

ENTRANCE EXAMINATION FOR ADMISSION, MAY 2010.

M.B.A. (BANKING TECHNOLOGY)

COURSE CODE : 381

Register Number :



Signature of the Invigilator
(with date)

COURSE CODE : 381

Time : 2 Hours

Max : 400 Marks

Instructions to Candidates :

1. Write your Register Number within the box provided on the top of this page and fill in the page 1 of the answer sheet using pen.
2. Do not write your name anywhere in this booklet or answer sheet. Violation of this entails disqualification.
3. Read each question carefully and shade the relevant answer (A) or (B) or (C) or (D) in the relevant box of the ANSWER SHEET using HB pencil.
4. Avoid blind guessing. A wrong answer will fetch you -1 mark and the correct answer will fetch 4 marks.
5. Do not write anything in the question paper. Use the white sheets attached at the end for rough works.
6. Do not open the question paper until the start signal is given.
7. Do not attempt to answer after stop signal is given. Any such attempt will disqualify your candidature.
8. On stop signal, keep the question paper and the answer sheet on your table and wait for the invigilator to collect them.
9. Use of Calculators, Tables, etc. are prohibited.

Find Error (Q 13-18) :

13. The shop assistance was very helpful and I was able to buy what I wanted.
(A) assistance (B) was (C) helpful (D) wanted
14. Have you wrote a reply to your grandmother to thank her for the present?
(A) wrote (B) to (C) to thank (D) present
15. My father told me don't stay out late at night with my friends.
(A) told (B) don't (C) out (D) with
16. We have to do it ourself as there are not enough workers to finish it on time.
(A) ourself (B) as (C) enough (D) on
17. Amy sits besides me in class while Sita is behind me
(A) sits (B) besides (C) while (D) behind
18. We are grateful for Mrs Halimah for helping us to win the inter-school debate.
(A) grateful (B) for (C) helping (D) inter-school

Comprehension :

During the decade of 1880-1890 it was becoming increasingly evident that the factors which had brought about the existence of two separate suffrage institutions were steadily diminishing in importance. The National Woman Suffrage Association had been launched by the intellectually irrepressible Elizabeth Cady Stanton and the ever catholic Susan B. Anthony. Both were ready to work with any-one, whatever their views on other matters, as long as they wholeheartedly espoused woman suffrage. Consequently in its earlier years the National was both aggressive and unorthodox. It damned both Republicans and Democrats who brushed the suffrage question aside. It was willing to take up the cudgels for distressed women whatever their circumstances, be they "fallen women," divorce cases, or underpaid seamstresses. The American Woman Suffrage Association, by contrast, took its tone and outlook from a New England which had turned its back on those fiery days when abolitionists, men and women alike, had stood up to angry mobs. Its advocacy of worthy causes was highly selective. Lucy Stone was not interested in trade unionism and wished to keep the suffrage cause untarnished by concern with divorce or "the social evil." The very epitome of the American's attitude was its most distinguished convert and leader, Julia Ward Howe - erudite, honoured lay preacher, the revered author of "The Battle Hymn of the Republic," who cast a highly desirable aura of prestige and propriety over the women's cause. It was not that Mrs. Howe in herself made suffrage respectable; she was a symbol of the forces that were drawing the suffrage movement into the camp of decorum. American society was becoming rapidly polarized. The middle class was learning to identify organized labor with social turmoil. A succession of strikes

ENGLISH :

Synonyms :

1. Baste
(A) attack (B) bake (C) stitch (D) scrub
2. GRIPE
(A) complaint (B) ripe (C) seize (D) smile
3. Ingenuous
(A) intelligent (B) stupid (C) straightforward (D) genius
4. Rudimentary
(A) rude (B) basic (C) powerful (D) odd
5. Collate
(A) dissemble (B) describe (C) ascribe (D) assemble
6. Latent
(A) buried (B) visible (C) cruel (D) display

Antonyms :

