COCHIN UNIVERSITY OF SCIECNCE AND TECHNOLOGY

NOTIFICATION

ADMISSION 2020-2021

Admission to B.Tech/M.Sc (Five year integrated) in Photonics and Integrated M.Sc in Science (Five year) Programmes of CUSAT for the academic year 2020 - 2021 will be done on the basis of marks obtained by the candidates for Physics, Chemistry and Mathematics/Biology for their Plus Two/PUC programmes.

1. The marks obtained by the candidates will be normalized for the purpose of preparing rank list. The standardization procedure published by Commissioner of Entrance Examination; Govt. of Kerala for KEAM 2020 will be utilized for normalizing marks obtained by the candidates in 12th Standard. The procedure in this connection is explained in Normalization Procedure (see Appendix).

   For B.Tech and M.Sc (Five year integrated) in Photonics, marks obtained in Physics, Chemistry and Mathematics will be utilized for normalization.

   For Integrated M. Sc in Science (Five year) Programme, marks obtained in Physics, Chemistry and Mathematics/Biology (Mathematics or Biology, whichever is greater, for students who studied both the subjects) will be considered for normalization.

2. Procedure for preparation of rank lists based on normalized score including criteria for tie breaking.

   a. Only those candidates who have submitted their marks through admission portal before the stipulated date/last date will be considered for ranking.

   b. Candidates securing minimum eligibility as prescribed in the Prospectus 2020 shall alone be included in the rank list of B.Tech/M.Sc (Five year integrated) in Photonics and Integrated M.Sc in Science (Five year) programmes.

   c. All KSC and KST candidates who have passed the qualifying examination will be included the rank list.

   d. Candidates applied for B.Tech and Integrated M.Sc. Programmes are required to furnish the marks obtained in individual subjects Mathematics, Physics, Chemistry, English and Biology (if applicable), Total Marks obtained in 12th Standard examination, the Exam Board concerned and the year of passing.

   e. In case of tie in the normalized marks, the following steps will be used for tie breaking. For breaking a tie, first use the marks of Mathematics. If tie continues then use Marks in Physics, then marks in Chemistry, then combined marks of Mathematics/Biology & Physics, then Mathematics/Biology & Chemistry, then Physics & Chemistry. If the tie still continues, use total marks obtained in Plus Two examination. In case a tie still continues, use marks obtained in English. In case of a further tie, date of births will be considered for tie breaking. Alphabetical order of the name may be considered for tie breaking in case tie still exists.

3. Details regarding admission to Postgraduate (except M.Tech), LLB and B.Voc programmes will be published separately.

Vinod Kumar P. P
Director
Directorate of Admissions

APPENDIX-I

NORMALISATION PROCEDURE

Normalisation of marks in the qualifying examination in respect of the subjects considered for ranking purposes is the process of making the marks obtained by students from streams other than Kerala Higher Secondary, in the subjects concerned, comparable to that of the Kerala Higher Secondary stream. The marks in respect of candidates who have come from the Kerala Higher Secondary stream will not be subjected to any Normalization. The marks obtained by such candidates in the subjects considered will be taken as such for ranking purposes.

The normalization process has to be applied to each subject relevant for admission. The subjects relevant for admission to various B.Tech courses are Mathematics, Physics and Chemistry. The Normalisation of marks of candidates of other streams would be carried out by the steps given below.

Stage I: Consider a candidate of any other stream *os*, (may be CBSE/CISCE/Other State Board etc), who had passed the Plus Two Examination with Mathematics, Physics and Chemistry. Let the score of the candidate (applied for admission at CUSAT) in Mathematics be X_o.

Normalisation of marks in Mathematics: Let the average mark of all students who have taken the examination in Mathematics, along with the candidate, in the particular year, in the OTHER stream and who have passed in the subject be M_o. Let the standard Deviation of marks of students who have taken the examination along with the candidate in the particular year in the Other stream and who have passed the Examination, be S_o [Standard deviation is a measure of the extend of variation in the marks of students who have taken the examination in the particular year in the Other stream and who have passed the Examination and is computed as $\sqrt{\frac{\sum_s (X_{os}-M_o)^2}{n}}$ where X_{os} is the mark of a student, M_o the average mark of the students who have passed in the subject and n, the number of candidates who have passed in the subject. The notation ^{P} denotes the summation taken over all students who have passed in the subject]. Based on the mean and standard deviation of marks, an index of the relative performance of the candidate in the other stream is computed as $\left(\frac{X_o-M_o}{S_o}\right)$.

Stage II: Let the average mark and Standard Deviation of marks of all students who have taken the examination in Mathematics, in Kerala Higher Secondary stream (h), in the particular year and who have passed in the subject be M_h and S_h respectively. Let Y_{oh} denote the equivalent mark in Mathematics, which the candidate considered under the OTHER stream, should get in the Kerala Higher Secondary stream, in order to get the same index of performance that the candidate got in the OTHER stream. If so, the Index of performance of this candidate in Mathematics in the Kerala Higher Secondary stream may be computed as $\frac{Y_{oh}-M_h}{S_h}$.

Stage III: Since Y_{oh} is determined so as to retain the same index of performance, the two indices representing the relative performance of the candidate in

Other stream and Kerala Higher Secondary Streams are equal. So, the two values $\frac{Y_{oh}-M_h}{S_h}$ and $\frac{X_o-M_o}{S_o}$ can be equated. This equation leads to the formula:

$$Y_{oh} = M_h + S_h\left(\frac{X_o - M_o}{S_o}\right).$$

This gives the normalised marks of the candidate of the OTHER stream in Mathematics.

Stage IV: The Normalised marks for Physics and Chemistry are also determined in the manner described in Pre-paras. This completes the process of Normalization.

REGISTRAR