Notations:
1. Options shown in green color and with ✔ icon are correct.
2. Options shown in red color and with ✗ icon are incorrect.

<table>
<thead>
<tr>
<th>Paper Id</th>
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<tr>
<td>2181865</td>
<td>TRAINEE JR PROGRAMMER 10th June 2017 Shift1</td>
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Question Paper Name: TRAINEE JR PROGRAMMER 10th June 2017 Shift1
Subject Name: TRAINEE JR PROGRAMMER
Creation Date: 2017-06-09 15:53:10
Number of Questions: 100
Total Marks: 100
Display Marks: No
Calculator: None
Magnifying Glass Required?: No
Ruler Required?: No
Eraser Required?: No
Scratch Pad Required?: No
Rough Sketch/Notepad Required?: No
Protractor Required?: No

TRAINEE JR PROGRAMMER

Group Number : 1
Group Id : 2181865
Group Maximum Duration : 0
Group Minimum Duration : 60
Revisit allowed for view? : No
Revisit allowed for edit? : No
Break time : 0
Group Marks : 100

TRAINEE JR PROGRAMMER

Section Id : 2181865
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions to be attempted: 100
Section Marks : 100
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Question Number : 1  Question Id : 218186401  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which works as a message relay agent?
Options :
1. ✔ SMTP
2. ✔ SNMP
3. ✔ LDAP
4. ✔ S/MIME

Question Number : 2  Question Id : 218186402  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Traces the existing network routing for a remote or local server...which Linux command is used?
Options :
1. ✔ traceroute
2. ✔ route
3. ✔ ping
4. ✔ touch

Question Number : 3  Question Id : 218186403  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Using Digital Signature, one cannot provide
Options :
1. ✔ Privacy
2. ✔ Integrity
3. ✔ Authentication
4. ✔ Non-repudiation

Question Number : 4  Question Id : 218186404  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
int y =5; printf("%x",y); What is the output in C?
Options :
1. ✔ FFFE
2. ✔ FFFF
3. ✔ FFEE
4. ✔ EEEE

Question Number : 5  Question Id : 218186405  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Assuming a default subnet mask, what is the network ID for a host with an IP address of 192.124.254.17?
Options :
1. ✔ 192.124.254.0
2. ✔ 192.0.0.0
3. ✔ 255.255.255.0
4. Problem of priority scheduling algorithm is
   Options:
   1. ✓ starvation
   2. * deadlock
   3. * spin-lock
   4. * fork

Question Number : 7  Question Id : 218186407  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Packet Filtering Firewall operates on which OSI Layer
Options:
1. ✓ Transport Layer
2. * Datalink Layer
3. * Application Layer
4. * Physical Layer

Question Number : 8  Question Id : 218186408  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Network Admin is configuring a Class E network with address 192.105.0.0 He needs at least 100 subnets that will provide maximum no of host on each subnet. Which subnet mask he would use?
Options:
1. ✓ 255.255.254.0
2. * 255.255.240.0
3. * 255.255.224.0
4. * 255.255.0.0

Question Number : 9  Question Id : 218186409  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following problem is not NP-Hard?
Options:
1. ✓ 0/1 Knapsack Problem
2. * Travelling Salesman Problem
3. * Graph Coloring
4. * All

Question Number : 10  Question Id : 218186410  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
If we have to process huge XML document to read it and to insert the records into the database, and there are limited memory resources, which parsing API would you use?
Options:
1. ✓ SAX
2. * DOM
3. * DTD
4. * XSD

Question Number : 11  Question Id : 218186411  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Because Client does not have the address of DHCP Server, it uses what source address?  
Options :  
1. ✓ 0.0.0.0  
2.  * 127.0.0.1  
3.  * 1.1.1.1  
4.  * 255.255.255.255  

Question Number : 12  Question Id : 218186412  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
What kind of device is used to connect your corporate LAN to the Internet?  
Options :  
1. ✓ A Router  
2.  * An NT Server  
3.  * A Bridge  
4.  * A Hub  

Question Number : 13  Question Id : 218186413  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Round Robin(R-R) Scheduling is similar to  
Options :  
1. ✓ FCFS with Preemption  
2.  * SJF  
3.  * Non-Preemptive SJF  
4.  * All  

Question Number : 14  Question Id : 218186414  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Find out false statement  
Options :  
1. ✓ JSON objects are typeless  
2.  * JSON is faster and lighter than XML  
3.  * XML data is typeless  
4.  * JSON is platform independent  

Question Number : 15  Question Id : 218186415  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
For each UPDATE, DELETE and INSERT SQL commands which cursor are declared by ORACLE  
Options :  
1. ✓ Implicit  
2.  * Explicit
3. ✗ Internal
4. ✗ External

Question Number : 16  Question Id : 218186416  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
MVC framework is defined in which Assembly?
Options :
2. ✗ System.CSS.Mvc

Question Number : 17  Question Id : 218186417  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which state transition of a process is not possible?
Options :
1. ✔ Blocked-->Run
2. ✗ Run--> Ready
3. ✗ Run--> Blocked
4. ✗ Run--> Terminated

Question Number : 18  Question Id : 218186418  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
How many Child Processes will get created when you executed following code? fork();fork();fork();
Options :
1. ✔ 7
2. ✗ 6
3. ✗ 3
4. ✗ 1

Question Number : 19  Question Id : 218186419  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
If page size is 4kB and logical address is 22-bit then number of entries in page table is
Options :
1. ✔ 1k
2. ✗ 2k
3. ✗ 4k
4. ✗ 3k

Question Number : 20 Question Id : 218186420  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
SWAP space is
Options :
1. ✔ DISK
2. ✗ RAM
Question Number : 21  Question Id : 218186421  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0  
When inorder traversing a tree resulted T P R Z U W S Q V; the preorder traversal would return  
Options :  
1. ✔ UFTZRSWQ  
2. ✔ UFTZRSQVW  
3. ✔ UFTZVQRSW  
4. ✔ ZFTQRSWVU

Question Number : 22  Question Id : 218186422  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0  
Which command undo all the updates performed by SQL in the transaction?  
Options :  
1. ✔ Rollback  
2. ✔ Commit  
3. ✔ Truncate  
4. ✔ Delete

Question Number : 23  Question Id : 218186423  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0  
What is the meaning of LIKE '%0%0%'  
Options :  
1. ✔ Features has two 0's in it at any positions  
2. ✔ Features begins with two 0's  
3. ✔ Features has more than two 0's  
4. ✔ Features ends with two 0's

Question Number : 24  Question Id : 218186424  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0  
Height of Binary tree is 3. Minimum and Maximum node in tree are  
Options :  
1. ✔ 3 and 7  
2. ✔ 0 and 3  
3. ✔ 7 and 7  
4. ✔ 1 and 3

Question Number : 25  Question Id : 218186425  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0  
Software requirement phase use which document?  
Options :  
1. ✔ SRS  
2. ✔ DTD
3. ** DFD
4. ** all

Question Number : 26  Question Id : 218186426  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which among these are NOT a part of Android’s native libraries?
Options :
1. ✔ Dalvik
2.  WebKit
3.  OpenGL
4.  Sqlite

Question Number : 27  Question Id : 218186427  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
In ACID property, Isolation is managed by
Options :
1. ✔ Concurrency Control Component
2.  Programmer
3.  User
4.  Recovery Management Component

Question Number : 28  Question Id : 218186428  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which is used to write database schema?
Options :
1. ✔ DDL
2.  DML
3.  SRS
4.  HTML

Question Number : 29  Question Id : 218186429  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A relation that has no partial dependency is in which normal form
Options :
1. ✔ 2 NF
2.  1 NF
3.  3 NF
4.  All

Question Number : 30  Question Id : 218186430  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
If following is preorder sequence of the tree, what is the value of root? 5 7 9 23 17 35 15
Options :
1. ✔ 5
2.  15
3. * 23
4. * 35

Question Number : 31  Question Id : 218186431  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A set of one or more attributes that taken collectively, allow us to identify unique entity in table is called
Options :
1. ✓ Super Key
2. * Primary Key
3. * Foreign Key
4. * Candidate Key

Question Number : 32  Question Id : 218186432  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Coupling and cohesion can be represented using a
Options :
1. ✓ Dependence Matrix
2. * SRS
3. * Cause-Effect Graph
4. * All

Question Number : 33  Question Id : 218186433  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following of output of materials requirement planning?
Options :
1. ✓ Work Orders
2. * Bills of Materials
3. * Master Production Schedule
4. * Sales forecast

Question Number : 34  Question Id : 218186434  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
ERP stands for
Options :
1. ✓ Enterprise Resource Planning
2. * Enterprise Research Planning
3. * Expense Resource Project
4. * Expenre Research Project

Question Number : 35  Question Id : 218186435  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which command in Linux is used to list all the files in current directory including hidden files?
Options :
1. ✓ ls-a
2. * ls-1
If you want to share the data across all Android applications, you should go for?

Options:
1. ✅ Content Provider
2. ✗ Shared Preferences
3. ✗ SQLite database
4. ✗ Internal Storage

What file is responsible for gluing everything together, explaining what the application consists of, what its main building blocks are, etc.?

Options:
1. ✅ Manifest File
2. ✗ Layout File
3. ✗ R File
4. ✗ String XML

Which function will convert a JavaScript object to a JSON string?

Options:
1. ✅ JSON.stringify()
2. ✗ JSON.text()
3. ✗ JSON.tostring()
4. ✗ JSON.stringify()

If function max() finds the maximum of two numbers, which of the following determines maximum of three numbers?

Options:
1. ✅ All
2. ✗ max(x, max(y, z));
3. ✗ max( max(x, y), z);
4. ✗ max(y, max(x, z));

Which Linux command will mount successfully USB drive?