7. Terminate
(A) depart (B) prevent (C) begin (D) hasten
8. Protract
(A) abbreviate (B) distract (C) reject (D) stabilize
9. Volubility
(A) shabbiness (B) brevity (C) disparity (D) subtlety
10. Late-Blooming
(A) flourishing (B) blatant (C) punctilious (D) precocious
11. Hone
(A) broaden (B) twist (C) dull (D) weld
12. Phlegmatic
(A) dogmatic (B) ardent (C) haphazard (D) self-assured

during the depression of 1873-1878, in textiles, mining, and railroads, culminated in the Great Railroad Strike of 1877 involving nearly 100,000 workers from the Atlantic coast to the Mississippi valley; they did not help to reassure women taught by press and pulpit to identify any type of militancy with radicalism. Nor was this trend allayed by the hysteria whipped up over the Molly Maguire trials for secret conspiracy among Pennsylvania coal miners, or the alleged communistic influences at work in such growing organizations as the Knights of Labor and the A. F. of L. The existence of a small number of socialists was used to smear all organized labor with the taint of "anarchism." The crowning touch took place during the widespread agitation for an eight hour day in 1886 when a bomb, thrown by a hand unknown to this day into a radical meeting in Chicago's Haymarket Square, touched off a nationwide wave of panic. The steady trend of the suffrage movement toward the conservative and the conventional during the last twenty years of the nineteenth century must be viewed in this setting, in order to avoid the misconception that a few conservative women took it over, through their own superior ability and the passivity of the former militants. Even the latter were changing their views, judging by their actions. It was one thing to challenge the proprieties at the Centennial of 1876; ten years later it would have been inconceivable even to the women who took part in the demonstration. Susan Anthony herself would have thought twice about flouting Federal election laws and going to jail in an era which witnessed the Haymarket hysteria.

19. The author's primary purpose in the passage is to
 - (A) contrast Susan B. Anthony with Julia Ward Howe
 - (B) recount the advances in the suffrage movement from 1880 to 1890
 - (C) account for the changes occurring in the suffrage movement from 1880 to 1890
 - (D) explain the growing divisions within the women's movement

20. Which of the following statements is most compatible with the early principles of the National as described in the passage?
 - (A) Advocates of suffrage should maintain their distance from socially embarrassing "allies."
 - (B) Marital and economic issues are inappropriate concerns for the suffrage movement.
 - (C) Propriety of behavior should characterize representatives of the women's cause.
 - (D) The concerns of all afflicted women are the concerns of the suffrage movement.

21. The passage singles out Julia Ward Howe as an example of

(A) a venerated figurehead	(B) an overzealous advocate
(C) a heterodox thinker	(D) an ordained cleric

22. Which of the following titles best describes the content of the passage?
- (A) Trade Unionism and the Suffrage Movement
 (B) Egalitarianism at the Close of the Nineteenth Century
 (C) Rifts in the Woman Suffrage Movement
 (D) Diminution of Radicalism in the Woman Suffrage Movement
23. The author's attitude toward the public reaction to the Molly Maguire trials is that the reaction was
- (A) appropriate (B) disorganized
 (C) overwrought (D) necessary
24. As used in the passage, the phrase "ever catholic" refers primarily to Anthony's
- (A) deep religious beliefs (B) inclusive sympathies
 (C) willingness to work (D) wholehearted feminism
25. The author stresses the growing antiradical bias of the American middle class during the decade 1880-1890 in order to
- (A) question a trend that proved destructive to the suffrage movement
 (B) explain the unexpected emergence of an able body of conservative leaders
 (C) refute the contention that Anthony was unchanged by her experiences
 (D) correct a misapprehension about changes in the suffrage movement

MATHEMATICS :

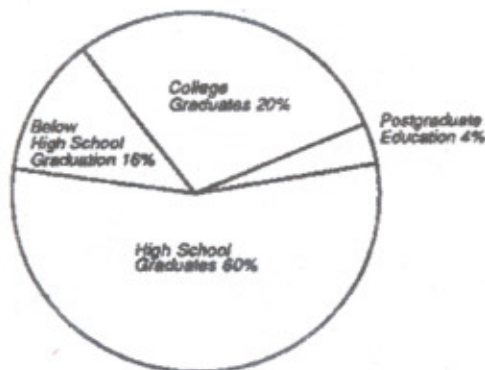
26. Find the remainder when the polynomial $x^4 - 3x^2 + 7x - 10$ is divided by $x - 2$
- (A) 8 (B) -20 (C) 18 (D) 0
27. If p and q are the roots of the equation $x^2 - bx + c = 0$, then what is the equation if the roots are $(pq + p + q)$ and $(pq - p - q)$?
- (A) $x^2 - 2cx + (c^2 - b^2) = 0$ (B) $x^2 - 2bx + (b^2 + c^2) = 0$
 (C) $bcx^2 - 2(b + c)x + c^2 = 0$ (D) $x^2 + 2bx - (c^2 - b^2) = 0$
28. If both 11^2 and 3^3 are factors of the number $a * 4^3 * 6^2 * 13^{11}$, then what is the smallest possible value of a ?
- (A) 121 (B) 3267 (C) 363 (D) 33

