

Test Booklet Code **D**

Test Booklet Sr. No.:

40361

TEST PAPER (SSA)

Marks: 100

Time: 01 hour 30 minute

ROLL NO.: _____	NAME: _____
SIGNATURE: _____	DATE / TIME: _____

INSTRUCTIONS FOR THE CANDIDATES

1	Before attempting the paper carefully read out all the Instructions & Examples given on Side 1 of Answer Sheet (OMR Sheet) supplied separately.
2	At the start of the examination, please ensure that all pages of your Test booklet are properly printed; your Test booklet is not damaged in any manner and contains 100 questions (General knowledge 1-40 & Technical 41 to 100) In case of any discrepancy the candidate should immediately report the matter to the invigilator for replacement of Test Booklet. No claim in this regard will be entertained at the later stage.
3	An OMR Answer Sheet is being provided separately along with this Test booklet. Please fill up all relevant entries like Roll Number, Test Booklet Code etc. in the spaces provided on the OMR Answer Sheet and put your signature in the box provided for this purpose.
4	Make sure to fill the correct Test booklet code on Side 2 of the OMR Answer Sheet. If the space for the Booklet Code is left blank or more than one booklet code is indicated therein, it will be deemed to be an incorrect booklet code & Answer Sheet will not be evaluated. The candidate himself/herself will be solely responsible for all the consequences arising out of any error or omission in writing the test booklet code.
5	This Test Booklet consists of 8 pages containing 100 questions (General knowledge 1-40 & Technical 41 to 100). Against each question four alternative choices (1), (2), (3), (4) are given, out of which one is correct. Indicate your choice of answer by darkening the suitable circle with BLACK/BLUE pen in the OMR Answer Sheet supplied to you separately. Note: In case you feel there is more than one correct answer, choose the best one.
6	The maximum marks are 100 . Each question carries 1 mark each. Candidate will be awarded one mark each for correct answer and 0.25 (1/4) mark each will be deducted for <i>incorrect answer</i> . <i>No deduction</i> will be made if <i>no answer</i> is indicated. More than one answer indicated against a question will be deemed as incorrect response and will be negatively marked.
7	Do not fold or make any stray marks on the OMR Answer Sheet. Any stray mark or smudge on the OMR Answer Sheet may be taken as wrong answer. Any damage to OMR Answer Sheet may result in disqualification of the candidate.
8	On completion of the test, candidate must hand over the OMR Answer Sheet to the invigilator on duty in the room/hall.
9	Use of Mobile phones and calculators etc. are not allowed.
10	Keep all your belongings outside the Examination hall. Do not retain any paper except the ADMIT CARD.

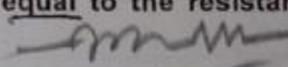
SSA (28042012)

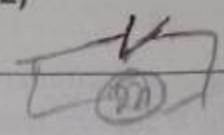
Q. No	Question
1	The name Chitra Subramaniam is associated with (1) Bofors (2) Agni V (3) Tatra (4) Adarsh
2	A Zero Hour is associated with (1) parliament (2) conserving nature (3) conserving electricity (4) time tables
3	A boy is 4 times younger than his sister. After 10 years, the sisters age becomes twice that of the boy's age find the sisters present age (1) 16 years (2) 20 years (3) 24 years (4) 28 years
4	The value of π is (1) 3.139 (2) 3.141 (3) 3.142 (4) 3.143
5	Select the correct option I all rectangles are squares II all ellipses are circles III all squares are rectangles IV. All circles are ellipses (1) I and II are correct (2) III and IV are correct (3) I and IV are correct (4) II and III are correct
6	B runs faster than C but slower than A. A runs faster than D but slower than E. Who runs the fastest (1) A (2) B (3) D (4) E
7	Represent Satinder's problem in the form of an equation: Satinder has Rs. 17 in her bag. How much money does she need to buy a book that costs Rs. 68? (1) $68 + x = 17$ (2) $x - 51 = 68$ (3) $x - 68 = 68$ (4) $17 + x = 68$
8	Integrated Check Post refers to (1) excise check post (2) customs check post (3) a kind of government appointment (4) none of these
9	Balbeer Singh Seechewal, Rajendra Singh, Nigmananda and G D Agrawal have the following thing in common: (1) they are important religious leaders of their localities (2) they are activists concerned with preservation of our water resources (3) they are political leaders in the forefront of the fight against corruption (4) they are important social leaders
10	What does DRDO stand for (1) Design and development of defence systems (2) To maintain order in the country (3) Development of India's relations with other nations (4) To appropriate funds for development of weapons systems
11	Vibgyor refers to (1) code for spies in the employ of one's own country (2) names of colours (3) digest of law cases (4) series of examination question
12	PNDT Act is about (1) dentists (2) doctors (3) engineers (4) foeticide

