M.Tech. (Electronics & Communication Engineering & ECE)
(VLSI Design) Entrance Test, 2022

1. Find $f(200)$ if $f(x) = \begin{vmatrix} {}^{x}C_0 & {}^{x}C_1 & {}^{x+1}C_1 \\ 2\,{}^{x}C_1 & 2\,{}^{x}C_2 & 2\,{}^{(x+1)}C_2 \\ 6\,{}^{x}C_2 & 6\,{}^{x}C_3 & 6\,{}^{(x+1)}C_3 \end{vmatrix}$:

(A) 200 (B) – 200

(C) 0 (D) – 2001

2. Which of the following is eigen vector for the matrix $\begin{bmatrix} 1 & 4 \\ 2 & -1 \end{bmatrix}$?

(A) $\begin{bmatrix} 1 \\ 3 \end{bmatrix}$ (B) $\begin{bmatrix} -1 \\ 1 \end{bmatrix}$

(C) $\begin{bmatrix} 3 \\ 1 \end{bmatrix}$ (D) $\begin{bmatrix} -2 \\ -2 \end{bmatrix}$

3. Area bounded by the curve $y^2 = x$ and the line $x = 3$ is.....square units.

(A) $2\sqrt{3}$ (B) $4\sqrt{3}$

(C) $6\sqrt{3}$ (D) $8\sqrt{3}$

4. Which of the following functions would have only odd powers of x in its Taylor series expansion about the point $x = 0$?

(A) $\sin(x^3)$ (B) $\sin(x^2)$

(C) $\cos(x^3)$ (D) $\cos(x^2)$

5. The particular integral of $(D^3 - 4D^2)y = 6$ is :

(A) x^2 (B) $\frac{3}{4}x^2$

(C) $-\frac{3}{4}x^2$ (D) $-\frac{x^2}{4}$

6. The second order partial differential equation

$$3x^2\frac{\partial^2 u}{\partial x^2} - 6xy\frac{\partial^2 u}{\partial x \partial y} + 3y^2\frac{\partial^2 u}{\partial y^2} - 5\frac{\partial u}{\partial x} + 7\frac{\partial u}{\partial x} = 6x^2 y$$

is :

(A) Elliptical equation

(B) Parabolic equation

(C) Hyperbolic equation

(D) Depends on value of x and y

7. Evaluate $\int_0^1 \int_0^{\sqrt{1-x^2}} \frac{dxdy}{\sqrt{1-x^2-y^2}}$.

(A) $\frac{\pi}{4}$ (B) 0

(C) $\frac{\pi}{2}$ (D) 1

8. The principal value of log $(-i)$ is.....

(A) $\log 1 + \frac{\pi}{2}i$ (B) $-\log 1 - \frac{\pi}{2}i$

(C) $-\log 1 + \frac{\pi}{2}i$ (D) $\log 1 - \frac{\pi}{2}i$

9. Find the residue corresponding to the poles of $\frac{1}{(9z^2-4)^3}$.

(A) $\frac{1}{2}, -\frac{1}{2}$ (B) 1, –1

(C) $\frac{1}{4}, -\frac{1}{4}$ (D) None of these

10. Evaluate $\int_C \frac{z-4}{z^2+4z+8} dz$, where C is a circle $|z| = 2$.

(A) 0 (B) πi

(C) $2\pi i$ (D) None of these

11. If six people sit around a circular table, the probability that two specified persons always sit side by side is :

(A) $\frac{14}{15}$ (B) $\frac{11}{15}$

(C) $\frac{2}{5}$ (D) $\frac{4}{15}$

12. If X(n, p) follows a binomial distribution with $n = 6$ such that 9P[X = 4] = P[X = 2], then P = ?

(A) $\frac{1}{3}$ (B) $\frac{1}{2}$

(C) 1 (D) $\frac{1}{4}$

13. The standard deviation of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 is M, then the standard deviation of 101, 102, 103, 104,.....and 111 is :

