK WHEN BLOCK HANDLE IS TURNED FROM LB TO LC ..... POLARITY GOES ON LINE **NEGATIVE**
26	DAC WORKS ON THE PRINCIPLE OF ..... **PHASE REVERSAL**
27	IN RE AREA ..... IS PROVIDED IN LINE CIRCUIT TO PROTECT THE B/INST FROM INDUCED VOLTAGE **FILTER UNIT**
28	PERCETNTAGE REGULATION OF TRACK RELAY SHALLNOT BE LESS THAN **68%**
29	ESSENTIAL OF INTERLOCKING IS RELATED WITH SEM PARA **7.82**
30	SWR IS REVISED AFTER ISSUING OF ..... CORRECTION SLIP **5**
31	PASSING OF IBS AT ON IS RELATED WITH GR PARA ..... **GR 3.75**
32	FACILITY FOR ISSUING DISCONNECTION MEMO IS IN .....LANGUAGE **THREE**
33	ACCORDING TO STANDARD OF INTERLOCKING 2004 (R) MAX SPEED IN Std III **UP TO 140 Kmph**
34	LEVEL CROSSING GATE WHICH ARE SITUATED IN STATION LIMIT ARE TERMED AS ..... **ENGG GATE**
35	CROSSING ANGLE OF ROAD AT RAIL SHALL NOT BE LESS THAN ..... **45 DEGREE**
36	OBSTRUCTION TEST OF POINT IS DONE WITH ..... MM TEST GAUGE **5**
37	DURING REVERSE OPERATION OF POINT ..... AND ..... CONTACT ARE MAKE **NC AND RC**
38	DURING NORMAL OPERATIONF POINT ..... SUPPLY IS PROVED IN CH **N110**
39	'ON ' ASPECT OF AUTO MATIC SIGNAL IS ..... **RED**
40	' NORMAL ' ASPECT OF AUTO MATIC SIGNAL IS ..... **GREEN**
41	IF HOME SIGNAL IS DISPLAYING YELLOW WITH ROUTE THEN ASPERCT OF D/DISTANT SIGNAL .....

	DOUBLE YELLOW
42	SPECIFICATION OF BATTERY CHARGER IS ------- **IRS-S-86/2000**
43	TERMINAL VOLTAGE DURING BOOST CHARGING IS KEPT ------- **2.4 V/CELL**
44	IN COLOUR LIGHT SIGNALING VISIBILITY OF DISTANCE SIGNAL IS CONSIDERED FROM------- **400 METER**
45	POSITIVE TERMINAL OF LEAD ACID CELL IS------ **LEAD PER-OXIDE**
46	NEGATIVE TERMINAL OF LEAD ACID CELL IS----- **SPONGY LEAD**
47	ELECTROLYTE OF LEAD ACID CELL IS----- **DILUTE H2SO4**
48	TO CALCULATE THE LENGTH OF PARALELLISM THE VALUE OF POWER FACTOR IS CONSIDER----- **1.5**
49	IN RE AREA INDUCED VOLTAGE IN SINGLE LINE SECTION IS CONSIDER **116 VAC/KM**
50	IN RE AREA INDUCED VOLTAGE IN DOUBLE LINE SECTION IS CONSIDER **95 VAC/KM**
51	THE DIFFERENCE BETWEEN NORMAL OPERATING CURRENT AND DECLUTCHING CURRENT SHALL NOT BE LESS THEN **0.5A**
52	FRICTION CLUTCH DECLUTCH BETWEEN-------- % OF NORMAL OPERATING CUURENT **150% TO 250%**
53	MOTOR USED IN IRS POINT MACHINE IS----- **DC SERIES SPLIT FIELD MOTOR**
54	MAXIMUM CURRENT THAT CAN BE PROVIDED TO IRS POINT MOTOR **8.5A**
55	WHEN 3.25 MM TEST PIECE IS KEPT AT 150 MM FROM TOE BETWEEN TONGUE RAIL & STOCK RAIL DETECTION CONTACT SHALL BE **JUST BREAK**
56	WHEN 1.6 MM TEST PIECE IS KEPT AT 150MM FROM TOE BETWEEN TONGUE RAIL & STOCK RAIL DETECTION CONTACT SHALL BE **JUST MAKE**
57	CALLING ON SIGNAL IS ------ **SUBSIDARY SIGNAL**
58	GAP BETWEEN TOP OF FIRST WILLIUM AND BOTTOM OF RAIL IS MAINTAINED------- **1.5 TO 3 MM**
59	THROUGH OF IRS POINT MACINEE IS------ **143MM**
60	NAME OF POINT OPERATION SWITCHING RELAY IS ------ **WR**
61	NAME OF POINT END OPERATION PROVING RELAY IS ------ **WKR3**
62	NAME OF POINT OPERATION TIME LIMITING RELAY IS ------

	W(R)R/W(N)R
63	RELAY -----PROVES THE PURPOSE OF SUPER IMPOSED DETECTION CIRCUIT **W(R)R/WNR**
64	DURING AUTOMATIC ROUTE RELEASE -------RELAY PROVES THE POWER SUPPLY AVAILABILITY **ZR**
65	TO OPERATE THE POINT IF POINT ZONE TRACK IS FAILED ------AND -----BUTTONS ARE PRESSED TO OPERATE THE POINT **EWN & CORRESPONDING POINT BUTTON**
66	THE ARRANGEMENT TO PREVENT THE POINT OPERATION IF POINT ZONE TRACK IS FAILED IS CALLED ------ **TRACK LOCKING**
67	UNIVARSAL TRACK CIRCUIT IS TERMED AS ----- **AFTC**
68	SIZE OF TRACK LEAD CONDUCTOR IN DC T/CIRCUIT------ **2.5 SQUARE MM**
69	LEVEL CROSSING GATE SITUATED BETWEENOUTER MOST STOP SIGNAL ARE TERMED AS **TRAFFIC GATE**
70	TO PREVENT THE SIGNAL TO GOING DANGER DURING POWER SUPPLY FLUCTUATION GR1 IS MADE ------ **SLOW TO RELEASE**
71	IN INDIA FIRST AC TRACTION WAS STARTED IN ----- **1960**
72	RESISTANCE OF BLOCK PROVING RELAY IS------- **77 OHM**
73	OVERHAULING OF BPR IS DONE AFTER ------ **7 YEARS**
74	TO INCREASE CURRENT TO A CIRCUIT BATTRIES ARE CONNECTED IN ----- **PARALLEL**
75	TO INCREASE VOLTAGE TO A CIRCUIT BATTRIES ARE CONNECTED IN ----- **SERIES**
76	STAGE 1 SPD IS CONNECTED BETWEEN ------AND ------- **PHASE & NEUTRAL AND NEUTRAL& EARTH**
77	STAGE 2 SPD IS CONNECTED BETWEEN ------AND ------- **PHASE & NEUTRAL**
78	AS THE SURGE VOLTAGE APPEARS ACROSS SPD IT SHOWS ------- EFFECT **CLAMPING**
79	IF ACTUAL NUMBER OF SMR IS NEEDED ' N' THEN NUMBER OF SMR PROVIDED IN IPS SYSTEM IS ..... **N+2**
80	THE VALUE OF MAINTAINANCE FREE EARTH SHALL BE------- **UP TO 1 OHM**
81	IN EI APPLICATION SOFTWERE IS RELATED WITH PARTIULAR ..... **YARD LAY OUT**
82	IN EI EXECUTIVE SOFTWERE IS ..... TO ALL LAY OUT

	COMMON
83	TO CLEAR THE CALLING SIGNAL …. ….. …. ARE PRESSED **GN, COGGN,UN**
84	ISOLATION IS PROVIDED IF TRAIN SPEED IS MORE THAN…… **50 KMPH**
85	K-50 RELAY ARE ……TYPE RELAY **PROOVED**
86	METAL TO CARBON CONTACT RELAY ARE CALLEED….. **NON PROVED TYPE RELAY**
87	WORKING FREQUENCY OF SIEMENS DAC IS..... **43 KHz**
88	WORKING FREQUENCY OF ELDYNE DAC IS..... **28 KHZ AND 30 K H z**
89	IF TVU IS BETWEEN 25000 TO 30000 THEN GATE IS CLASSIFIED AS ….. **B 1 CLASS**
90	IBS IS EQUIVALENT TO .....STATION **C-CLASS**
91	AS DECR DROPS DR RELAY DROPS **F**
92	AS BLOCK HANDLE TURNED FROM LC TO TOL BLOCK HANDLE LOCKS THEN AFTER TOL CIRCUIT COMPLETED **True**
93	Z1NWR AND Z1RWR ARE INTERLOCKED RELAY
94	WKR2 RELAY IS CALLED CROSS PROTECTION RELAY **True**
95	FOR STRAIGHT ROUTE A U(R)S IS SET **True**
96	POLARITY ON EITHER SIDE OF G/JOINT IS SAME IN CONTINUOUS TRACK CIRCUITING **False**
97	LED OF HG ASPECT IS KEPT IN BLANKING MODE **True**
98	IN PROOVED TYPE RELAY BACK CONTCT PROVING IS COMPULSORY **True**
99	BREAK CONTACT OF NOMALLY PICK UP RELAY IS BACK CONTACT **True**
110	AFTER REMOVING CRANK HANDLE KEY FROM CH BOX POINT CAN BE OPERATED FROM PANEL **True**

State True or False

1	DG sets are used as Emergency source of supply in Non – RE area. **True**
2	It is possible to take off two signals at the sometime which lead to any conflicting movement. **False**
3	The tripping of clutch driven lever shall not cause a vidiual induction to be displayed in the cabin thus repeating the faulty condition of the transmission. **False**
4	The compensator should transmit working stroke unchanged although it must reverse the direction. … **True**
5	When the track circuit is occupied just ahead of the cleared signal, the signal turns yellow. **False**
6	There are three types of Standards of Interlocking, Std-1,Std-2,Std-3. **True**
7	The maximum distance by which a point can be operated by Power is limited to 1 K.M. **False**
8	Relays CR-1, CR-2 & CR-3 are used as Coding Relays in Podnur S/L token less block instrument. **True**
9	Disconnection /Reconnection need not be given when any repair or alteration is necessary in a Point or signal. **False**
10	Signal Overlap of 120 mtrs. must be kept clear in advance of a signal before signal in rear can change to caution aspect. **False**
11	DTR should be written up daily **TRUE**
12	Detailed estimate should not be prepared for works **FALSE**
13	In double wire system Push – Pull and Pull – Pull systems is used. **TRUE**
14	The tripping of Clutch driven lever shall not cause a visual indicator to be displayed in the cabin thus repeating the faulty condition of the transmission. **FALSE**
15	The maximum distance by which a point can be operated by power is unlimited **TRUE**
16	The staggering between the rails indicators in axle counter fixed to the two rails is adjusted to be not less than 160mm and not more than 185. **TRUE**
17	The time set for back lock is 120secs for home signals in a panel interlocking station.

	FALSE
18	Gate signals (Stop) are provided with letter 'C' in black on yellow **FALSE**
19	The length of track in advance of a stop signal, which should be kept clear before the signal next in rear can be taken 'Off" is known as the signal overlap. **TRUE**
20	It is possible to take 'Off' at the same time any two fixed signal which may lead to any conflicting movements. **FALSE**
21	Picking up of WKR2 relay in signals point group proves correct setting and locking. **FALSE**
22	Failure of indication lamp does not affect the signal lamp voltage **TRUE**
23	There are three types of standards of Interlocking Std – I, Std – II & Std – III. **True**
24	In double wire system "push-pull" and "pull-pull" system is used **True**
25	The maximum distance by which a point can be operated by power is unlimited **True**
26	The staggering between the rails indictors in axle counter fixed to the two rails is adjusted to be not less than 160 mm and not more than 185mm. **True**
27	The length of track in advance of a stop signal, which should be kept clear before the signal next in rear can be taken 'Off" is known as the signal overlap. **True**
28	Picking up of WKR2 relay in signals point group proves correct setting and locking. **False**
29	The time set for back lock is 120secs for home signals in a panel interlocking station. **False**
30	Gate signals (Stop) are provided with letter 'C' in black on yellow circular disc. **False**
31	When GR 1 and GLSR picks-up, signal clears to yellow aspect **False**
32	Failure of indication lamp does not affect the signal lamp voltage **True**
33	In fully charged condition specific gravity of electrolyte should be more than 1180. – **True**
34	Humming is observed during speech due to earth fault on line. **True**
35	PC starts with the help of operating System.

	True
36	Bell/Buzzer used in telephone may be AC/DC. **True**
37	D-8 cable is used for microphone cord. **False**
38	Aviation lamp is lighted during entire day. **False**
39	Radio patching system only speech is transmitted. **False**
40	NMS used for OFC Maintenance **True**
41	Charcoal and salt are commonly used for preparation of earth. **True**
42	E-mail can be send by Internet. **True**

Audio Frequency Track Circuit (AFTC)

1	AFTC is not suitable for non-traction area. **False**
2	For longer length of track sections centre fed version of AFTC is to be used. **True**
3	"S" bond is used in Siemens AFTC. **True**
4	ABB AFTC is coded type. **False**
5	In AFTC, ordinary line relay works as track relay. **True**
6	Before replacing any card of Siemens AFTC, **A) Remove the concerned card, clean its connector and re-insert.** B) Replace the card with another card C) Repair the card and re-insert it.
7	For separation between two Siemens AFTCs, the bond used is A) Shunt bond B) Terminal bond **C) S bond**
8	In Siemens AFTC, components failures are taken care of by A) dual channel design of receiver equipment B) Parallel movement (Synchronism) of track circuit relays **C) Both of the above.**
9	Siemens AFTC have **A) 10 different bit code patterns** B) 15 different bit code patterns C) 20 different bit code patterns
10	In Siemens AFTC FTG 46 has **A) 4 channel frequencies** B) 6 channel frequencies C) 8 channel frequencies
11	Minimum length of Siemens AFTC is **A) 50 Meter** B) 40 Meter C) 30 Meter
12	Maximum length of transmitter cable of Siemens AFTC FTGS 917 with 0.5 TSR is A) 3 KM B) 4.5 KM **C) 6.5 KM**
13	Maximum length of receiver cable of Siemens AFTC FTGS 917 with 0.5 TSR is A) 7 KM **B) 4.5 KM** C) 3 KM
14	Maximum length of receiver cable of Siemens AFTC FTGS 46 with 0.5 TSR is A) 3 KM B) 4.5 KM **C) 6.5 KM**

15	Maximum length of transmitter cable of Siemens AFTC FTGS 917 with 0.5 TSR is A) 3 KM B) 7.4 KM **C) 4.7 KM**
16	ABB AFTC works on principle of **A) FSK** B) MSK C) ASK
17	In ABB AFTC when worked as low power mode. transmitter is connected to the tuning unit terminal number **A) 1 & 2** B) 4 & 5 C) 2 & 4
18	In ABB AFTC receiver is always connected on tuning unit terminal number **A) 1 & 2** B) 4 & 5 C) 1 & 3
19	In normal power mode of ABB AFTC transmitter is connected to tuning unit terminal number A) 1 & 2 **B) 4 & 5** C) 2 & 4
20	Type of Siemens AFTC is **A) coded,** B) encoded, C) both

Digital Axle Counter (DAC)

1	Transformer in the ZP43 unit combines the signal of both channels and feed them into the signalling cable. **True**
2	The information is transmitted to the interlocking via the BELA 12 board. **True**
3	The transmission process uses floating relay contacts and Optocouplers for information input and output. **True**
4	VESBA board transmit at two signal frequency **True**
5	AZ S 350 U is a comprises of two micro processors **True**
6	Az S350 U uses microprocessor 8085. **True**
7	SIMIS Fail safe microcomputer system comprises of two identically programmed microcomputers. **True**
8	In DAC data transmission procedure provides communication between- A. Az S350U B. DEK43 and ZP43 **C. Az s 350U AND ZP43**
9	In digital Axle counter, when Axle enters the double wheel detector zone **A).It increases the alternating electromagnetic field.** B). Decrease the alternate electromagnetic field. C). Electromagnetic field remains unchanged.
10	In digital axle counter when axle enters the double wheel detectors sensing range **A. It increases the magnetic coupling between transmitter receivers.** B. It decreases the magnetic coupling between transmitter receivers. C. Remains unchanged.
11	As the receiver voltage increases beyond quiescent voltage when wheel passes over detections head, the voltage frequency convert or reacts by A. Decreasing the frequency beyond lower band limit. **B. Increasing the frequency beyond upper band limit.** C. None
12	Each track vacancy detection section has A. Single channel to reset restriction. B. Reset acknowledgement. **C. Both of the above.**