SSA (28042012)

13	Raj Chengappa is a (1) script writer (2) journalist (3) bureaucrat (4) sports personality
14	A can complete a job in 20 days, B can complete the same job in 30 days while C takes 60 days to complete the same job. They decide to work together, but C leaves the group after 5 days. How much time will A and B take to finish the rest of the job? (1) 6 days (2) 12 days (3) 15 days (4) 20 days
15	A snail is trying to crawl out of a hole 30 feet deep. During the day he climbs 5 feet but at night, he slips down 4 feet. How many days will he take to climb out of the hole. (1) 30 days (2) 25 days (3) 26 days (4) 29 days
16	A cage contains some geese and some lambs. A man counted the number of heads to be 7 and the number of feet to be 18. How many geese were present in the cage (1) 3 (2) 4 (3) 5 (4) 6
17	If 'gan sham nam' in a certain coded language means 'tree is tall' and in the same language 'mohe sham nam' means 'tree is big' what is the code word for tall (1) gan (2) mohe (3) sham (4) nam
18	$A^3 + B^3 = (A+B)(A^2 - AB + B^2)$ (1) $(a+b)(a^2 + b^2 - ab)$ (2) $(a-b)(a^2 + b^2 - ab)$ (3) $(a-b)(a^2 + b^2 + ab)$ (4) $(a+b)(a^2 + b^2 + ab)$
19	Cars A and B are 200 km away from each other. Car A moves away from Car B at a speed of 25km/hr. Car B approaches Car A at a speed of 75 km/hr. What distance will Car A travel by the time Car B catches up with it? (1) 50 km (2) 100 km (3) 150 km (4) 200 km
20	A Presidential Reference is when the opinion of the (1) President is sought (2) Supreme Court is sought by the President (3) President is expressed (4) Prime Minister is given to the President
21	Vectra is a (1) unit of measure (2) company (3) peak in the Himalayas (4) weapons system
22	Karam Chand Thapar, the industrialist, made his fortunes in which business? (1) coal and textile (2) coal and media (3) textile and media (4) media and power generation
23	Choose the odd one out: (1) Dr. George Grierson Award (2) Jnanpith Award (3) Sahitya Akademi Fellowship (4) Shanti Swarup Bhatnagar Prize
24	The Punjab State Electricity Regulatory Commission (1) Regulates the generation of electricity in Punjab. (2) Regulates the distribution of electricity in Punjab. (3) Determines the tariff for generation, supply, transmission and wheeling of electricity in Punjab. (4) Regulates the relationship between the state & the people of Punjab as far as electricity is concerned.
25	The JCB in the name of the excavator refers to (1) The name of the father of the owner of the company (2) The name of the son of the owner of the company (3) The name of the mother of the owner of the company (4) The name of the owner