(A) M (B) 100 + M

(C) 100 – M (D) M – 100

14. The absolute error in bisection method is :

(A) 2^n (B) $\frac{1}{2^n}|b-a|$

(C) $\frac{1}{|b-a|}$ (D) $|b-a|2^n$

15. Taylor series expansion of $3\sin x + 2\cos x$ is :

(A) $2+3x-x^2-\frac{x^3}{2}+....$ (B) $2-3x+x^2-\frac{x^3}{2}+....$

(C) $2+3x+x^2+\frac{x^3}{2}+....$ (D) $2-3x-x^2+\frac{x^3}{2}+....$

16. To a highly inductive circuit, a small capacitance is added in series. The angle between voltage and current will :

(A) increase (B) decrease

(C) remain nearly the same (D) become indeterminant

17. The value of current at resonance in a series RLC circuit is affected by the value of :

(A) R (B) C

(C) L (D) All of these

18. The ramp voltage $v(t)$ = 100 volts, is applied to an RC differentiating circuit with R = 5 kΩ and C = 4 μF. The max. output is :

(A) 0.2 volt (B) 2.0 volts

(C) 10.0 volts (D) 50.0 volts

19. A two port network device is defined by the following pair of equations : $I_1 = 2V_1 + V_2$ and $I_2 = 2V_1 + V_2$. Its impedance parameters (Z_{11}, Z_{12}, Z_{21}, Z_{22}) are given by :

(A) (2, 1, 1, 1) (B) (1, –1, –1, 2)

(C) (1, 1, 1, 2) (D) (2, –1, –1, 1)

20. A circuit with resistor, capacitor and inductor in series is resonant of f_o Hz. If all the component values are now doubled, the new resonant frequency is :

(A) $2f_o$ (B) still f_o

(C) $f_o/2$ (D) $f_o/4$

21. The power in a series RLC circuit will be half of that at resonance when the magnitude of the current is equal to :

(A) $\frac{V}{2R}$ (B) $\frac{V}{\sqrt{3}R}$

(C) $\frac{V}{\sqrt{2}R}$ (D) $\frac{\sqrt{2}V}{R}$

22. For a 2-port symmetrical bilateral network, if transmission parameters A = 3 Ω and B = 1 Ω, then the value of the parameter C is :

(A) 3 Ω (B) 8 Ω

(C) 10 Ω (D) 12 Ω

23. With the usual notations, a two-port resistive network satisfies the condition A = D = 2/3, B = 4/3 C. Z_{11} of the network is :

(A) 5/3 (B) 4/3

(C) 2/3 (D) 1/3

24. When conductivity is minimum, then hole concentration is :

(A) 7.2×10^{11} cm^{-3} (B) 1.8×10^{13} cm^{-3}

(C) 1.44×10^{11} cm^{-3} (D) 9×10^{13} cm^{-3}

25. A Zener diode works on the principle of :

(A) Tunnelling of charge carriers across the junction

(B) Thermionic emission

(C) Diffusion of charge carriers across the junction

(D) Hopping of charge carriers across the junction

26. Silicon diode is less suited for low voltage rectifier operation, because :

(A) It can withstand high temperature

(B) Constant output with low internal resistance

(C) Its cut-in voltage is high

(D) Its breakdown voltage is high

27. Avalanche photodiodes are preferred over PIN diodes in optical communication systems because of :

(A) Speed of operation

(B) Higher sensitivity

(C) Larger bandwidth

(D) Larger power handling capacity

28. If V_{BE} = 0.5V, then collector current I_C is :

(A) 7.75 μA (B) 1.6 μA

(C) 0.16 μA (D) 77.5 μA

29. In a common emitter amplifier, the unbypassed emitter resistance provides :

(A) Voltage shunt feedback (B) Current series feedback

(C) Negative voltage feedback (D) Positive current feedback

30. In a transistor push pull amplifier, there is :

(A) No d.c. present in output (B) No distortion in output

(C) No even harmonics in output (D) Both (A) and (C)

