No.	Question	Option A	Option B	Potion C	Option D
1	Which generating plant has highest ramp rate?	Thermal	Hydro	Diesel	All of the above
2	What is the approximate total installed capacity in India?	230000 MW	130000 MW	500000 MW	30 GW
3	The auxiliary consumption in a thermal power (Steam)station is …	2-5 %	7-10%	10-15%	none of the above
4	The voltage of a solar cell is…	0.5 to 1V	1 to 2 V	2- 4 V	0- 0.5 V
5	Large size steam plants and nuclear plants are suitable for	Peak load	Intermediate loads	Both peak and Base load	Base load
6	The transformer steps up the voltage by a factor of 100. The ratio of current in the primary to that in the secondary is …..	1	100	0.01	(100)²
7	The 400/230 v single phase 50 Hz transformer is connected to 25 Hz supply. In order to keep the magnetising current Iμ constant the supply voltage should be ……	Half	Double	four times	one forth
8	Which three phase connection can be used on a transformer to introduce a phase difference of 30 0 between its output and input?	Star- Star	Star- Delta	Delta -Delta	Zig Zag
9	A transformer is supplying pure resistive load. The power factor on primary side will be	Unity	Zero	0.9 Lagging	0.95 Leading
10	The inputs to the state estimation are	Perfect power system measurements	Imperfect power system measurements	Voltage and frequency of the system	active power generation and load
11	Making capacity of a circuit breaker is expressed in terms of	Symmetrical breaking current and rated voltage	rated voltage and rated current	o.c. voltage and s. c. current	s. c. voltage and o. c. current
12	The RRRV of the circuit breaker depends upon the…	Type of circuit breaker	capacitance of the system only	inductance of the system only	inductance and capacitance of the system only
13	SF6 Circuit breakers have drawback(s) of	sealing problem of gas	ingress of moisture in the gas system is dangerous	deterioration of SF6 with time	both (a) and (b)
14	The rating of a circuit breaker is usually determined on the basis of __fault	Symmetrical	line to line	single line to ground	double line to ground
15	Capacitor switching in 33kV power system is better done with ____circuit breaker	air blast	vacuum	minimum oil	SF6
16	The resistance of the earth should be	low	High	the minimum possible	infinite
17	The transmission of power using cable is impossible beyond …	20-30 km	40-60 km	80-100 km	200 km
18	The insulation resistance test is performed on power line using	megger	ohmmeter	earth tester	any of these
19	Load frequency control uses	Proportional controller	Integral controller	both proportional and integral control	either proportional or integral
20	If the generating unit is situated far from the load centre the penalty factor for the unit will be	unity	less than one	zero	more than one

21	The principle of incremental cost is employed for deciding the…	sequence of adding unit	load allocation between the units	total plant capacity to be operated	All the above
22	Which method is used for Unit commitment ?	incremental fuel cost	loss coefficient	Dynamic programming	kron's method
23	Load duration curve gives information of	variation in the load during different hours of the day	average load	duration of the rated load	none of the above
24	The load factor is equal to	average load/peak load	peak load/average load	average load/ connected load	average load/base load
25	A generating station has a maximum demand of 30 MW, a load factor of 60% and a plant capacity factor of 50%. The reverse capacity of the plant is	5MW	4MW	6MW	10MW
26	The power which must be available under emergency condition is known as ….	spinning reserve	firm reserve	cold reserve	hot reserve
27	A 3 phase Y connected alternator is rated at 1600KVA, 13500 V. The armature effective resistance and synchronous reactance are 1.5 and 30 Ohm respectively per phase. Calculate the % regulation for a load of 1280 kW at unity p.f.	3.22	5.33	10	90
28	If the input to the prime mover of an alternator connected to infinite bus is kept constant but the excitation is changed, then the _____out put changes	reactive power	active power	both active and reactive power	voltage
29	In a transmission system, the weight of copper used is proportional to	E	1/E²	E²	1/E
30	String efficiency of insulator gives indication of ...	potential cross each disc	Short circuit current of insulator	dielectric strength of Insulator disc	losses in each disc
31	The string efficiency of a high voltage line is around	100%	60%	10%	80%
32	The effect of corona is ….	increased energy loss	increased inductance	increased reactance	All the above
33	The skin effect in conductor results in	increase in d c resistance	decrease in ac resistance	increase in ac resistance	decrease in d c resistance
34	The inductance of the power transmission line increases with	decrease in line length	increase in diameter of the conductor	increase in spacing between conductors	increase in load current
35	Bundled conductors are used to	reduce the inductance of the line	reduce the corona loss	reduce the inductance and capacitance	reduce the inductance and corona loss
36	The values of A B C and D constants of a short transmission line are respectively	Z,0,1 and 1	0,1,1 and Z	1,Z,0 and 1	1,1,Z and 0
37	A cable has inductance of 0.22 mH per km and capacitance of 0.202 μF per km. The surge impedance of the cable is	28Ω	20Ω	42Ω	32Ω
38	The surge impedance of the transformer is in the range of	80-100Ω	1000-2000Ω	30-100Ω	400-500Ω
39	For formation of the Y bus, which model of the transmission line is used?	π (PI)	T (Tee)	distributed	lumped