26	Gurumukhi is a (1) language (2) book (3) script (4) philosophy
27	TISS is a body that concerns (1) sciences (2) social sciences (3) engineering (4) horticulture
28	A shopkeeper gives a discount of 20% on the price of an object which costs Rs. 100. Later he puts an additional discount of 25%. What is the objects price now (1) Rs. 55 (2) Rs.60 (3) Rs. 65 (4) Rs. 70
29	A is 5 times as efficient as B and A takes 40 days less than B to complete a job. How many days will B take to complete the job (1) 20 (2) 30 (3) 40 (4) 50
30	$(a - b) (a - b) = ?$ (1) $a^2 + b^2 - 2ab$ (2) $2a - 2b$ (3) $2b - 2a$ (4) $2(a - b)$
31	If 'isatan' is coded as hrzszm then what is the code word for saint (1) zsmhr (2) mhrrsz (3) rzhms (4) hzrsm
32	Which of the following is not the same as others: (1) man woman children grandparents (2) seed seedling plant tree (3) infant child teenager man (4) ABCD
33	An angstrom is used to measure (1) depth (2) height (3) length (4) weight
34	Which word does not belong with the others (1) mammoth (2) minute (3) immense (4) humongous
35	The ratio between two numbers is 1:3. If one is added to both of them the new ratio between them becomes 1:2. Find the larger of the two numbers (1) 3 (2) 4 (3) 2 (4) 6
36	The side of a square is equal to the base of a right angled triangle. Assuming the height of the triangle is double its base. What is the ratio of the area of the square to the triangle (1) 1 : 3 (2) 2 : 1 (3) 1 : 1 (4) 1 : 2
37	If $\{(3x + 5y) = 1\}$, and $\{(4x + 2y) = 1\}$ then what is the value of x and y? (1) $\frac{3}{14}$ and $\frac{1}{14}$ (2) $\frac{1}{7}$ and $\frac{2}{7}$ (3) $\frac{3}{4}$ and $\frac{2}{3}$ (4) $\frac{5}{6}$ and $\frac{3}{5}$
38	T & D losses often implies (1) quantum of power theft (2) problems with distribution equipment (3) problems with administration (4) the quarterly loss made by a business
39	Shaheen 1 is a kind of (1) bird (2) animal (3) weapon (4) school
40	The name of Madras was changed to Tamilnadu, of Bangalore to Bengaluru, of Bombay to Mumbai, of Orissa to Odisha. These changes were made because (1) The people so demanded (2) The respective state governments so demanded. (3) This was part of the anti-imperial struggle in India (4) This was part of the anti-globalisation in India.

41	An inductor and a resistor are in series with a sinusoidal voltage source. The frequency is set so that the inductive reactance is equal to the resistance. If the frequency is increased, then 	(1) $V_R > V_L$ (2) $V_L < V_R$ (3) $V_L = V_R$ (4) $V_L > V_R$	4
42	Four wires of same material, same cross-sectional area and the same length when placed in parallel gives a total resistance of 0.25Ω . If the same 4 wires are connected in series, what will be the effective resistance	(1) 1Ω (2) 4Ω (3) 2Ω (4) 16Ω	2
43	Kirchhoff's current law is applicable to	(1) Electric circuits (2) Electronic circuits (3) Junctions in a network (4) Closed loop in a network	3
44	While drawing phasor diagram for series circuit, the reference phasor is	(1) Voltage (2) Current (3) Power (4) Resistance	2
45	The force of attraction or repulsion between the two poles of strength m_1 and m_2 Webers placed d meters apart in any medium of relative permeability μ_r is given as	(1) $m_1 \cdot m_2 / (4\pi \mu_0 \mu_r d^2)$ (2) $m_1 \cdot m_2 / (4\pi \mu_0 \mu_r d)$ (3) $(m_1 \cdot m_2)^2 / (4\pi \mu_0 \mu_r d^2)$ (4) $(m_1 \cdot m_2)^2 / (4\pi \mu_0 \mu_r d)$	1
46	Eddy currents always tend	(1) To flow in the direction of magnetic flux (2) To flow in planes perpendicular to magnetic flux (3) Can flow any direction (4) None of these	2
47	In a p-channel MOSFET the substrate	(1) Is p-type (2) Is n-type (3) May be p-type or n-type (4) None of these	3
48	In a transistor most of the heating occurs at	(1) Emitter junction (2) Collector junction (3) Anywhere (4) None of these	2
49	In symbols of PNP transistors, and NPN transistors the arrow on the emitter shows the direction of	(1) Holes, electrons (2) Electrons, holes (3) Holes, holes (4) Electrons, electrons	3
50	In squirrel-cage induction motor, if the rotor is open, the rotor	(1) Will make noise (2) Will run at very low speed (3) Will not run (4) Will run at very high speed	3
51	In a capacitor start motor, the capacitor is connected in	(1) In series with main winding (2) In parallel with auxiliary winding (3) In series with auxiliary winding (4) None of these	3
52	Eddy current loss in a transformer depends on	(1) Both voltage and frequency (2) Voltage alone (3) Load current alone (4) Thickness of core	4
53	In a JFET, if the gate voltage V_{gs} is made more than negative, then	(1) Channel conductivity increases (2) Depletion region decreases (3) Channel conductivity decreases (4) Channel current increases	3
54	When a PNP transistor is properly biased, the holes from emitter	(1) Diffuse through the base into the collector region (2) Recombine with the electron base (3) Recombine with the electrons in emitter itself (4) None of these	2
55	The power factor of an ordinary lamp is	(1) Zero (2) Unity (3) Slightly more than unity (4) Slightly less than unity	2