31. If $\alpha = 0.995$, $I_E = 10$ mA and $I_{CO} = 0.5$ μA, then I_{CEO} will be :

(A) 25 μA (B) 100 μA

(C) 10.1 μA (D) 10.5 μA

32. If the differential and common mode gains of a differential amplifier are 50 and 0.2 respectively, then CMRR will be :

(A) 100 V (B) 49.8 V

(C) 8.7 V (D) 10.7 V

33. Value of total collector *c*/*n* in a CB circuit is :

(A) $I_c = \alpha I_e$ (B) $I_c = \alpha I_e + I_{CO}$

(C) $I_c = \alpha I_e - I_{CO}$ (D) $I_c = \beta I_e$

34. As the collector current I_c increases, the value of f_T :

(A) increases

(B) decreases

(C) remains constant

(D) decreases to a minimum and then increases

35. For an amplifier, the FET is operated in :

(A) VVR region (B) Pinch off region

(C) Avalanche breakdown region (D) None of these

36. Which power amplifier has the maximum distortion ?

(A) Class A (B) Class B

(C) Class C (D) Class AB

37. Epitaxial growth in IC chip :

(A) may be *n*-type only

(B) may be *p*-type only

(C) involves growth from liquid phase

(D) involves growth from gas phase

38. The MOSFET switch in its ON state may be considered equivalent to :

(A) Resistor (B) Inductor

(C) Capacitor (D) Battery

39. Mobility of an electron in a conductor is expressed in terms of :

(A) $\frac{cm^2}{V\text{-}s}$ (B) $\frac{cm}{V\text{-}s}$

(C) $\frac{cm^2}{V}$ (D) $\frac{cm^2}{s}$

40. The threshold voltage of an *n*-channel MOSFET can be increased by :

(A) increasing channel doping concentration

(B) reducing channel length

(C) reducing gate oxide thickness

(D) decreasing channel doping concentration.

41. With 10ºC rise in temperature across it the reverse saturation current in a semiconductor will :

(A) be halved (B) remain same

(C) be doubled (D) be tripled

42. A two stage amplifier with negative feedback has an overshoot when damping factor k is :

(A) less than unity (B) greater than unity

(C) zero (D) unity

43. In class A direct amplifier, maximum dissipation capacity of the transistor is 2.5 watt. When delivering maximum ac power; dc power in the load is :

(A) 5 watts (B) 2.5 watts

(C) 8 watts (D) .625 watt

44. The bandwidth of RF tuned amplifier is dependent on Q-factor of the :

(A) tuned o/p of the circuit

(B) tuned i/p of the circuit

(C) operating point

(D) o/p and i/p circuits as well as quiescent operating point

45. If an amplifier with the gain of –1000 and feedback of $b = -0.1$ had a gain change of 20% due to temperature, then change in gain of the feedback amplifier would be :

(A) 10% (B) 5%

(C) 0.2% (D) 0.01%

46. Op amp used as a tuned amplifier has the tuned circuit connected :

(A) across i/p (B) across series impedance at the i/p

(C) across feedback impedance Z_f (D) across o/p

47. If a differential amplifier has a differential gain of 20000, CMRR = 80 dB, then the common mode gain is :

(A) 2 (B) 1

(C) 1/2 (D) 0

48. Zener diodes are used primarily as :

(A) rectifier (B) voltage regulator

(C) oscillator (D) amplifiers

49. In the saturation region of transistor is :

(A) $V_{CE} = V_{CC}$ (B) $V_{CE} = 0$

(C) $V_{CE} = 5V$ (D) V_{CE} = Infinity

50. Collector to base biasing circuit is practical circuit implementation of :

(A) Trans-resistance amplifier (B) Voltage amplifier

(C) Trans-conductance amplifier (D) Current amplifier

51. An op-amp with slew rate of %V/μs. The largest sine wave output possible at a frequency of 1 MHz is :

(A) 10π volts (B) 5 volts

(C) $5/\pi$ volts (D) $5/2\pi$ volts

52. An op-amp is open-loop gain of 10^5 and open loop upper cut-off frequency of 10 Hz. If this op-amp is connected as an amplifier with a closed loop gain at 100, then the new upper cut-off frequency will be :