29. What is the value of M and N respectively? If $M39048458N$ is divisible by 8 and 11; Where M and N are single digit integers?
- (A) 7, 8 (B) 8, 6 (C) 6, 4 (D) 5, 4
30. When two dice are thrown simultaneously, what is the probability that the sum of the two numbers that turn up is less than 11?
- (A) $5/6$ (B) $11/12$ (C) $1/6$ (D) $1/12$
31. A man bets on number 16 on a roulette wheel 14 times and losses each time. On the 15th span he does a quick calculation and finds out that the number 12 had appeared twice in the 14 spans and is therefore, unable to decide whether to bet on 16 or 12 in the 15th span. Which will give him the best chance and what are the odds of winning on the bet that he takes? (Roulette has numbers 1 to 36)
- (A) 16; 22 : 14 (B) 12; 72 : 1
(C) 12; 7 : 1 (D) Either; 35 : 1
32. An experiment succeeds twice as often as it fails. What is the probability that in the next 5 trials there will be four successes?
- (A) 0 (B) $(2/3)^4$
(C) $5 * ((2/3)^4) * (1/3)$ (D) $((2/3)^4) * (1/3)$
33. Obtain the sum of all positive integers up to 1000, which are divisible by 5 and not divisible by 2.
- (A) 10050 (B) 5050 (C) 5000 (D) 50000
34. Given $A = 2^{65}$ and $B = (2^{64} + 2^{63} + 2^{62} + \dots + 2^0)$
- (A) B is 2^{64} larger than A (B) A and B are equal
(C) B is larger than A by 1 (D) A is larger than B by 1
35. Of the 200 candidates who were interviewed for a position at a call center, 100 had a two-wheeler. 70 had a credit card and 140 had a mobile phone. 40 of them had both, a two-wheeler and a credit card, 30 had both, a credit card and a mobile phone and 60 had both, a two wheeler and mobile phone and 10 had all three. How many candidates had none of the three?
- (A) 0 (B) 20 (C) 10 (D) 18