Options:
1. ✅ mount /dev/sda1 /mnt/usb
2. `mount /dev/uda1 /mnt/usb`
3. `mount /dev/fdd1 /mnt/usb`
4. `mount /mnt/fcd1 /mnt/usb`

Question Number : 41  Question Id : 218186441  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

What is a major problem with priority scheduling?

Options :
1. **starvation**
2. **unavailable I/O**
3. **unavailable memory**
4. **unavailable CPU**

Question Number : 42  Question Id : 218186442  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

In Java, which is used to separate the hierarchy of the class while declaring an import statement?

Options :
1. **Package**
2. **Applet**
3. **Browser**
4. **method**

Question Number : 43  Question Id : 218186443  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

Which variables are created when an object is created with the use of the keyword 'new' and destroyed when the object is destroyed?

Options :
1. **instance Variables**
2. **Local Variables**
3. **Object Variables**
4. **Class Variables**

Question Number : 44  Question Id : 218186444  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

Which of the devices translates dissimilar network protocols?

Options :
1. **Gateway**
2. **Router**
3. **Repeater**
4. **Switch**

Question Number : 45  Question Id : 218186445  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

Which command can be used in Linux to set priority in priority based scheduling?

Options :
1. nice
2. chmod
3. grep
4. tail

Question Number : 46  Question Id : 218186446  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
In OSI, Which layer is responsible for ensuring reliable delivery of message on network?
Options :
1. ✓ Transport Layer
2. ✗ Datalink Layer
3. ✗ Session Layer
4. ✗ Network Layer

Question Number : 47  Question Id : 218186447  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
1.0-Base-T refers to
Options :
1. ✓ Ethernet using utp cable
2. ✗ Ethernet using thin coaxial cable
3. ✗ Ethernet using thick coaxial cable
4. ✗ Optical Fiber

Question Number : 48  Question Id : 218186448  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which is interior routing protocol?
Options :
1. ✓ RIP,OSPF
2. ✗ BGP
3. ✗ BGP,OSPF
4. ✗ RIP,BGP

Question Number : 49  Question Id : 218186449  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The task of performing the state save of current process and state restore of a different process is called
Options :
1. ✓ context switch
2. ✗ swapping
3. ✗ process switch
4. ✗ task switch

Question Number : 50  Question Id : 218186450  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Subnet Mask is: 11111111 11100000 00000000 00000000. Find out class and number of subnetwork
Options :
1. ✔ CLASS A, 8
2. ✔ CLASS A, 3
3. ✔ CLASS B, 3
4. ✔ CLASS B, 8

Question Number : 51  Question Id : 218186451  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which two models can be used for interprocess communication?
Options :
1. ✔ shared memory, message passing
2. ✔ shared memory, vector passing
3. ✔ segmented memory, message passing
4. ✔ page memory, message passing

Question Number : 52  Question Id : 218186452  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Given IP address is 201.14.73.65 and subnet mask is 255.255.255.224 what is the subnet address?
Options :
1. ✔ 201.14.78.64
2. ✔ 201.14.78.0
3. ✔ 201.14.78.65
4. ✔ 201.14.78.66

Question Number : 53  Question Id : 218186453  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The difference between two decimal numbers 87 and 63 in binary format will be
Options :
1. ✔ 110000
2. ✔ 10100
3. ✔ 10010
4. ✔ 10000

Question Number : 54  Question Id : 218186454  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the name of file where we define our parent domain in Linux?
Options :
1. ✔ /etc/bind/named.conf.options
2. ✔ /etc/bind/named
3. ✔ /etc/bind/named.conf
4. ✔ /etc/bind/named.local

Question Number : 55  Question Id : 218186455  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the keyword used for domain alias?
Options :
1. ✔ CNAME
2. ✔ MX
3. ✔ PTR
4. ✔ NS

Question Number : 56  Question Id : 218186456  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
In: what formats are usually IPv6 addresses displayed?
Options :
1. ✔ in hexadecimal format
2. ✔ in canonical form (CNAME)
3. ✔ in Host record
4. ✔ in Mail exchanger record (MX)

Question Number : 57  Question Id : 218186457  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which is Black Box Testing Method?
Options :
1. ✔ Boundary Value Analysis
2. ✔ Code Path Analysis
3. ✔ Basic Path Analysis
4. ✔ Graph Flow Analysis

Question Number : 58  Question Id : 218186458  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What file does the nslookup program use to locate name server?
Options :
1. ✔ /etc/resolv.conf file
2. ✔ /etc/named.boot file
3. ✔ /etc/hosts file
4. ✔ /var/log/message file

Question Number : 59  Question Id : 218186459  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the use of pipe?
Options :
1. ✔ stream input to output
2. ✔ environment variable
3. ✔ shutdown
4. ✔ shell

Question Number : 60  Question Id : 218186460  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
DHCP server use which UDP port to send data to client?
Options :
1. ✔ 2
2. ✔ 47
3. ✔ 66
4. ✔ 31

Question Number : 61  Question Id : 218186461  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Time Complexity of simple search is
Options :  
1. ✔ \(O(n)\)
2. ✔ \(O(\log n)\)
3. ✔ \(O(n\log n)\)
4. ✔ \(\log n\)

Question Number : 62  Question Id : 218186462  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
DHCP is used for
Options :  
1. ✔ Both IPv6 and IPv4
2. ✔ IPv4
3. ✔ IPv6
4. ✔ MAC

Question Number : 63  Question Id : 218186463  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which one of following is used on a IP network to monitor a router?
Options :  
1. ✔ SNMP
2. ✔ SMTP
3. ✔ SNPP
4. ✔ SGCP

Question Number : 64  Question Id : 218186464  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following declaration is true for "array of 5 pointers to char"
Options :  
1. ✔ char *ptr[5];
2. ✔ char **ptr[5];
3. ✔ char (*ptr)[5];
4. ✔ char ptr[5];

Question Number : 65  Question Id : 218186465  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following allows to secure remote command line access?
Options :
1. ✓ SSH
2.  telnet
3.  SSL
4.  Rlogin

Question Number : 66  Question Id : 218186466  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A proxy server is
Options :
1. ✓ None
2.  Backup Server
3.  An Email Server
4.  A File Server

Question Number : 67  Question Id : 218186467  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
In which attack, an intruder comes between two communicating parties, intercepting and replying their messages
Options :
1. ✓ Man-in-the-middle
2.  Bucket-bridge
3.  Reply
4.  Return

Question Number : 68  Question Id : 218186468  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Consider the Array: 50, 35, 11, 49, 54, 30, 80. How array will look like after 2 (two) iterations of Bubble Sort?
Options :
1. ✓ 50, 11, 35, 49, 30, 54, 80
2.  50, 11, 35, 49, 54, 30, 80
3.  11, 50, 35, 30, 49, 54, 80
4.  30, 50, 35, 30, 49, 54, 11

Question Number : 69  Question Id : 218186469  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Who act as a security buffer between a company's private network and all external networks?
Options :
1. ✓ firewall
2.  Gateway
3.  router
4.  switch

Question Number : 70  Question Id : 218186470  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Small files that are deposited on a user’s hard drive when they visit web sites are called
1. ✓ cookies
2. * codes
3. * profiles
4. * trakers

Question Number : 71  Question Id : 218186471  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The regular expression 0*1(0*10*1)* represents string with
Options :
1. ✓ Odd no. of 1's
2. * Even no. of 1's
3. * Even no. of 0's
4. * Odd no. of 0's

Question Number : 72  Question Id : 218186472  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Who provides secure, stable and fast file and print services for all clients using the SMB/CIFS protocol, such as all versions of Windows and Linux?
Options :
1. ✓ Samba
2. * Squid
3. * Apache
4. * Cyberom

Question Number : 73  Question Id : 218186473  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
There are 15 users communicating to each other. How many pairs of the keys are required to authenticate the communication is symmetric key is used?
Options :
1. ✓ 105
2. * 15
3. * 30
4. * 200

Question Number : 74  Question Id : 218186474  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which is a superclass of all exception classes?
Options :
1. ✓ Throwable
2. * Exception
3. * IOException
4. * RuntimeException

Question Number : 75  Question Id : 218186475  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
**Question 76**

**Display Question Number**: Yes  
**Option Shuffling**: Yes  
**Single Line Question Option**: No  
**Option Orientation**: Vertical  
Correct: 1  Wrong: 0

Summary of network connections and status of sockets is checked by

**Options**:
1. **✓** netstat  
2. **‡** ping  
3. **‡** ifconfig  
4. **‡** nslookup

**Question 77**

**Display Question Number**: Yes  
**Option Shuffling**: Yes  
**Single Line Question Option**: No  
**Option Orientation**: Vertical  
Correct: 1  Wrong: 0

in JAVA, static member can not refer

**Options**:
1. **✓** this & super  
2. **‡** this  
3. **‡** super  
4. **‡** None

**Question 78**

**Display Question Number**: Yes  
**Option Shuffling**: Yes  
**Single Line Question Option**: No  
**Option Orientation**: Vertical  
Correct: 1  Wrong: 0

Sharepoint server is used to manage

**Options**:
1. **✓** All  
2. **‡** documents  
3. **‡** emails  
4. **‡** contact

**Question 79**

**Display Question Number**: Yes  
**Option Shuffling**: Yes  
**Single Line Question Option**: No  
**Option Orientation**: Vertical  
Correct: 1  Wrong: 0

In Android Application development, parent class of service is

**Options**:
1. **✓** ContextWrapper  
2. **‡** Object  
3. **‡** Class  
4. **‡** ContextThemeWrapper

**Question 80**

**Display Question Number**: Yes  
**Option Shuffling**: Yes  
**Single Line Question Option**: No  
**Option Orientation**: Vertical  
Correct: 1  Wrong: 0
CMM means

Options:
1. ✔ Capability Maturity Model
2.  ❌ Class Make Model
3.  ❌ Code Maturity Model
4.  ❌ None