56	Constant voltage source is	(1) Active & bilateral (2) Passive & bilateral (3) Active & unilateral (4) Passive & unilateral	3
57	The maximum efficiency of a half-wave rectifier circuit can be	(1) 37.2% (2) 40.6% (3) 53.9% (4) 81.2%	2
58	A 3-phase, 400 V, 50 Hz, 4-pole induction motor is fed from 3-phase, 400 V supply and runs at 1425 rpm. The frequency of the rotor emf is	(1) 2.5 Hz (2) 50 Hz (3) 48 Hz (4) zero	1
59	If a single phase motor fails to start but gives humming noise, it is because of	(1) High voltage (2) Low voltage (3) Wrong connection (4) Winding may be short circuited	4
60	In an auto-transformer, the voltage ratio V_1/V_2 while $V_1 > V_2$, the fraction transferred inductively is	(1) $V_1/(V_1 + V_2)$ (2) V_2/V_1 (3) $(V_1 - V_2)/(V_1 + V_2)$ (4) $(V_1 - V_2)/V_1$	4
61	A D.C. series motor is running at rated speed without any additional resistance in series. If an additional resistance is placed in series. The speed of the motor	(1) Increases (2) Decreases (3) Remains unchanged (4) Oscillates around rated speed	2
62	The no-load current of a transformer normally varies from	(1) 0-2% (2) 2-5% (3) 5-10% (4) 10-15%	2
63	Which of the following is not the high voltage fuse	(1) H.R.C fuses (2) Cartridge type fuses (3) Liquid type fuses (4) Metal clad type fuses	1
64	If the speed of an alternator is changed from 3000 rpm to 1500 rpm, the emf generated will become	(1) Twice (2) One fourth (3) Half (4) Four times	3
65	The materials having low retentivity are suitable for	(1) Temporary magnets (2) Weak magnets (3) Strong magnets (4) Permanent magnets	2 (1) sit
66	The reluctance of a magnetic circuit of length l m, area of cross-section a m ² and absolute and relative permeability μ_0 and μ_r , respectively is	(1) $\frac{l a}{\mu_0 \mu_r}$ (2) $\frac{l \mu_0 \mu_r}{a}$ (3) $\frac{l}{\mu_0 \mu_r a}$ (4) $\frac{1}{\mu_0 \mu_r l a}$	3
67	When an inductor and capacitor are in series in a.c circuit, the phase angle between voltage drops across them will be	(1) 0° (2) $\pi/2$ radians (3) π radians (4) $\pi/4$ radians	3
68	The electrical energy required to raise the temperature of a given amount of water is 200 kWh. If the heat losses are 20%, the total energy required is	(1) 250 kWh (2) 240 kWh (3) 160 kWh (4) 180 kWh	4180
69	1 kWh is equal to	(1) 735.5 W (2) 36×10^5 W (3) 36×10^5 J (4) 36×10^7 J	2000 x 20
70	The motor used in house hold food mixer is _____ motor	(1) shaded pole (2) reluctance (3) universal (4) hysteresis	3