13	In interlocking a dual channel reset is used via A). AZGrT B). VAZGrT **C.) AZGrT and VAZGrT**
14	Siemens Digital Axle counter system is base on. (A)Track shunt principle, **(B) Axle counting principle** (C) None
15	In digital axle counter system counting heads are provided at A. The beginning of Axle counter section. B. The end of Axle counter section. **C. Both beginning and end of the section.**
16	In digital Axle counter system incount is equal to outcount than **A. Section is indicated as clear.** B. Section is indicated as occupied. C. None
17	DAC Axle counter system can be used in A. Straight track detection. B. Point and crossover track detection. **C. Both straight and point & cross over track detection.**
18	In Digital Axle Counter evaluation computer carries out A. Evaluates the signals transmitted from the counting head. B. Compares the number of axles counted in and the number of axle counted out. **C. Both (A) & (B)**
19	In Siemens DAC valuation of evaluator computer A. Monitors track vacancy detection sections. B. Generates track clear or occupied indication. **C. Both of (A) & (B)**
20	In Siemens DAC, STEU card provided for **A). Different indications.** B). displays in count only C. displays out count only

Initial Battery Charging

1	When battery charger is in Boost mode and Lead Acid Battery voltage reaches 2.4V per cell, charger will switch back to Float mode automatically. **True**
2	Lower level of Electrolyte in Lead Acid battery will over heat battery while charging. **True**
3	Worn out plates of Lead Acid battery will lead to unequal voltage and unequal specific gravity of cell. **True**
4	Premature gassing defect of Lead Acid cell is rectified by prolonged charging at very low rate at half the freshening rate of charge. **True**
5	Electrolyte loss due to spillage should be replaced with proper amount of electrolyte of the same specific gravity. **True**
6	For preparation of solution for Lead Acid Cell the ratio of acid to distilled water is **A) 1:5** B) 2:5 C) 3:5 D) None
7	Initial Charging of Lead Acid Cell should be continues at least for **A) 12Hours** B) 20 Hours C) 40 Hours D) 60 Hours
8	The temperature of Electrolyte in Lead Acid Cell should not be allowed to rise above **A) 45 degree centigrade** B) 55 degree centigrade C) 65 degree centigrade D) 70 degree centigrade
9	The period of Initial discharging of Lead Acid Cell should not be less than A) 4 hours B) 6 hours C) 8hours **D) 10 hours**
10	Electrolyte prepared for filling in Lead Acid cell for Initial Charging must have specific gravity of **A)1.190 +/-0.005** B)1.215+/-0.005 C)1.240+/-0.005
11	Lead acid batteries to be initially charged should be of A) Same type & any AH capacity **B) Same AH capacity & type** C) Same AH capacity & Company.
12	For continuous load, the battery bank should be on **A)"FLOAT CHARGE" working** B)"TRICKLE CHARGE" working C))"CHARGE DISCHARGE" working
13	During initial charging if temperature of electrolyte rises above 45

	degree centigrade charging current should be reduced to A) 1/2 of the rate **B)1/3 of the rate** C) 1/4 of the rate
14	It is preferable to dilute Sulphuric acid to prepare solution for filling in Lead Acid Batteries in A) Single Stage **B)Two Stage** C)Three Stage
15	During Initial charging, Mode selecter switch of Battery Charger should be kept in A) Manual mode **B) Auto mode** C) Any of these
16	Number of micro switch to be kept ON, on cell selecter switch is **A) one** B) Two C) All
17	Voltage selecter switch shall be used for adjusting cell voltages in case of A) Auto mode **B) Manual Mode** C) Both modes
18	In Lead Acid Batteries all vent caps should be kept closed and all floats are in position A)To prevent Discharging of cell **B)to check level of electrolyte** C)To prevent addition of Water
19	Positive of charger has to be connected to battery terminal **A) Positive of Battery** B) Negative of Battery C) Any where
20	Low level of electrolyte in the lead acid cell is caused by **A)Excess charging** B)Impure Distilled water C) Both of these

Electronic Interlocking –GE

1	VGPIO card provides eight vital inputs for sensing voltage. **True**
2	VGPIO provides eight vital outputs for driving cards. **False**
3	Current loop adapter module communicates serially with local control panel. **True**
4	Module RS 485 is typically used for communication between VHLC & PC **True**
5	RS 232 communicates between two VHLC units. **True**
6	Number of inputs/outputs a VGPIO card can cater is A) 6/6 B) 6/8 C) 8/6 **D) 8/8**
7	Number of inputs a VGPI card can cater is A) 8 B) 10 C) 14 **D) 16**
8	Number of inputs/outputs a NVIO card can cater is **A) 16/16** B) 16/8 C) 8/16 D) 8/8
9	LED indication showing VGPIO module healthy is A) Red B) Yellow **C) Green** D) Blue
10	Communication between CLA and CLLP I/O is **A) 128** B) 64 C) 32 D) 16

Power supply Equipment's

1	In Integrated power supply system, modules cannot be replaced when system is ON. **False**
2	On stations provided with Integrated power supply system, signal supply is assured even if all incoming supply fails. **True**
3	To dilute acid, acid is added in distilled water. **True**
4	D.C - D.C converter works on A.C supply **False**
5	Float charging is adopted where the load is of continuous type. **True**
6	Centre rod of 6 I cell consists of A) Zinc **B) Solid Carbon** C) Iron D) Lead.
7	Powder filled around carbon rod in 6I cell is A) NH4Cl B) CO2 **C) Mn02** D) Coal
8	Capacity of 6I cell is A) 20 AH **B) 40 AH** C) 80 AH D) 120AH
9	In IPS, inverters and Ferro-resonant based voltage regulators are provided in **A) AC distribution panel** B) DC distribution panel C) SMPS panel
10	IPS is suitable for use with A) VRLA batteries (IRS S93/96A) B) Low maintenance batteries (IRS S 88/93) **C) Any of these**
11	For non-RE Area, capacity of battery bank provided with IPS has a capacity of A) 120 AH B) 200 AH **C) 300 AH**
12	For RE Area capacity of battery bank provided with IPS is **A) 120 AH** B) 200 AH C) 300 AH
13	Maximum AC power (Current) required at 230V by IPS in RE Area is A) 6KVA **B) 3KVA** C) 2.5KVA
14	Maximum AC power (current) required for IPS designed for MACLS with end cabins is A) 6KVA B) 3KVA **C) 2.5 KVA**
15	In IPS, "Start generator" indication is displayed and resettable alarm sounds when **A) Battery discharges to 50%** B) Battery discharges to 75% C)

	When incoming power supply fails.
16	In IPS, System shutdown indication and non-resettable alarm sounds when **A) Battery discharges to 70%** B) Battery discharges to 90% C) When power supply given to IPS fails.
17	Positive terminals of batteries, which are to be charged, should be connected to A) Negative terminal of battery charger B) Positive terminal of "LOAD "on charger **C) Positive terminal of battery charger**
18	Electrolyte in VRLA cell is absorbed in A) PVC B) Wood **C) Absorptive Glass Mat**
19	Negative plate of VRLA cells is **A) Lead Cadmium Alloy** B) Patented MFX Alloy C) Lead peroxide
20	VRLA cell supplied by the firm is **A) Fully charged** B) Partially charged C) Un-charged

Basic Concept of Signalling

1	When calling ON signal is taken OFF, the driver is authorized to resume full sectional speed. **False**
2	After granting line clear in class "A" station, shunting can be permitted in face of an approaching train. **False**
3	Multiple aspect signalling a signalling arrangement in which signals display at any one time any one of the three or more aspects. **True**
4	For protecting the obstruction only one man is sufficient **False**
5	Breaking distant should not be less than 1000 meter. **True**
6	Route indicators are treated as A.Stop signals **B. Signal device** C. Subsidiary signal D. None
7	Visibility of main line starter in MACLS is **A.400 mtrs** B. 600 mtrs C 200 mtrs. D. None
8	Hand flag is not available in A) Red colour B) Green colour **C) Yellow colour D) None**
9	The colour of light used during night to show hand signal in case of emergency is **a) Red colour** b) Green colour c) yellow Colour d) white colour.
10	BSLB is provided at a station on **A) D/L section** B) both single & double line station C) MA/UQ territory D) None
11	Signal overlap in 2-aspect territory is A.120 mtrs. **B. 180 mtrs.** C. 400 mtrs. D. 600 mtrs.
12	The White miniature armed signal painted with red band in Semaphore signal is called A. Shunt signal B. Co-acting signal **C. Calling on signal** D. None
13	Stations are mainly classified as **A. Block and Non-block** B. Class A & Class B C. Class C & Class D D. None
14	Shunt signal is classified as A) Receiving signals B) Departure signal C) Main stop signal **D) Subsidiary signal**
15	"P" marker is provided on A) Stop signals B) Gate signals **C) All permissive signal** D) None

16	Warner signal located below a stop signal is capable of displaying A) 3 aspect signal **B) 2 aspect signal** C) 4 aspect signal D) None
17	Calling on signal cannot be placed below a A) Stop signal B) starter signal **C) LSS** D) None
18	Co-acting signals are provided in **A) Semaphore signal territory** B) CLS territory C) PI. /RRI territory D) None
19	Example for subsidiary signal is A) Home **B) Shunt** C) Distant
20	First detonator is placed at _____m from the site of obstruction **A) 1200,** B) 600, C) 450
21	A Token may also be used as an authority to proceed. **True**
22	Where trains are worked under absolute block system, no train shall be allowed to leave a block station in advance until a line clear is received from the block station in advance. **True**
23	A driver finds an IB stop signal at ON then driver may be passed with prescribed procedure. **True**
24	When a driver finds an IB stop signal at ON he shall bring his train to a stop in rear of the signal. **True**
25	The distance between outer face of gate and gate stop signal is 180m/400m as Block .Overlap. **True**
26	The White miniature armed signal painted with red band in Semaphore signal is called A. Shunt signal B. Co-acting signal **C. Calling on signal** D. None
27	Stations are mainly classified as **A.Block and Non-block** B. Class A & Class B C.ClassC & ClassD D.None
28	In Basic concept of Signalling, SR means A.Stick relay **B. Subsidiary Rule** C. Safety rule D. None
29	Visibility of main line starter in MACLS is **A.400 mtrs** B. 600 mtrs C 200 mtrs. D. None
30	A lower quadrant signal system have (A)3 aspect signals (**B)Outer signal with Warner**(C)Home signal with route (D) None
31	Colour of Banner flag is **(A) Red colour** B) Green colour C) Yellow colour D) None
32	The colour of light used during night to show hand signal in case of emergency is **a) Red colour** b) Green colour c) yellow Colour d) white colour.

33	The colour of light used in ON position of Calling on signal is **A) No light** B) Red light C) yellow light D) Green light.
34	"P" marker is provided on A) Stop signals B) Gate signals **C) All permissive signal** D) None
35	Co-acting signals are provided in **A) Semaphore signal territory** B) CLS territory C) PI. /RRI territory D) None
36	The FSS of class 'A' station is **A) Outer** B) Warner C) Home D) None
37	Shunting in the face of an approaching train up to SLB is permitted in A) Class 'A' station **B) Class 'B' station** C) Class 'C' station D) None.
38	Example for subsidiary signal is A) Home Signal **B) Shunt Signal** C) Distant Signal
39	First detonator is placed at what distance from the site of obstruction **A) 1200,** B) 600, C) 450
40	Block overlap in LQ is A) 120 m **B) 400m**, C) 180m

Orthodox Signalling

1	Opening of rodding compensator arm should be 29 ½ inch when the lever is in reverse position. **True**
2	Following Williams stretcher is maintained by S& T staff. **False**
3	While adjusting a point, fixed heel switch is not connected with lever if it is not in centre position. **True**
4	In a single wire transmission, for wire run at long angular diversion, horizontal wheel is used. **True**
5	In a single wire transmission, due to stretch in wire, lever operation becomes hard **True**
6	Channel pitch in direct type lever frame is **A) 110 mm** B) 40 mm C) 65 mm
7	On straight rodding run, maximum distance between two adjacent roller guide is A) 6 feet B) 7 feet 9 inch **C) 7 feet**
8	Length of adjustable arm in right angle adjustable crank is **A) 18 inch** B) 16 inch C) 12 inch
9	When lever is in normal position, opening of the rodding compensator arm is A) 21 ½ inch **B) 13 ½ inch** C) 8 inch
10	Minimum number of lock bar clips provided in lock bar is A) 5 no's B) 3 no's **C) 9 no's**
11	During the adjustment of facing point lock, before connecting the lock plunger with plunger driving rod, the lock plunger should kept clear from split stretcher notch by **A) Half inch** B) 3 inch C) 1 inch
12	Minimum number of bar stop in lock bar are A) 5 B) 6 **C) 3**
13	When lock bar is operated, it should be clear from toe of switch(in BG) by A) Half inch **B) 1inch (25mm)** C) 1 1/2 inch
14	In a unit wire detector, size of notch on lock slide is A) 2 inch x 1/2 inch **B) 1 inch x 1/2 inch** C) 2 1/8 inch x 1/8 inch

15	The number of point slide in a unit wire detector is A) 5 B) 4 **C) 1**
16	In a unit wire detector, thickness of signal slide is **A) 10 mm** B) 15 mm C) 25 mm
17	Burners of signal lamp must be changed at every A) 6 months **B) 3 months** C) 12 months
18	In single wire transmission, length of long distance transmission is more than **A) 300 meter** B) 1000 meter C) 500 meter
19	In single wire transmission, size of wire rope is A) 7/17 SWG **B) 7 x 7/22 SWG** C) 7/22 SWG
20	In a single wire transmission, swing pulley is available maximum in **A) 3 way** B) 6 way C) 9 way
21	In catch handle type lever frame, conflicting notch can be avoided by use of Top piece. **True**
22	Signal Maintainer can give disconnection memo for overhauling of lever frame. **False**
23	In signal fitting, signal roundel rings are fixed in rear of "B" type spectacle. **True**
24	In semaphore arm signal, back light screen is directly connected to the spectacles casting in "A" type Spectacle. **True**
25	In a single wire transmission, draft wheel is used on signal lever tail for short distance signal. **False**
26	In catch handle type lever frame, stroke of tappet is A) 346mm B) 110 mm **C) 65 mm**
27	In catch handle type lever frame, slack locking is existing if the catch blocks is lifted above the quadrant notch by more than A) 12 mm **B) 10 mm** C) 25 mm
28	In a Catch handle lever frame, Catch handle levers are available in group of A) 5 or 7 lever **B) 8 or 10 lever** C) 3 or 1 lever
29	Maximum number of channels in Catch Handle type lever frame is A) 4 B) 3 **C) No limit**
30	In rodding run, maximum bend permitted in rodding is A) 60 mm **B) 90 mm** C) 25 mm
31	In rodding run, on straight rodding run, maximum distance between two adjacent roller guide is A) 6 feet B) 7 feet 9 inch **C) 7 feet**
32	In rodding run, height of low relief crank is A) 8 inch **B) 3 inch** C) 5 1/2 inch
33	In rodding run for lock operating rod, rodding compensator is not

	required for a length upto **A) 18.5 meter** B) 12 meter C) 60 meter
34	In rodding run, the crank provided at lead out is A) Adjustable arm crank B) Straight arm crank **C) Accommodating crank**
35	In rodding run, the last crank of rodding run can be A) Normal crank B) Reverse crank **C) Normal OR Reverse crank**
36	In mechanical points in BG, Lock bar is normally below the rail level by **A) 38 mm** B) 25 mm C) 44 mm
37	While testing a mechanical point, size of test piece used by S&T Staff is **A) 1/8 inch** B) 1 inch C) Half inch
38	In a unit wire detector, maximum throw of point slide is **A) 4 1/2 inch** B) 3 1/2 inch C) 21/2 inch
39	In semaphore signal, dead space in "B" type spectacle is A) 2 1/2 inch **B) 1 1/2 inch** C) 3 inch
40	In signal fitting, burners of signal lamp must be changed at every A) 6 months **B) 3 months** C) 12 months