40	As per the electricity regulations in India the maximum permissible voltage change at consumer premises should be____ of declared voltage	5%	6%	10%	12%
41	The point in a power system where no protection is provided is called a	Hidden spot	Blind spot.	Unprotected spot.	Dark spot.
42	If a relay fails to operate for the faults within its own reach, it is said to	Over reach	Double reach	Under reach	Properly reach
43	If the fault current is 3000 A, the relay setting is 75 % and the CT ratio is 400/5, the plug setting multiplier will be	25	10	50	15
44	In inverse definite minimum time relays, the minimum time feature is achieved because of	Saturation of the magnetic circuit.	Appropriate time delay element.	Proper mechanical design.	Electro-magnetic damping.
45	In over current protection, the setting of earth fault relays is	Equal to phase fault relays.	Less than phase fault relays.	More than phase fault relays.	The two setting are not related to each other.
46	MHO relay is normally used for the protection of	Short transmission lines	Medium transmission lines	Long transmission lines	Distribution lines
47	The boundary of a protective system is determined by the location of	Circuit breakers.	CT's.	Transformers.	PT's.
48	For the protection of transformers, harmonic restraint is used to guard against	Magnetic in rush current.	Lightning.	Unbalanced operation.	Switching overvoltage.
49	Bus-bar zone faults are generally	Phase to phase faults.	Double line to ground faults.	Single line to ground faults.	Three phase short circuits.
50	For 3 phase feeder protection in a distribution network, the number of earth fault relays required is	1	3	2	5
51	For the protection of parallel feeders fed from one end, the relays required are	Non-directional relays at the source end and directional relays at the load end.	Non-directional relays at both the source end and at the load end.	Directional relays at the source end and non-directional relays at the load end.	Directional relays at both the source end and the load end.
52	In carrier current protection, the purpose of the wave trap is for	Trapping power frequency waves.	Trapping carrier frequency waves	Trapping high frequency waves entering into the generator-transformer unit.	Trapping low frequency waves entering into the generator-transformer unit.
53	Time graded protection of a radial feeder can be achieved by using	Definite time relays.	Inverse time relays.	Definite and inverse time relays.	Very inverse time relays.
54	In a 3 step distance protection, the first zone distance relay protects a transmission line section upto…..	Its full length.	50% of its full length.	25% of its full length.	80% of its full length.
55	Location of a lightning arrestor is near a	Generator	Transformer.	Bus-bar	Circuit breaker
56	As the series capacitance of the transmission line increase the transmission capacity	Increases	Decreases	remains same	can't say
57	Booster is connected in	Parallel with feeder	Series or parallel	Star connection	Series with feeder
58	Which fault gives rise to symmetrical fault current?	Single line to ground fault	Three phase fault	Line to line fault	Double line to ground fault
59	Ferranti effect in a transmission system _____ the receiving voltage	Increase	decrease	does not change	can't say

60	The electric breakdown strength of insulating materials depends on	Nature of applied voltage	Imperfection of dielectric material	Pressure, temperature and humidity	All of these
61	In context with tanδ test, the angle δ is the angle between ….	two current vectors	two voltage vectors	current and voltage vector	voltage and current vector
62	Which of the following connection of transformers will give the highest value of secondary voltage?	Star primary star secondary	Delta primary delta secondary	delta primary star secondary	star primary delta secondary
63	For a load flow solution the quantities specified at the load bus are	P and Q	P and δ	Q and |V|	P and |V|
64	Load flow solution is best assured in case of	Gauss method	Newton Raphson method	Gauss Siedel method	None of the method guarantees convergence
65	The bus admittance matrix of a power system is not	symmetric	square matrix	full matrix	matrix having dominant diagonal elements
66	An EHV line of length 300 km can be approximated by a lossless line having propagation constant β 0.00127 radians per km. Then the percentage ratio of line length to wavelength is	24.24%	19.05%	12.12%	6.06%
67	A generator with 1.0 pu terminal voltage supplies power through a step up transformer of 0.12 pu reactance and a double circuit line each having reactance of 'x'pu to infinite bus bar. The infinite bus voltage is 1.0 pu. The steady state stability po	12.5pu	10.0 pu	3.125 pu	5.0 pu
68	If, for a given alternator in economic operation mode, the incremental cost is given by (0.012P + 8) Rs/MWh, dPL/dP = 0.2 and plant λ = 25, then power generation is	1000 MW	750 MW	1250 MW	1500 MW
69	The inductance of a transmission line is minimum when	GMD is high	Both GMD and GMR are high	GMR is high	GMD is low and GMR is high
70	In case of three phase short circuit in a system, the power fed into the system is	mostly active	active and reactive both equal	mostly reactive	only reactive
71	A power system network with a capacity of 100 MVA has a source impedance of 10% at a point. The fault MVA at that point is…	10 MVA	100 MVA	30 MVA	1000 MVA
72	Transmission lines are transposed to	reduce copper loss	prevent interference with neighboring communication circuits	reduce skin effect	prevent short circuit between lines
73	A single phase transmission line of impedance j0.8 ohm supplies a resistive load of 500A at 300V. The sending power factor is	unity	0.8 leading	0.8 lagging	0.6 lagging
74	A thermal generating station has an installed capacity of 15 MW and supplies a load of 10 MW for 12 hours and 5 MW for remaining 12 hours. The plant capacity factor for this station is	0.5	0.75	0.67	1

