# SIX-MONTH CERTIFICATE COURSE IN DATA SCIENCE

COURSE DURATION - SIX MONTHS

ORGANIZED BY

### INDIAN ASSOCIATION FOR PRODUCTIVITY, QUALITY & RELIABILITY

in collaboration with

WEST BENGAL STATE UNIVERSITY



Venue

Institute for Inspiration & Self Development (IISD) IB- 200/1, Sector-III, Salt Lake Kolkata – 700 106

### Admission Requirements:

Minimum Qualification	Graduate with Mathematics as a subject	
Course Fees	Rs.40,000/- (Rupees Forty thousand only)	
<b>Registration Fees</b>	Rs. 1,000/- (Rupees one thousand only)	
Examination Fee Rs.4	Rs.4000/- (Rupees Four thousand only)	
Class Schedule	Monday, Wednesday & Friday – 5:00 PM to 7:30 PM (with 30 minutes break) Saturday - 2:00 PM to 6:30 PM (with 30 minutes break).	

Class work (including practical)	16 weeks
Project work	4 weeks
Study leave and examination	3 weeks
Publishing result	1 week
Total	24 weeks

#### **Syllabus**

Paper	Topics	Marks
I	Linear Algebra / Relational Algebra	100
	Basics of probability, including common probability distributions	
	Simple statistical tools including correlation and regression	
II	Basic computing techniques using R	
	Data structure using Python	100
	Database management system	
	Basics of machine learning	
III	Simple multivariate analysis	100
	Clustering and classification	
IV	Time series analysis and prediction	100
	Big data analytics – ideas, Hadoop	
	Applications in finance and marketing	
V	Project work	100
TOTAL		

Each of the first four papers to have two halves - one theoretical and other practical

#### **Faculties**

Prof. S.P. Mukherjee, Former Centenary Professor in Statistics, C.U. Prof. Aditya Bagchi, Former Professor, Indian Statistical Institute, Kolkata Prof. H.S. Ray, Former Professor, I.I.T., Kharagpur Prof. S.B. Bagchi, Emeritus Professor, Univ. of Engineering and Management
Prof. B. Das, Former Professor in Statistics, Presidency College, Kolkata
Prof. Surojit Mukherjee, Professor, I.I.T., Kharagpur
Dr. Sanghamitra Pal, Associate Professor, West Bengal State University
Dr. Goutam Banerjee, Former Senior Scientist, CSIR-CGCRI, Kolkata
Dr. Lakshmikanta Dutta, Former Senior Executive, Allahabad Bank
Besides some senior academics, executives and practitioners will also be included as faculty members.

#### Syllabus Application Procedure

Candidate can apply by downloading the application form given along with the Brochure. The filled in application form along with a passport size photograph and a self attested copy of certificate & Mark sheets to be submitted to the office of IAPQR at AE-199, Sector I, Salt Lake City, Kolkata – 700 064 within 30<sup>th</sup> March 2020. Candidate can send the scan copy of the application and the certificates through email. E-mail Id: *iapqr@yahoo.co.in* 

## Kindly Note: The office of IAPQR will remain open on Monday, Wednesday and Saturday from 2.00 PM to 6:00 PM

#### Last Date of submission of application form $-6^{th}$ April, 2020.

Date of announcement of List of Selected Candidates – 08<sup>th</sup> April 2020. (List of Selected Candidates will available in our website *www.iapqr.org*). The candidates will also be communicated by e-mail about their selection.

Only selected candidate will be admitted to the Course. Candidates will have to pay 50% of the course fee i.e., Rs.20,000/- (Rupees twenty thousand only) along with the Registration fee of Rs. 1,000/- (Rupees one thousand only) at the time of admission. Balance amount of course fee will have to be paid within a month from the date of commencement of classes.