Signal Reverser, LLCC, ALR

1	**If Signal Arm is not correctly at 'ON' and 'OFF' position, then repeating Arm of Arm and light repeater should show "wrong" position.** True
2	Lever Lock works on AC & DC supply. **True**
3	All the split pins of Lever Lock and Circuit Controller should be in open position. **True**
4	Counter weight is provided in IRS type Lever Lock. **False**
5	In IRS type Lever Lock, coil can be connected in Series/Parallel as per requirement. **False**
6	B type signal reverser is suitable for A) U.Q. B) L.Q. **C) U.Q. & L.Q.**
7	Reverser is connected with between A) Spectacle rod and coupling lever B) Operating rod and supporting lever **C) Spectacle rod & Operating rod**
8	In reverser Unauthorised operation of semaphore arm is prevented by **A) Lock pawl** B) Electro magnet C) Operating crank
9	Spectacle lever and Operating lever are coupled by **A) Coupling lever** B) Supporting lever C) Roller & bracket
10	Clearance between lock pawl and spectacle lever gear teeth of reverser should not be more than A) 3 mm **B) 1 mm** C) 5 mm
11	Minimum working voltage of a reverser is A) 10 V B) 12.5V **C) 7.5V**
12	Polarity of reverser coil should be changed once in A) Every six months **B) Every month** C) Fortnightly
13	In circuit controller of lever lock 1 number band is always **A) In inner side of the circuit controller** B) Front side of the circuit controller C) Middle of the circuit controller
14	Lever lock & circuit controller works on supply A) DC supply B) AC supply **C) Both AC or DC supply**
15	Electro- mechanical equipment's require force drop arrangement. A) For positive normalisation B) To energisation C) To make the

	back contact.
16	The edge of notch of lever lock slide should be in shape of A) Round shape **B) Square shape** C) Slopped
17	lever lock & circuit controller bands are nominated **A) As per lever position** B) As per band position C) As per requirement
18	Coil resistance of arm repeater of arm & light repeater unit is **A) 300 ohm**s B) 150+150 ohms C) 200 ohms
19	Repeating arm of Arm & light repeater unit repeats the position of **A) Signal Arm** B) Signal Lever C) SM slide
20	If the signal arm is not correctly at ON or OFF position ,then the arm of the Arm & light repeater unit should show A) ON indication B) OFF indication **C) Wrong indication**

Int. Slotting, EKT

1	**Cross protection is to be provided in all electrical circuit.** False
2	A slotted signal shall not taken off without receipt of slot. **True**
3	Dropping of concerned track circuit shall cause the slot circuit to fail. **True**
4	In RWRK circuit NWKR back contact is proved in Electrical detector. **True**
5	Cross protection is not compulsory in Electrical detector circuit. **True**
6	A slotted device is controlled by. A) more than one agency B)one agency **C) one or more agency.**
7	A slotted signal can be put back at ON by A) all controlling agency **B) any one of the controlling agency** C) none
8	One slot one signal system is worked by. **A) SR circuit** B) E type lock C) levers
9	For slotting, the device provided on semaphore arm signal is **A) Reverser** B) Electrical Key Transmitter C) Lever
10	To establish an electrical control on mechanical lever, device used is A) EKT B) Reverser **C) Electric lever lock and circuit controller.**
11	Electric lever lock is fitted with **A)Mechanical lever** B) Signal post C) Electrical detector
12	Lever position can be repeated by A) Electric lever lock **B) Circuit controller** C) Relay
13	A slot relay is a **A) line relay** B) time element relay C) PR relay
14	A slot relay picks up when slot controlling track circuit is in A)De- energised condition **B) energised condition** C) any condition
15	In a slot circuit, provision of cross protection is **A) must** B) optional C) not necessary
16	The relay ensuring one train on one slot is A) YR **B) YSR** C) SR

17	For operation of point ,signal or gate a key can be transmitted electrically by means of **A) EKT** B) Electric Lever lock C) Reverser
18	Slot indication is given by A) Reverser **B) Slot Indicator** C) Buzzer
19	In 25 KV RE Slot circuits are controlled through **A) AC immunised Relay** B) Non immunised Relay C) Track relay
20	In luminous type slot indicator rating of used bulb is A) 12 V,24 W B) 12 V,2.4 W **C) 12 V,4 W**
21	In Electrical Key Transmission, same circuit can be used for RE & Non RE area. **False**
22	As far as possible, Electrical Key Transmiter shall be fitted near to the gear, which it controls by key **True**
23	In Electrical detector, NWKR back contact is proved in RWKR circuit. **True**
24	'N' band of point lever is used in NWKR circuit of Electrical detector. **True**
25	Cross protection is not compulsory in Electrical detector circuit. **False**
26	A slotted device is controlled by. A) more than one agency B)one agency **C) one or more agency.**
27	A slotted signal can be put back at ON by A) all controlling agency **B) any one of the controlling agency** C) none
28	One slot one signal system is worked by. **A) SR circuit** B) E type lock C) levers
29	For slotting, the device provided on semaphore arm signal is **A) Reverser** B) Eleactrical Key Transmitter C) Lever
30	To establish an electrical control on mechenical lever, device used is A) EKT B) Reverser **C) Electric lever lock and circuit controller**.
31	Electirc lever lock is fitted with **A)Mechanical lever** B) Signal post C) Electrical detector
32	Lever position can be repeated by A) Electric lever lock **B) Circuit controller** C) Relay
33	A slot relay is a **A) line relay** B) time element relay C) PR relaay
34	A slot relay picks up when slot controling track circuit is in A)De- energised condition **B) energised condition** C) any condition
35	In a slot circuit, provision of cross protection is **A) must** B) optional C) not necessary
36	The relay ensuring one train on one slot is A) YR **B) YSR** C) TR
37	For operation of point ,signal or gate a key can be transmitted electricaly by means of **A) EKT** B) Electric Lever lock C) Reverser
38	Slot indication is given by

	A) Reverser **B) Slot Indicator** C) Buzzer
39	In 25 KV RE Slot circuits are controlled through **A) AC immunised Relay** B) Non immunised Relay C) Track relay
40	In luminous type slot indicator rating of used bulb is A) 12 V,24 W B) 12 V,2.4 W **C) 12 V,4 W**

Relays

1	**In self type, Track relays takes more current to pick up in comparison with line relay.** True
2	In Q style relay, same plug boards cannot be used for all type Q style relays. **True**
3	K-50 relay is non proved type relay **False**
4	'Q' style relay is a proved type relay. **False**
5	Rated voltage of QTA2 relay is 1.4 Volts. **True**
6	Contact combination of K 50 UECR is **A) 5F/1B** B) 6F/2B C) 2F/1B
7	In K 50 mini group relay, spring contact number which remains front contact always is **A) 11-12** B) 51-52 C) 91-92
8	Number of relays in Major group are A) 12 B) 15 **C) 30**
9	In 3 aspect Siemens main signal group number of K 50 relays are A) 10 **B) 13** C) 30
10	A.C immunization level of 4F/4B K.50 relay is A) 120 VAC B) 300 VAC **C) 130 VAC**
11	Maximum pick up current of shelf type AC immunized track relay is A) 39 mA. B) 10 mA. **C) 72 mA.**
12	In shelf type AC immunized relay, magnetic shunt is provided on core **A) above the copper slug** B) below the copper slug C) None
13	AC immunized shelf type Line relay can control a circuit up to a length of A) 1.6 km B) 450 M **C) 3 Km**
14	In QJ1 relay, coil resistance of thermal element is **A) 43 ohms** B) 680 ohms C) 195 ohms
15	In QL1 relay, coil resistance of releasing coil is A) 400 ohms B) 150 ohms **C) 680 ohms**
16	Rated voltage of QBAT relay is A) 1.4 V **B) 1.75 V** C) 0.5 V
17	In Siemens point group, number of K 50 relay is

	A) 11 **B) 12** C) 15
18	Minimum pick up current of QTA2 A) 105mA B) 140mA **C) 120mA**
19	Maximum pick up current of QBAT track relay is **A) 175 mA** B) 140 mA C) 120 mA
20	Q style relay is preferred because its replacement is **A) Easy** B) difficult C) none
21	Shelf type line relay coils are always connected in parallel only. **False**
22	Code pin arrangement is provided in Q style relay to prevent a wrong relay being plugged in a base of different contact combination relay. **True**
23	QSPA1 relay is a slow operating relay. **True**
24	Polarized relay is used only in Single Line Token Block Instruments. **False**
25	Realy having no testing label can be connected in circuit. **False**
26	In QL1 relay, coil resistance of releasing coil is A) 400 ohms B) 150 ohms **C) 680 ohms**
27	Rated voltage of QBAT relay is A) 1.4 V **B) 1.75 V** C) 0.5 V
28	Coil resistance of 6F / 2B K 50 relay is A) 1260 ohms B) 615 ohms **C) 1840 ohms**
29	Contact combination of K 50 ECR is A) 4F/4B **B) 3F/3B** C) 5F/3B
30	Contact combination of K 50 UECR is **A) 5F/1B** B) 6F/2B C) 2F/1B
31	In K 50 mini group relay, spring contact number which remains front contact always is **A) 11-12** B) 51-52 C) 91-92
32	Contact pin number 12 represents contact spring Number A) 31-32 **B) 81-82** C) 33-34
33	Number of relays in Siemens Major group are A) 12 B) 15 **C) 30**
34	In 3 aspect Siemens main signal group number of K 50 relays are A) 10 **B) 13** C) 30
35	AC immunisation level of shelf type track relay is **A) 50 VAC** B) 80 VAC C) 300 VAC
36	A.C immunization level of 4F/4B K.50 relay is A) 120 VAC B) 300 VAC **C) 130 VAC**
37	In shelf type AC immunized relay, magnetic shunt is provided on core **A) above the copper slug** B) below the copper slug C) None
38	AC immunized shelf type Line relay can control a circuit up to a length of A) 1.6 km B) 450 M **C) 3 Km**
39	In Siemens point group, number of K 50 relay is A) 11 **B) 12** C) 15
40	Minimum pick up currrent of QTA2

	A) 105mA B) 140mA **C) 120mA**

Track Circuit

1	In an open Track Circuit track relay is normally in de-energies position **True**
2	When TSR of 0.5 ohms is connected across a DC closed Track Circuit the track relay voltage should not be more than 85% of its drop away value **True**
3	Broken and loose rail bonds and jumpers of Track Circuit should be attended promptly. **True**
4	When 0.15 ohms TSR is connected across an AC Track Circuit, front contacts of track relay should break. **True**
5	If any positive jumper in a Track Circuit is by passed then parallel portion of the Track Circuit may not get shunted when occupied by train. **True**
6	In reactance fed AC track circuit, regulating device is variable A) Resistance B) Condenser **C) Reactance**
7	In a double rail Track circuit in non-electrified area, block joints are provided on A) Any One rail **B) Both rails** C) None
8	In Siemens type double rail AC Track Circuit impedance bond used is **A) Siemens impedance bond** B)Resonated impedance bond C) Auto coupled impedance bond
9	Maximum length of DC Track Circuit in RE Area with RCC sleepers and with 50 V AC immunized track relay is A)450M B)750M **C)350M**
10	Maximum length of DC Track Circuit in non RE with RCC sleepers in station yard is **A) 670m** B) 1000m C) 450m
11	AC immunity level of QTA1, track relay is A)100V AC B) 80V AC **C) 30V AC**
12	AC immunity level of QBAT track relay is **A)80V AC** B)50V AC C)100V AC
13	AC immunity level of QTA2 track relay is **A) 50V AC** B) 80V AC C)100V AC

14	Resistance value of 'B' type choke is. A) 120 OHMS **B) 3 OHMS** C) 100 OHMS
15	Maximum phase angle for an AC Track Circuit is **A)90 DEGREE** B)60 DEGREE C)100 DEGREE
16	Track transformer used for condenser feed Track Circuit is A)300/12V **B)110/110V** C)110/12V
17	Minimum TSR for AC Track circuit is A) 0.5 OHMS **B) 0.15 OHMS** C) 0.25 OHMS
18	Track relay used for AC condenser feed Track Circuit is. A) NON RESONATED TRACK RELAY **B) RESONATED TRACK RELAY** C) NONE
19	Value of reactance used for AC double rail reactance fed Track circuit is (A) 25 OHMS **(B) 6 OHMS** C) 10 OHMS
20	Track relay used for AC reactance fed Track Circuit is A) NON RESONATED TRACK RELAY B**) RESONATED TRACK RELAY** C) NONE
21	Phase angle of AC Track Circuit should not be less than 60 degree. **True**
22	In AC Track Circuit, Phase angle of condenser feed Track Circuit is poor. **False**
23	In condenser fed AC Track Circuit, phase angle remains constant for any change in the value of ballast resistance. **True**
24	TSR of DC Track circuit should be less than 0.5 ohm **False**
25	The value of TSR is directly proportional to the relay voltage. **False**
26	Track Circuit provided on point zone is A) Open T/Ckt B) Double rail T/Ckt **C) Multiple type Track circuit**
27	In reactance fed AC track circuit, regulating device is a variable A) Resistance B) Condenser **C) Reactance**
28	In resistance feed AC Track Circuit, regulating device is a variable A) Condenser **B) Resistance** C) Reactance
29	Maximum length of DC Track Circuit in non RE with RCC sleepers in station yard is **A) 670m** B) 1000m C) 450m
30	Maximum length of DC Track Circuit in RE area with wooden sleeprs and 50 VAC immunized track relay is **A)450M** B)350M C)1000M
31	AC immunity level of QTA1, track relay is A)100V AC B) 80V AC **C) 30V AC**

32	Impedance value of 'B' type choke is A) 100 OHMS B) 3 OHMS **C) 120 OHMS**
33	Minimum phase angle for an AC Track Circuit is A**) 60 DEGREE** B) 120 DEGREE C) 30 DEGREE
34	In resistence fed Track Circuit, regulating device is variable A)CONDENSER B) REACTANCE **C) RESISTANCE**
35	In reactance fed Track Circuit regulating device is variable. **A) REACTANCE** B) CONDENSER C) RESISTANCE
36	Track transformer used for condenser feed Track Circuit is A)300/12V **B)110/110V** C)110/12V
37	Track transformer used for reactance feed Track Circuit is **A)110/12V** B)300/12V C)110/110V
38	Minimum TSR for AC Track circuit is A) 0.5 OHMS **B) 0.15 OHMS** C) 0.25 OHMS
39	Track relay used for AC resistance fed Track Circuit is A) RESONATED TRACK RELAY **B) NON RESONATED** TRACK RELAY C) NONE
40	Local supply of AC double element track relay is A) 12V AC **B) 110V AC** C) 60V AC

Signal Machine

1	**The signal machine is suitable for working with LQ and UQ signal** True
2	In signal machine snubbing circuit 2 ohms resistance with diode is used to limit the current and direction of current. **True**
3	Signal machine cover is provided with suitable gasket. **True**
4	Blocking diode prevents the battery, discharging back through the solar cell. **True**
5	Voltage regulation avoids excess charging of battery. **True**
6	Solar panel is used only for signal lighting. **False**
7	Solar cells are coated with anti-reflecting coating. **True**
8	The K and H contacts in signal machine is normally made **True**
9	In signal machine, 'K' & 'H' contacts are normally break. **False**
10	The motor used in Signal machine is DC **A) Series** B) Shunt C) Compound d) None
11	In signal machine assembly reducing gear set is **A) 3gear** B) 4 gear C) 5gear D) None
12	In signal machine pick up coil resistance is **A) 45 ohms** B) 90 ohms C) 100 ohms D) 120 ohms
13	In signal machine hold "off" coil resistance is **A) 580 ohms** B) 700 ohms C) 900 ohms D) 100 ohms
14	In signal machine working current of pick-up coil is **A) 220mA** B) 17 mA C) 300mA D) None
15	Current of Hold off coil of signal machine is A) 220mA **B) 17 mA** C) 300mA D) None
16	In signal machine, ON position of semaphore arm is **A) 0-2 Degree** B) 10 Degree C) 45 Degree D) 90 Degree
17	In signal machine LQ semaphore arm "Off " position is A) 0-2 Degree B) 10 Degree C) 45 Degree **D) 90 Degree**
18	Open voltage of single solar cell

	A) 0.85 V B) 0.55 v C) 2V D) None
19	Load voltage of single solar cell A) 0.85 v **B) 0.55 V** C) 2V D) None
20	Solar panel is to be cleaned once in **A) 15days** B) 30 days C) 45 days D) None