Question Number: 81  Question Id: 218186481  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
In 2016, ICC Test Cricketer of the Year award was given to

Options:
1. ✔ R Ashwin
2.  ❌ Virat Kohli
3.  ❌ M S Dhoni
4.  ❌ Anil Kumble

Question Number: 82  Question Id: 218186482  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
OROE is the scheme by which country

Options:
1. ✔ China
2.  ❌ India
3.  ❌ USA
4.  ❌ Rusia

Question Number: 83  Question Id: 218186483  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
Find out ODD

Options:
1. ✔ Saina Nehwal
2.  ❌ Sania Mirza
3.  ❌ Venus Williams
4.  ❌ Maria Sharapova

Question Number: 84  Question Id: 218186484  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
GIFT city is

Options:
1. ✔ Gujarat International Finance Tech City
2.  ❌ Global Inc. Finance Technology City
3.  ❌ Global Inc. Foerign Tech City
4.  ❌ Gujarat India Finance Tech City

Question Number: 85  Question Id: 218186485  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
At present, Defence Minister of India is
Options:
1. ✔ Arun Jaitley
2. ✗ Rajnath Singh
3. ✗ Nitin Gadkari
4. ✗ Sushma Swaraj

Question Number : 86  Question Id : 218186486  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1 Wrong : 0
At Present, Speaker of Gujarat Assembly is
Options:
1. ✔ Ramanlal Vora
2. ✗ Nitin Patel
3. ✗ Ganpat Vasava
4. ✗ Sambhuji Thakor

Question Number : 87  Question Id : 218186487  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1 Wrong : 0
Cricket is the national game of
Options:
1. ✔ Australia
2. ✗ New Zealand
3. ✗ India
4. ✗ Pakistan

Question Number : 88  Question Id : 218186488  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1 Wrong : 0
GST means
Options:
1. ✔ Goods and Services Tax
2. ✗ Gross Sales Tax
3. ✗ Global Sales Tax
4. ✗ Gujarat Sales Tax

Question Number : 89  Question Id : 218186489  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1 Wrong : 0
The Value of One U.S. Dollar is 66 Indian Rupees today, compared to 60 last year. The Indian Rupees has___________.
Options:
1. ✔ depreciated
2. ✗ depressed
3. ✗ appreciated
4. ✗ stabilised

Question Number : 90  Question Id : 218186490  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Complete the sentence: Communication and Interpersonal Skills are _____ important in their own ways.

Options:
1. ✓ both
2. * all
3. * either
4. * each

Question Number: 91  Question Id: 218186491  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0
The ages of two friends is in the ratio 6:5. The sum of their ages is 66. After how many years will the ages be in the ratio 8:7?

Options:
1. ✓ 12 years
2. * 2 years
3. * 10 years
4. * 3 years

Question Number: 92  Question Id: 218186492  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0
International Yoga Day is celebrated every year on

Options:
1. ✓ 21st June
2. * 16th May
3. * 21st May
4. * 16th June

Question Number: 93  Question Id: 218186493  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0
Find missing number in series: 3, 22, 7, 45, 15, ?, 31.

Options:
1. ✓ 91
2. * 17
3. * 71
4. * 19

Question Number: 94  Question Id: 218186494  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0
Cost of making a robot consists of material cost, repairing cost, coloring cost and is in the ratio 3:4:5. If the material cost is 1200 then find out the cost of the robot.

Options:
1. ✓ 4800
2. * 2400
3. * 3600
4. * 6000
Question Number : 95  Question Id : 218186495  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Find next term in sequence: 13M, 17Q, 19S, ____.
Options :
1. ✓ 23W  
2. ✗ 21V  
3. ✗ 21W  
4. ✗ 23V  

Question Number : 96  Question Id : 218186496  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Complete the sentence: Dare ______ mistakes.
Options :
1. ✓ to commit  
2. ✗ committing  
3. ✗ commit  
4. ✗ committed  

Question Number : 97  Question Id : 218186497  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Find Similar Pair: Medicine:Health
Options :
1. ✓ Education:Knowledge  
2. ✗ Wealth:Peace  
3. ✗ Money:Happiness  
4. ✗ Science:Experiment  

Question Number : 98  Question Id : 218186498  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Which word is nearly opposite in meaning to given word? Frequency
Options :
1. ✓ rarity  
2. ✗ persistency  
3. ✗ periodicity  
4. ✗ gradualness  

Question Number : 99  Question Id : 218186499  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Find ODD term:  
Options :
1. ✓ N, V, B, D  
2. ✗ W, E, K, O  
3. ✗ I, Q, W, A  
4. ✗ F, N, T, X
Which word is nearly similar in meaning to given word? Mitigate

Options:
1. ✔ Diminish
2. ✗ Divulge
3. ✗ Dedicate
4. ✗ Denote

Question Paper Name: VS Jr Engineer Civil 10th June 2017 Shift 1
Subject Name: VS Jr Engineer Civil
Creation Date: 2017-06-09 16:12:40
Number of Questions: 100
Total Marks: 100
Display Marks: No
Calculator: None
Magnifying Glass Required?: No
Ruler Required?: No
Eraser Required?: No
Scratch Pad Required?: No
Rough Sketch/Notepad Required?: No
Protractor Required?: No

Group Number: 1
Group Id: 2181866
Group Maximum Duration: 0
Group Minimum Duration: 60
Revisit allowed for view?: No
Revisit allowed for edit?: No
Break time: 0
Group Marks: 100

Sub-Section Number: 1
Sub-Section Id: 2181866
Question Shuffling Allowed: Yes
When \( \nu \) is Poisson's ratio, the relation between modulus of elasticity \( E \) and modulus of rigidity \( G \) is

Options:
1. \( \checkmark G = \frac{E}{(2+\nu)(1+\nu)} \)
2. \( E = \frac{G}{(2+\nu)(1+\nu)} \)
3. \( G = \frac{E}{(2+\nu)} \)
4. \( G = \frac{E}{(2+\nu)} \)

Question Number : 2  Question Id : 218186502  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The strain generated in a bar having coefficient of thermal expansion \( \alpha \) and temperature is raised by \( t^\circ C \), when ends are fixed.

Options:
1. \( \checkmark \alpha t \)
2. \( 2\alpha t \)
3. \( \alpha t^2 \)
4. \( E\alpha t \)

Question Number : 3  Question Id : 218186503  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Double integration method is used to calculate

Options:
1. \( \checkmark \) bending deformation in beams
2. shear deformation in beams.
3. lateral deformation in beams.
4. both bending and shear deformation in beams.

Question Number : 4  Question Id : 218186504  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The test used for finding out modulus of elasticity of a metal is

Options:
1. \( \checkmark \) Tension test
2. Compression test
3. Impact test
4. Shear test

Question Number : 5  Question Id : 218186505  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The analytical method for adding of more than three vectors

Options:
1. \( \checkmark \) Resolution of forces
2. Force polygon
3. Triangle law of forces
4. All
Question Number : 6  Question Id : 218186506  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The rotational tendency of a force is called
Options :
1. ✔ Moment
2. ✗ Momentum
3. ✗ Angular momentum
4. ✗ Shear force

Question Number : 7  Question Id : 218186507  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The efficiency of self locking machine is always
Options :
1. ✔ < 50%
2. ✗ > 50%
3. ✗ < 70 %
4. ✗ < 90 %

Question Number : 8  Question Id : 218186508  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Degree of saturation in soil is
Options :
1. ✔ volume of water / volume of voids
2. ✗ volume of voids / volume of solids
3. ✗ Volume of voids / total volume of soil
4. ✗ volume of air / total volume of soil

Question Number : 9  Question Id : 218186509  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Relation between void ratio (e) and porosity (n) is
Options :
1. ✔ e=n/(1−n)
2. ✗ e=n/(1+n)
3. ✗ n=e/(1−e)
4. ✗ e = n*(1−n)

Question Number : 10  Question Id : 218186510  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Effective size of soil is given by
Options :
1. ✔ D_{10}
2. ✗ D_{60}
3. ✗ D_{90}
4. **D_{30}

**Question Number : 11**  **Question Id : 218186511**  **Question Type : MCQ**  **Option Shuffling : Yes**  **Display Question Number : Yes**  **Single Line Question Option : No**  **Option Orientation : Vertical**
Correct : 1  Wrong : 0
Liquid limit is defined as

Options :
1. ✔️ **Minimum water content at which soil can flow**
2. ✔️ **Maximum water content at which soil can flow**
3. ✔️ **Minimum water content at which soil can deform plastically**
4. ✔️ None

**Question Number : 12**  **Question Id : 218186512**  **Question Type : MCQ**  **Option Shuffling : Yes**  **Display Question Number : Yes**  **Single Line Question Option : No**  **Option Orientation : Vertical**
Correct : 1  Wrong : 0
Cone penetrometer is used to determine

Options :
1. ✔️ **Liquid limit**
2. ✔️ **Plastic limit**
3. ✔️ **Shrinkage limit**
4. ✔️ **Plasticity index**

**Question Number : 13**  **Question Id : 218186513**  **Question Type : MCQ**  **Option Shuffling : Yes**  **Display Question Number : Yes**  **Single Line Question Option : No**  **Option Orientation : Vertical**
Correct : 1  Wrong : 0
The size of 'Cobbles' is

Options :
1. ✔️ **Between 300 mm and 75 mm**
2. ✔️ >300 mm
3. ✔️ <75 mm
4. ✔️ Between 300 mm and 125 mm

**Question Number : 14**  **Question Id : 218186514**  **Question Type : MCQ**  **Option Shuffling : Yes**  **Display Question Number : Yes**  **Single Line Question Option : No**  **Option Orientation : Vertical**
Correct : 1  Wrong : 0
According to 15:1498, size of clay particles is