(A) 10 Hz (B) 100 Hz

(C) 10 kHz (D) 100 kHz

53. Boolean expression $\bar{X}Y\bar{Z} + \overline{XYZ} + XY\bar{Z} + X\bar{Y}Z + XYZ$ can be simplified to :

(A) $\bar{X}Z + \bar{X}Z + YZ$ (B) $XZ + \bar{Y}Z + Y\bar{Z}$

(C) $\bar{X}Y + YZ + XZ$ (D) $\overline{XY} + Y\bar{Z} + \bar{X}Z$

54. The basic gates are :

(A) AND and NAND (B) AND, OR and NOT

(C) OR and NOR (D) NAND and NOR

55. The code used while solving K-Map :

(A) Excess-3 (B) Grey

(C) Binary (D) BCD

56. If X and Y logic inputs are available and their complements $\bar{X}$ and $\bar{Y}$ are not available, minimum number of two-input NAND required to implement (X XOR Y) :

(A) 5 (B) 4

(C) 6 (D) 7

57. The matrix expression for the given k-map is :

CD \ AB	00	01	11	00
00		1	1	
01		1	x	
11	1	1	x	x
10	1		x	x

(A) $\bar{C}\bar{B} + BD + CD$ (B) $AB + C\bar{B} + B\bar{C}$

(C) $C\bar{B} + AC + B\bar{C}$ (D) $\bar{C}B + CD + C\bar{B}$

58. The minimum number of the NAND gates required to implement the expression $(A + A\bar{B} + A\bar{B}C)$ is equal to :

(A) 1 (B) 0

(C) 4 (D) 7

59. Name the two bit comparator out of the given options :

(A) NAND gate (B) X-OR gate

(C) NOR gate (D) X-NOR gate

60. A carry look ahead adder is frequently used for the addition because it :

(A) is faster (B) is more accurate

(C) uses fewer gates (D) costs less

61. Which is the fastest logic family ?

(A) DTL (B) TTL

(C) CMOS (D) ECL

62. A 4-bit present table UP counter has preset input 0101. The preset operation takes place as soon as the counter becomes maximum 1111. The modulus of the counter is :

(A) 5 (B) 10

(C) 11 (D) 15

63. A memory system has a total of 8 memory chips, each with 12 address lines and 4 data lines. The total size of the memory system is :

(A) 6 Kbytes (B) 32 Kbytes

(C) 48 Kbytes (D) 64 Kbytes

64. A mod-2 counter followed by mod-5 counter is :

(A) Same as mod 5 counter followed by mod-2 counter

(B) Decade counter

(C) Mod-7 counter

(D) None of the above

65. Data can be changed from spatial code to temporal code and vice versa by using :

(A) ADCs and DACs (B) shift registers

(C) Synchronous counter (D) timers

66. In standard TTL, totem pole stage refers to :

(A) Multi-emitter input stage (B) Phase shifter

(C) Output buffer (D) Open collector o/p stage

67. The instruction DAA :

(A) Converts binary to BCD (B) Converts BCD to binary

(C) Decrements accumulator (D) None of these

68. When a subroutine is called, then address of the instruction following the CALL is stored in/on the :

(A) Stack pointer (B) Accumulator

(C) Program counter (D) Stack

69. The Laplace transform of $f(t)$ is F(s). Given $F(s) = \frac{\omega}{s^2 + \omega^2}$, then the final value of $f(t)$ is :

(A) Infinity (B) Zero

(C) One (D) None of these

70. Sinusoidal signal $x(t) = 4\cos\left(200t + \frac{\pi}{6}\right)$ is passed through a square law device defined by the input-output relation $y(t) = x^2(t)$. The DC component in the signal is :

