Instructions

Duration:

Answer all questions.
 Each question below carries one mark.

Sl. No.	Questions	Answers
1	Which figure is identical to the first?	С
2	Which pattern can be folded to make the cube shown? A B C D	D
3	Which one is the Low Level Language: A. Assembly B. Java C. C++ D. None of The Above	A
4	What do you call a single point on a computer screen: A. Cell B. Element	С

	C. Pixel D. None of The Above	
5	Which of the following relations depict relation between Celsius and Fahrenheit scale?	
	A. $({}^{\circ}C / 5) = ({}^{\circ}F - 32) / 9$ B. $({}^{\circ}C / 9) = ({}^{\circ}F - 32) / 5$ C. $({}^{\circ}C / 32) = ({}^{\circ}F - 9) / 5$ D. None of the above	A
6	Which of the following statements is true for LVDT?	С
	 A. It is a mutual capacitive transducer B. Presence of hysteresis gives high repeatability C. It can measure displacement and pressure D. All of the above 	
7	Directions— (Q. 7 to 11) Below is given a passage followed by several possible inferences which can be drawn from the facts stated in the passage. You have to examine each inference separately in the context of the passage and decide upon its degree of truth of falsity. Now, mark your answer as—	NULL
	(A) if the inference is 'definitely true' i.e., it properly follows from the statement of facts given.	
	(B) if the inference is 'probably true' though not 'definitely true' in the light of the facts given.	
	(C) if the 'data are inadequate', i.e., from the facts given you cannot say whether the inference is likely to be true or false.	
	(D) if the inference is 'probably false', though not 'definitely false' in the light of the facts given.	
	The main benefit to the economy from an active stock market is the ready availability of risk capital for investment in equities through the primary market. For that risk capital be readily available. Investors need to have an easy exit route. A liquid secondary market provides an easy exit route through	

	the active involvement of buyers and sellers. It does not matter whether these buyers and sellers have short or long term investment horizons. Liquidity in the market is enhanced by leveraged players who either borrow to play the market or achieve a similar result through futures contracts whose economic value includes financing costs. Short sellers confer a similar benefit by borrowing stock or achieving the same result through futures contracts.	
8	Nature of activity of the long-term players in the secondary market has significant effect on the health of stock market.	В
9	Players in the primary market generally borrow funds and earn money by quick disposal in the secondary market.	С
10	Active secondary market provides liquidity to the transactions in primary market.	D
11	Passive stock market enhances availability of capital.	A
12	The above symbol denotes A. Capacitor B. Inductor C. Diode D. None of the above	D
13	Direction— (Q. 13-16) In each of the following given questions there is a question followed by two statements I and II are given. You have to find out that the information given in the statements is sufficient to answer or not. Read both the statements. Give Answer— (A) If only statement I is sufficient to answer the question.	D

	(B) If only Statement II is sufficient to answer the question.	
	(C) If either I or II alone is sufficient to answer the question.	
	(D) If both the Statements I and II are sufficient to answer the question.	
	(E) If both the Statements I and II are not sufficient to answer the question.	
	What is the meaning of 'come' in a coded language? Statement - I. The meaning of 'pit na ja' is 'come and go' in that coded language. Statement - II. The meaning of 'na dik sa' is 'you may go' in that coded language.	
14	Who is the tallest amongst M, T, R, K and Q?	C
	Statement - I. T is taller than R, M and Q but shorter than K.	
	Statement – II. R is shorter than T and M but taller than Q.	
15	In which direction is D from P? Statement - I. S is in the South from P which is in the West of D.	A
	Statement - II. P and R is in a straight line and R is in the South from D.	
16	In which month of the year Mohan was born? Statement - I. Mohan was born in the winter.	В
	Statement - II. Mohan was born exactly after 14 months of his sister, birth and she was born in the month of October.	
17	In Human eye, which of the following is responsible for perception of color.	В
	A. Rod cells B. Cone cells C. Fovea D. Cornea	
<u> </u>		

18	Choose the correct antonym of the given word Homogeneous	С
	A. ParsimoniousB. ConsciousnessC. VariegatedD. Loquacious	
19	Which of the following cables would you need to connect a PC to the internet? A. HDMI cable B. VGA cable	С
	C. Ethernet cable D. None of the above	
20	Choose the correct antonym of the given word Candid	В
	A. ShallowB. SecretiveC. VagueD. Anxious	
21		Ans: B
		Weight of metal A = 5 kg.
	5 kg of metal A and 20 kg of metal B are mixed to form an alloy. The percentage of metal A in the alloy is	Total weight of the alloy = $(5 + 20)$ kg = 25 kg.
	A. 10% B. 20% C. 30% D. 40%	Therefore, Required percentage = (
		$\frac{5}{25}$
		$\times 100)\% = 20\%.$

22	Which of the following ports are generally found in modern projectors? A. HGB port B. HDMI port C. Both the above D. None of the above	В
23	8 men can complete a piece of work in 20 days. 8 women can complete the same work in 32 days. In how many days will 5 men and 8 women together complete the same work? A. 10 days B. 16 days C. 18 days D. 20 days	B $1 \text{ man's 1 day's work} = \frac{1}{(20 \times 8)}$ = $\frac{1}{160}$ 1 woman's 1 day's work = $\frac{1}{(32 \times 8)}$ = $\frac{1}{256}$ (5 men + 8 women)'s 1 day's work = ($\frac{5}{160}$