75	The voltage stability problem in the system basically means……	Large variation in the voltage	voltage regulation is poor	reactive power support is less	active power demand is more
76	In Load Flow Studies/ Analysis, the load connected to bus is represented as	Constant impedance connected at the bus	Constant current drawn from the bus	Voltage and frequency dependent source at the bus	constant real and reactive power drawn from the bus
77	Which of the following is not used as load forecasting method	regression method	time series method	least square method	gauss method
78	The line current in a three phase unbalanced load are Ia= 4 +j6, Ib=2-j2 and Ic= -3 +j2, then zero sequence component of current will be	3 + j6	9 + j10	1 + j2	3 -j6
79	Inertia constant H of a machine of 200 MVA is 2 p.u. Its value corresponding to 400 MVA is	2	1	0.5	4
80	The Z matrix of 2 port network is given by [0.9 0.2;0.2 0.6] The element Y22 of the corresponding Y matrix for the same network is given by	1.2	0.8	-0.4	1.8
81	"KATHAKALI" dance is from _____ state of the India	Kerala	Tamilnadu	Karnataka	Andhrapradesh
82	When it is 1.30 AM in Ahmedabad, the Time in New York would be about	3.00PM	12.00 AM	12.00 PM	3.00 AM
83	Which of the following is the western most city?	Patana	Gwalior	Agra	Delhi
84	Which one among the following planets is biggest planet?	Jupiter	Uranus	Mars	Mercury
85	Which one of the following freedom fighters coined slogen"Jai Jawan Jai Kishan"	Sardar Patel	Lal Bahdur Shastri	S. C. Bose	B. G. Tilak
86	Which of the following is not a fundamental Right in India?	Right against exploitation	Right to constitutional remedis	Right to property	Cultural and Educational Rights
87	What is the approximate(letest) literacy rate in Gujarat state?	70%	79%	90%	85%
88	Which satellite has been launch by India recently?	Mars Orbiter Mission	GSAT-14	INSAT 7	ARYABHATA
89	Who is the energy minister of Gujarat ?	Bhupendra sinh Chudasama	Narottam bhai Patel	Saurabh Patel	Nitinbhai Patel
90	How far is the moon from the earth?	384,400 km	38,000 km	153400 km	60,000km
91	He was offered a part time job but he _____it _____ because he wanted to concentrate on his studies.	turned back	turned out	turned over	turned down
92	Our manager gave us the general plan and we _____ the minor details	worked on	worked to	worked over	worked in
93	As they approaching to the house, the colonel's wife calls him for tea	they approaching the	they will be approaching the	they approach the	they approach to the

94	Centuries of servility has been making him tame and passive, incapable of any resentment or revolt	has been making him	have made him	has made him	has been made him
95	Give synonym of THRIFTLESS	PENURIOUS	MENDACIOUS	PROFLIGATE	TACKLESS
96	Give antonym of SPONTANEOUS	VOLENTARY	AUTOMATIC	COERCIVE	IRRITABLE
97	Give synonym of PERFUNCTORY	CURSORY	OPERATIVE	AGILE	BENEFICIAL
98	Give antonym of ABSTEMIOUS	DISCIPLINED	UNINTERESTING	UNRESTRICTED	INTEMPERATE
99	The reason why the aberration does not show _____ on the U. N. Panel's graph is simple.	off	out	away	up
100	The police swooped _____ on unsuspecting residents in Bhopal in their search for the fugitives.	down	off	away	up