Colour Light Signalling

1	Siemens "ON" Lamp checking relay cannot be converted to "OFF" Lamp checking relay. **True**
2	Colour light signal has a good visibility on curvature. **False**
3	Aspect focusing of colour light signal is done whenever a particular aspect goes out of focus. **True**
4	SL-35A signal lamp is used in "OFF" aspect of the signal. **True**
5	In Diesel Engine Cam shaft operates the valve in time. **True**
6	Diameter of outer lens of colour light signal is **A) 213 mm** B)140mm C) 100mm
7	Filament of signal lamp is **A) THICK** B)THIN C) NONE
8	Capacity of Siemens signal transformer is **A)50VA** B)40VA C) 80VA
9	Secondary load of "H" type current transformer is **A) ECR** B) SL 5 C) SL 31
10	Primary winding of "I" type current transformer connected in series with primary of signal transformer is **A) PRIMARY** B) SECONDARY C) NONE
11	Primary winding of "L" type current transformer connected in series with primary of signal transformer is **A) PRIMARY** B) SECONDARY C) NONE
12	Secondary voltage of "H" type current transformer is **A) 9V AC +/- 5%** B) 7V AC +/- 5% C) NONE
13	Primary current of "L" type current transformer is A) 2.5 A **B) 0.3** A C) 0.5 A
14	Primary current of "H" type current transformer is **A) 2.5** A B) 0.3 A C) 0.5 A
15	Voltage induced on secondary winding of current transformer is depending upon the primary A) VOLTAGE **B) CURRENT** C) NONE
16	In R E, minimum distance of signal post in rear of mast shall be A) 10 M B) 7 M **C) 30 M**
17	The maximum length of signal aspect controlling cable with

	110/12V signal transformer on single line is A) 605 M **B) 180 M** C) 495 M
18	The maximum length of signal controlling cable with 300/12V signal transformer on single line is **A)495 M** B) 220 M C) 605 M
19	Cable should cross the track at an angle of **A) 90 degrees** B) 60 degrees C) 45 degree D) 30 degrees
20	While laying cable, percentage of spare cable to be provided is **A) 20%** B) 30% C) 40% D) 50%
21	Focusing of Colour light signal is easy **True**
22	Distant HR and HHR is controlled by the back contact of DPR and DECR relay contacts. **True**
23	In automatic signaling interlocked gate can not be provided . **False**
24	In automatic signaling interlocked gate is provided with G board **True**
25	In Diesel Engine Lubricating oil in air cleaner is changed after 250 Hrs. **True**
26	Signal lamp prior to use in circuit is to be tested with A)12V AC **B) 10.5VAC** C) NONE
27	Capacity of workshop make signal transformer is A) 50VA **B) 40VA** C) 80VA
28	MECR unit has A) "L" type current transformer **B) "H" type current transformer** C) None
29	Signal lamp has A) 2pin B) 4pin **C) 3 pin**
30	Capacity of "H" type current transformer is A) 0.5VA **B)0.9VA** C) 2.5VA
31	Secondary voltage of "L" type current transformer is **A) 9V AC+/- 5% AC** B)7V AC +/- 5% AC C) NONE
32	Primary voltage of "I" type current transformer is A) 0.5 V AC **B) 110 V AC** C) 0.3 V AC
33	Primary current of "H" type current transformer is **A) 2.5 A** B) 0.3 A C) 0.5 A
34	Glow voltage of signal lamp is A) 12 V AC **B) 2.3 V AC** C) 10.8 V AC
35	In R E Area, no parts of signal fittings shall fall within A) 0. 2 METERS **B) 2 METERS** C) 7 METERS
36	As per revised design, cable used in RE shall be only A) SCREENED CABLE **B) UNSCREENED CABLE** C) NONE
37	The maximum length of signal controlling cable with 300/12V signal transformer on single line is **A)495 M** B) 220 M C) 605 M
38	The maximum length of signal controlling cable with 300/12V signal transformer on double line is

	A) 495 M B) 220 M **C) 605 M**
39	Signal transformer used only in RE area is A) 110/12 V **B) 300/12V** C) NONE
40	Cable should cross the track at an angle of **A) 90 degrees** B) 60 degree C) 45 degree D) 30 degrees

Point Machine

1	High speed single end point machine takes 3 seconds for complete operation. **True**
2	In M63 point machine, locking is straight-through SLM type. **True**
3	While testing point, 3.25mm test piece is placed at a distance of 150mm from toe of tongue rail. **True**
4	In Siemens Point Machine working voltage should not fall below 90 VDC. **True**
5	DC ELD is provided to detect cable failure before it occurs & reduce failure. **True**
6	In Siemens Point Machine, reduction gear ratio is **A) 20.8 : 1** B) 30 : 1 C) 20 : 1 D) 1 : 1
7	In Siemens point machine, if detector contact is made accurately, the gap between keeper and finger contact is **A) 2mm** B) 1mm C) 5mm D) 6mm
8	In Siemens point machine, friction clutch should be considered good if the difference between normal working current and obstruction current is **A) 1 amp.** B) 0 amp C) 4 amp. D) Less than 1 amp
9	In thick web point, Switch Setting Device is provided between sleepers **A) 13th , 14th** B) 1st, 2nd, C) 3rd, 4th, D) 9th 10th
10	Opening of thick web tongue rail is **A) 220mm** B) 160mm C) 115mm D) 100mm
11	Throw of thick web point machine is **A) 220mm** B) 143mm C) 115mm D) 100mm
12	Throw of Siemens Point Machine is A) 220mm **B) 143mm** C) 115mm D) 100mm
13	In Siemens Point Machine, switching unit contacts are **A) self-wiping** B) adjustable C) steady D) not steady.
14	In Siemens Point Machine super imposed circuit, out of correspondence is established by energisation of relay **A) WKR2** B) WKR1 C) WKR3 D) WJR
15	In Siemens Point Machine super impose circuit, cross protection is

	proved by energisation of relay **A) WKR2** B) WKR1 C) WKR3 D) WJR
16	In Siemens panel point group, Heavy duty contact relay is **A) WR** B) W(R)R C) W(N)R D) WJR
17	In Siemens panel Normal point operation is carried by pressing buttons: **A) WN& WWN** B)WN & EWN C)WN & OYN D)WN & EUUYN
18	Type of snubbing provided in Siemens point machine is A) electrical**, B) mechanical** C) relay
19	In Siemens Point machine in case of RH turn out RC contact is A) 1-1a **B) 2-2a** C) 3-3a
20	Point initiation relay in Siemens point circuit is A) WKR1 **B) Z1WR1** C) WKR3
21	High speed single end point machine takes 3 seconds for complete operation. **True**
22	In Siemens point machine operation, detector roller moves on detector slides for 115 mm. **True**
23	Before working on point machine, disconnection memo should be given and permission accepted from SM/ASM. **True**
24	In Siemens Point Machine working voltage should not fall below 90 VDC. **True**
25	Obstruction current of any point machine is more than the working current. **True**
26	In Siemens Point Machine, reduction gear ratio is **A) 20.8 : 1** B) 30.8 : 1 C) 20 : 1 D) 1 : 1
27	In siemens point machine rack and pinion arrangement, number of teeth in rack are **A) 6** B) 5 C) 4 D) 7
28	In siemens point machine, if detector contact is adjusted properly, the gap between keeper and finger contact is **A) 2mm** B) 1mm C) 5mm D) 6mm
29	In a point, clearance between bottom of stock rail and top of Ist William stretcher should be A) 2mm **B) 1.5 mm** C) 5mm D) 10 mm
30	Throw of thick web switch point machine is **A) 220mm** B) 143mm C) 115mm D) 100mm
31	The fuse used in operation circuit of Siemens Point Machine is A) 7amp. B) 30 amp. C) 20 amp. **D) 10 amp.**
32	In siemens point machine, for one complete operation of the point,

	Crank Handle has to be rotated A) 200 times B) 100 times **C) 87 1/2 times** D) 20.8 times
33	In Siemens Point Machine, switching unit contacts are **A) self wiping** B) adjustable C) non-wiping
34	In Siemens Point Machine super imposed circuit, out of correspondence is established by energisation of relay A) WKR3 B) WKR1 **C) WKR2** D) WJR
35	In Siemens Point Machine super impose circuit, cross protection is proved by energisation of relay A) WKR1 B) WKR2 C) WKR3 D) WJR
36	In Siemens Panel/RRI point group, heavy duty contact relay is A) WJR B) W(R)R C) W(N)R **D) WR**
37	In Siemens panel individual point operation is carried out by pressing buttons: A) WN & EWN **B) WN& WWN** C)WN & OYN D)WN & EUUYN
38	In Siemens panel when point track is down, point operation is carried out by pressing buttons A) WN & WWN **B) WN & EWN** C) WN & OYN D) WN & EUUYN.
39	Type of snubbing provided in Siemens point machine is A) electrical, **B) mechanical** C) relay
40	Initiation relay in Siemens PI point group is A) WKR1 **B) Z1WR1** C) WKR3

Relay Interlocking (Metal to Carbon)

1	Counter is provided for calling on signal **True**
2	Relay interlocking should full fill the conditions of interlocking as per SEM **True**
3	In British panel interlocking, back contact of EUUYNR is proved in UCR circuit. **True**
4	WJR relay is slow to drop relay. **True**
5	In British panel interlocking, front contact of CHR is proved in HR circuit. **True**
6	Colour of point button on British panel is A) Red **B) Blue** C) Grey
7	Colour of route button on British panel is A) Red B) Blue **C) Grey**
8	NCR relay is normally A) De-energised **B) Energised** C) none
9	ASR relay in British panel is normally A) De-energised **B) Energised** C) none
10	RJPR relay in British panel is normally A) De-energised **B) Energised** C) none
11	Track locking in British panel is achieved by A) WCR **B) WLR** C) WJR
12	NCR buzzer sounds if push button on panel is pressed for more than **A) 15 seconds** B) 30 seconds C) 25 seconds
13	In British panel Contact used of WLR in HR ckt is A) Front contact **B) Back contact** C) none
14	In British panel Route is locked by dropping of **A) WLR relay** B) ASR relay C) UCR relay
15	Type of Relay used in British Panel is A) Proved type **B) Non-proved type** C) none
16	Route setting type panel is used for A) Minor yard **B) Major yard** C) none
17	The relay which proves that all Point button relays are down is A) UNCR **B) WNCR** C) GNCR

18	In British panel Colour of shunt signal button is A) Red B) BLUE **C) Yellow**
19	Non Route setting type panel is used for **A) Minor yard** B) Major yard C) none
20	The relay which picks up proving that all signal button relays are down is A) UNCR B) WNCR **C) GNCR**

Relay Interlocking (Metal to Metal)

1	In Siemens Panel signal group, GLSR relay energizes with GZR, U(R)S front contact and signal and route button pressed. **True**
2	In Siemens Panel, 16th terminal on domino is negative. **True**
3	In Siemens Panel, for performing SI cancellation, break open seal of EUYN, insert SI key, turn to right and press EUYN and WN button of required sub route. **True**
4	In SPM point group, When W(R)R is energized, operation circuit is established. **True**
5	First give disconnection memo and after accepted by S.M. then only carry out maintenance work **True**
6	In Siemens panel, while operating a point from R to N, WKR1 is de-energized by energisation of relay A) WKR3 **B) WJR** C) W(R)R D) WKR2
7	In Siemens panel, out of correspondence of point is taken by energisation of A) WKR3 B) WJR C) W(R)R **D) WKR2**
8	Extra attachment of condenser for WJR relay in Siemens panel is provided at intermediate distribution frame terminal number **A) 8, 9** B) 9, 10 C) 10, 11 D) 8, 10
9	In Siemens panel WJR relay when energized hold for **A) 10 sec** B) 20 sec C) 4 sec D) 120 sec
10	In Siemens panel, button used to lower Calling On Signal are **A) GN, COGGN, UN** B) WN, COGGN, UN C) WN, WWN D) OYN, UN
11	In Siemens panel, when track portion is energized without route setting, track indication is displayed by **A) No light** B) White light C) Red light D) White light flashing.
12	In Siemens panel AJTR is fed with A) AJTR1 **B) AJTR2** C) AJTR3 D) AJTR
13	In Siemens panel, relay in series with the counter in SM cancellation is A) EUUYNCR B) EUUYR **C) EUYR** D) ERN
14	In Siemens panel, Overlap is cancelled after

	A) 120 sec. **B) 90 sec**. C) 60 sec. D) 5 minutes.
15	In Siemens panel single end point operation, time taken to set a point to either positions **A) 3 sec**. B) 2 sec. C) 7 sec. D) 20 sec.
16	In Siemens panel, Flasher relay flashes A) 120 sec B) 90 sec. C) 5 minutes. **D) Continuously.**
17	In Siemens panel, Coil resistance of K-50 latch relay is **A) 615 ohms** B) 700 ohms C) 800 ohms D) 1260 ohms
18	In Siemens panel, Maximum continuous load of closed contact of K-50 relay is **A) 5A** B) 10A C) 15A D) 20 A
19	In Siemens panel, Approach locking and back locking test are carried once in every **A) 3 months** B) 6 months C) 9 moths D) 1 year.
20	In Siemens panel, Testing of counter EUYN, COGGN, OYN, EWN is carried once in every **A) 1 month** B) 2 months C) 15 days D) 3 months

Axle Counter

1	In universal Axle counter track device, excess track cable should be kept in zig zag manner inside the location box. **True**
2	In an universal Axle counter, all line verification box key should have separate ward. **True**
3	In an universal Axle counter, shielded cable should be used for Evaluator and supervisory relays. **True**
4	Intermediate Block Signal is automatically replaced to "ON" by the passage of train. **True**
5	Red indication will be displayed on panel in rear station when IB signal passed at ON position. **True**
6	In an universal axle counter system, maximum loss in cable connecting evaluator and EJB is limited to **A) 20 db** B) 4 db C) 15db D) None
7	An universal axle counter system can control a section up to a length of A) 30 kms B) 20kms **C) 15 kms** D) None
8	In an universal axle counter system, one of the output of DC-DC converter is **A) Isolated 10VDC** B) 24VDC C) 60 VDC D) 100VDC
9	In an universal axel counter system, +10VDC supply of DC-DC converter should be adjusted for **A) 10.2 VDC** B) 11 VDC C) 15 VDC D) None
10	In EJB of an universal axle counter system, oscillator card output voltage is A) 70V (rms) +/- 10% B) 80V (rms) +/- 10% **C) 60V (rms) +/- 10%** D) None
11	Number of cards in an universal axle counter EJB should be A) 9 cards B) 7 cards **C) 3 cards** D) None
12	The number of cards in an universal axle counting system is A) 7 cards **B) 10 cards** C) 3 cards D) None
13	Evaluator and supervisory relay voltage in an universal axle counter system should not be less than A) 9V B) 10V **C) 11V** D) None

14	Minimum length of trolley suppression track circuit for an universal axle counter system on double line **A) 3 rail length** B) 5 rail length C) 7 rail length D) None
15	Output voltage of receiver amplifier card of an universal axle counter system EJB should not be less than **A) 0.7V** B) 2V C) 3V D) None
16	Time a driver has to wait before proceeding during day and night, when IB signal is at "ON" and all communication failed **A) 5 min.** B) 2 min C) 3 min D) None
17	Provision of IBS working increases **A)Train Frequency** B) Safety C) Bi direction D) None
18	A button to reset the axle counter failure or improper counting A) PB1 **B) PB2** C) P{B3 D) None
19	A button to give co-operation to the station in rear A) PB1 B) PB2 **C) PB3** D) None
20	A button to acknowledge the alarm of train passing IBS at ON or power failure A) PB1 B) PB2 C) PB3 **D) ACK**
21	In Electronic Junction Box, oscillator card output is fed to the receiver coil. **False**
22	In universal Axle counter, for establishing direction of train movement, each end comprises two sets of transmitters and receiver coils. **True**
23	In an universal Axle counter in non RE area, armouring of Axle counter cable shall be earthed at one end only i.e. on Evaluator end. **True**
24	Red indication will be displayed on panel in rear station when IB signal passed at ON position. **True**
25	Intermediate Block signalling is provided on double line only. **True**
26	An universal axle counter system can control a section upto a length of A) 30 kms B) 20kms **C) 15 kms** D) None
27	In an universal axle counter system, one of the output of DC-DC converter is **A) Isolated 10VDC** B) 24VDC C) 60 VDC D) 100VDC
28	In an universal axel counter system, +10VDC supply of DC-DC conveter should be adjusted for A**) 10.2 VDC** B) 11 VDC C) 15 VDC D) None
29	In EJB of an universal axle counter system, oscillator card output voltage is A) 70V (rms) +/- 10% B) 80V (rms) +/- 10% **C) 60V (rms) +/- 10%** D) None
30	Number of cards in an universal axle counter EJB should be A) 9 cards B) 7 cards **C) 3 cards** D) None