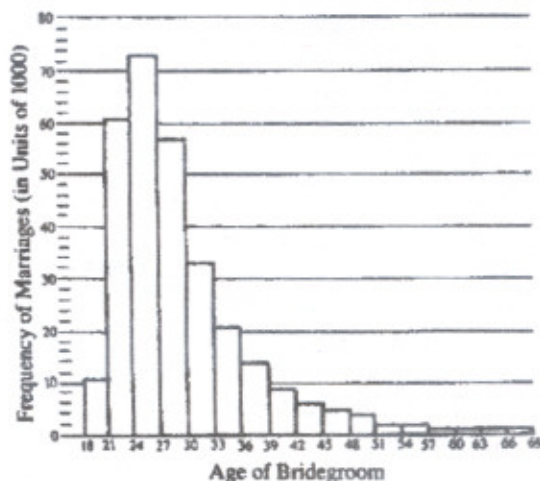
36. Which of the following has the largest numerical value?
 (A) $8/0.8$ (B) $0.8/8$
 (C) $(0.8)^2$ (D) $\sqrt{0.8}$
37. If $(x+2)^2 = 9$ and $(y+3)^2 = 25$, then the maximum value of x/y is
 (A) $1/2$ (B) $5/2$ (C) $5/8$ (D) $1/8$
38. For what values of 'm' is $y = 0$, if $y = x^2 + (2m+1)x + m^2 - 1$? x is a real number.
 (A) $m \geq -2$ (B) $m < 0$ (C) $m = 0$ (D) $m \geq -1.25$
39. A stairway 10 ft high is such that each step accounts for half a foot upward and one-foot forward. What distance will an ant travel if it starts from ground level to reach the top of the stairway?
 (A) 30 ft (B) 33 ft (C) 10 ft (D) 29 ft
40. If ABC is a right angle triangle with angle A = 90 and $2s = a + b + c$, where $a > b > c$ where notations have their usual meanings, then which one of the following is correct?
 (A) $(s-b)(s-c) > s(s-a)$ (B) $(s-a)(s-c) > s(s-b)$
 (C) $(s-a)(s-b) < s(s-c)$ (D) $4s(s-a)(s-b)(s-c) = bc$
41. If the sum of the interior angles of a regular polygon measures up to 1440 degrees, how many sides does the polygon have?
 (A) 10 sides (B) 8 sides (C) 12 sides (D) 9 sides
42. The set of points where $f(x) = x/1 + |x|$ is differentiable is
 (A) $(-\infty, 0) \cup (0, \infty)$ (B) $(-\infty, -1) \cup (-1, \infty)$
 (C) $(-\infty, \infty)$ (D) $(0, \infty)$
43. Differentiation of $\log x \cdot \sin x$
 (A) $\sin x \cdot 1/x$ (B) $\cos x \cdot \sin x + \log x$
 (C) $\sin x \cdot 1/x + \log x \cdot \cos x$ (D) $\cos x \cdot (-1/x) + 1/\log x$
44. $y = \sin x$ then evaluate $dy/dx =$ then what is Integration of?
 (A) $\sin x$ (B) $\cos x$ (C) $-\sin x$ (D) $-\cos x$
45. $y = \sin x + \cos x - 5a$ what is dy/dx
 (A) $\cos x - \sin x$ (B) $\cos x + \sin x - 5$
 (C) $\sin x - \sec x$ (D) $\sin x + \cos x + 5$

Question 46-50 :

HIGHEST LEVEL OF EDUCATION OF BRIDE-GROOMS IN 24-27 AGE GROUP



DISTRIBUTION OF 302,000 MARRIAGES ACCORDING TO AGE OF BRIDEGROOM



46. If drawn accurately, how many degrees should there be in the central angle of the sector indicating the number of college graduates?
 - (A) 20
 - (B) 40
 - (C) 60
 - (D) 72
47. In one million marriages, how many thousand (to the nearest thousand) bridegrooms would you expect to be between the ages of 51 and 60?
 - (A) 5
 - (B) 15
 - (C) 16
 - (D) 17
48. Which of the following best represents the percentage of men who married at age 24 or younger?
 - (A) 7
 - (B) 10
 - (C) 24
 - (D) 32
49. Which of the following can be inferred from the graphs?
 - I. Almost three times as many marriages occur when bridegrooms are in the 21-24 age bracket as occur when they are aged 33-36.
 - II. Most bridegrooms are high school graduates.
 - III. About 2920 bridegrooms aged 24-27 receive postgraduate education.
 - (A) I only
 - (B) II only
 - (C) III only
 - (D) I and III
50. Approximately what percentage of the men who married were between the ages of 21 and 27 years?
 - (A) 7
 - (B) 13
 - (C) 26
 - (D) 44

51. All of the following are examples of real security and privacy risks EXCEPT:
- | | |
|-------------|--------------------|
| (A) Hackers | (B) Spam |
| (C) Viruses | (D) Identity theft |
52. Outlook Express is a
- | | |
|-------------------|----------------------|
| (A) E-Mail Client | (B) Scheduler |
| (C) Address Book | (D) All of the above |
53. Which of the following is the latest version of Microsoft Word?
- | | |
|-------------|-------------|
| (A) Word 97 | (B) Word 98 |
| (C) Word ME | (D) Word XP |
54. Which of the following statements in regard to Directories is false?
- (A) Directories can exist inside directories
- (B) The root directory is always at the highest level
- (C) Directories with files can be deleted
- (D) Directories cannot be renamed
55. FAT stands for
- | | |
|------------------------------|-------------------------|
| (A) File Accommodation Table | (B) File Access Tape |
| (C) File Allocation Table | (D) File Activity Table |
56. VIRUS stands for
- (A) Very Important Resource Under Search
- (B) Virtual Information Resource Under Seize
- (C) Verify Interchange Result Until Source
- (D) Very Important Record User Searched
57. C language is available for which of the following operating system
- | | |
|----------|----------------------|
| (A) DOS | (B) Windows |
| (C) Unix | (D) All of the above |
58. Which of the following symbol is used to denote a pre-processor statement?
- | | | | |
|-------|-------|-------|-------|
| (A) ! | (B) # | (C) ~ | (D) ; |
|-------|-------|-------|-------|
59. Which of the following is a Scalar Data type
- | | | | |
|-----------|-----------|-----------|-------------|
| (A) Float | (B) Union | (C) Array | (D) Pointer |
|-----------|-----------|-----------|-------------|