		$+\frac{8}{256}$ $) = \frac{1}{32}$ $+\frac{1}{32}$ $=\frac{1}{16}$ Hence, 5 men and 8 women together can complete the work in 16 days.
24	What is the synonym for the word upright A. honorable B. horizontal C. humble D. supine	A
25	In a computer Operating System, what is the full name of FAT? A. File attribute table B. File allocation table C. Font attribute table D. Format allocation table	В

	T	
26	Which of the following is not application software?	A
	A. Windows 7	
	B. WordPad	
	C. Photoshop D. MS-excel	
	D. WIS-excel	
27	Who is known as the father of Computer Science :	A
	A. Charles Babbage	
	B. Herman Hollerith	
	C. James Gosling	
	D. None of The Above	
28	Subject will be in focus, but objects that are closer or farther away will be out of focus. What does this represent?	В
	A A :: - :	
	A. Aperture B. Shallow Depth of Field	
	C. Deeper Depth of Field	
	D. ISO	
29	What does HDR stand for?	С
	A. Hard Drive Restore	
	B. High Definition Resource	
	C. High Dynamic Range	
	D. none of the above	
30	JPEG stand for	1 marks to all
	A Laint Photographic aveal group	
	A. Joint Photographic excel group B. Joint picture elements group	
	C. Joint poster expert group	
	D. None of the above	
31	DSLR stand for:	A
	A Digital single lens reflex	
	A. Digital single lens reflex.B. Digital standard lens refraction.	
	C. Digital single light recorder.	
L	1	

	D. None of the above.	
32	Which file format is exclusive for web image - Apng Bjpg Cgif Dtiff	A
33	The most appropriate shot size for showing the emotions on a character's face is A. Long shot B. Full shot C. Mid shot D. Close up	D
34	A. The rule of thirds B. The 180 degree rule C. The 30 degree rule D. Head room	В

35	12 V DC battery powers two series resistors: 1 kΩ and 3 kΩ. The voltage drop across 3 kΩ resistor is: A. 3 V B. 6 V C. 9 V D. 12 V	С
36	linear network can be reduced to a voltage source and a series resistor by using: A. Norton theorem B. Thevenin theorem C. Superposition theorem D. Maximum power transfer theorem	В
37	Which of the following is not a media player file format Aflac Bafm Cwm Divf	В
38	Which Windows utility uses points in time that enable you to return your system to a previous date and state? A. System Configuration utility B. Snapshot Manager C. System Restore D. GRUB or LILO	С
39	In Windows Operating System, which key combination is used to minimize all open windows and displays in the screen? A. ALT+M B. SHIFT+M C. CTRL+D D. Windows Key+D	D

51	Primary Cache memory is located in:	В
	A. Hard Disk B. CPU	
	C. Mother boardD. Random Access Memory	
40	876, 962, 421, 679, 752, 321	С
	A. 962 B. 876 C. 679 D. 321	
41	I_2	В
	I_1	
	$I \bigcirc 1\Omega \lessapprox 2\Omega$	
	Consider the circuit diagram above with the DC current source.	
	For the next four problems (41 - 44), assume that $I = 3A$ in the above circuit.	
	The currents in the two branches are	
	A. $I_1 = 1A, I_2 = 2A$ B. $I_1 = 2A, I_2 = 1A$ C. $I_1 = 1.5A, I_2 = 1.5A$ D. None of the above	
42	For the same circuit above, the voltage across the 2Ω resistor is equal to	В
	A. 1V	

	B. 2V C. 3V D. None of the above	
43	For the same circuit above, the voltage across the 1Ω resistor is equal to A. 1V B. 2V C. 3V D. None of the above	В
44	For the same circuit above, the power dissipated by the 1Ω resistor is equal to $A. \ 1W \\ B. \ 2W \\ C. \ 3W \\ D. \ None of the above$	D
45	V_s I_1 I_2 I_1 I_2 I_3 I_4 I_5 I_6 I_8	D
	In the above circuit, assume that $V_{\rm S}=9V$. Use this for the next four questions (45 -48) . Consider the circuit diagram above with the DC voltage source. Then $A.\ \ I_1=\ 1A, I_2=\ 2A$	
	B. $I_1 = 3A, I_2 = 1A$ C. $I_1 = 2A, I_2 = 2A$	

	D. None of the above	
46	For the same circuit above, the voltage across the 2Ω resistor is equal to	В
47	For the same circuit above, the voltage across the 1Ω resistor is equal to	A
48	For the same circuit above, the power dissipated by the 3Ω is equal to	D
49	The above symbol denotes A. Capacitor B. Inductor C. Diode D. None of the above	C

50	What is Attach Decay Sustain Release is related to:	D
	A. Wave phaseB. Funsamental FrequenciesC. PreampD. Wave Envelope	

PART B

Instructions:
Answer the following questions.
Both the questions are compulsory

- Q1. You have arranged the place for the talk of two Japanese professors at IIT Hyderabad. Imagine, if you are the person in-charge of coordinating this seminar, prepare a checklist of activities for the event. For example: Writing email to other institute heads inviting their faculty and students to attend the seminar. List out at least **ten** tasks to be performed (excluding the given example). You can mention specific details for each task if required.
- **Q2**. Write a letter to the Head of an Institution inviting their faculty and students inviting them to attend the seminar by the two Japanese Professors to be held in IIT Hyderabad. Assume that the letter will be sent by Dean (Academics) as hardcopy. You can assume and include other data relevant to the event.