

**MAH MCA CET 2017 QUESTION PAPER**

- Q. 1 Value of  $\sin x / (\operatorname{cosec} x + \cot x)$  evaluate identical  
(a)  $\cot x + 1$  (c)  $1 - \cos x$   
(b)  $\cos x + \cot x$  (d)  $\cos^2 x + \cot^2 x$
- Q. 2 On driving to Delhi to Noida a person will be stopped by each of three policemen who controls the traffic at three different places is 0.60. What is the probability that none of policeman will stop the person?  
(a) 0.04 (c) 0.064  
(b) 0.6 (d) 0.4
- Q. 3 Two events are said to be a complementary if  
(a) Joint probability of two events equals to 1  
(b) Sum of probability is equals to 1  
(c) They are disjoint and probability sums to 1  
(d) They are independent events with equal probability
- Q. 4 Graph of solution to  $dy/dx = -x/y$   
(a) Straight line (c) parabola  
(b) Circle (d) Hyperbola
- Q. 5  $A = \{1, 3, 5\}$   $B = \{2, 3\}$ , which relation is true  
(a) A is subset B (c)  $A \times B = B \times A$   
(b) B is subset C (d)  $A \times B \neq B \times A$
- Q. 6 Standard deviation of 3, 5, 2, 7, 8  
(a) 3.42 (c) 3.84  
(b) 2.84 (d) 4.68
- Q. 7 Upper part of the tree broken by wind make an angle of  $60^\circ$  with ground and horizontal distance from root of the tree to the point where the top of the tree meets the ground is 10m height of the tree before breaking?  
(a) 43.20 (c) 39.50  
(b) 20 (d) 37.30

- Q. 8 Length of largest pencil that can be kept in a compass box of  $12\text{cm} \times 9\text{cm} \times 8\text{cm}$ ?  
 (a) 15cm (c) 27cm  
 (b) 13cm (d) 17cm
- Q. 9 A square of area  $x^2 - 10x + 25$  has perimeter  
 (a)  $4x - 20$  (c)  $2x$   
 (b)  $2x - 10$  (d)  $4x$
- Q. 10 Value of  $x$ :  $\log_3 [\log_2 (\log_3 x)] = 1$   
 (a) 5678 (c) 5768  
 (b) 6651 (d) 6561
- Q. 11 Length of major axis of ellipse  $16x^2 + 5y^2 = 400$   
 (a) 10 (c) 5  
 (b)  $8\sqrt{5}$  (d)  $10\sqrt{5}$
- Q. 12 Order and Degree of differential equation  $y'' + y^5 = 2x^3$   
 (a) Order 2, degree 1 (c) Order 2, degree 5  
 (b) Order 5, degree 3 (d) Order 2, degree 3
- Q. 13 Equation of circle whose center is at point  $(-8, 2)$  and passes through a point  $(4, -6)$   
 (a)  $x^2 + y^2 + 8x - 12y - 156 = 0$   
 (b)  $x^2 + y^2 + 8x + 12y - 156 = 0$   
 (c)  $x^2 + y^2 + 16x - 4y - 140 = 0$   
 (d)  $x^2 + y^2 - 16x + 4y - 140 = 0$
- Q. 14 A is a mother of F, F is married to G. K is the only brother of G. R is the father of K. M is the daughter of G. If L is grandfather of M. How L is related to A?  
 (a) Husband (c) Brother-in-law  
 (b) son (d) Wife
- Q. 15 A is mother of F, F is married to G. K is the only Brother of G. R is the father of K. How is F related to S?  
 (a) Daughter (c) Daughter-in-law  
 (b) Brother (d) Brother-in-law
- Q. 16 Solution of differential equation  $x + y \frac{dy}{dx} = \sec(x^2 + y^2)$   
 (a)  $\sin(x^2 + y^2) = 2x + c$  (c)  $\sec(x^2 + y^2) = 2x + c$   
 (b)  $\sec^2(x^2 + y^2) = 2x + c$  (d)  $\cos(x^2 + y^2) = 2x + c$

- Q.17 Dinesh made a 90 miles sales trip for the first half of distance he averaged 45 miles per hour for last half he drove at 60 miles per hour. What was the total time in hours for trip?  
(a)  $1\frac{3}{4}$  (b)  $1\frac{1}{2}$  (c)  $1\frac{1}{4}$  (d) 2