31	Evaluator and supervisory relay voltage in an universal axle counter system should not be less than A) 9V B) 10V **C) 11V** D) None
32	In an universal axle counter system, coil resistance of transmitter coil at the end of cable is A) 12 ohms B) 5 ohms **C) 2 ohms** D) None
33	Maximum counting capacity of an universal axle counter system is A) 512 B) 264 C) 128 **D) 1024**
34	Output voltage of receiver amplifier card of an universal axle counter system EJB should not be less than **A) 0.7V** B) 2V C) 3V D) None
35	Time a driver has to wait before proceeding during day and night, when IB signal is at "ON" and all communication failed is **A) 5 min**. B) 2 min C) 3 min D) None
36	The button to be pressed to reset the circuit whenever the IBS is passed at "ON" is **A) PB1** B) PB2 C) PB3 D) None
37	A button to reset the axle counter failure is A) PB1 **B) PB2** C) P{B3 D) None
38	A button to give co-operation to the station in rear in IBS is A) PB1 B) PB2 **C) PB3** D) None
39	The button to acknowledge the alarm caused by a train passing IBS at ON or power failure is A) PB1 B) PB2 C) PB3 **D) ACK**
40	Axle counter re-setting relay is **A) ACRSR** B) ACZR C) ACPR D) PBPR

Block Instruments Token

1	The Block Instrument has a capacity of 42 tokens **False**
2	Jerking contact is provided on spring clutch shaft **True**
3	Galvo indicates the presence of incoming / outgoing current **True**
4	Do not bend the contact spring specially the finger contact **True**
5	Battery must be kept sealed. **True**
6	Current of the galvo of NT B/I is **A 15- 25 mA** B) 10 -–15 mA C) 15-20 mA D) 0-25 Ma
7	Voltage of galvo of NT B/I is **A) 3 volt** B) 2 volt C) 4.5 volt D) 1.9 volt
8	Resistance of bell in NT B/I is **A) 28 ohms** B) 150 ohms C) 77 ohms D) 140 ohms
9	Current of bell in NT B/I is **A) 80 mA** B) 25 mA C) 160 mA D) 17 Ma
10	Voltage of bell in NT B/I is A) 2 v **B) 3v** C) 4.5v D) 1.9 v
11	Current of TCF/TGT lock coil in NT B/I is **A) 160 mA** B) 80 Ma C) 17 Ma D) 25 Ma
12	Voltage of TCF/TGT lock coil in NT B/I is **A) 4.5 V** B) 1.9 v C) 3.0 v DA) 2.0 v
13	Resistance of polarized relay in NT B/I is **A) 77 ohms** B) 150 ohms C) 140 ohms D) 28 ohms
14	Voltage of polarized relay in NT B/I is **A) 1.9 v** B) 2.0 v C) 4.5 v D) 3.0 v
15	Working current of NT Block Instt. Is **A 25 mA** B) 160 mA C) 80 mA C) 10 Ma
16	Token capacity of NT B/I is **A) 36 Nos Token**. B) 40 Nos Token. C 32 Nos Token. D) 42 Nos Token.
17	In RE area the bell circuit is functioning on AC supply and the frequency is **A) 150 Hz** B) 50 Hz C) 250 Hz D) 63 Hz
18	The earth resistance of NT B/I should not more than **A) 10 ohms** B) 7 ohms C) 50 ohms D) 25 ohms

19	In one complete sequence of operation of the NT B/I TCF lock is energized A) One time B) 2 time **C) 3 time** D) 0 time
20	Neal's Block is overhauled once in A) 07 years **B) 10 years** C) 15 years D) None

Block Instruments Token less

1	In Daido Single Line block Instrument Receiver receives the modulated frequency. **True**
2	In single line Daido block instrument ASR picks up after picking up of TRSR **True**
3	"TOL" code can not be received when Station master key is removed from single line Daido block instrument. **False**
4	"TOL" code can be received when Station Master key is extracted in single line Daido block instrument **True**
5	In single line token less push button B/I working principle in three step polar impulse **True**
6	The colour of TOL indicator indicating "Train on Line" indication with occupation of Block section is A) White **B) Red** C) None
7	Working current of Daido single line block instrument is A) 60mA B) 25mA **C) 110mA**
8	In Single line token less block instrument push button type, Reception code checking relay is A) TCKR **B) RCKR** C) CRR D) CTPPR
9	In Single line token less block instrument push button type Receiving delivery relay is A) TCKR B) RCKR C) CRR **D) RDR**
10	Token less Block Instrument used in AC RE area on single line is. **A) Daido S/L B/Instt** B) PTJ S/L C) Kyosan S/L
11	By use of Token less Block Instrument section capacity can A) Decrease **B) Increase** C) None
12	Carrier frequency of Daido Block instrument is A) 65 Hz B) 85 Hz **C) 1800 Hz.**
13	Daido Single Line Block Instrument works on **A) Modulated frequency** B) DC coding C) None
14	1800 Hz carrier frequency Daido Block Instrument connected with a Daido Block Instrument of carrier frequency of A) 1800 Hz **B) 2700 Hz** C) None
15	Batteries required for Daido Single line Block Instrument. is

	A) 2 sets B) 1 sets **C) 3 sets**
16	In Single line Daido block instruments Transmitter and Receiver is operated by **A) Local battery** B) Location battery C) Line battery
17	In "AC RE" in single line Daido block instrument filter unit is connected with A) Bell circuit **B) Line circuit** C) None
18	In Single line token less block instrument push button type line battery current while operation should be **A) 60mA** B) 30 mA C) 2 amp. D) 100 mA
19	In Single line token less block instrument push button type, telephone battery should be **A) 3 VDC** B) 12 VDC C) 24 VDC D) 60 VDC
20	In Single line token less block instrument push button type, line wire used are **A) 2** B) 4 C) 3 D) 1
21	In NT Block Instrument, All Block earth and their connection must be examined at interval of not less than one month **True**
22	Single line token Block Instt. are required to be overhauled once in 12 yrs **False**
23	In NT Block Instrument,If the position of commutator is normal and pressing the plunger the deflection of galvo will be RHS **True**
24	In NT Block Instrument, If the position of commutator is reverse the deflection of galvo will be LHS **True**
25	In NT Block Instrument,when a token can be taken out from instrument without proper signals being exchanged Block instrument shall be suspended **True**
26	Current of the galvo of NealsToken Block Instrument, is **A) 15- 25 mA** B) 10 -–15 mA C) 15-20 mA D) 0-25 mA
27	Voltage of galvo of NealsToken Block Instrument is **A) 3 volt** B) 2 volt C) 4.5 volt D) 1.9 volt
28	Resistance of bell in NealsToken Block Instrument is **A) 28 ohms** B) 150 ohms C) 77 ohms D) 140 ohms
29	Current of bell in NealsToken Block Instrument is **A) 80 mA** B) 25 mA C) 160 mA D) 17 mA
30	Voltage of bell in NT B/I is A) 2 v **B) 3v** C) 4.5v D) 1.9 v
31	Resistance of TCF/ TGT lock coil in NT Block Instrument, is **A) 28 ohms** B) 150 ohms C) 140 ohms D) 77 ohms

32	In NT Block Instrument, current of TCF/TGT lock coil is **A) 160 mA** B) 80 mA C) 17 mA D) 25 mA
33	In NT Block Instrument,Voltage of TCF/TGT lock coil is **A) 4.5 V** B) 1.9 v C) 3.0 v DA) 2.0 v
34	In NT Block Instrument, resistance of polarized relay is **A) 77 ohms** B) 150 ohms C) 140 ohms D) 28 ohms
35	In NT Block Instrument,c urrent of polarized relay is **A) 25mA** B) 40 mA C) 80 mA D) 160 Ma
36	In NT Block Instrument,Voltage of polarized relay is **A) 1.9 v** B) 2.0 v C) 4.5 v D) 3.0 v
37	Working current of NT Block Instt. Is **A 25 mA** B) 160 mA C) 80 mA C) 10 Ma
38	Token capacity of Neal Token Block Instrument is **A) 36 Nos Token**. B) 40 Nos Token. C 32 Nos Token. D) 42 Nos Token.
39	In RE area the bell circuit is functioning on AC supply and the frequency is **A) 150 Hz** B) 50 Hz C) 250 Hz D) 63 Hz
40	The earth resistance of NT B/I should not more than **A) 10 ohms** B) 7 ohms C) 50 ohms D) 25 ohms

Block Instruments Double Line

1	Whenever any Block Instrument is sent for overhauling its BPR should also be sent for overhauling. **True**
2	In SGE Block Instrument bell code cannot be transmitted when Station Master key is removed. **False**
3	In RE Area, TWBB unit is connected in bell circuits in SGE block Instrument. **True**
4	Output of TWBB unit is 40 to 60 volts DC. **False**
5	Output of TWBB is 60VAC, 150Hz. **True**
6	The rated current of SGE Block Instrument is A) 25 mA B) 500 mA **C) 17mA**
7	The working current of SGE Block instrument is A) 17mA B) 500mA **C) 25mA**
8	The coil resistance of BPR is A) 60 ohms **B) 77 ohms** C) 140 ohms
9	The working current of door lock coil of SGE Block is **A) 200 mA** B) 150 mA C) 70 mA
10	The working current of bell coil of SGE Block is **A) 150 mA** B) 200 mA C) 50 mA
11	The working current of bell relay of SGE Block is A) 150 mA B) 50 mA **C) 500mA**
12	The working current of BPR is A) 17mA B) 50mA **C) 25mA**
13	In indication circuit of SGE Block in RE area the protection device connected is **A) Filter unit** B) TWBB Unit C) None
14	In bell circuit of SGE Block in RE, protection device connected is. A) Filter unit **B) TWBB unit** C) None
15	The coil resistance SGE Block door lock coil is A) 140 ohms B) 500 ohms **C) 50 ohms**
16	The coil resistance of Top indicator coil of SGE Block is A) 500 ohms B) 50 ohms **C) 140 ohms**
17	The coil resistance of bell relay of SGE Block is **A) 500 ohms** B) 50 ohms C) 140 ohms

18	The coil resistance of bell coil of SGE Block is **A) 60 ohms** B) 50 ohms C) 140 ohms
19	In SGE, with pet quad cable in AC RE area, contact of bell plunger assembly is not used. A) X+, B) XL, **C) X**
20	Output of TWBB unit is A) 40-60VDC, **B) 40-60VAC**, C) 150VAC
21	In SGE for block clearance circuit two closed track circuits shall be used. **True**
22	Block Instrument cover shall not be opened without disconnection memo **True**
23	SR is a normally energized relay. **True**
24	SGE block Commutator gets locked when operated from `Line Closed` to TOL. **False**
25	In SGE block instrument, half notch is provided for force drop arrangement. **False**
26	The coil resistance of Top indicator coil of SGE Block is A) 500 ohms B) 50 ohms **C) 140 ohms**
27	The coil resistance of bell relay In SGE Block Instrument is **A) 500 ohms** B) 50 ohms C) 140 ohms
28	The coil resistance of bell coil of SGE Block is **A) 60 ohms** B) 50 ohms C) 140 ohms
29	The coil resistance of bottom indicator coil of SGE Block is A) 500 ohms **B) 140 ohms** C) 50 ohms
30	The working current of SGE Block instrument is A) 17mA B) 500mA **C) 25mA**
31	The coil resistance of BPR of SGE Block Instrument .is A) 60 ohms **B) 77 ohms** C) 140 ohms
32	The working current of door lock coil of SGE Block is **A) 200 mA** B) 150 mA C) 70 mA
33	The working current of indicator coil of SGE Block is A) 17mA **B) 25mA** C) 150 mA
34	The working current of bell coil of SGE Block is **A) 150 mA** B) 200 mA C) 50 mA
35	The working current of bell relay of SGE Block is A) 150 mA B) 50 mA **C) 500mA**
36	The working current of BPR of SGE Block Instrument is A) 17mA B) 50mA **C) 25mA**
37	In indication circuit of SGE Block in RE area the protection device connected is

	A) Filter unit B) TWBB Unit C) None
38	In bell circuit of SGE Block in RE, protection device connected is A) Filter unit **B) TWBB unit** C) None
39	In SGE block, with pet quad cable in AC RE area, contact of bell plunger assembly is not used. A) X+, B) XL, **C) X**
40	Output of TWBB unit is A) 40-60VDC, **B) 40-60VAC**, C) 150VAC

Signalling in RE (25 KV AC)

1	In 25KV RE Area, Electro static induction effect is eliminated by replacing the overhead line with underground cable. **True**
2	Cable should not be laid in concrete pipe in vicinity of substation in 25KV RE Area. **False**
3	In 25KV RE Area, insulators in Rodding run are provided to protect staff from induced voltages. **True**
4	In 25KV RE Area, 77 ohms BPR shall be used in B/Instrument. **True**
5	As per revised design in RE, only screened cable is used. **False**
6	In 25KV RE Area, as per existing design maximum induced voltage in unscreened cable is A) 35 V / km **B) 87.5 V / km** C) 116 V / km
7	In 25KV RE Area, as per revised design maximum induced voltage in double line section is A) 116 V / km B) 35 V / km **C) 95 V / km**
8	In 25KV RE Area, in the vicinity of switching station, the distance between the cable and station earthing is **A) 5 m** B) 0.5m C) 1 m
9	In 25KV RE Area, value of ballast resistance should not be less than. A) 1 ohm / km **B) 2 ohm / km** C) none,
10	In 25KV RE Area, value of rail resistance should not be more than A) 3 ohm/km B) 4 ohm/km **C) 1 ohm/km**
11	In 25KV RE Area, protective iron screen should be provided on the signal structure if the signal Fitting falls within **A) 2M** B) 7M C) none
12	In 25KV RE Area, in front of mast signal should be provided at a minimum distance of A) 20M **B) 10M** C) 30M
13	In 25KV RE Area, minimum height of Red aspect of signal above rail level is **A) 3.65M** B) 4M C) 2.35M
14	In 25KV RE Area, as per revised design maximum length of signal control circuit with unscreened cable and 110V power supply on

	double line is A) 600M B) 1.6KM **C) 220M**
15	In 25KV RE Area, with screened cable maximum length of signal control circuit with 110V Power supply is **A) 600M** B) 650M C) 495M
16	In 25KV RE Area, glow voltage of signal lamp is **A) 2.3 V** B) 4.7 V C) 12 V
17	In 25KV RE Area, impedance value of S1 choke provided with filter unit is: A) 40 ohm B) 600 ohm **C) 40,000 ohm**
18	In 25KV RE Area, test voltage of S2 is: **A) 50 V** B) 600 V C) 30 V
19	In 25KV RE Area, coil resistance of Top indicator of SGE block instrument is: **A) 140 Ohms** B) 550 Ohms C) None
20	Induced voltage on Double Line is **A) 95, V/Km** B) 116, V/Km C) 87.5 V/Km
21	In 25KV RE Area, by reducing the length of control circuits, Electro magnetic induction effect can be reduced. **True**
22	In 25KV RE Area, a siemens point machine can be operated up to a distance of 420M on double line section. **True**
23	In 25KV RE Area, cable terminals should be painted with Red paint. **True**
24	In 25KV RE Area, stabilizer is used to give variable voltage. **False**
25	As per revised design in RE, only screened cable is used. **False**
26	In 25KV RE Area, as per revised design maximum induced voltage in double line section is A) 116 V / km B) 35 V / km **C) 95 V / km**
27	In 25KV RE Area, in rocky soil depth of cable trench is **A) 0.5 m** B) 0.8m C) 1 m
28	In 25KV RE Area, in the vicinity of switching station, the distance between the cable and station earthing is **A) 5 m** B) 0.5m C) 1 m
29	In 25KV RE Area, value of ballast resistance should not be less than. A) 1 ohm / km **B) 2 ohm / km** C) none,
30	In 25KV RE Area, protective iron screen should be provided on the signal structure if the signal Fitting falls within **A) 2M** B) 7M C) none

31	In 25KV RE Area, in front of mast signal should be provided at a minimum distance of A) 20M **B) 10M** C) 30M
32	In 25KV RE Area, minimum height of Red aspect of signal above rail level is **A) 3.6**5M B) 4M C) 2.35M
33	In 25KV RE Area, as per revised design maximum length of signal control circuit with unscreened cable and 110V power supply on double line is A) 600M B) 1.6KM **C) 220M**
34	In 25KV RE Area, with screened cable maximum length of signal control circuit with 110V Power supply is **A) 600M** B) 650M C) 495M
35	In 25KV RE Area, maximum length of DC Track circuit with QBAT track relay is A) 450 B) 270M **C) 750M**
36	In 25KV RE Area, if the length of rodding run is more ,then additional insulated joint shall be provided at every: A) 400 m **B) 300 m** C) None
37	In 25KV RE Area, impedance value of S1 choke provided with filter unit is: A) 40 ohm B) 600 ohm **C) 40,000 ohm**
38	In 25KV RE Area, test voltage of S2 is: **A) 50 V** B) 600 V C) 30 V
39	In 25KV RE Area, TWBB oscillator generates a frequency of: A) 50Hz **B) 150Hz** C) None
40	In 25KV RE Area, coil resistance of Top indicator of SGE block instrument is: **A) 140 Ohms** B) 550 Ohms C) None