Options :
1. ✔️ <2 μm
2. ✔️ <4.75 mm
3. ✔️ <4.75 μm
4. ✔️ <4 μm

**Question Number : 15**  **Question Id : 218186515**  **Question Type : MCQ**  **Option Shuffling : Yes**  **Display Question Number : Yes**  **Single Line Question Option : No**  **Option Orientation : Vertical**
Correct : 1  Wrong : 0
Constant head permeability test is suitable for

Options :
1. ✔️ **Coarse grained soil**
2. ✔️ **Medium grained soil**
3. ✔️ **Fine grained soil**
4. all

Question Number : 16  Question Id : 218186516  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Rapid hardening cement is used when
Options :
1. ✔ development of high early strength is required
2. ✔ highly durable concrete is required
3. ✔ highly workable concrete is required
4. ✔ early setting is required

Question Number : 17  Question Id : 218186517  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The impact strength of a material indicating its
Options :
1. ✔ toughness
2. ✔ hardness
3. ✔ corrosion resistance
4. ✔ fatigue resistance

Question Number : 18  Question Id : 218186518  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The bending moment for a certain portion of the beam is constant. For that section shear force is
Options :
1. ✔ zero
2. ✔ increasing
3. ✔ decreasing
4. ✔ constant

Question Number : 19  Question Id : 218186519  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The maximum bending stress in an I-beam occurs at
Options :
1. ✔ extreme fiber
2. ✔ at neutral axis
3. ✔ at joint between web and flange
4. ✔ where shear stress is maximum

Question Number : 20  Question Id : 218186520  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A circular shaft is subjected to uniform torsion. The maximum shear stress will occur
Options :
1. ✔ at surface of shaft
2. ✔ at center of shaft
3. ✔ at the middle of radius
4. The shape of cable supported at same level and subjected to uniformly distributed load along horizontal projection of length is
   Options:
   1. parabolic
   2. catenary
   3. circular
   4. triangular

Question Number : 22  Question Id : 218186522  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
The internal forces generated in an arch due to loading are
   Options:
   1. All
   2. normal thrust
   3. radial shear force
   4. bending moment

Question Number : 23  Question Id : 218186523  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
In an ideal machine
   Options:
   1. All
   2. efficiency is 1
   3. effort equals work done
   4. friction losses are neglected

Question Number : 24  Question Id : 218186524  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
The principle used to draw IDL of indeterminate beams
   Options:
   1. Muller-Bressier's theorem
   2. Maxwell's theorem
   3. Castigliano's theorem
   4. Pappu's theorem

Question Number : 25  Question Id : 218186525  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
Which of the following methods is a force method
   Options:
   1. consistent deformation method
   2. Stiffness matrix method
3. **slope deflection method**
4. **moment distribution method**

**Question Number : 26  Question Id : 218186526  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
The slope deflection method is useful to analyse
Options :
1. ✔ structures made up of flexural members
2.  trusses
3.  grids
4.  cables

**Question Number : 27  Question Id : 218186527  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
If P is the standard consistency of cement, how much water is added to cement for setting time test?
Options :
1. ✔ 0.85 P
2.  0.7 P
3.  0.75 P
4.  0.8 P

**Question Number : 28  Question Id : 218186528  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
When air permeability method is used to determine fineness of cement, the fineness is expressed as
Options :
1. ✔ total surface area in square cm / gramme of cement
2.  % cement residue
3.  % cement passage
4.  kg / m³

**Question Number : 29  Question Id : 218186529  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
The unsound cement can undergo
Options :
1. ✔ large expansion after setting
2.  cause false set
3.  reduce workability
4.  increase durability

**Question Number : 30  Question Id : 218186530  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
The sand with fineness modulus value is suitable for making concrete
Options :
1. ✔ < 3.2
2.  > 4
3. 3.5
4. 5

Question Number : 31  Question Id : 218186531  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
According to IS:456:2000, the modulus of rupture of concrete is (fck is characteristic cube strength of concrete)
Options :
1. ✓ 0.7 (fck)⁰.⁵
2. * 0.07 (fck)⁰.⁵
3. * 0.75 (fck)⁰.⁵
4. * 0.075 (fck)⁰.⁵

Question Number : 32  Question Id : 218186532  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
As per IS: 456:2000, actually measured value of modulus of elasticity of concrete may differ from assumed value
Options :
1. ✓ ± 20%
2. * ± 2%
3. * ± 0.2%
4. * ± 15%

Question Number : 33  Question Id : 218186533  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
As per IS:456: 2000, minimum cement content, maximum free water cement ratio and minimum grade of concrete for severe environmental condition is
Options :
1. ✓ 320, 0.45, M30
2. * 300, 0.5, M20
3. * 250, 0.5, M20
4. * 280, 0.55, M25

Question Number : 34  Question Id : 218186534  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
If 40mm nominal maximum size aggregate is used in concrete, as per IS:456:2000, adjustment in minimum cement content shall be made
Options :
1. ✓ -30 kg / m³
2. * +30 kg / m³
3. * 35 kg / m³
4. * -40 kg / m³

Question Number : 35  Question Id : 218186535  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
For the reinforced concrete structure in sea water or exposed directly along the sea coast the minimum grade of concrete shall be used.

Options:
1. ☑️ M 30
2. ✗ M 20
3. ✗ M 25
4. ✗ M 35

Question Number : 36  Question Id : 218186536  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
The minimum grade of nominal mix concrete, which can be used in reinforced concrete structures
Options:
1. ☑️ M 20 or lower
2. ✗ M 25 or lower
3. ✗ M 15 and higher
4. ✗ M 20 and higher

Question Number : 37  Question Id : 218186537  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
When ambient temperature does not fall below 15°C, OPC is used with adequate curing, the striking period for the slabs spanning over 4.5 m
Options:
1. ☑️ 14 days
2. ✗ 5 days
3. ✗ 7 days
4. ✗ 3 days

Question Number : 38  Question Id : 218186538  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
When effective depth of member is more than 200 mm, the reinforcement shall be placed within tolerance of
Options:
1. ☑️ ± 15 mm
2. ✗ ± 10 mm
3. ✗ ± 20 mm
4. ✗ ± 25 mm

Question Number : 39  Question Id : 218186539  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
The minimum frequency of sampling for quantity of 20 m³ concrete is
Options:
1. ☑️ 3
2. ✗ 2
3. ✗ 4
4. ✗ 1
For load test, load applied on the structure is

Options:
1. ✓ DL + 1.25*LL
2. ✗ 1.5*(DL+LL)
3. ✗ 0.9*DL+1.5*LL
4. ✗ 1.2*(DL+LL)

For monolithic construction like R.C. framed structure, critical section for moments for flexural design is

Options:
1. ✓ at face of support
2. ✗ at center of support
3. ✗ at distance d from support
4. ✗ at distance 0.5d from support

Magnitude of an earthquake is

Options:
1. ✓ indicating energy released in an earthquake
2. ✗ indicate intensity of shaking at a site
3. ✗ varying from one place to another
4. ✗ measured on modified Mercalli scale

In equivalent static method, the $S_a/g$ value is decided corresponding to fundamental time period of the building using

Options:
1. ✓ design response spectrum
2. ✗ frequency response curve
3. ✗ zoning map
4. ✗ transmissibility ratio

The coefficient of thermal expansion of structural steel is

Options:
1. ✓ $12 \times 10^{-6}/°C$
2. ✗ $22 \times 10^{-6}/°C$
3. ✗ $1.2 \times 10^{-6}/°C$
4. ✗ $20 \times 10^{-6}/°C$
Question Number : 45  Question Id : 218186545  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

According to IS:800:2007, the maximum effective slenderness ratio for a tension member in which a reversal of direct stress occurs due to loads other than wind or seismic forces

Options :
1. ✓ 180
2. ✗ 250
3. ✗ 300
4. ✗ 400

Question Number : 46  Question Id : 218186546  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

As per IS:800: the maximum width of the covered building beyond which suitable provision for expansion joint may be made.

Options :
1. ✓ 150
2. ✗ 120
3. ✗ 140
4. ✗ 180

Question Number : 47  Question Id : 218186547  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Partial load factor for loads for load case of WL or EQ in case of load combination DL + WL or EQ is

Options :
1. ✓ 1.5
2. ✗ 1.2
3. ✗ 0.9
4. ✗ 1

Question Number : 48  Question Id : 218186548  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

The failure mode of a steel tension member can be

Options :
1. ✓ All
2. ✗ Yielding of gross section
3. ✗ Rupture of critical section
4. ✗ block shear

Question Number : 49  Question Id : 218186549  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

A steel column is completely restrained at one end and other end is free to translate and restrained against rotation at other end. If L is unsupported length of column, what is the effective length of the column?