(Q . 18-20) A,B,C,D,E and F , lives on 6 different floors 1 to 6.Each of the work at different companies .Casio ,Vogue ,Dell, Puma ,IBM ,Lakme. Not necessary in same order. The one who works for Lakme lives on floor -3 ,only one person lives between A and one who works for Lakme .B lives immediately above E ,Neither B nor one who works for Dell lives on floor no.4. The one works for Vogue lives immediately above C. The number of people between C and F is same as that between the one who works for Vogue and one works for Dell. Only 3 people live between D and one who works for Casio. the one who works Puma does not lives on lowest floor

- Q.18 Which company does E works?  
(a) Dell (c) Casio  
(b) Vogue (d) Puma

- Q.19 Who works for IBM?  
(a) B (b) F (c) C (d) E

- Q. 20 How many people above F ?  
(a) 3 (b) 2 (c) 1 (d) none

- Q.21 Binary system has power?  
(a)2 (b) 10 (c) 4 (d)252

- Q.22 Symbol for single line comment in C  
(a)<!-- (b) !! (c) # (d) //

- Q.23 Refer to the rules and guidelines that should be followed for using software  
(a) Utility (c) Programs  
(b)Procedures (d) Rules

- Q.24 Hexadecimal letters A through F are used for decimal equivalent value of  
(a) 11 through 17 (c) 1 through 6  
(b)10 through 15 (d)9 through 14

- Q. 25 Smallest unit of information of computer can understand and process is  
(a)kb (c)bit  
(b)digit (d)byte

- Q.26 Part of CPU that instruct the bus unit to read unit stored at certain memory address is  
(a)write back  
(b)Decode unit  
(c)Pretech Unit  
(d)Bus Device
- Q.27 Left most position with a given binary number  
(a)LSB (c)MSD  
(b)MSB (d)LSD
- Q.28 Multi-Programming of computer increase  
(a)Storage (c)CPU utilization  
(b)Cost (d) Memory
- Q.29 Real time system are used in Programming  
(a)Program development  
(b)Super Computer  
(c)used in main frame  
(d)none of these
- Q.30 Unit that transfer input to output  
(a)CPU (c)Ram chip  
(b)Bus chip (d) Motherboard
- Q.31 Symbols represents a block of code in  
(a)<---code here>  
(b)[---code here ]  
(c){---code here )  
(d)[---code here )
- Q.32 Bytes can represent any number between 0 and ----  
(a)255 (b)1024 (c) 2 (d) 256
- Q.33 In which standard library file of C function printf() is defined  
(a)stdlib.h  
(b)stdio.h  
(c)stdoutput.h  
(d)stdout.h
- Q.34 Storage device includeall except  
(a)RAM (c)DVD drive  
(b)Recodable CD (d)Hard drive

- Q.35 CPU 's'ALU contains  
(a)Register  
(b)Secondary storage system  
(c)RAM space  
(d)Byte space
- Q.36 Number of instructions CPU can fetch and process data and instructions in one second ?  
(a)Frequency rate (c) Bus rate  
(b)Cycle rate (d)Clock cycle
- Q.37 -----Chips holds the program (sequence of instructions) and data that CPU is processing  
(a) RO (c)Flash  
(b)Card (d)RAM
- Q.38 Memory that stores date,time and calendar is  
(a)Flash memory (C)CMOS  
(b)ROM (d)RAM
- Q.39 Group of wires that transfer data in system are  
(a)System Bus (c)CMOS  
(b)Clock (d)BUS
- Q.40 Device that translate data and program that human can understand into from computer can process  
(a)Output (c)Tablet  
(b)Input (d)Solid state
- Q.41 Decimal equivalent of 111110  
(a)64 (b)62 (c)126 (d)256
- Q.42 Primary use of Operating system  
(a)Managing Resources  
(b)provide utilities  
(c)Command Resources  
(d)Be user friendly
- Q.43 Improves Hard disk performance of acting as temporary high speed holding area device and CPU  
(a)Defile decomposition  
(b)RAID  
(c)Disk Caching  
(d)File compression

Q.44 Correct Sequence of Mathematical Operators

- (a) Modulus Multiplication Substraction
- (b) Addition Modulus Substraction
- (c) Modulus Multiplication Division
- (d) Addition Modulus Division

Q.45 Word similar to CRACK

- |            |           |
|------------|-----------|
| (a) Broken | (c) Sound |
| (b) Split  | (d) Lucid |