Payment has to be made by Cash/ Cheque (to be drawn in favour of "Indian Association for Productivity, Quality and Reliability") or by NEFT. The Bank details are as under:

1	Bank Account (Savings Bank)	0025010100158558
2	Beneficiary Name	Indian Association for Productivity, Quality
		and Reliability
3	Beneficiary Address	AE-199, Sector I, Salt Lake City, Kolkata –
		700 064
4	Bank & Branch Name	Axis Bank, Salt Lake Branch
5	Branch Address	BD-20, Sector I, Salt Lake City, Kolkata – 700
		064
6	IFSC Code	UTIB0000025

Dates for Admission: 09<sup>th</sup> April 2020, 11<sup>th</sup> April 2020 and 13<sup>th</sup> April 2020. Time 2:00 PM to 6:00 PM. Place: IAPQR Office at Salt Lake.

#### **Date of Commencement of Classes – 18th April 2020**

#### For enquiry : The General Secretary, IAPQR, <u>iapqr@yahoo.co.in</u> Prof. S.B. Bagchi, 9432430073 Dr. Sanghamitra Pal, 9830294972 Dr. Ayan Chandra, 9830080317

#### About the Organizers

#### Indian Association for Productivity, Quality and Reliability

Established in 1973, Indian Association for Productivity, Quality and Reliability (IAPQR) has been engaged in the pursuit, propagation and promotion of concepts, methods and practices to enhance productivity in manufacturing and service organizations through Quality and Reliability. Through its dedicated services to the Nation for more than four decades, the Association has grown over the years as a force to reckon within the fields of Productivity, Quality and Reliability in the country. In the recent past, IAPQR has successfully organizes short term programmes in Total Productive Maintenance, 6-Sigma Black Belt Examination of ASQ, TRIZ- Inventive Problem Solving, Orientation Programme for Newly Recruited Scientists (at various CSIR Labs), Knowledge Management, Quality Management, Quality Function Deployment, 8D Methodology, Research Methodology etc.

The Association carries out its activities through its three main Divisions, viz., Training, Publication and Promotional Activities.

In recent past, the association organized International Conference on "Strategic Management, Decision Theory and Data Sciences" at Kolkata in collaboration with CSIR – Central Glass & Ceramic Research Institute. The conference enumerated that the Policy decisions regarding both core and support functions in any enterprise can derive strengths from contemporary developments in management science that is based on decision theory and data sciences.

In recognition of the contributions of IAPQR in advancement the foundation of Quality and Reliability in the country, it has been made a member of various Technical Committees and sub-committees, including Rajiv Gandhi National Quality Award Committee of Bureau of Indian Standards, New Delhi.

#### West Bengal State University

West Bengal State University is a university situated in Berunanpukuria, Malikapur, Barasat, North 24 Paraganas, West Bengal, India. All the 59 colleges (including Undergraduate, Postgraduate and B.Ed) in the district of North 24 Parganas, which were formerly affiliated with the University of Calcutta, are affiliated to this university. The campus is located at Berunanpukuria and the university operates from there. All the selected postgraduate course classes have started.

#### Application for enrollment in Certificate Course in Data Science

organized by Indian Association for Productivity, Quality & Reliability in collaboration with West Bengal State University

1) Name (in block letters) :

2) Gender :

Male/Female/Transgender

STAMP SIZE PHOTO

- 3) Communicating Address : Mobile Number(s) : E-mail :
- 4) Date of Birth:
- 5) Highest Qualification :

Name of the University/Institution

Registration No.

(Attached self attested photo copies of mark sheet and certificate last examination passed. All original documents will be verified at the time of admission)

- 6) Occupation (with designation, if employed) :
- 7) Aadhaar Number:

Dated :

Signature :

For Office Use Only

Application (i) Received on \_\_\_\_\_

(ii) Decision Selected/Not Selected

Course fees : Bank draft/cheque No.\_\_\_\_\_, Dated \_\_\_\_\_

On \_\_\_\_\_\_ or NEFT Details : \_\_\_\_\_\_

Dated :

Signature(s) :