71	The length of a certain conductor of resistance 100Ω is doubled and its cross-sectional area is halved. Its new resistance is:	4
	(1) 100Ω (2) 200Ω (3) 50Ω (4) 400Ω	
72	The effect of connecting an additional parallel load to an electrical supply source is to increase the	3
	(1) Resistance of the load (2) Voltage of the source (3) Current taken from the source (4) p.d. across the load	
73	A 50 turns circular coil has a radius of 4 cm. The flux density at the centre of the coil when it carries a current of 5A is:	Cancel
	(1) $2.987 \times 10^{-3} T$ (2) $2.564 \times 10^{-3} T$ (3) $3.986 \times 10^{-3} T$ (4) $3.297 \times 10^{-3} T$	
74	The r.m.s voltage for the given voltage waveform $V=200 \sin \omega t + 100 \sin 3\omega t + 50 \sin 5\omega t$ is	1
	(1) 162 V (2) 160 V (3) 350 V (4) 165 V	
75	An electromagnet has an air gap of 4 mm and flux density in the air gap is 1.3 Wb/m^2 . Determine the ampere turns of the gap	1
	(1) 4138 (2) 4150 (3) 4500 (4) 4160	
76	Which of the following transistor amplifier configurations has the highest power gain?	1
	(1) Common base (2) Common collector (3) Common emitter (4) None of these	
77	The field on an induction motor rotor rotates with reference to stator at	4
	(1) Slip speed (2) Rotor speed (3) Very low speed (4) Synchronous speed	
78	As compared to a split phase motor, a capacitor start motor has	1
	(1) Higher starting torque (2) Lower starting torque (3) Higher running torque (4) None of these	
79	A 25 MVA, 11 kV alternator is supplying full load at a power factor of 0.75 lagging. Determine the increase in earning capacity when it is operated at improved power factor of 0.96 lagging	3
	(1) 4.56 MW (2) 5.90 MW (3) 5.25 MW (4) 5.02 MW	
80	The smaller the lagging reactive power drawn by a circuit, its power factor will be	1
	(1) Better (2) Power (3) Unit (4) None of these	
81	In a D.C. machine the armature m.m.f. is always directed along the	2
	(1) Polar axis (2) Brush axis (3) Interpolar axis (4) None of these	
82	An air cored solenoid of length 50 cm has 1000 turns and carries a current of 5A. The flux inside the coil is	2
	(1) 0.0156 T (2) 0.0125 T (3) 0.0134 T (4) 0.0146 T	
83	An alternating voltage $e=200 \sin 314t$ is applied to a device which offers an ohmic resistance of 20Ω to the flow of current in one direction while preventing the flow of current in opposite direction. The form factor for the current over one cycle is	3
	(1) 1.43 (2) 1.47 (3) 1.57 (4) 1.61	
84	The effect of an air gap in a magnetic circuit is to:	1
	(1) Increase the reluctance (2) Reduce the flux density (3) Divide the flux (4) Reduce the magnetomotive force	
85	A commutator in a dc machine can convert	4
	(1) a.c. to d.c. (2) d.c to a.c. (3) Pulsating to d.c. (4) Both (1) & (2)	
86	The principle of statically induced emf is utilized in	3
	(1) Motor (2) Generator (3) Transformer (4) Battery	

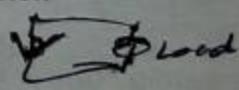
87	The forbidden energy gap for germanium is (1) 0.3e V (2) 3.5e V (3) 0.7e V (4) 1.12e V	3
88	A synchronous motor can run at (1) A leading power factor (2) Unity factor (3) Lagging, leading or unity power factor (4) Zero power factor	3
89	In 3-phase balanced delta connected system, the line currents are (1) 30° behind the respective phase currents (2) 30° ahead the respective phase currents (3) In phase with the respective phase currents (4) None of these	1
90	A resistor of 100 Ω is connected in series with a 50 μ F capacitor to a supply of 200 V, 50 Hz, the power factor for the circuit is (1) 0.86 (2) 0.63 (3) 0.75 (4) 0.92	1
91	A D.C shunt motor has external resistance R_f in the field circuit and R_a in the armature circuit. The starting armature current can be reduced by keeping (1) Maximum R_f and minimum R_a (2) Minimum R_f and minimum R_a (3) Minimum R_f and maximum R_a (4) Maximum R_f and maximum R_a	3
92	A magnet has a pole strength of 5×10^{-3} Wb, its field strength at a distance of 20 cm from the pole in the air is (1) 6.15 N/Wb (2) 7.06 N/Wb (3) 7.916 N/Wb (4) 7.54 N/Wb	3
93	The open circuit test on transformer is performed to obtain (1) Leakage impedances (2) Ohmic losses (3) Hysteresis losses (4) Core losses	4
94	For the protection of <u>steady loads</u> , the fuse should be selected to provide (1) Overload protection (2) Short circuit protection (3) Both (1) & (2) (4) None of these	3
95	In order to find Z_{TH} in Thevenin's theorem (1) All independent voltage sources are short circuited and all independent current sources are open circuited. (2) All independent current sources are short circuited and all independent voltage sources are open circuited. (3) All independent voltage and current sources are short circuited (4) All independent voltage and current sources are open circuited	1
96	The efficiency of a transformer at full load 0.8 p.f. lag is 90%. Its efficiency at full load 0.8 p.f. lead is (1) Less than 90% (2) More than 90% (3) 90% (4) None of these	3
97	Maximum power is transferred from a source to a load when (1) the load resistance is very large (2) the load resistance is very small (3) the load resistance is twice the source resistance (4) the load resistance equals the source resistance	4
98	If <u>copper loss</u> of a transformer at 7/8 th full load is 4900 W, then its full load copper would be (1) 5600 W (2) 6400 W (3) 373 W (4) 429 W	2
99	The reactance of a coil required for a 33 KV, 3-phase transmission system for earthing is----- when the capacitance of each conductor of transmission to earth is $3.8 \mu F$. (1) 234.5 ohms (2) 279.2 ohms (3) 270.5 ohms (4) 210.5 ohms	2
100	A synchronous machine is called a doubly excited machine because (1) it can be overexcited (2) it has two sets of rotor poles (3) both its rotor and stator are excited (4) it needs twice the normal exciting current	3