60. Memory is made up of
 (A) Set of wires (B) Set of circuits
 (C) Large number of cells (D) All of the above
61. Algorithm and Flow chart help us to
 (A) Know the memory capacity
 (B) Identify the base of a number system
 (C) Direct the output to a printer
 (D) Specify the problem completely and clearly
62. The equality operator is represented by
 (A) := (B) .EQ. (C) = (D) ==
63. The output of `printf("%u", -1)` is
 (A) -1 (B) minimum int value
 (C) maximum int value (D) error message
64. Which operator in C is called a ternary operator
 (A) if..then (B) ++ (C) ?: (D) ()
65. Identify the invalid pointer arithmetic
 (A) Addition of float value to a pointer
 (B) Comparison of pointers that do not point to the element of the same array
 (C) Subtracting an integer from a pointer
 (D) Assigning the value 0 to a pointer variable
66. _____ is the first program run on a computer when the computer boots up
 (A) System software (B) Operating system
 (C) Application software (D) All of the above
67. Multiprogramming systems
 (A) Are easier to develop than single programming systems
 (B) Execute each job faster
 (C) Execute more jobs in the same time period
 (D) Are used only on large mainframe computers

68. An organized collection of logically related data is known as
 (A) Data (B) Meta data
 (C) Database (D) Data versus Information
69. In databases, Locking level is also called as
 (A) Granularity (B) S lock (C) X lock (D) Dead lock
70. Programs stored in ROM are called
 (A) Hardware (B) Firmware
 (C) Software (D) All of the above
71. Which technology is used in a CDROM Drive?
 (A) Mechanical (B) Electromechanical
 (C) Optical (D) Fiber Optical
72. MTBF means
 (A) Mean Time Between Failure (B) Master Time Buffer Feature
 (C) Most Treated Buffer Time (D) Master Test Board Feature
73. Time taken to move from one cylinder of a hdd to another is called
 (A) Transfer rate (B) Average seek time
 (C) Latency (D) Roundtrip time
74. Which of the following statements is/are true?
 (A) Cache Memories are bigger than RAM
 (B) Cache Memories are smaller than RAM
 (C) ROM is faster than RAM
 (D) Information in ROM can be written by users
75. A process known as _____ is used by large retailers to study trends
 (A) Data mining (B) Data selection
 (C) POS (D) Data conversion
76. The phase velocity of an electromagnetic wave propagating in a hollow metallic rectangular waveguide in the TE_{10} mode is
 (A) greater than the velocity of light in free space
 (B) equal to its group velocity
 (C) less than the velocity of light in free space
 (D) none of the above

77. A device with input $x(t)$ and output $y(t)$ is characterized by : $y(t) = x^2(t)$. An FM signal with frequency deviation of 90 kHz and modulating signal bandwidth of 5 kHz is applied to this device. The bandwidth of the output signal is
- (A) 370 kHz (B) 190 kHz
(C) 380 kHz (D) none of the above
78. Consider the following statements S1 and S2.
- S1 : The threshold voltage (V_T) of a MOS capacitor decreases with increase in gate oxide thickness
- S2 : The threshold voltage (V_T) of a MOS capacitor decreases with increase in substrate doping concentration
- Which one of the following is correct?
- (A) S1 is FALSE and S2 is TRUE (B) Both S1 and S2 are TRUE
(C) Both S1 and S2 are FALSE (D) S1 is TRUE and S2 is FALSE
79. The impurity commonly used for realizing the base region of a silicon n-p-n transistor is
- (A) Gallium (B) Indium (C) Boron (D) Lithium
80. Despite the presence or negative feedback, control system still have problems of instability because the
- (A) components used have nonlinearities
(B) dynamic equations of the subsystems are not known exactly
(C) mathematical analysis involves approximations
(D) all of the above
81. The insulation strength of an EHV transmission line is mainly governed by
- (A) load power factor (B) switching over-voltages
(C) harmonics (D) all of the above
82. The output voltage waveform of a three-phase square-wave inverter contains
- (A) only even harmonics (B) both odd and even harmonics
(C) only odd harmonics (D) only sinusoidal harmonics
83. Two wattmeters, which are connected to measure the total power on a three-phase system supplying a balanced load, read 10.5 kW and -2.5 kW, respectively. The total power and the power factor, respectively, are
- (A) 13.0 kW, 0.334 (B) 13.0 kW, 0.684
(C) 8.0 kW, 0.334 (D) None of the above