(A) 3.46 (B) 4

(C) 2.83 (D) 8

71. Energy of a signal $nu(n)$ is :

(A) A^2 (B) $A^2/2$

(C) $A^2/4$ (D) 0

72. Energy of the signal $n.u(n)$ is :

(A) $\frac{n(n+1)}{2}$ (B) $\frac{n(n+1)(2n+1)}{6}$

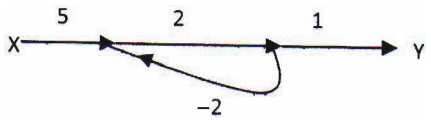
(C) $\left(\frac{n.(n+1)}{2}\right)^2$ (D) ∞

73. The difference equation representation for a system is
$y(n) - 2y(n-1) + y(n-2) = x(n) - x(n-1)$.
If $y(n) = 0$ for $n < 0$ and $x(n) = \delta(n)$, then $y(2)$ will be :

(A) 2 (B) –2

(C) –1 (D) 0

74. In the signal flow graph of the figure y/x equals :



(A) 3 (B) 5/2

(C) 2 (D) None of these

75. For a feedback system of type 2, the steady state error for a ramp input is :

(A) Infinite (B) Constant

(C) Zero (D) Indeterminate

76. Consider the unity feedback control system with open loop transfer function $G(s) = \frac{K}{s(s+1)}$. The steady state error of the system due to a unit step input is :

(A) Zero (B) K

(C) $\frac{1}{K}$ (D) ∞

77. The position and velocity error coefficients for the systems of transfer function $G(s) = \frac{50}{(1+0.1s)(1+2s)}$ respectively are :

(A) Zero and zero (B) 50 and infinity

(C) 50 and zero (D) Zero and infinity

78. The transfer function of a system is $\frac{10}{(1+s)}$. Then operated as unity feedback system, the steady state error to a unit step i/p will be :