$Q = 1.21 \text{ eV}$
 $W = 0.725 \text{ eV}$

$R = \sqrt{3} V_L I_L$

$P = VI \cos \phi$

$\frac{5 \times 10^{-3} \times 10}{20 \times 10^{-2}}$



NO resistance difference

162
 32000 ohms

Q. NO	Asst. Mgr. (HR)				UDC General				UDC Accounts				Asst. Mgr. (IT)				AE Electrical				AE Civil				JE Electrical				JE Civil				Accounts Officer				Accountant				SSA				Electrician Gr-II				Law Officer		Draftsman (Civil)		Draftsman (Electrical)		
	KEY Set A	KEY Set B	KEY Set C	KEY Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C	Key Set D	Key Set A	Key Set B	Key Set C
75	2	4	1	3	2	2	2	2	4	3	4	4	2	2	3	1	4	3	4	3	1	2	3	3	1	2	3	1	2	2	1	2	3	1	1	4	2	4	4	1	3	1	3	1	2	2	4	4	1	3					
76	4	3	3	3	3	3	3	3	3	3	1	3	4	1	3	1	0	2	1	3	4	1	1	1	1	3	4	2	3	4	3	3	1	2	2	3	4	3	4	1	4	1	3	1	3	3	1	3	2	4	2	1	3		
77	1	1	3	2	2	2	4	2	2	1	1	4	4	3	1	3	1	3	3	4	4	3	1	1	1	4	3	1	2	3	1	2	1	1	2	2	4	3	3	4	4	3	2	2	3	2	1	2	4	2	1	1			
78	1	3	1	1	2	3	1	4	1	4	2	2	4	2	3	4	2	1	4	2	4	4	1	1	1	3	1	1	2	3	4	4	3	1	1	3	1	1	3	1	1	4	3	1	1	2	1	2	1	1					
79	4	2	2	2	4	2	3	4	4	4	3	1	2	1	4	3	4	3	3	1	4	2	2	4	4	1	0	3	4	3	1	3	3	1	4	2	1	1	1	2	3	3	4	1	1	2	1	2	4	3	4				
80	2	4	4	2	1	3	1	3	2	3	4	1	2	4	3	4	2	3	3	3	1	3	2	3	2	3	1	3	2	2	1	3	1	2	1	3	1	4	1	3	1	4	1	3	1	2	1	2	1	3	4				
81	3	3	3	2	1	4	2	3	4	2	2	3	4	2	3	2	3	4	4	2	1	2	3	0	1	1	3	3	2	1	3	1	2	1	1	1	1	1	3	3	3	2	2	2	2	1	3	1	2	1	1				
82	4	2	2	2	2	4	2	3	4	3	3	1	4	1	2	1	1	4	4	3	2	2	3	3	3	1	1	4	3	4	1	3	3	3	1	1	2	1	2	1	2	1	2	1	4	1	1	4	4	1	4				
83	4	1	1	3	1	1	4	3	3	3	3	4	3	1	2	4	3	1	1	2	3	4	1	0	3	2	1	4	3	1	2	2	3	1	3	3	2	4	1	3	4	3	1	4	4	3	3	3	3	3	3				
84	1	1	4	2	3	2	3	1	2	3	1	3	4	2	1	2	0	1	1	2	4	3	1	2	4	2	3	2	3	2	4	1	1	4	4	3	4	4	3	3	3	2	3	1	1	2	1	4	2	3	3				