Options :
1. ✓ 1.2 L
2. ✗ L
3. ** 0.8 L
4. ** 2.0 L

**Question Number : 50**  Question Id : 218186550  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
In case of members of trusses, buckling in the plane perpendicular to the plane of the truss, what is the effective length if the distance between the centres of intersections is L?
Options :
1. ✓ L
2.  1.2 L
3.  0.7 L
4.  2.0 L

**Question Number : 51**  Question Id : 218186551  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The lacing shall be designed to resist a total transverse shear of
Options :
1. ✓ 2.5 % of axial force in member
2.  2.5 times axial force in member
3.  25 % of axial force in member
4.  0.25 of axial force in member

**Question Number : 52**  Question Id : 218186552  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The sag bar is provided in
Options :
1. ✓ purlins to support the section in bending about minor axis
2.  columns in place of lacing
3.  in trusses to reduce deflection
4.  in column bases

**Question Number : 53**  Question Id : 218186553  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following member is a strut?
Options :
1. ✓ inclines subjected to compression
2.  columns
3.  braces
4.  beam

**Question Number : 54**  Question Id : 218186554  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Why intermediate transverse stiffeners are provided?
Options :
1. ✓ to reduce panel aspect ratio
2. to take care of concentrated loads
3. for aesthetic purpose
4. to reduce weight of girder

The surge load in gantry girder is assumed to be resisted by
Options:
1. ✔ compression flange only
2. ✔ whole cross section
3. ✔ compression and tension flanges
4. ✔ cross section above neutral axis

The ratio of strength of concrete at 3 months and 28 day is approximately
Options:
1. ✔ 1.15
2. ✔ 1
3. ✔ 0.75
4. ✔ 1.35

The strength of concrete is direct proportional to
Options:
1. ✔ cement water ratio
2. ✔ water cement ratio
3. ✔ sand cement ratio
4. ✔ water aggregate ratio

The maximum strain in concrete due to flexure at the outermost compression fibre of beam is
Options:
1. ✔ 0.0035
2. ✔ 0.03
3. ✔ 0.0003
4. ✔ 0.035

Imposed load on inclined roofs with slope up to 10°, when access is provided
Options:
1. ✔ 1.5 kN/m²
2. * 1.0 kN/m²
3. * 2.0 kN/m²
4. * 0.75 kN/m²

Question Number : 60  Question Id : 218186560  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Most common measurement for rise and trade of a stair are
Options :
1. ✓ 0.15 m and 0.25 m
2. * 0.1 m and 0.3 m
3. * 0.2 m and 0.25 m
4. * 0.2 m and 0.35 m

Question Number : 61  Question Id : 218186561  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Compaction of soil means
Options :
1. ✓ reduction of air voids
2. * drainage of water from soil
3. * compression of soil particles
4. * All

Question Number : 62  Question Id : 218186562  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Capacity of a structure or its members to undergo large elastic deformations without significant reduction of strength or stiffness is
Options :
1. ✓ ductility
2. * deformability
3. * plasticity
4. * durability

Question Number : 63  Question Id : 218186563  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A state in saturated cohesionless soil wherein the effective shear strength is reduced to negligible value due to pore pressure caused by vibrations due to earthquake is
Options :
1. ✓ liquefaction
2. * dynamic consolidation
3. * boiling
4. * slope failure

Question Number : 64  Question Id : 218186564  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A wall designed to resist lateral forces acting in its own plane
1. ✓ shear wall
2. * partition wall
3. * retaining wall
4. * load bearing wall

The lateral stiffness of a storey is less than 70% of that in storey above or less than 80% of the average lateral stiffness of the three storeys above.

1. ✓ soft storey
2. * open storey
3. * weak storey
4. * service storey

Raft foundation is provided when:

1. ✓ All
2. * bearing capacity of soil is low
3. * total area of foundation is more than half the covered area
4. * to reduce differential settlement

The maximum intensity of loading that the foundation will safely carry without the risk of shear failure of soil irrespectively of any settlement that may occur:

1. ✓ safe bearing capacity
2. * bearing capacity
3. * ultimate bearing capacity
4. * net bearing capacity

A foundation with width is greater than depth is:

1. ✓ shallow foundation
2. * deep foundation
3. * floating foundation
4. * None
Plate load test is performed to determine

Options :
1. ✓ bearing capacity of soil
2. * porosity
3. * shear strength parameters
4. * classification of soil

Question Number : 70  Question Id : 218186570  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Force or moment, which a member can withstand without buckling is

Options :
1. ✓ buckling strength
2. * buckling load
3. * crushing load
4. * All

Question Number : 71  Question Id : 218186571  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
A steel cross section, which can develop plastic moment, but has inadequate plastic rotation capacity needed for formation of plastic collapse mechanism of the member or structure

Options :
1. ✓ compact section
2. * plastic section
3. * semi-compact section
4. * elastic section

Question Number : 72  Question Id : 218186572  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Any limiting condition beyond which the structure ceases to fulfill its intended function

Options :
1. ✓ limit state
2. * ultimate stage
3. * life safety stage
4. * working stage

Question Number : 73  Question Id : 218186573  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The dissolved oxygen level in natural unpolluted water at normal temperature is

Options :
1. ✓ 10 mg / lit
2. * 1 mg / lit
3. * 50 mg / lit
4. * 150 mg / lit

Question Number : 74  Question Id : 218186574  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
The effective size of sand particles used in slow sand filters is

Options:
1. ✔️ 0.25 to 0.35 mm
2. ✖️ 0.35 to 0.50 mm
3. ✖️ 0.50 to 0.75 mm
4. ✖️ 0.75 to 1.10 mm

The end product after separation and anaerobic bacterial digestion of organic municipal solid waste is called

Options:
1. ✔️ humes
2. ✖️ compost
3. ✖️ leachate
4. ✖️ ashes

The process of chlorination beyond the breakpoint is

Options:
1. ✔️ breakpoint chlorination
2. ✖️ pre chlorination
3. ✖️ post chlorination
4. ✖️ super chlorination

Biodegradable organic waste is part of

Options:
1. ✔️ both domestic and industrial waste
2. ✖️ industrial waste
3. ✖️ domestic waste
4. ✖️ None

The function of an expansion joint in rigid pavement is to

Options:
1. ✔️ allow free expansion
2. ✖️ relieve warping stresses
3. ✖️ relieve shrinkage stresses
4. ✖️ resist stress due to expansion
Benkelman beam deflection method is used for design of

Options:
1. ✔️ flexible overlay on flexible pavement
2. ✗ rigid overlay on rigid pavement
3. ✗ flexible overlay on rigid pavement
4. ✗ rigid overlay on flexible pavement

when the path travelled along the road surface is more than the circumferential movement of the wheels due to rotation, then it result in

Options:
1. ✔️ skidding
2. ✗ slipping
3. ✗ turning
4. ✗ revolving

In frame–shear wall building, the moment resisting frames are designed to resis:

Options:
1. ✔️ 25 % base shear
2. ✗ total base shear
3. ✗ 50 % base shear
4. ✗ 10% base shear

The first human heart transplant operation was conducted by the surgeon

Options:
1. ✔️ Dr. C. Barnard
2. ✗ Dr. L. Waskansky
3. ✗ Dr. C. Show
4. ✗ Dr. P. Gaylord

Each year world red cross day is celebrated on

Options:
1. ✔️ 8 May
2. ✗ 18 May
3. ✗ 8 June
4. ✗ 18 June
Fire temple is place of worship for the religion
Options:
1. ✔ Zoroastrianism
2. ✗ Taoism
3. ✗ Judaism
4. ✗ Shintoism

Film and TV Institute of India is located at
Options:
1. ✔ Pune
2. ✗ Rajkot
3. ✗ Delhi
4. ✗ Madras

During world war II, when did Germany attacked France
Options:
1. ✔ 1940
2. ✗ 1943
3. ✗ 1942
4. ✗ 1941

Ecology deals with
Options:
1. ✔ reaction between organisms and their environment
2. ✗ Birds
3. ✗ formation
4. ✗ tissues

Who was the first Indian chief of army staff of the Indian Army?
Options:
1. ✔ Gen. K.M. Cariappa
2. ✗ Vice Admiral R.D. Katari
3. ✗ Gen. Maharaja Rajendra Singhji
4. ✗ None
Question Number : 89  Question Id : 218186589  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Durand cup is associated with the game of
Options :
1. ✓ Football
2. ✗ Cricket
3. ✗ Hockey
4. ✗ Volleyball

Question Number : 90  Question Id : 218186590  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
G-15 is an economic group of
Options :
1. ✓ third world nations
2. * first world nations
3. * second world nations
4. * fourth world nations

Question Number : 91  Question Id : 218186591  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The word 'frugal' means
Options :
1. ✓ economical
2. ✗ invention
3. ✗ to whisper
4. ✗ explore

Question Number : 92  Question Id : 218186592  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
-------- by nature, Jagat spoke very little even with his family members.
Options :
1. ✓ taciturn
2. * garrulous
3. * equivocal
4. * arrogant

Question Number : 93  Question Id : 218186593  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
She -------- piano very well.
Options :
1. ✓ plays
2. ✗ will play
3. ✗ play
4. ✗ playing
Question Number : 94  Question Id : 218186594  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
The antonym of word 'violent' is  
Options :  
1. ✔ gentle  
2. * tame  
3. * humble  
4. * harmless

Question Number : 95  Question Id : 218186595  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
The father was anxious _______ the safety of his son.  
Options :  
1. ✔ about  
2. * for  
3. * with  
4. * at

Question Number : 96  Question Id : 218186596  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
The manager would like you to help Dhiru. Means  
Options :  
1. ✔ the manager desires you to help Dhiru  
2. * Dhiru expects the manager to tell you to help him  
3. * the manager would like you if you help Dhiru  
4. * the manager likes you because you help Dhiru

Question Number : 97  Question Id : 218186597  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Generally speaking, _______ boys are stronger than girls.  
Options :  
1. ✔ no article  
2. * a  
3. * an  
4. * the

Question Number : 98  Question Id : 218186598  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
Leave or remove from a place considered dangerous is  
Options :  
1. ✔ evacuate  
2. * evade  
3. * avoid  
4. * exterminate
Question Number : 99  Question Id : 218186599  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

They ________ their new car two weeks ago.
Options :
1. ✔ bought
2. ✗ have brought
3. ✗ will buy
4. ✗ buy

Question Number : 100  Question Id : 218186600  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Ravi could not dissociate himself ________ what he said earlier.
Options :
1. ✔ from
2. ✗ with
3. ✗ off
4. ✗ to

Question Paper Name: PLANT OPERATOR GRADE 1 10th June 2017 Shift 1
Subject Name: PLANT OPERATOR GRADE 1
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Number of Questions: 100
Total Marks: 100
Display Marks: No
Calculator: None
Magnifying Glass Required?: No
Ruler Required?: No
Eraser Required?: No
Scratch Pad Required?: No
Rough Sketch/Notepad Required?: No
Protractor Required?: No

GROUP NUMBER : 1
Group Id : 2181867
Group Maximum Duration : 0
Group Minimum Duration : 60
Revisit allowed for view? : No
Revisit allowed for edit? : No
Break time: 0
Group Marks: 100
Question Number : 1  Question Id : 218186601  Question Type : MCQ  Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0
Which type of air is used in air blast circuit breaker?