84. A dc potentiometer is designed to measure up to about 2 V with a slide wire of 800 mm. A standard cell of emf 1.18 V obtains balance at 600 mm. A test cell is seen to obtain balance at 680 mm. The emf of the test cell is
 (A) 1.00 V (B) 1.34 V
 (C) 1.50 V (D) None of the above
85. Total instantaneous power supplied by a 3-phase ac supply to a balanced R-L load is
 (A) Zero (B) Constant
 (C) Variable (D) Pulsating with zero average
86. Which one of the following is derived unit (NOT a basic unit) in SI system?
 (A) Candela (B) Coulomb (C) Kelvin (D) Joules
87. International temperature scale in the range 0-630°C is defined by means of a
 (A) mercury pressure spring thermometer
 (B) platinum-platinum. 10% rhodium thermocouple
 (C) total radiation pyrometer
 (D) none of the above
88. A second order feedback system is found to be oscillating with a high frequency. The oscillations can be reduced by
 (A) increasing the proportional action (B) increasing the integral action
 (C) increasing the derivative action (D) any of the above methods
89. Two copper-constantan thermocouples are connected such that the two constantan wires are joined together. The two copper wires are connected to the input of a low noise chopper stabilized differential amplifier having a gain of 1000. One of the thermocouple junctions is immersed in a flask containing ice and water in equal proportion. The other thermocouple is at a temperature T. If the output of the amplifier is 2.050 V, the temperature T is
 (A) 205°C (B) 51.25°C
 (C) 50°C (D) None of the above
90. The refractive index of the core of an optical fiber is n_1 and that of the cladding is n_2 . If $(n_1 - n_2) = \Delta n$, then the fiber can be made single mode with numerical aperture unchanged by
 (A) reducing core diameter and increasing Δn
 (B) reducing both core diameter and Δn
 (C) reducing Δn alone
 (D) reducing core diameter alone

91. Who is the founder of Oracle Corporation
(A) Andrew S Grove (B) Lars Ellison
(C) Marc Andreesson (D) None of the above
92. Macromedia is a name of a company related with
(A) Software (B) Peripherals
(C) Services (D) All of the above
93. What is the address given to a computer connected to a network called?
(A) Host Address (B) IP Address
(C) Network Address (D) All of the above
94. Direct X is
(A) A type of Activex Control (B) An audio peripheral device
(C) A software for graphic hardware (D) None of the above
95. When you purchase a product over a Mobile phone, the transaction is called
(A) B2A transaction (B) B2B transaction
(C) B2C transaction (D) None of the above
96. Who is the present NASSCOM chairman?
(A) Ramadorai (B) Ganesh Natrajan
(C) Som Mittal (D) K.V. Kamath
97. Which is the state below which was the first to propose 20 percent reservation in public and private housing projects in its draft policy of July 2007?
(A) Gujarat (B) Tamilnadu (C) Maharastra (D) Punjab
98. Who is the 13th Finance commission chairman?
(A) Vijay Khelkar (B) C.N. Rangarajan
(C) P. Chidambaram (D) Montek Singh Ahluwalia
99. Which Indian bank currently has maximum number of foreign branches?
(A) State Bank of India (B) Bank of Baroda
(C) ICICI Bank (D) HDFC Bank
100. Who was the Satyam Computers chief financial officer resigned when the company surfaced serious financial fraud?
(A) Ramalinga Raju (B) Ram Mynampati
(C) Srinivas Vadalamani (D) Ramaraju