(A) Zero (B) 1/11

(C) 10 (D) ∞

79. The characteristic polynomial of a system is $q(s) = 2s^5 + s^4 + 4s^3 + 2s^2 + 2s + 1$. The sysetm is :

(A) Stable (B) Oscillatory

(C) Unstable (D) Marginally stable

80. For making an unstable system stable :

(A) Gain of the system should be increased

(B) Gain of the system should be decreased

(C) Number of zero to the loop T.F. should be increased

(D) Number of poles to the loop T.F should be increased

81. Sinusoidal oscillators are :

(A) Stable (B) Unstable

(C) Marginally stable (D) Conditionally stable

82. If the open loop gain of the system is doubled, the gain margin :

(A) is not affected (B) gets doubled

(C) becomes half (D) becomes one-fourth

83. The gain margin of the given transfer function $G(s) = \frac{0.75}{(s+1)(s+2)}$ will be :

(A) 4 dB (B) 8 dB

(C) 12 dB (D) 16 dB

84. If DSB is employed, bandwidth of the modulated signal is :

(A) 5 kHz (B) 10 kHz

(C) 20 kHz (D) None of these

85. Let W be the BW of message signal $m(t)$. AM will be recovered if :

(A) $f_c > W$ (B) $f_c > 2W$

(C) $f_c > 3W$ (D) $f_c > 4W$

86. If minimum range is to be doubled in a radar, then the peak power has to be increased by a factor of :

(A) Thirty two (B) Sixteen

(C) Eight (D) Four

87. An FM signal is being broadcast in the 88-108 MHz band having a carrier swing of 125 kHz. The modulation index is :

(A) 100% (B) 83%

(C) 67% (D) 80%

88. Equalizing pulses in TV composite video signal are placed during :

(A) Horizontal blanking pulses (B) Video blanking period

(C) Serrations (D) Horizontal retrace

89. A 1 kw carrier is modulated to a length of 60%. The total power in the modulated carrier is :

(A) 1 kW (B) 1.18 kW

(C) 1.06 kW (D) 1.6 kW

90. Number of stations accommodated in a 100 kHz bandwidth with highest modulating frequency of 5 kHz :

(A) 5 (B) 10

(C) 15 (D) 20

91. Receiver sensitivity of a receiver with BW = 200 kHz, noise figure = 4, S/N = 20 dB, will be :

(A) 2 μV (B) 4 μV

(C) 3 μV (D) 5 μV

92. Nyquist sampling rate for the signal $g(t) = 10 \cos (50\pi t)\cos^2 (150\pi t)$, where t is I seconds, is :

(A) 150 sps (B) 200 sps

(C) 300 sps (D) 350 sps

93. Frequency shift keying is mostly used in :

(A) Radio transmission (B) Telegraphy

(C) Telephony (D) None of these

94. The reflection coefficient on a line is $0.2\text{-}45^{\circ}$. The SWR of this line is :

(A) 0.8 (B) 1.1

(C) 1.2 (D) 1.5

95. The dominant mode in a rectangular wave guide is TE_0, because this mode has :

(A) No attenuation (B) The highest cut off wavelength

(C) No magnetic field component (D) No cut off

96. For the dominant mode, in a rectangular wave guide with breadth 10 cm, the guide wavelength for a signal of 2.5 GHz will be :

(A) 12 cm (B) 15 cm

(C) 18 cm (D) 20 cm

97. In order to radiate 100 W from a circular loop of circumference equal to 0.1 λ, the current required will be :

(A) 5 A (B) 10 A

(C) 20 A (D) 40 A

98. An antenna of input resistance 73 ohm is connected to a 50 ohm line. If losses are ignored, then its efficiency will be nearly :

(A) 0.19 (B) 0.81

(C) 0.97 (D) 1.19

99. A non-magnetic medium has an intrinsic impedance $360 < 30^{\circ}\ \Omega$. Then the dielectric constant is :

(A) 1.634 (B) 1.234

(C) 0.936 (D) 0.548

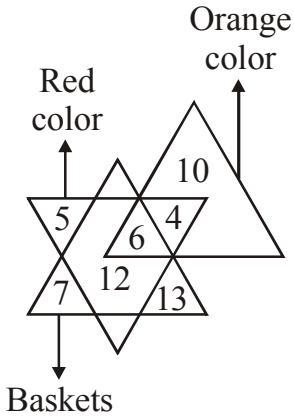
100. In a broad side array of 20 isotropic radiators, equally spaced at the distance of $\lambda/2$, the beam width between first null is :

(A) 51.3° (B) 11.46°

(C) 102.6° (D) 22.9°

GENERAL APTITUDE - II

101. How many baskets are neither of red color nor of orange color ?



(A) 20 (B) 18

(C) 05 (D) 06

102. Directions : Study the following question carefully and choose the right option :

1. Trillion
2. Thousand
3. Billion
4. Hundred
5. Million

(A) 1, 2, 4, 3, 5 (B) 1, 5, 3, 2, 4

(C) 4, 2, 3, 5, 1 (D) 4, 2, 5, 3, 1

103. In a row of children, Divya is 7th from the left and Vijay is 9th from the right. When they interchange their places among themselves, Divya becomes 18th From the left. Then what will be Vijay"™s present position from the right ?

(A) 6th (B) 16th

(C) 20th (D) 24th

104. G is the husband of M. M is the sister-in-law of A. A is the son of O and B is the wife of O. How is G related to O ?

(A) Son-in-law (B) Brother

(C) Cousin (D) Son

105. **Directions** : In the question below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows/ follow from the given statements, disregarding commonly known facts.

Statements :

Some printers are scanners.

Some scanners are microphones.

Many microphones are speakers.

Conclusions :

I. Some printers are speakers.

II. Not a single printer is speaker.

(A) If only conclusion I follow

(B) If only conclusion II follow

(C) If neither conclusion I nor conclusion II follows

(D) If either conclusion I or conclusion II follows

106. Directions : Read the given instructions carefully and answer the question below :

P + Q states that P is 2 m East Of Q

P ^ Q states that P is 2 m South Of Q

P & Q states that P is 4 m East Of Q

P – Q states that P is 2 m West Of Q

P / Q states that P is 2 m North Of Q

Read the following information carefully and answer the question

A – B ^ C & D + E, F + B

What is the shortest distance between D and B ?