Auxiliary Warning System

1	In Auxiliary Warning System F1 & F4 frequencies are generated for yellow aspect when inter signal distance is more than 700 meters. **False**
2	In Auxiliary Warning System only frequencies F1 to F5 are used for oscillator. **False**
3	In Auxiliary Warning System, Emergency Brakes are applied when the train speed increases more than 10 KMPH than the required speed. **True**
4	In Indication panel of Auxiliary Warning System, Colour of Reset button is green. **True**
5	In Indication panel of Auxiliary Warning System, Colour of Vigilant button is Red. **True**
6	In Auxiliary Warning System, frequencies used for Absolute Red aspect are **A) F1 - F2** B) F3 - F4 C) F1 - F4 D) F1- F5
7	In Auxiliary Warning System, frequencies used for yellow aspect (with inter-signal distance less than 700m) are A) F1 - F2 B) F3 - F4 **C) F1 - F4** D) F1- F5
8	In Auxiliary Warning System, frequencies used for yellow aspect (with inter signal distance more than 700m) are A) F1-F2 B) F3 - F4 **C) F2 - F4** D) F1- F5
9	In Auxiliary Warning System, frequencies used for permissive Red aspect (with auxiliary signals provided below it) are A) F1-F2 B) F3 - F4 C) F1 - F4 **D) F1- F5**
10	In Auxiliary Warning System, when a yellow signal is passed, (with inter-signal distance less than 700m) speed of the train must be brought to 38KMPH within A) 120m B) 180m C) 400m **D) 290m**
11	On Indication panel of Auxiliary Warning System, Colour of reset button is A) Yellow **B) Green** C) Blue D) Red
12	On Indication Panel of Auxiliary Warning System, Colour of vigilant button is A) Yellow B) Green C) Blue **D) Red**

13	In Auxiliary Warning System, Track magnet is provided on **A) Inner gauge face on RHS** B) Inner gauge face on LHS C) Outer gauge face on RHS D) Outer gauge face on LHS
14	In AWS, track magnet is provided on Inner gauge face of RHS rail at a distance of **A) 231mm from inner gauge face** B) 213mm from inner gauge face C) 161mm from inner gauge face D) 123mm from inner gauge face
15	In AWS, the button required to be pressed to pass an automatic signal at "ON" position. A) SFBB B) Reset C) Vigilant **D) None**
16	In AWS, after passing a caution aspect signal, driver has to press "Vigilant" button to show his vigilance within A) 15 Sec B) 10 Sec **C) 4 Sec** D) 8 Sec
17	In AWS, with seven frequencies, number of information that can be transmitted using two frequencies for one information are A) 28 **B) 21** C) 14 D) 7
18	AWS system used in Mumbai suburban is designed with inter signal distance of A) 300 mtrs **B) 400 mtrs** C) 800 mtrs D) none
19	In AWS, colour code of wire used for connecting double yellow aspect to the opto coupler card is A) Yellow B) Green C) Red **D) Grey**
20	In AWS, Tacho-generator provides information about A) Distance travelled B) Speed of train C) Direction of motion of train **D) All of these**
21	In Auxiliary Warning System F1 & F4 frequencies are generated for yellow aspect when inter signal distance is more than 700 meters. **False**
22	In Auxiliary Warning System F2 & F4 frequencies are generated for yellow aspect when inter signal distance is less than 700 meters. **False**
23	In Auxiliary Warning System Track magnet works as Transmitter. **True**
24	In Indication panel of Auxiliary Warning System, White LED indicates healthy system functioning. **True**
25	In Indication panel of Auxiliary Warning System,Colour of SFBB button is red. **True**
26	In Auxiliary Warning System, frequencies used for Absolute Red aspect are

	A) F1 - F2 B) F3 - F4 C) F1 - F4 D) F1- F5
27	In Auxiliary Warning System, frequencies used for yellow aspect (with inter-signal distance less than 700m) are A) F1 - F2 B) F3 - F4 **C) F1 - F4** D) F1- F5
28	In Auxiliary Warning System, frequencies used for yellow aspect (with inter signal distance more than 700m) are A) F1-F2 B) F3 - F4 C**) F2 - F4** D) F1- F5
29	In Auxiliary Warning System, frequencies used for permissive Red aspect (with auxilliary signals provided below it) are A) F1-F2 B) F3 - F4 C) F1 - F4 **D) F1- F5**
30	When inter-signal distnace is more than 700m, additional track magnet of Auxiliary Warning System is provided in rear of the next signal, at a distance of A) 120m B) 180m **C) 400m** D) 290m
31	In Auxiliary Warning System, when a yellow signal is passed, (with inter-signal distance less than 700m) speed of the train must be brought to A) 50KMPH B) 15KMPH C) 30KMPH **D) 38KMPH**
32	In Auxiliary Warning System, when a yellow signal is passed, (with inter-signal distance less than 700m) speed of the train must be brought to 38KMPH within A) 120m B) 180m C) 400m **D) 290m**
33	On Indication Panel of Auxiliary Warning System, Colour of vigilant button is A) Yellow B) Green C) Blue **D) Red**
34	In Auxiliary Warning System,Track magnet is provided on **A) Inner gauge face on RHS** B) Inner gauge face on LHS C) Outer gauge face on RHS D) Outer gauge face on LHS
35	In AWS, after passing a caution aspect signal, driver has to press "Vigilant" button to show his vigilance within A) 15 Sec B) 10 Sec **C) 4 Sec** D) 8 Sec
36	In AWS, Oscillators provided in track magnet get power for operation from A) Signal Aspect B) Nearby location **C) From engine magnet** D) None
37	In AWS, Track magnet is a **A) Passive device** B) Active device C) Control device D) None
38	In AWS, with seven frequencies, number of information that can be transmitted using two frequencies for one information are A) 28 **B) 21** C) 14 D) 7
39	In AWS, colour code of wire used for connecting double yellow aspect to the opto coupler card is A) Yellow B) Green C) Red **D) Grey**
40	In AWS, Tacho-generator provides information about A) Distance traveled B) Speed of train C) Direction of motion of train **D) All of these**

Mechanical Interlocking

1	**Signal lock first trailing point lock bar** True
2	In route, opposite lock bar locks to each other **True**
3	Reverse notch is in the channel when the lever is in normal position **False**
4	Reverse notch come in channel when lever is operated in reverse position. **True**
5	Reverse notch can also be provided on normal conditional lever **True**
6	Function and levers are numbered with **A) Same numbers** B) Different numbers C) Mixed numbers
7	All numbers in the lever frame are numbered serially from A) Right to Left **B) Left to Right** C) none
8	Most popularly numbering of levers in a Lever frame is done by A) Geographical method B) Group method **C) Group cum Geographical method**
9	In group cum Geographical method numbering of all the function are divided in numbers of groups **A) 03** B) 02 C) none
10	For numbering, point and lock bars are grouped in A) Ist group **B) IInd group** C) IIIrd group
11	In a lever frame spare levers are left in between A) Ist and IIIrd group B) IIst and IIIrd group **C) Ist & IInd group and IInd & IIIrd group**
12	Route holding is provided when the distance between signal and the first facing point is **A) More than 180 mtrs** B) 180 mtrs C) 120 mtrs
13	For route holding in the same route the relation between two facing lockbars is A) Lock bar in advance locks the lock bar in rear **B) Lock bar in rear is released lock bar in advance** C) none
14	In a lever frame point to point locking causes **A) Economising of locking** B) It is easy C) none
15	In a lever frame slot lever having seprate overlap

	A) Released by each other **B) Locks to each other** C) none
16	For clearing a signal of when point is required in normal position the relation between signal and point is **A) Signal locks the point** B) Signal is released by point C) Signal locks point both ways
17	A tappet has Normal and Reverse Notches for A)normal locking **B) both way locking** C)released by locking
18	Conditional locking is achieve through A)cut lock B)full lock **C)swinger**
19	Swingers are types of **A) 02** B) 03 C) 04
20	No swinger should be used in A)first channel **B) first and last channel** C) last channel

Electro-Mechanical Signalling

1	**'SR' Drops when train passes the signal.** True
2	Once 'SR' is picked up, it remains in picked up position through its own front contact. **True**
3	Automatic working is introduced for diversion line. **False**
4	For diversion 'HR' pick up after 'UHR' **True**
5	NWKR' picks up when point is set and lock & lever is in 'B' position **True**
6	Indication locking on signal lever is provided for Colour Light Signal. **True**
7	ON aspect ECR front contact is proved in the indication locking circuit of Colour Light Signal. **True**
8	Track locking is effective only when point track circuit is occupied **True**
9	Approach locking is provided on Point lever. **False**
10	Once the signal lever is reversed, dead approach locking is released after the train has passed the signal or after the time delay. **True**
11	'JR' pick up when approach track circuit is occupied and signal lever is in "B" position. **True**
12	To release route locking, 'SR' back contact is proved in route locking circuit. **True**
13	Cross protection is must in 25KV RE area. **True**
14	Indication for signal is achieved through D positions of signal lever. **False**
15	Track locking on point lever for Normal to Reverse operation is provided on A) D position B) C position **C) A position**
16	Indication locking on signal lever is provided on A) A position **B) B position** C) None

17	Indication locking on point lever for Reverse to Normal operation is effective at **A) B position** B) D position C) None
18	Indication locking on point lever is provided for A) Mechanically operated point **B) Electrically operated point** C) None
19	Which locking performs the function of lock bar A) Indication locking **B) Track locking** C) None
20	Approach locking is provided on lever. **A) signal,** B) point, C) route

SSI / Data Logger

1	In Safe lock Solid State Interlocking, replacement of defective card with similar card is easier. **True**
2	In Safe lock Solid State Interlocking, wiring and relay accessory are reduced drastically. **True**
3	In Safe lock Solid State Interlocking, relay logic is used. **True**
4	In Safe lock Solid State Interlocking, power consumption is 40% less than PI. **True**
5	Safe lock Solid State Interlocking has extensive self-diagnostic features **True**
6	Safe lock Solid State Interlocking can be installed in parallel with PI **True**
7	In Safe lock Solid State Interlocking, Invalid status is displayed when each status of programmed function does not tally 100% with the present status of the function. **True**
8	In Safe lock Solid State Interlocking, Read input card acts as input interface of the system. **True**
9	In Safe lock Solid State Interlocking, EPROM programmed with principle of interlocking is called 'SYSTEM EPROM'. **True**
10	In Safe lock Solid State Interlocking, only vital relays for gear driving are used. **True**
11	In Safe lock Solid State Interlocking, input to the SSI comes from field relays and operator's panel. **True**
12	Safe lock Solid State Interlocking has got extensive self-diagnostic features. **True**
13	Failure in Safe lock Solid State Interlocking is self-annunciated on the maintainer's console.

	True
14	Uninterrupted Power supply should feed at least for 6 hrs. to data logger when no supply is available. **True**
15	Inbuilt temperature sensors are provided in Efftronics data logger **True**
16	Number of inputs that a RI card of a Safe lock SSI can accommodate is **A) 48** B) 64 C) 96 D) 56
17	Number of RI card a Safe lock SSI can accommodate is A) 9 B) 7 C) 4 **D) 6**
18	Number of output relays that a Safe lock SSI can drive is A) 48 B) 64 **C) 56** D) 96
19	In Safe lock SSI, number of output relays that a RD card can drive is A) 04 B) 05 C) 07 **D) 8**
20	The microprocessor chip used in Safe lock SSI is A) Intel 8085 **B) Intel 8086** C) Intel 8088 D) Motorola 68000
21	In Safe lock Solid State Interlocking, relay logic is used. **True**
22	Safe lock Solid State Interlocking has extensive self diagnostic features. **True**
23	In Safe lock Solid State Interlocking, Read input card acts as input interface of the system. **True**
24	In Safe lock Solid State Interlocking, input to the system is received from field gear controlling relays, field gear indicating relays and commands from operators panel. **True**
25	In Safe lock Solid State Interlocking system, there are 6 RI cards. **True**
26	The existing Safe lock Solid State Interlocking system has sufficient inputs / outputs for a four road stations. **True**
27	In Safe lock Solid State Interlocking, EPROM programmed with principle of interlocking is called 'SYSTEM EPROM'. **True**
28	In Safe lock Solid State Interlocking ,result of both the processors is compared by comparator card. **True**
29	The Safe lock Solid State Interlocking system automatically shut down in case of any un-safe failure.

	True
30	Inbuilt temperature sensors are provided in 9*+20154 make data logger . **True**
31	Maximum number of analog inputs that can be monitored by a ध)+ data logger is 96 **True**
32	Each stag box of Efftronics data logger can take 512 digital inputs. **True**
33	Each stag box of Efftronics Data Logger can accommodate 8 digital inputs cards. **True**
34	With help of data logger, signal passed at danger can be found out. **True**
35	No name or password should be put in data logger. **True**
36	Number of inputs that a RI card of a Safelock SSI can accommodate is **A) 48** B) 64 C) 96 D) 56
37	Number of RI card a Safelock SSI can accommodate is A) 9 B) 7 C) 4 **D) 6**
38	Number of output relays that a Safelok SSI can drive is A) 48 B) 64 **C) 56** D) 96
39	In Safelock SSI, number of output relays that a RD card can drive is A) 04 B) 05 C) 07 **D) 8**
40	The microprocessor chip used in Safelock SSI is A) Intel 8085 **B) Intel 8086** C) Intel 8088 D) Motorola 68000

BPAC

1	In Block Proving by Axle Counter, re-set counters are provided. **True**
2	BPAC block instrument is auto normal type. **True**
3	Axle counter proving block does not have auto TOL feature. **True**

Power supply Equipments

1	RDSO specification for Integrated power supply system is RDSO/SPN/165/2000. **True**
2	Integrated power supply system (RDSO/SPN/165/2000) is based on SMPS principle. **True**
3	Voltage of discharged Lead acid cell is 1.8v **True**
4	Specific gravity of lead acid cell is measured by lactometer. **False**
5	After giving AC supply to transformer, it gives DC out put. **False**
6	Centre rod of 6 I cell consists of A) Zinc **B) Solid Carbon** C) Iron D) Lead.
7	Zinc container used in 6I cell acts as **A) Negative electrode** B) Positive electrode C) Neutral D) None
8	In IPS, Float cum boost charger module is provided (FRBC) in A) DC distribution Panel B) AC distribution Panel **C) SMPS Panel**
9	In IPS, Status Indication and critical alarms are provided in **A) Monitoring Panel in SMs room** B) SMPS Panel C) None
10	For RE Area, normally capacity of battery bank provided with IPS is **A) 120 AH** B) 200 AH C) 300 AH
11	For non-RE, Maximum AC power (Current) required at 230 V by IPS is approximately **A) 6KVA** B) 3KVA C) 2.5KVA
12	Maximum AC power (current) required for IPS designed for MACLS with end cabins is approximately A) 6KVA B) 3KVA **C) 2.5 KVA**
13	In IPS, "Start generator" indication is displayed and resetable alarm sounds when condition of battery / power supply is **A) Battery discharges to 50%** B) Battery discharges to 75% C) When incoming power supply fails.
14	In IPS, "Start Emergency Generator" indication and resetable alarm sounds when condition of battery / power supply is A) Battery discharges to 50% **B) Battery discharges to 60**% C) When incoming power supply fails.
15	In IPS, System shutdown indication and non resettable alarm sounds when condition of battery / power supply is **A) Battery discharges to 70**% B) Battery discharges to 90% C) When power supply given to IPS fails.
16	Positive terminals of batteries, which are to be chargerd by battery charger, should be connected to A) Negative terminal of battery charger B) Positive terminal of "LOAD"on charger **C) Positive terminal of battery charger**

17	VRLA cell has separators of A) PVC **B) Absorptive Glass Mat** C) Non woven Cotton
18	Electrolyte in VRLA cell is absorbed in A) PVC B) Wood **C) Absorptive Glass Mat**
19	Type of VRLA cells are A)Flooded electrolyte type B) Saturated electrolyte type **C) Starched electrolyte type**
20	Positive plate of VRLA cells is A) Lead Cadmium Alloy **B) Petented MFX Alloy** C) Lead peroxide.