85	3	3	2	4	1	2	2	1	3	3	1	1	3	2	3	3	4	3	1	3	2	2	0	3	3	2	4	1	3	2	2	1	3	3	4	1	4	3	3	3	3	2	2	1	1	3	1	4	2	4	4	4			
86	4	2	2	4	4	1	2	1	1	4	4	3	1	2	2	3	1	1	4	3	1	3	3	1	3	3	1	3	2	1	2	3	3	1	3	3	2	1	2	3	3	1	1	2	2	1	3	4	1	1	3	2	3		
87	2	2	2	1	3	2	1	2	1	1	1	4	1	2	3	2	2	3	4	2	2	1	1	1	1	0	1	4	1	4	2	1	4	2	2	1	3	3	1	2	3	3	3	2	3	1	2	4	2	1	1	3			
88	3	2	2	3	1	4	2	3	3	3	1	4	4	4	1	0	2	3	3	3	2	4	1	2	4	1	3	1	1	2	1	1	3	1	1	2	2	1	3	3	3	2	4	2	2	4	3	2	1	1	2	3	3		
89	3	3	4	3	3	1	3	2	4	4	1	3	3	4	2	4	4	4	2	4	1	1	1	3	4	1	4	1	3	1	4	3	3	1	2	3	3	1	0	3	1	1	2	3	1	1	4	3	2	3	2	2	1	1	
90	3	3	2	1	2	2	1	3	1	1	1	1	4	2	3	1	2	4	1	1	3	1	2	3	4	3	2	2	2	2	4	4	2	3	4	1	1	4	2	4	3	4	1	2	2	1	2	1	1	3	4	4			
91	2	3	4	1	3	4	3	2	3	4	1	1	1	3	2	3	1	2	2	1	3	3	2	3	1	1	2	3	1	1	3	1	4	2	2	1	3	1	4	3	3	2	4	1	3	1	4	2	3	3	3	3			
92	4	4	4	4	3	3	3	2	4	3	2	2	1	4	3	1	0	4	1	3	4	3	2	1	3	4	4	3	1	4	4	1	2	3	2	4	4	3	1	4	3	1	2	2	3	1	4	1	3	1	2	4			
93	3	2	3	1	2	1	2	4	1	4	2	3	2	2	4	1	4	2	1	1	2	4	3	4	3	4	3	1	1	3	3	3	1	3	3	4	2	2	1	2	4	1	1	3	4	3	4	3	2	2	2				
94	2	3	2	1	4	3	1	2	4	1	1	3	4	3	4	3	4	3	4	1	2	1	2	4	0	3	4	1	3	1	1	1	1	1	1	3	2	2	1	3	3	2	3	3	1	3	1	2	2	1	2	3	1		
95	4	3	2	4	2	3	3	4	4	1	3	4	4	3	1	1	2	1	1	4	3	3	2	1	1	3	1	1	2	3	2	1	3	2	2	1	3	1	3	3	3	1	2	1	1	2	1	1	2	3	1	1	2	3	1
96	1	3	1	2	2	2	1	1	1	3	4	2	2	2	3	3	4	2	3	1	2	1	4	1	3	4	3	4	1	3	4	2	1	3	4	2	1	3	3	3	1	3	3	4	2	1	2	1	1	3	3	3	3		
97	2	4	1	1	3	4	1	3	4	3	4	2	4	2	2	3	4	1	1	3	3	2	2	2	2	2	2	1	4	1	4	1	4	1	2	1	1	2	1	3	1	1	1	1	1	4	1	1	4	3	4	4			
98	3	3	3	3	2	4	4	2	3	1	1	3	4	3	4	2	2	3	2	4	4	4	2	4	4	4	4	1	X	1	4	1	4	2	3	4	3	1	2	3	4	3	2	2	1	4	1	3	4	1	1	1	1		
99	2	1	2	2	4	1	4	2	1	4	4	1	3	1	4	1	1	1	2	2	2	2	4	3	2	3	4	3	2	3	1	2	3	2	1	1	4	1	4	1	4	1	4	1	2	1	1	2	3	4	1	4	4	4	
100	2	2	4	4	2	3	1	1	3	4	4	3	2	2	3	2	4	1	2	1	4	4	4	3	4	2	4	4	X	2	3	4	3	1	2	1	1	1	1	1	1	2	4	4	3	1	4	1	1	4	3	3	3	4	