(A) 13 m (B) 4 √5 m

(C) 3 √6 m (D) 2 √5 m

107. Directions : Read the following information carefully and answer the question given below :

In a certain code language,

'lavish lifestyle high desires' is coded as "@16f $36i @9d $16g"

'humanity seldom exhibit mercy' is coded as "@25h #16f @16g $16e"

'opinion matters heart felt' is coded as "#9g $25g %9e $9d"

'push yourself achieve goals' is coded as "&9d $25h $9g %9e"

Find the code for "spectacular" ?

(A) @49k (B) %49g

(C) @49i (D) %49k

108. Complete the series :

50 59 75 100 ?

(A) 120

(B) 125

(C) 130

(D) 136

109. **Directions** : Read the following information carefully and answer the question given below.

8 persons from A to H sit around a square table such that 2 persons sit in the middle of each of the sides. The persons sitting on one side of the table face the persons sitting exactly opposite to them on the opposite side of table.

A sits on the immediate right of E. G faces the one who is second to the left of B. 3 persons sit between A and G. Two persons sit between F and D (when counted from one side only), who is adjacent to E. Only one person sits between G and C (when counted from one side only). A is not adjacent to F.

How many persons sit between A and H when counted from the left of A ?

(A) 1

(B) 2

(C) 3

(D) 4

110. Air : Ubiquitous :: Fire : ?

(A) Explosion

(B) Oxygen

(C) Water

(D) Luminosity

GENERAL ENGLISH-II

111. Fill the blank with correct phrasal verb :

The meeting was so boring that I…….

(A) dozed on (B) dozed about

(C) dozed off (D) dozed in

112. Given below are sentences which have been presented in a random order. Arrange the following sentences in a proper sequence to form a meaningful paragraph and identify the correct sequence.

A. This is because your witness will be called upon to testify in court if the will is ever challenged.

B. Lawyers advise people to use witnesses who are younger than they and are likely to outlive them.

C. You can make a will as simple as you want. You will need to sign the document in the presence of two witnesses, who will then have to put the signature on it.

D. It helps if a doctor is a witness or the document is signed in his presence.

E. This is because he could be called upon to testify to the stability of your mental condition when you drew up the will.

(A) ABCDE (B) CBADE

(C) DCBAE (D) CDBAE

113. Fill in the blank :

Luckily, I made it to the station…….time to catch the last train.

(A) for (B) in

(C) at (D) to

114. **Direction** : The given sentence has been broken up into four different parts. The error, if any, will be in any *one* part of the sentence. Select the option which contains the part of the sentence which has an error (spelling, grammatical or contextual) :

He said that it was the first time/that such a trick/is discovered.

(A) He said that it was the first time

(B) that such a trick

(C) is discovered.

(D) No error

115. **Direction** : The following question has two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits in the context of the sentence :

The idea of a single large PSB mimicking the Life Insurance Corporation of India model in the insurance space may be considered, but such an entity could create serious distortions, such as…….hazard stemming from the too-big-to-…….syndrome, with the next biggest bank being on-fourth its size.

(A) serious, drown

(B) mortal, shut

(C) moral, fail

(D) factual, protect

116. Find the correctly spelt word :

(A) Interegnum

(B) Intregnum

(C) Interregnum

(D) Interregnim

117. **Direction** : Identify the words that are contextually similar to the phrase given in bold and mark that as your answer. The options do not need to be correct grammatically :

Creativity is something that anybody who is remotely original has to guard very fiercely and passionately because people just want you to be run-of-the- mill.

(A) Remarkable (B) Expensive

(C) Unlicensed (D) Ordinary

118. Out of the four alternatives choose the one which can be substituted for the given words/sentence in the question :

To issue a thunderous verbal attack :

(A) Languish (B) Animate

(C) Fulminate (D) Invigorate

119. Find the synonym of Rescind :

(A) Reunite (B) Repeal

(C) Reserve (D) Reproach

120. Find the antonym of Ebullient :

(A) Eccentric

(B) Sanguine

(C) Spiritless

(D) Macabre