A)	नि□सं□□□□र□के पूण□□□म□को लिख□□ Write full forms of following abbreviations
	VRLA – Valve Regulating Lead Acid
	LDCE - Limited Departmental Competitive Examination
	HOER - Hours of Employment and Regulations
	RDSO - Research Design and Standard Organization
	LAP – Leave on average Pay
	a) HOER - **Hours of Employment and Period of Rest Rules**
	b) DAR - **Disciplinary appeal rules**
	c) ARME - **Accident Relief Medical Equipment**
	d) RDSO - **Research Designs and standards organization**
	e) RITES - **Rail India Technical and Economic Service**
	f) G&SR - **General and subsidiary rules**
	g) SWR - **Station working rule**
	h) IPS - **Integrated Power Supply**
	i) SEM - **Signal Engineering Manual**
	j) MACLS - **Multi aspect color light signalling**
	k) DMTR – **Daily material transaction register**
	i) MAS – **Material at site**

Telecommunications

Power plant

1	Positive plate of lead acid cell is PbO2 **True**
2	Bleeding Resistance decides Battery charger current. **True**
3	Recharging period of Battery is 8 hrs. **True**
4	Rating of transformer is represented by voltage and current **True**
5	If two cells are connected in series capacity will increase. **False**
6	Capacity of Battery is given by **A) AH** B) Watt C) Current
7	Maximum drain current from 6I cell (55 AH) is **A) 750 ma** B) 150ma C) 250 ma
8	Life of battery is given in term of A) No of cycles **B) No of years** C) Both
9	During charging of battery the direction of current in Battery is from **A) +ve** B) -ve C)Both
10	During charging of lead Acid Battery gas produced is **A) H2** B)NH3 C) N2
11	Trickle charging is used for A) Stabilized voltage **B) Compensating self leakage voltage** C)None
12	Internal Resistance of primary cell (6I) should not be more than **A) 2 Ohm** B) 5 Ohm C) Both
13	Internal short circuit effects in Battery **A) Warming of Battery** B) No O/P Voltage C) None
14	In automatic battery charger current is controlled by **A) SCR** B) Zener Diode C) LED
15	Zener diode normally works in A) Forward Bias **B) Reverse Bias** C) In Both
16	AC supply frequency in secondary winding of transformer is **A)50 Hz** B) 60 Hz C) 100Hz
17	Testing of transformer is done by applying load A) Resistive Load B) Inductive Load **C) Both**

18	No output voltage in transformer is due to **A) Secondary Coil Open** B) Secondary Coil Short C) None
19	The input voltage of Inverter is **A) DC** B) AC C) Both
20	Type of transformer used in DC-DC converter circuit is **A) Step Down** B) Step up C) None

Basic Electricity

1	For motors HRC fuses are the best **True**
2	Frequency of DC is 50 C/s **False**
3	A secondary cell produces AC with the frequency 50 HZ **False**
4	An inverter converts AC into DC **False**
5	Insulation resistance is measured by meggar. **True**
6	One kilo volt is Equal to A) 100 mV B) 1000MV **C) 1000 V**
7	To measure current the meter should always be in **A) series** B) Parallel C) series - parallel
8	According to ohms law the current is measured in **A) Amp.** B) mili amp C) None
9	According to ohms law V is equal to **A) I X R** B) I/R C) R/I
10	The insulation resistance of overhead lines must be more than A) 2 Ohm B) 1 0hm **C) 8 M Ohm**
11	The property to attract iron, is known as A) magnate B) Induction **C) magnetism**
12	A bar magnet has number of poles **A) 2** B) 1 C) 3
13	Number of winding in auto transformer **A) One** B) Two C) Three
14	A good rectifier must have **A) more efficiency and less ripple** B) less efficiency and more ripple C) both less
15	Fuse is provided in the circuit to protect from A) Fault **B) high current** C) fire
16	The lightening arrestor is a **A) Safety device** B) Measuring Instrument C) None
17	The maximum current capacity for HRC fuses is A) 1.5 KA B) 2.5 KA **C) 6 KA**
18	Loop resistance of RE cable (0.9 mm dia copper conductor) is **A) 56 ohms/km** B) 172 ohm/km C) 110 ohm/km
19	Unit of frequency is

	a) Cycle/Second b) Minute /Second c) Cycles/min
20	To maintain the constant power supply the device used is A) Inverter B) Charger **c) Stabilizer**

Overhead lines/Under Ground Cable

1	PG champ is used for non tension joint **True**
2	Earth coupling reduces noise in circuit. **False**
3	Maximum cross talk level is better than -61dbm **True**
4	Insulation test is performed by Megger. **True**
5	ACSR(6/1/1.5mm dia) wire loop resistance is 5.6 ohms/loop km. **True**
6	Loop resistance of GI Wire (300 lbs) is A) 30 ohm/Km **B) 22.2 ohm/KM** C)27 ohm/Km
7	Transmission loss of 6/1/1.96 mm dia ACSR wire is **A) 0.027 db/Km** B) 0. 023 db/Km C) 0.038 db/Km.
8	Height of over head alignment for road crossing. **A) 15 Feet** B) 18 Feet C) 23 Feet.
9	Height of overhead alignment on Railway Crossing. A) 15 Feet B) 18 Feet **C) 23 Feet.**
10	Distance of over head alignment from center of track **A) Height of post +7 Feet** B)Height of post +11 Feet C) None
11	Loop resistance of ACSR joint is **A) 0.02 ohm** B) 0.05 ohm C) 0.007 ohm.
12	Break fault is detected by using **A) Multimeter** B) Megger C) dB meter
13	T fault of line is known by using **A) Multimeter** B) Megger C) dB meter
14	Earth fault is tested by A) Multimeter **B) Megger** C) TMS Kit
15	OFC fibre is made of **A) Silica** B) Plastic C) PVC
16	Diameter of VF Quad conductor is A) 1.00mm **B) 0.9mm** C) 1.5mm
17	Cut off frequency in RE Cable is A) 3.34 KHz **B) 3.35 KHz** C) 4 KHz
18	Quad means A) Two conductor **B) 4 conductor** C) 3 conductor
19	Pair of cable means **A) Two conductor** B) 4 conductor C) 3 conductor

20	In RE cable last quad is **A) Reference** B) Marker C) General

Telephone Instrument

1	The Bell coil resistance is 1000 ohms. **True**
2	Stone transmission bridge is used in capacitive coupling **True**
3	Inspection & testing of telephone should be done by JE . **True**
4	Microphone converts sound energy into electrical energy. **True**
5	DKT Is a digital telephone. **True**
6	Line cord of Auto telephone is **A) 2 way** B) 4way C) 3 way
7	Type IL is **A) Transmitter** B) Receiver C) None
8	Frequency response of receiver is A) 1 KHz **B) 2.8 KHz** C) 3.4 KHz
9	Impedance of receiver at 1 KHz is **A) 225 ohms** B) 60 ohsm C) None
10	Type of head set used in magneto telephone is **A) 164** B) 200 C) 300
11	Resistance of induction coil for magneto telephone are A) 1.3 ohms B) 17 ohms **C) both of them**
12	Resistance of induction coil for auto telephone are A) 35 ohms B) 75 ohms **C) Both of them**
13	Anti side tone is separated by **A) Induction coil** B) Transmitter C) Receiver
14	Impedance matching of telephone instrument is done by **A) Induction coil** B) Transmitter C) Receiver
15	AC &DC supply is separated by **A) Induction coil** B) Transmitter C) Receiver
16	Speed of rotary dial is **A) 9-11 P/S** B) 10 P/S C) 9 P/S
17	Speed of dial in Push button telephone **A) 10 P/S** B) 9 P/S C) 11 P/S
18	Inspection of telephones is done by A) TCM B) JE **C) JE/SE**
19	Way station control phone introduces a loss while speaking of **A) 0.6 db** B) 1 db C) 0 db

20	Push button telephone needs supply A) 9 volts **B) 12 volts** C) 4.5 volts

PA, PRS, FAX, IVRS, MODEM

1	Talk back is duplex type of communication **False**
2	Box type speakers are used for open ground **False**
3	For commercial use, B class amplifier is used. **True**
4	Amplifier converts sound energy into electrical energy. **False**
5	Modem is not required to send FAX **False**
6	Pitch is affected by A) Voltage B) Current **C) Intensity**
7	Loudness depends on A) Acoustic feedback B) Voltage & type of Amplifier **C) Frequency**
8	Impedance of speakers depends on **A) Frequency** B) Shape of speaker C) Size of speaker
9	In marshalling yard matching is A) Impedance **B) Voltage** C) None of them
10	In voltage matching to connect more number of speakers tapping used is **A) 70 volts** B) Impedance matching with 16 ohms C) None of them
11	Gain of amplifier is expressed in A) DBM **B) DB** C) Watts
12	Battery backup for PA amplifiers. A) - 48 v B) + 48 v **C) + 24 V**
13	Talk back is a type of communication. **A) Simplex** B) Duplex C) None of them
14	For open ground type of matching used is **A) Voltage matching** B) Impedance matching C) Both
15	In closed area type of speakers used are **A) Box type** B) Horn type C) None of them
16	Talk back system is used at A) On railway platform **B) Marshalling Yard** C) None of them
17	Arrival /Departure indicators are used for A) Mail express train b) suburban train **C) both**.
18	FAX Machine in railway is used for sending A) circulars B) Important documents **C) Both.**

19	Test which can be given on modem are- A) 4- wire loop B) Digital loop **C) Both**.
20	CCTV display A) Live programme B) Video prog. **C) Both**

Electronic Exchange

1	If subscriber is getting continuous ring then his subscriber card may be faulty. **True**
2	C-DOT console will not work if key pad is faulty. **True**
3	In SLIC card no. of subscriber is 8. **True**
4	Voice mail is facility of CORAL Exchange. **True**
5	Maximum no of subscribers in CDOT-128 is 128. **False**
6	Six junction are there in junction card of C-DOT Exchange. **False**
7	C-DOT 128 is a non-blocking Exchange. **True**
8	6144 Numbers can be provided in CORAL-III Exchange. **True**
9	Voice mail is the facility of C-DOT Exchange. **False**
10	Switching speed of Electronic Exchange is in. A) Milli second **B) Micro second** C) Second
11	Maintenance in Electronic Exchange is **A) Less** B) More C) None
12	Which is not a card of peripheral shelf of coral -III exchange. A)RPS B) PPS **C) MEX**
13	Which is a card of control shelf of coral -III exchange? **A) 4GC** B) 4TEM C) PPS
14	Protective device is used on. A) MDF B)IDF **C) Both**
15	Fuse is connected in. **A) Series** B)Parallel C) Both
16	If there is no dial tone in telephone, it may be due to. A)Telephone may be faulty B) Fuse on MDF may be blown **C) Both**
17	Line faults is due to following line problem. A) Break B) Contact **C) Break, Contact & Low Insulation**
18	Lightening arrestor is a. **A) Safety device** B) Used for decoration C) Both
19	Maintenance console of exchange is used for.

	A)Giving facilities to subscriber B) Testing of line **C) Both**
20	Following connection can be given by operator console. A) STD B) Conference **C) Both of them**

Analog Microwave

1	Tower maintenance is done by BRI staff. **True**
2	Impedance at HF Trans in DTL Mux is 75 ohms. **True**
3	VHF frequency range is 3 MHz to 30 MHz. **True**
4	All channels are working during fading. **False**
5	Earth Tester is used for testing earth Resistance of Microwave Equipment. **True**
6	Microwave stations are placed after **A) HOP distance** B) 100 Km C) None
7	Stages of modulation in DTL MUX are A) One **B) Two** C) Four
8	Circulator is used for connecting **A) Equipment To Antenna** B) Equipment To Power meter C) None
9	Isolator is used as last stage of **A) Transmitter** B) Receiver C) None
10	Dehydrator is used in A) Radio Equipment **B) Wave guide** C) None
11	Dehydrator uses **A) Silica gel** B) Ammonium chloride C) None
12	BB IN level of MELCO in dbm is A) -15 B) -30 **C) -45**
13	MELTRON UHF (RF-11) power consumption is A)60 W **B)90W** C) 100W
14	White noise test set measures A) Threshold noise B) Inter modulation noise C) All type of noise.
15	For FD equipment, difference between two transmitter frequency should be A) 2% B)3% **C) 5%**
16	2nd carrier frequency in DTL MUX is A) Fix **B) Programmable** C) None
17	Deviation test is done at the time of A) Daily B) Short term **C) Line up**
18	Receiver test is done at the time of

	A) Daily B) Short term **C) Line up**
19	Transmit power of MELTRON RF-11 in dbm is **A)+37** B) +33 C) +40
20	As transmission line UHF (RF-11) uses A) Wave guide **B) RF co-axial cable** C) None

Digital Microwave

1	Input to skip MUX is VF channel. **False**
2	Aviation lamp protects tower. **True**
3	Aviation lamp is lighted during entire day. **False**
4	If earth resistance value is high then earth renovation may be done. **True**
5	Maximum 480 channels works in digital M/W. **True**
6	Digital UHF band in GHz is. **A)1.7-2.7 GHz** B) More than 3 GHz C) None
7	Modulation used in Digital Mux is. A) PPM B) PAN **C) PCM**
8	Last stage of PCM transmitter is A) Coding **B) Line coding** C) Filtering
9	Number of Voice Frequency(VF) channels combined by primary PCM MUX is **A) 30** B) 32 C) 31
10	Number of time slots in primary PCM MUX is A) 30 **B) 32** C) 31
11	Fading in digital Microwave (ITI-NEC) occurs at the level in dbm. **A) -80** B) -70 C) -65
12	Maximum separation between two Space Diversity (SD) antenna is up to. A) 10 meter B) 20 meter **C) 30 meter**
13	Fading is reception of Radio Frequency (RF) signal below **A) Threshold** B) Normal level C) None
14	Fading is due to. **A) Climate** B) Failure of power supply C) Failure of Equipment
15	Transmission line between equipment and antenna in Microwave is called. **A) Wave guide** B)Feeder cable C) Both
16	Type of wave guide in Digital Microwave is. **A) Elliptical** B) Circular C) Rectangular
17	Earth Resistance readings are taken A) Before monsoon B) After monsoon **C) Both**

18	Earth resistance is resistance of A) Plate B) connecting wire **C) Soil**
19	Frequency of radio is measured by. **A) MW Frequency meter** B) Frequency counter C) DTA
20	Condition of secondary cell is given by. A) Specific gravity B) Voltage **C) Both**

Train Traffic Control

1	Conduction test of control line should be done at Hottest period of the day **True**
2	Amplifier Gains are checked for trans/Receive signal **True**
3	Phantom voltage in 4 wire control circuit is 50 v AC **True**
4	The level of DTMF signalling is 1 dbm **False**
5	The signalling voltage of 2W control is 200V to 240.V **False**
6	Power supply used for HQ equipment. **A) +12V DC** B) -12V DC C) -48V DC
7	Speech & signalling is transmitted to control line by **A) Combiner** B) Microprocessor C) None
8	Impedance of 2-wire control line is **A) 600 ohm** B) 1120 ohm C) 470 ohms
9	Characteristic Impedance of VF Quad in RE cable is-- **A) 1120 ohms** B) 56ohms C) None
10	Insertion loss of 2 wire control phone is A) 3db **B) 0.25db** C)1db
11	Speaking loss of 2 wire control phone is **A) 3db** B) 2db C)1db
12	Receiving loss of ECP should be. **A) 0.025db** B) 0.25db C)1db
13	Transmission loss in 2-wire control line (6/1/1.5 mm ACSR)/Km. **A) 0.038db** B) 0.077db C) 0.037db
14	Earth resistance of control ckt should not be more than. A) 2 ohm B) 4 ohm **C) 5 ohm**
15	Radio patching equipment is provided at. **A) M/W Stn** B) Way Station C) HQ
16	Efficiency of 2-wire control ckt should be **A) 80%** B) 95% C)100%
17	Efficiency of 4-wire control ckt should be **A) 95%** B) 100% C) 80%
18	For Block instrument which quad is used in RE Area **A) PET Quad** B) VF Quad C) Both
19	Loading of RE cable is done to reduce.