Options :
1. ✔ Ionised air
2. ✗ Moisture free Air
3. ✗ Air should have the least CO2
4. ✗ Air must have oil mist.

Question Number : 1  Question Id : 218186601  Question Type : MCQ  Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0
SF6 gas has an excellent heat transfer property as it possesses

Options :
1. ✔ Low gaseous viscosity & Higher molecular weigh
2. ✗ Low gaseous viscosity
3. ✗ High dielectric strength
4. ✗ Higher molecular weight

Question Number : 2  Question Id : 218186602  Question Type : MCQ  Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0
SF6 gas has an excellent heat transfer property as it possesses

Options :
1. ✔ Low gaseous viscosity & Higher molecular weigh
2. ✗ Low gaseous viscosity
3. ✗ High dielectric strength
4. ✗ Higher molecular weight
4. For transformer stepped cores are used...

Options:
1. ✓ to reduce the cu loss
2. * to reduce the core loss
3. * to provide more mechanical strength to the core
4. * to reduce the magnetizing current

4. Transformer's action is possible only if there is...

Options:
1. ✓ alternating magnetic flux
2. * constant magnetic flux
3. * increasing magnetic flux
4. * alternating electric flux

5. CRGO laminations in transformer are used to reduce...

Options:
1. ✓ Both eddy-current and hysteresis losses
2. * eddy-current loss
3. * Hysteresis loss
4. **Ohmic loss**

Question Number : 5  Question Id : 218186605  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

As the load on a transformer is increased, the core loses...

Options :
1. ✔️ may decrease or increase according to the nature of the load
2. ✔️ Decrease slightly
3. ✔️ Increase slightly
4. ✔️ Remains constant

Question Number : 6  Question Id : 218186606  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

The no-load current in a transformer lags the applied voltage by?

Options :
1. ✔️ about 75 degree
2. ✔️ 90 degree
3. ✔️ 0 degree
4. ✔️ about 110 degree
4. If a multimeter, set to measure the resistance, is connected to one terminal of primary and the other terminal of secondary of transformer, the reading should be...

Options:
1. infinity
2. zero
3. zero or infinity
4. equal to the resistance of the windings

5. In a transformer, the tappings are provided on?

Options:
1. H.V side at the middle
2. H.V. side at one end of the winding
3. L.V. side at one end of the winding
4. L.V.side at the middle

6. When a short circuit occurs in transformer windings, the adjoining turns of the same winding experiences...

Options:
1. attractive force
2. * repulsive force
3. * no effect
4. * may be attractive force or repulsive force depending upon the current directions

Question Number : 10  Question Id : 218186610  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✔  
2. *  
3. *  
4. *  

In transformers, the noise or hum is produced primarily due to...

Options :
1. ✔  loose bolts etc
2. *  improper tightening of core laminations
3. *  magnetostriction
4. *  Tank walls

Question Number : 11  Question Id : 218186611  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✔  
2. *  
3. *  
4. *  

The conductor which is used to give supply at the domestic consumer's terminals is known as?

Options :
1. ✔  service mains
2. *  Distributors
3. *  feeder
4. *  none
2. ☑️ ☐☐☐☐☐
3. ☐☐☐☐
4. ☐☐☐☐☐

Question Number : 13  Question Id : 218186613  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Galvanized steel is generally used as a main component in?
Options :
1. ☑️ all
2. ☑️ stay wire
3. ☑️ earth wire
4. ☑️ structural components

Question Number : 14  Question Id : 218186614  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The corona depends upon?
Options :
1. ☑️ all
2. ☑️ conductor size
3. ☑️ conductor shape
4. ☑️ Surface condition of the conductor

Question Number : 15  Question Id : 218186615  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the phenomenon of rise in voltage at the receiving end of the open-circuited or lightly loaded line is called?
Options :
1. ✔ Ferranti effect

2. * Skin effect
3. * Raman effect
4. * none

Question Number : 15  Question Id : 218186615  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

What is the cause of null effect?

Options :
1. ✔ 44
2. 33
3. 55
4. 99

Question Number : 16  Question Id : 218186616  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Which of the following is the source of heat generation in cables?

Options :
1. ✔ All
2. * Dielectric losses in cable insulation
3. * Losses in the conductor
4. * Losses in the metallic sheath and armoring

Question Number : 16  Question Id : 218186616  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

What is the source of heat generation in cables?

Options :
1. ✔ All
2. * Dielectric losses in cable insulation
3. * Losses in the conductor
4. * Losses in the metallic sheath and armoring

Question Number : 17  Question Id : 218186617  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Which of the following is usually not the voltage generated in India?

Options :
1. ✔ 3.8 kV
2. * 6.6 kV
3. * 11 kV
4. * 13.2 kV
Question Number : 17  Question Id : 218186617  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

The presence of ozone due to corona is harmful as it...

Options :
1. ✓  3.8\,\text{GHz}
2.  6.6\,\text{GHz}
3.  11\,\text{GHz}
4.  13.2\,\text{GHz}

Question Number : 18  Question Id : 218186618  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

A feeder, in a transmission system, feeds power to...

Options :
1. ✓  3.8\,\text{GHz}
2.  6.6\,\text{GHz}
3.  11\,\text{GHz}
4.  13.2\,\text{GHz}

Question Number : 19  Question Id : 218186619  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

A feeder, in a transmission system, feeds power to...

Options :
1. ✓  distributors
2.  generating stations
3.  service mains
4.  all

Question Number : 19  Question Id : 218186619  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

A feeder, in a transmission system, feeds power to...

Options :
1. ✓  distributors
2.  generating stations
3.  service mains
4.  all
Which of the following relays is used on long transmission lines?

Options:
1. ✓ Mho’s relay
2. ✗ Impedance relay
3. ✗ Reactance relay
4. ✗ None

A circuit is disconnected by isolators when...

Options:
1. ✓ there is no current in the line
2. ✗ line is energized
3. ✗ line is on half load
4. ✗ circuit breaker is not open

In a substation, which of the following equipments is not installed?

Options:
1. ✓ exciters
2. ✗ series capacitors
3. ✗ shunt reactors
4. ✗ potential transformers
Question Number : 22  Question Id : 218186622  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Question Number : 23  Question Id : 218186623  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Question Number : 24  Question Id : 218186624  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

The frequency of voltage generated, in case of generators, can be increased by?

Options :
1. ✔ adjusting the governor
2. ✗ using reactors
3. ✗ increasing the load
4. ✗ reducing the terminal voltage

Options :
1. ✔ changing load
2. ✗ using transformers
3. ✗ reducing frequency
4. ✗ increasing frequency

For which of the following equipment current rating is not necessary?

Options :
1. ✔ Isolators
2. ✗ Circuit breakers
3. ✗ Load break switch
4. ✗ Circuit breakers and load break switches

Options :
1. ✔ Grounding
2. ✗ Earthing
3. ✗ Earthing
4. ✗ Earthing
When a conductor carries more current on the surface as compared to core, it is because of?

Options:
1. ✔ skin effect
2. ✗ permeability changes
3. ✗ corona loss
4. ✗ unsymmetrical fault

In the case of a fuel cell, which energy is converted into electrical energy?

Options:
1. ✔ chemical
2. ✗ thermal
3. ✗ mechanical
4. ✗ solar

Which of the following are the commercial sources of energy?

Options:
1. ✔ fossil fuels, nuclear, hydroelectric
2. ✗ solar, wind, geothermal
3. ✗ biomass, tidal
4. ✗ none
Question Number: 27  Question Id: 218186627  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0

Options:
1. ✓ across the terminals of inductive load
2. * closer to Inductive load
3. * far end from Inductive load
4. * anywhere in network

Question Number: 28  Question Id: 218186628  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0

Options:
1. ✓ across the terminals of inductive load
2. * closer to Inductive load
3. * far end from Inductive load
4. * anywhere in network

Question Number: 28  Question Id: 218186628  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0

Options:
1. ✓ across the terminals of inductive load
2. * closer to Inductive load
3. * far end from Inductive load
4. * anywhere in network

Question Number: 29  Question Id: 218186629  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0

Options:
1. ✓ be doubled
2. * be reduced by half
3. * be four times as high
4. * be reduced to one fourth

Question Number: 29  Question Id: 218186629  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  
Correct: 1  Wrong: 0

Options:
1. ✓ be doubled
2. * be reduced by half
3. * be four times as high
4. * be reduced to one fourth
The power factor of a D.C. circuit is always...

Options:
1. unity
2. less than unity
3. greater than unity
4. zero

Ohm is the unit of all of the following except?

Options:
1. capacitance
2. inductive reactance
3. capacitive reactance
4. resistance

In a three-phase supply floating neutral is undesirable because it may lead to...

Options:
1. unequal line voltages across the load
2. high voltage across the load
3. low voltage across the load
4. balanced voltage across the load
3. The power factor of electric bulb is?

