ANNUAL EXAMINATION 2020

(Only for Regular Students)

Centre No. 135 ***Centre Name- Disha College, Raipur (C.G.)***
Class-BCA-I, II(New and old course), III **Subject- Bridge Course**
Paper Name- Bridge Course
Time- 3 hrs. **Max M.-50 Min M.- 17**

Note:-Attempt any two parts from each unit. All carry equal marks.

UNIT-I

Q1 To resolve $\frac{2x-3}{x^2+7x+12}$ into partial fraction.

Q2 In an A.P. the sum of 30 terms is 1635. Its last term is 98,then find first term and common difference

Q3 Evaluate the determinant : $A=\begin{vmatrix} 1 & 2 & 3 \\ 2 & 4 & 4 \\ 3 & 6 & 5 \end{vmatrix}$

UNIT-II

Q1 Find the value of $(x^2 + 2a)^5$ with the help of binomial theorem.

Q2 $^nC_{r-1} + {}^nC_r = {}^{n+1}C_r$

Q3 How many different words can be made by the word CHHATTISGARH ?

UNIT-III

Q1 If $tan\theta = \frac{3}{4}$,then find the values of sinθ and secθ.

Q2 Find the value of $sin30^0 + cos60^0 + tan45^0 + tan135^0$

Q3 The angle of elevation of the top of a tower of a point on the ground is 30° .If on walking on 20 meters towards the tower ,the angle of elevation becomes 60° ,then find the height of tower.

UNIT-IV

Q1 Find the locus of a point so that the join of (-5,1) and (3,2) subtends a right angle at the moving point.

Q2 Find out the gradient of the line passing through the points, (3, -2) and (-6, -5).

Q3 Find the obtuse angle between the lines x – 2y + 3 = 0, 3x + y -1 = 0

UNIT-V

Q1 Calculate the arithmetic mean for the following table.

Class Interval	0-20	20-40	40-60	60-80	80-100
Frequency	2	7	10	3	3

Q2 The scores of batsman in ten innings are 38,70,48,34,42,55,63,46,54,44. Find the mean deviation about the median.

Q3 Find the variance and standard deviation for the following data:

65,68,58,44,48,45,60,62,60,50

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