	A) Attenuation loss B) Cross talk C) None
20	Control ckt are used as Auto Telephone line in **A) Disaster management** B) Normal working C) Both

OFC

1	Optical time domain reflector meter have dead zone section. **True**
2	One OLTE is required for terminal station **True**
3	Total bits send to check PCM equipt In telegram are 12 megabits. **True**
4	Block section can works on optical fibre cable. **True**
5	NMS used for OFC maintenance **True**
6	OFC is a made by **A) Silica** B) Mica C) Fibre
7	Diameter of core of mono mode fibre is A**) 10 micro meter** B) 75 micro meter C) 55micro meter
8	Refractive index of Core is- **A) 1.5** B) 1.4 C) 1.3
9	OFC Marker placed at distance of A) 1km **B) 50meter** C) None of above
10	Drum length of OFC is A) 6 km **B) 3 Km** C) 10 Km
11	splicing loss of OFC is **A) 0.2 db** B) 1 db C) 3 db
12	Two optical fibre are joined by **A) Splice machine** B) Soldering Iron C) Both
13	Minimum depth at OFC is buried in soil A) 2meter **B) 1meter** C) None of them
14	OTDR can be used to test ---------- A) OFC cable brake distance) OFC losses **C) Both**
15	OTDR works on A) Only on battery 12v/10 AH **B) Batt. & Main supply** C) 12VAC/15V
16	OLTE works on **A) -48VDC** B) +40VDC C) 110 VDC
17	In Branch line number of OLTE equipment's are. A) One Optical Transmitter /Receiver **B) Two optical transmitter /receiver** C) Three optical transmitter /receiver
18	LASER power for long distance OLTE is A) -16 dbm to - 35 dbm **B) -4dbm to 0dbm** C) 30 dbm

19	In block interfacing equipment Z80 CPU is used for **A) Read data from Input** B) Power supply C) Amplifier
20	EPROM stand for **A) Erasable Programmable Read only Memory** B) Programmable read only memory

Universal emergency communication

1	Gain of antenna (A) = 17.8 + 20 log D + 20 log F Db **True**
2	In Universal emergency communication two channels are used one for signalling and one for speech. **True**
3	The duration of SOS call is 30 seconds. **True**
4	UHF radio relay system is mostly used in Private sectors. **True**
5	In satellite service transmitting power is 645 mw. **True**
6	Low earth orbit & Medium Earth Orbit lie between 700Km. And 10000Km. **True**
7	In Railway VHF frequency range is 146 – 174 Mhz **True**
8	VHF range is ---------- A) 3--30 MHZ. **B) 30---300 MHZ**. C) 300---3000MHZ.
9	In Indian Rly. Microwave frequency used is------ A) 1725 TO 7125 MHZ **B) 7125 TO 7425 MHZ** C) 7125 TO 3725 MHZ.
10	Characteristic impedance of Isotropic zone is. A) 240 Ohms **B) 377 Ohms** C) 248 ohms
11	Loss of rectangular wave guide is---------- A) 0.7 db/meter **B) 0. 07db/meter** C) 0.O6 meter
12	Maximum gain of Yagi antenna is. A) 2 db **B) 9 db** C) 7 db
13	Modulation used in Universal Emergency communication (U.E.C.) System is. **A) FM** B) TDM C) AM
14	Universal emergency communication (U.E.C.) system is. A) Duplex **B) Simplex** C) One way
15	Power supply for VHF communication equipment is. A) 24 VDC **B) 12 VDC** C) 48 VDC
16	Impedance of antenna used in VHF is. A) 100 Ohm **B) 50 Ohm** C) 150 Ohm
17	Base station VHF Receiver sensitivity is. **A) 0.25 micro volt** B) 25 micro volt C) 15 micro volt

18	Types of modulation used in Train Radio communication is. A)A.M. B) F.M . C) P.M.
19	Low earth orbit & Medium earth orbit lie between. A) 500KM TO 600 KM. **B) 700 TO 10000KM**. C) 1000 TO 2000 KM.
20	Communication between the operational satellites and other provisions of mobile Phone and pager services is in the L - band which is. **A) 1616- 1625 .5 MHZ** B) 1000 -1500 MHZ C) 1800--2000MHZ

PA, PRS, FAX, IVRS, MODEM

1	Amplifier can be connected to speakers in voltage matching **True**
2	Talk back is duplex type of communication **False**
3	Speed of V.24 data interface is Lower than V.35 **True**
4	To telephony- FXO inter face Exchange is connected) **True**
5	Horn type speaker is used in outdoor area **True**
6	Mike may need A) External voltage B) No external voltage **C) Either A or B**
7	Microphone converts Sound energy into **A) Electrical** B) Mechanical C) None
8	Speakers converts A) Sound energy in to electrical energy B**) Electrical energy into sound energy** C) None of the above
9	Impedance of speakers depends on **A) Frequency** B) Shape of speaker C) Size of speaker
10	In voltage matching to connect more number of speakers tapping used is **A) 70 volts** B) Impedance matching with 16 ohms C) None of them
11	Battery back up for PA amplifiers. A) - 48 v B) + 48 v **C) + 24 V**
12	For open ground type of matching used is **A) Voltage matching** B) Impedance matching C) Both
13	In closed area type of speakers used are **A) Box type** B) Horn type C) None of them
14	Talk back system is used at A) On railway platform **B) Marshalling Yard** C) None of them
15	Remote paging is used for A) local announcement **B) CA system** C) in yard
16	Arrival /Departure indicators are used for A) Mail express train b) suburban train **C) both.**
17	FAX Machine in railway is used for sending A) circulars B) Important documents **C) Both.**
18	If there is no display on monitor it may be due to

	A) ON- OFF switch defective. B) power connector of monitor defective **C) both**
19	CCTV display A) Live programme B) Video prog. **C) Both**
20	CCTV works on **A) 230 volts** B) 110 Volts C) Both

1	The current from battery is **A) AC B) DC C) Electron.**
2	Earth fault is tested by A) Multimeter **B) Megger** C) TMS Kit
3	Quad means A) Two conductor **B) 4 conductor** C) 3 conductor
4	Input supply of PC is. **A) 230 volt** B)5 volt DC C) 12 volt DC
5	Line cord of Auto telephone is **A) 2 way** B) 4way C) 3 way
6	In closed area type of speakers used are **A) Box type** B) Horn type C) None of them
7	Line faults is due to following line problem. A) Break B) Contact **C) Break, Contact & Low Insulation**
8	Two optical fibre are joined by **A) Splice machine** B) Soldeirng Iron C) Both
9	Power supply for VHF communication equipment is. A) 24 VDC **B) 12 VDC** C) 48 VDC
10	Which system gives unreserved computer tickets for journey? A) PRS **B) UTS** C) FOIS
11	Line cord of Auto telephone is **A) 2 way** B) 4way C) 3 way
12	In closed area type of speakers used are **A) Box type** B) Horn type C) None of them
13	Power supply for VHF communication equipment is. A) 24 VDC **B) 12 VDC** C) 48 VDC
14	Earth fault is tested by A) Multimeter **B) Megger** C) TMS Kit
15	Capacity of Battery is given by **A) AH** B) Watt C) Current
16	Fuse is provided in the circuit to protect from A) Fault **B) high current** C) fire
17	Tape recorder used for A) record purpose B) play purpose **C) Both**
18	Earth resistance of control ckt should not be more than.

	A) 2 ohm B) 4 ohm **C) 5 ohm**
19	One byte is equal to A) 4bits B) 16 bits **C) 8 bits**
20	अथ मेजरमे□ट का □मधा□रत समय होता है अ) मानसुन के पहले ब) मानसुन के बाद क) उपरो□त सभी
21	voltage मापने के □लये मीटर को हमेशा रखते है। (अ) □ेणी □ म मा□(ब) □ेणी समांतर □ म मा□**(क) समांतर □ म म**□
22	सबसे ग□नमान पोट होता है. अ) □सरा□यल ब) पैरलल **क) यु एस बी**
23	IPM आर डी एस ओ के अनुसार लाइट□मंग □ोटे□शन लेबल है. अ) □लास अ ब) □लास ब क) □लास स **ड) □लास ड**
24	□व□युत धारा मापने के □लये मीटर को हमेशा रखते है। (अ) □ेणी समांतर □ म मा□(ब) समांतर □ म मा□**(क) □ेणी □ म म**□
25	कैट -5 केबल मा अ□धकतम डाटा □पीड **MBPS** मा होती है। अ**)** 10 **ब**)**100** स**)** 1000
26	E.1 मा डाटा□पीड होता है एमबीपीएस मा **A) २** B) ६४ C) १२८
27	रेलनेट का □म□न के □लए इ□तेमाल होता हे A) e-mail भेजने हेतु B) सुचना सेयर करने हेतु C) पेपर लेस काय□□नाल□हेतु **D) सभी**
28	वाक□ टोक□ सेट □कतने वो□ट पर काय□करता ह A) १२ B) २४ **C) ७.५**
29	पी सी क□ ग□न आजकल नापते है □कस इकाई मा□ अ**) □**कलो हट□ज ब**)** मेगा हट□ज **स**) **गीगा हट□ज**
30	अ□थ□ा क□ आव□यकता होती है। अ) उपकरण क□ सुर□ा के □लए ब) अपनी सुर□ा के □लए **स) उपरो□त सभी**
31	□म□न को IP address नह□ देते A) रोउटर B)सरवर **C) हब** D) पी सी
32	रेलनेट का □म□न के □लए इ□तेमाल होता है। A) e-mail भेजने हेतु B) सुचना सेयर करने हेतु C) पेपर लेस काय□□नाल□**हेतु D) सभी**
33	□म□न WAN के उदहारण हे A) PRS B) Railnet C) FOIS **D) सभी**
34	IP Address होता है। A) 8 Bit B) 16Bit **C) 32 Bit**
35	OFC का □सधांत ह□

	A) TIR B) ITR C) SCATTERING
36	क□पुटर का इनपुट □डवाइसेस के नाम अ) क□बोडब्र) माउस **स) दोन□**
37	रे□वे मा सज वो□टेज का □□ोत है. a)लाइट□मंग(b) □व□चंग transient **© सभी**
38	6 Q केबल का लूप रे□स□टस होता है ओ□म मा **A) 56** B)65 C) 650
39	□यूज □न□न मा□कसके कारण उड़ता है | A) आ□धक रेजि□टस) B) आ□धक वो□टेज **C) आ□धक करट**

State True or False

1	आर्थिंग पीट का गहराई ३ मीटर से अधिक होना चाहिए. **TRUE**
2	रेलनेट रेलवे का इंटरनेट सिस्टम है । **TRUE**
3	VF आवृत्ति रेंज ०.३ से ३.४ किलो हटज़ है। **TRUE**
4	जीनर डायोड एक SURGE प्रोटेक्शन डिवाइस है। **TRUE**
5	DTMF सिगनल मे अधिकतम 99 स्टेशन को जोड़ सकते है। **TRUE**
6	फिक्स्ड VHF SET का पावर 25 वाट होता है **TRUE**
7	DIODE ए.सी को डी.सी मे बदलता है। **TRUE**
8	5W के वीएचएफ सेट का रेंज १ किमी होती है। **FALSE**
9	आर्थिंग सज धारा से उपकरणो को बचाता है। **TRUE**
10	ऑडियो आवृत्ति रेंज 20 से 200 किलो हर्स है। **FALSE**
11	सेकेण्डरी सेल को सीरीज **(SERIES)** मे जोड़ने **CURRENT SAME** रहता है | **TRUE**
12	कोरल एक्सचेंज-III (Tadiran)मे ज्यादा से ज्यादा 6144 PORT के होते है। **TRUE**
13	PIJF केबल मे जेली वाटर ब्लॉकिंग मटेरियल है । **TRUE**
14	OFC मे कोर का रेफ्रेक्टिभ इंडेक्स (R.I.)का मान 1.5 माइक्रो मीटर होता है । **TRUE**
15	टेलिफोन एक्सचेंज का वार्किंग वोल्टेज -48 V DC होता है । **TRUE**
16	MTRC मे Frequncy band 380 to 410 MHZ है। **TRUE**
17	SLS 24 कार्ड मे २४ पोर्ट होते है । **TRUE**
18	FOIS रेलवे का WAN है । **TRUE**
19	ESI एवं EMI आर ई एरिया मे OFC को प्रभावित करते है। **FALSE**
20	ट्रेप उप ट्रांसफोर्मर मे वाइमरल विन्डिंग के टर्न कम होते है । **FALSE**

21	VHF □ांसमीटर मा MODULATION □क्रया जाता है । **TRUE**
22	MEGGER से इंसुलेशन नापते भेजते ह। **TRUE**
23	□फ□ □ड VHF SET का पावर 5 वाट होता है **FALSE**
24	□ांसफामर□ डी.सी को ए.सी मा बदलता है। **FALSE**
25	DTMF □सगनल मा अ□धकतम 77 □टेशन को जोड़ सकते ह□ **FALSE**
26	रेजि□टर□ को सीरा□ज मा जोड़ने से मान घटता है I **FALSE**
27	इंसुलेशन टे□ट मेगर से □क्रया जाता है **TRUE**
28	राउटर PRS Network मा □ट सेट करता ह। **TRUE**
29	LAN Extender □वारा LAN के सद□य को ३ □क्रमी दूर भी लगा सकते ह। **TRUE**
30	फॉरवड बायस मा डायोड का resistance कम होता है| **TRUE**
31	म□य रेल एसटा□ट□आय/ भायखला सवर□ का IP address 10.31.25.50 हे **TRUE**
32	□वच का काम डाटा का□ □वा□घंग करना है **TRUE**
33	मोडम डाटा को टोन मा बदलता ह। **TRUE**
34	MTWE उपकरण 24 वो□ट DC पर काय करता है **FALSE**
35	सेक□ी सेल को सीरा□ज **(SERIES)** मा जोरने पर **voltage** नहां बदलताहै | **FALSE**
36	RE केबल vf □वाड मा □ांस□मशन लोस ०.25 db है । **TRUE**
37	OFC मा कोर का refractive index cladding से □यादा होता है । **TRUE**
39	टेल□फोन ए□सचज□ का वा□क्रंग वो□टेज -48 V DC होता है । **TRUE**
39	MTRC मा Frequency band 380 to 410 MHZ है।

	TRUE
40	ESI एवं EMI आर ई एरा या म OFC को भा वत करते है। **FALSE**
41	In fully charged condition specific gravity of electrolyte should be more than 1180. **True**
42	PC starts with the help of operating System. **True**
43	Bell/Buzzer used in telephone may be AC/DC. **True**
44	Aviation lamp is lighted during entire day. **False**
45	Radio patching system only speech is transmitted. **False**
46	E-mail can be send by Internet. **True**
47	Unit of Resistance is ohm.- **True.**
48	Box type speakers are used for open ground **False**
49	Power supply of VHF equipment is 12 V DC. **True**
50	Satellite phone use in Break Down Train. **True**

1	रेलवे वी एच् एफ बड़ ----------से----------MHZ. है । **146, 174**
2	Yellow, RED, GREEN रंग के रजि□टर□ का मान---------- है। **4.2 M**
3	CAT-5 केबल क□ पेच कोड□ बनाने हेतु ---------- कने□टर लगता है। **RJ-45**
4	STM-1 क□ अ□धकतम चैनल कैप□ सट□---------- होती है। **189**
5	गाड और □ाईवर को □दये जाने वाले वीएचएफ सेट ---------- □ □वक्षी पर काय करता है। **161.15MHZ**
6	UHF बड़ ----------से----------MHZ.तक है । **300-3000 MHZ**
7	CAT-6 केबल क□ पेच कोड□ बनाने हेतु ---------- कने□टर लगता है। **RJ-45**
8	STM-1 क□ अ□धकतम चैनल कैप□ सट□---------- होती है। **189**
9	गाड और □ाईवर को □दये जाने वाले वीएचएफ सेट ---------- □ □वक्षी पर काय करता है। **61.15 MHZ**
10	ART को □दये जाने वाले वीएचएफ सेट ---------- □ □वक्षी पर काय करता है। **147.975 MHZ.**
11	STM का वाक्षग VOLTAGE _____होता है । **-48VDC**
12	मदेन□स □ □अथ रेजि□ट□स का अ□धकतम मान ---------होना चा□हए . **ONE**
13	कं□ क्षर ..... पास करता है एवं ..... रोकता है। **AC,DC**
14	CAT-6 केबल क□ अ□धकतम ल□बाई LAN मा ---------- मीटर ह□ । **100 METER**
15	1000 MBPS डाटा □पीड के □लए ---------- केबल लगता ह□ । **CAT-6**
16	DTMF frq. Range ----------HZ से -------- HZ है। **697-1633 HZ**
17	STM-4 क□ अ□धकतम चैनल कैप□ सट□---------- होती है। **756**
18	OFC cable का बे□□डंग diameter ---------- D होता हे **3**

19	लेड अ□सड सेल मा इले□ □ोलाइट----------तथा----------है **DISTILLED ATER, SULPHURIC ACID**
20	बैटर□ क□ कैमे □सट□----------मा नापी जाती है. **AH**