Options:
1. unity
2. zero
3. lagging
4. leading

4. Burden of a protective relay is defined as- The power...

Options:
1. required by the circuit of relay
2. required to operate the circuit breaker
3. developed within the relay circuit
4. required to clear the fault.
Transmission line is protected by designing?
Options:
1. ✓ both distance protection time graded and current graded over current protection.
2. ● magneticrush protection
3. ● distance protection
4. ● time graded and current graded over current protection

H.R.C. fuses provide best protection against?
Options:
1. ✓ short-circuits
2. ● earth fault
3. ● reverse current
4. ● open-circuits

Which of the following statements is false?
Options:
1. ✓ Station batteries are used only for relay operation
2. ● The lightning arresters are generally surge diverters
3. ● An impedance relay has maximum fault current when fault occurs at nearby point
4. ● A static relay is made up of electronic components
Question Number : 37  Question Id : 218186637  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓ inverse definite minimum time
2. ✓ inverted differential maximum time
3. ✓ increased directional minimum time
4. ✓ integrated definite miniature time

Question Number : 38  Question Id : 218186638  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓ inverse definite minimum time
2. ✓ inverted differential maximum time
3. ✓ increased directional minimum time
4. ✓ integrated definite miniature time

Question Number : 39  Question Id : 218186639  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓ neutrally charged
2. ✓ negatively charged
3. ✓ positively charged
4. ✓ none

Question Number : 39  Question Id : 218186639  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓
2. ✓
3. ✓
4. ✓
Question Number : 40  Question Id : 218186640  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

Short-circuit currents are due to?

Options :
1. ✔ all
2. * single line to ground faults
3. * line to line faults
4. * Double line to ground faults

Question Number : 40  Question Id : 218186640  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

In substation Interlocking is done between?

Options :
1. ✔ circuit breaker, isolator and Earth switch
2. * CT, PT and Relay
3. * Insulator, surge diverter and wave trap
4. * none

Question Number : 41  Question Id : 218186641  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0

Main advantage of a Static relay is?

Options :
1. ✔ All
2. * Quick response
3. * high sensitivity
4. * small size
Question Number : 42  Question Id : 218186642  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓  
2. ✗  
3. ✗  
4. ✗  

Question Number : 43  Question Id : 218186643  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Phase angle error in PT is ?
Options :
1. ✓ angle between primary voltage vector and reversed secondary voltage vector 
2. ✗ Difference between primary voltage vector and reversed secondary voltage vector 
3. ✗ ratio of primary voltage vector and reversed secondary voltage vector 
4. ✗ none

Question Number : 44  Question Id : 218186644  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Most popular isolator is ?
Options :
1. ✓ pentograph type 
2. ✗ horizontal break type 
3. ✗ vertical break type 
4. ✗ bow type
Question Number : 45  Question Id : 218186645  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Pole mounted transformer substation is?
Options :
1. ✓ outdoor type
2. § indoor type
3. § mounted between poles
4. § metal enclosed type

Question Number : 46  Question Id : 218186646  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
which of these exhibits non linear resistance?
Options :
1. ✓ Thyrite
2. § Coal
3. § Wood
4. § Porcelain

Question Number : 46  Question Id : 218186646  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
which of these exhibits non linear resistance?
Options :
1. ✓ Thyrite
2. § Coal
3. § Wood
4. § Porcelain

Question Number : 47  Question Id : 218186647  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
SIL of Transmission line means?
Options :
1. ✓ Surge Impedence Loading
2. § Super Insulation Level
3. § Surge Imposed Line
4. § Some Insulated Levels
Question Number : 47  Question Id : 218186647  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Question Number : 48  Question Id : 218186648  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Question Number : 49  Question Id : 218186649  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Question Number : 48  Question Id : 218186648  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Question Number : 49  Question Id : 218186649  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

At normal atmospheric conditions breakdown strength of air is?

Options :
1. ✓ 3KV/mm
2. * 30KV/mm
3. * 3KV/m
4. * 3KV/cm

Main difference between Fuel cell and storage betteries is?

Options :
1. ✓ It doesn’t need recharging
2. * They operate at room temperature
3. * They need no maintenance
4. * They are economical

Detail difference between Fuel cell and storage betteries is?

Options :
1. ✓ The fuel cell is more efficient
2. * The fuel cell has a longer life than storage betteries
3. * The fuel cell is more environmetaly friendly than storage betteries
4. * The fuel cell is less expensive than storage betteries
3Ph 4 wire system is generally used for?

Options:
1. ✓ secondary distribution
2. * primary distribution
3. * primary transmission
4. * secondary transmission

Dielectric strength of transformer oil is?

Options:
1. ✓ 40KV/mm
2. * 40KV/cm
3. * 40KV/m
4. * 40KV/ppm

Value of Insulation resistance of winding in standard electrical equipments used in power system should be?

Options:
1. ✓ 1Megaohm/KV
2. * 0.5Megaohm/KV
3. * 10Megaohm/KV
4. * 1.5Megaohm/KV
Question Number : 52  Question Id : 218186652  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
If the polarization index is more, then one quality of insulation is?
Options :
1. ✔ 1.0000000/0.0000
2. ✗ 0.5000000/0.0000
3. ✗ 1.0000000/0.0000
4. ✗ 1.5000000/0.0000

Question Number : 53  Question Id : 218186653  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
If the polarization index is more, then one quality of insulation is?
Options :
1. ✔ excellent
2. ✗ bad
3. ✗ medium
4. ✗ none

Question Number : 53  Question Id : 218186653  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the contribution of the insulation to the efficiency of the electrical equipment?
Options :
1. ✔ 30%
2. ✗ 20%
3. ✗ 15%
4. ✗ 40%

Question Number : 54  Question Id : 218186654  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following are the Types of Preventive Maintenance?
Options :
1. ✔ Routine and periodic maintenance
2. ✗ Breakdown and periodic maintenance
3. ✗ Routine and Breakdown maintenance
4. ✗ none

Question Number : 54  Question Id : 218186654  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the contribution of the insulation to the efficiency of the electrical equipment?
Options :
1. ✔ 30%
2. ✗ 20%
3. ✗ 15%
4. ✗ 40%
Question Number : 55  Question Id : 218186655  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Growler is used for?

Options :
1. ☑️ to find internal faults in armature -commutator
2. ✡️ To measure current
3. ✡️ to measure Earth’s resistance
4. ✡️ to measure insulation resistance

Question Number : 55  Question Id : 218186655  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the meaning of Earthing, Grounding & Bonding?

Options :
1. ☑️ Earthing- directly connected to earth  Grounding -may be connected to earth or equipotential point  Bonding -connected to equipotential point:
2. ✡️ Bonding - directly connected to earth  Grounding -may be connected to earth or equipotential point  Earthing -connected to equipotential point:
3. ✡️ Earthing- directly connected to earth  Bonding -may be connected to earth or equipotential point  Grounding -connected to equipotential point:
4. ✡️ Grounding- directly connected to earth  Earthing -may be connected to earth or equipotential point  Bonding -connected to equipotential point:

Question Number : 56  Question Id : 218186656  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Safety regulation and laws related to electrical work are?

Options :
1. ☑️  
2. ✡️  
3. ✡️  
4. ✡️  

Question Number : 57  Question Id : 218186657  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

What is the meaning of Earthing, Grounding & Bonding?

Options :
1. ☑️ Earthing- directly connected to earth  Grounding -may be connected to earth or equipotential point  Bonding -connected to equipotential point:
2. ✡️ Bonding - directly connected to earth  Grounding -may be connected to earth or equipotential point  Earthing -connected to equipotential point:
3. ✡️ Earthing- directly connected to earth  Bonding -may be connected to earth or equipotential point  Grounding -connected to equipotential point:
4. ✡️ Grounding- directly connected to earth  Earthing -may be connected to earth or equipotential point  Bonding -connected to equipotential point:
Question Number : 57  Question Id : 218186657  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
In a transmission line, what does sag depend upon?
Options :
1. ✔ All
2. ✗ 1923
3. ✗ 1948, 1956
4. ✗ 1948 and payment of wages act, 1936

Question Number : 58  Question Id : 218186658  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
In a transmission line, what does sag depend upon?
Options :
1. ✔ All
2. ✗ span length
3. ✗ tension in conductors
4. ✗ conductor weight per unit length

Question Number : 59  Question Id : 218186659  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct : 1  Wrong : 0
Insulators used for EHT lines are made from?
Options :
1. ✔ Porcelain
2. ✗ PVC
3. ✗ glass
4. ✗ steatite
1. ✔ magnetic circuit
2. * capacitive circuit
3. * electronic circuit
4. * superconductive circuit

Question Number : 61  Question Id : 218186661  Question Type : MCQ  Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1 Wrong : 0
Electrical power generation is designed on the basic rules given by?
Options :
1. ✔ Faraday
2. * Edison
3. * Newton
4. * Albert Einstein

Question Number : 61  Question Id : 218186661  Question Type : MCQ  Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct : 1 Wrong : 0
What are the minimum requirements to initiate current flow?
Options :
1. ✔
2. *
3. *
4. *
1. ✔ A voltage source and conductor
2. ✗ A voltage source, resistor and switch
3. ✗ A supply and lamp
4. ✔ A supply source, ammeter, conductor and a switch

Question Number : 62  Question Id : 218186662  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The ratio of voltage and electric current in a closed circuit...
Options :
1. ✔ is almost constant
2. ✗ changes
3. ✗ increases
4. ✗ decreases

Question Number : 63  Question Id : 218186663  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
which law relates heat production due to current flowing through the conductor?
Options :
1. ✔ Joule's law
2. ✗ Ohm's law
3. ✗ Kelvin's law
4. ✗ Kirchoff's law

Question Number : 64  Question Id : 218186664  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
1. ✓ direction of flow of current through the resistor
2. * value of current
3. * value of resistance
4. * value of EMF

Question Number : 66  Question Id : 218186666  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is done To protect the machinery from deposition of static charge?
Options :
1. ✓ framework is earthed
2. * machinery is insulated
3. * machinery is placed in insulated cabins
4. * all

Question Number : 67  Question Id : 218186667  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
what does the thumb represent In Fleming's left hand rule?
Options :
1.  ✔ direction of mechanical force
2.  ✗ direction of magnetic field
3.  ✗ direction of EMF
4.  ✗ direction of current

Question Number : 67  Question Id : 218186667  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the direction of EMF generated in a conductor due to magnetic field?
Options :
1.  ✔ direction of magnetic field
2.  ✗ direction of mechanical force
3.  ✗ direction of EMF
4.  ✗ direction of current

Question Number : 68  Question Id : 218186668  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The safety of electrical appliances and wiring is ensured by providing what?
Options :
1.  ✔ All
2.  ✗ earthing
3.  ✗ insulation
4.  ✗ protective equipment like fuse, MCB

Question Number : 68  Question Id : 218186668  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The safety of electrical appliances and wiring is ensured by providing what?
Options :
1.  ✔ All
2.  ✗ earthing
3.  ✗ insulation
4.  ✗ protective equipment like fuse, MCB

Question Number : 69  Question Id : 218186669  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The secondary of a CT is...
Options :
1.  ✔ never left open circuited
2.  ✗ never left short circuited
3.  ✗ always kept open circuited
4.  ✗ none

Question Number : 69  Question Id : 218186669  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The secondary of a CT is...
Options :
Question Number : 70  Question Id : 218186670  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
A bus bar is rated by?  
Options :  
1. ✓ current, voltage, frequency and short circuit current  
2. * current only  
3. * voltage only  
4. * frequency only  

Question Number : 70  Question Id : 218186670  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
What is Marshaling Kiosk in power transformer?  
Options :  
1. ✓ It provides alarms, trip information, controls & indications from main transformer  
2. * it is the base on which the transformer rail is provided to place the transformer  
3. * it is the device for protection  
4. * none  

Question Number : 71  Question Id : 218186671  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  
Correct : 1  Wrong : 0  
In a sub station which device is used as a carrier communication device?
Options:
1. ✔ Wave trap
2. * CVT
3. * Earth conductor
4. * Surge diverter

Question Number : 72  Question Id : 218186672  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the purpose of using a wave trap?
Options:
1. ✔ To interrupt the flow of electrical current
2. * To increase the voltage level
3. * To provide protection against lightning
4. * To redirect the flow of electrical current

Question Number : 73  Question Id : 218186673  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Substation land is covered with stones in order to?
Options:
1. ✔ To avoid growing of plants and weeds
2. * To avoid fire accident in case of short circuit fault
3. * To provide insulation
4. * All

Question Number : 73  Question Id : 218186673  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the purpose of using a wave trap?
Options:
1. ✔ To interrupt the flow of electrical current
2. * To increase the voltage level
3. * To provide protection against lightning
4. * To redirect the flow of electrical current

Question Number : 74  Question Id : 218186674  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following relay operates when there is a vector difference between two similar electrical quantities?
Options:
1. ✔ Differential relay
2. * Earth fault relay
3. * lDMTrelay
4. * Unbalanced relay

Question Number : 74  Question Id : 218186674  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is the purpose of using a wave trap?
Options:
1. ✔ co efficient of expansion
2. * Thermal Conductivity
3. * specific heat
4. * all

**Question Number : 75  Question Id : 218186675  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
Einmetallic strip present in Thermal relays will have two metal strips having different ..?  
Options :
1. ✔  
2. *  
3. *  
4. *  

**Question Number : 75  Question Id : 218186675  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
Einmetallic strip present in Thermal relays will have two metal strips having different ..?  
Options :
1. ✔  
2. *  
3. *  
4. *  

**Question Number : 76  Question Id : 218186676  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
What is a Buchholz relay?  
Options :
1. ✔ Gas operated relay  
2. * current actuated relay  
3. * Pressure actuated relay  
4. * temperature actuated relay  

**Question Number : 76  Question Id : 218186676  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
What is a Buchholz relay?  
Options :
1. ✔  
2. *  
3. *  
4. *  

**Question Number : 77  Question Id : 218186677  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**
Correct : 1  Wrong : 0
What is a Relay?  
Options :
1. sensing device
2. breaking device
3. making device
4. alarm device

Question Number : 77  Question Id : 218186677  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Options :
1.  
2.  
3.  
4.  

Question Number : 78  Question Id : 218186678  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Options :
1. internal faults
2. External faults
3. overloads
4. short circuits

Question Number : 78  Question Id : 218186678  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Options :
1.  
2.  
3.  
4.  

Question Number : 79  Question Id : 218186679  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Options :
1. both make and break operation
2. break operation
3. make operation
4. never make only break operation

Question Number : 79  Question Id : 218186679  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Options :
1. ✓ trip unit
2. ✓ arcing unit
3. ✓ operating mechanism
4. ✓ control mechanism

Question Number : 81  Question Id : 218186681  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
What is a Booster?
Options :
1. ✓ series generator
2. ✓ shunt generator
3. ✓ compound generator
4. ✓ induction generator

Question Number : 82  Question Id : 218186682  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The resistance between lightning protection system and earth should be?
Options :
1. almost zero
2. high
3. infinite
4. none

Question Number: 82  Question Id: 218186682  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
What of the following quantities are independent of each other?
Options:
1. almost zero
2. high
3. infinite
4. none

Question Number: 83  Question Id: 218186683  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
Electrical surges occur due to?
Options:
1. EHV switching and lightning strikes both
2. EHV switching
3. Lightning strikes
4. none

Question Number: 83  Question Id: 218186683  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
What of the following quantities are independent of each other?
Options:
1. almost zero
2. high
3. infinite
4. none

Question Number: 84  Question Id: 218186684  Question Type: MCQ  Option Shuffling: Yes  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Correct: 1  Wrong: 0
What of the following is produced due to friction between two elements?
Options:
1. Static electricity
2. Dynamic electricity
3. Induced electricity
4. Mutual electricity
1. ✔ from electrical to mechanical
2. * from mechanical to electrical
3. * from magnetic to static
4. * from static to magnetic

In case of electric motor energy conversion is?

Options:

1. ✔ from electrical to mechanical
2. * from mechanical to electrical
3. * from magnetic to static
4. * from static to magnetic

Which of the following circuit breaker requires less maintenance?

Options:

1. ✔ Vacuum cb
2. * Air blast cb
3. * SF6 cb
4. * oil cb

Which of the following always have more efficiency than 95%?

Options:
1. transformer
2. D.C. generator
3. D.C. motor
4. synchronous machine

Question Number : 87  Question Id : 218186687  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following is used in wind power plants?
Options :
1. ✓ transformer
2. D.C. generator
3. D.C. motor
4. synchronous machine

Question Number : 88  Question Id : 218186688  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Which of the following generator is used in wind power plants?
Options :
1. ✓ induction generator
2. D.C. generator
3. Synchronous generator
4. induction regulator

Question Number : 89  Question Id : 218186689  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
For Bulk power transmission over long distance HVDC is preffered because of...
Options :
1. ✓ minimum line losses
2. of low cost
3. no harmonic problems
4. simple protection schemes
1. ✔ Plug Setting Multiplier
2. * Power Setting Multiplier
3. * Pole Soft Medium
4. * Positive Setting Multiplier

Question Number : 91  Question Id : 218186691  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Space satellites obtain the energy from...?
Options :
1. ✔ Solar cells
2. * Fuel cell
3. * Cryogenic storage
4. * Edison cells

Question Number : 92  Question Id : 218186692  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
The Full form of B.R.T.S. is?
Options :
1. ✔ Bus Rapid Transit System
2. ✗ Bus Ready Transport Service
3. ✗ Bus Regular Transition Supply
4. ✗ Bus Route Travel System

Question Number : 92  Question Id : 218186692  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
In which state in India does the maximum amount of salt?
Options :
1. ✔ Gujarat
2. ✗ Goa
3. ✗ Kerala
4. ✗ West Bengal

Question Number : 93  Question Id : 218186693  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Who is the Vice President of India?
Options :
1. ✔ Mohmmad Hamid Ansari
2. ✗ Dr.Pranab Mukharji
3. ✗ Mukhtar Abbas Nakhvi
4. ✗ Yogi Adityanath

Question Number : 94  Question Id : 218186694  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Who is the Vice President of India?
Options :
1. ✔ Mohmmad Hamid Ansari
2. ✗ Dr.Pranab Mukharji
3. ✗ Mukhtar Abbas Nakhvi
4. ✗ Yogi Adityanath
1. ✓ Madam Bhikaji Kama was the...?
   Options:
   1. The first lady to hoist Indian Flag on foreign soil in 1907
   2. The first lady Doctor Of India
   3. The first lady poet Of India
   4. The first lady army officer Of India

2. Question Number : 96  Question Id : 218186696  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
   Correct : 1  Wrong : 0
   What is G.S.T related to tax system in India?
   Options:
   1. ✓ Goods and Services Tax
   2. Gold and Sales Tax
   3. General Service Tax
   4. Gadgets and Smartphones Tax

3. Question Number : 97  Question Id : 218186697  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
   Correct : 1  Wrong : 0
   Find the odd one out
   Options:
1. conductor
2. circuit breaker
3. protective relay
4. fuse

Question Number : 97  Question Id : 218186697  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓
2. 
3. 
4. 

Question Number : 98  Question Id : 218186698  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
About what has I.S.R.O. set the world record recently?
Options :
1. ✓ sending 104 satellites in space in one go
2. 
3. 
4. 

Question Number : 98  Question Id : 218186698  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
1. ✓
2. 
3. 
4. 

Question Number : 99  Question Id : 218186699  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0
Friction can be reduced by ...
Options :
1. ✓ sliding to rolling
2. 
3. 
4. 

Question Number : 99  Question Id : 218186699  Question Type : MCQ  Option Shuffling : Yes  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct : 1  Wrong : 0

Options :
How many spikes are there in the Ashok Chakra of our Indian Flag?

Options:
1. ✅ 24
2. ✗ 22
3. ✗ 25
4. ✗ 26