Aliah University

(Under the department of Minority Affairs and Madrasah Education, Govt.of West Bengal)
IIA/27, New Town, Kolkata - 700160, Phones: (033) 2341 6444, West Bengal, India

2.6.1 The institution has stated learning outcomes (Program and Course outcomes)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Additional information provided herewith:

Registrar (Officiating)
Aliah University
New Town, Kolkata-700160

2.6.1 **The institution has stated learning outcomes (Program and Course outcomes)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution (15)**

Aliah University has developed an effective structure to measure the attainment of the Programme outcomes, Programme specific outcomes and course outcomes and the same are communicated to the students at the end of the each semester first through classroom meeting. A well-defined Outcome Based Education Manual has been developed for both Faculties & Students, defining the parameters & procedures for evaluating the assessment on the basis of defined Learning Outcome. Attainment of program outcomes, program specific outcomes and course outcomes are evaluated on the basis of both Continuous Internal assessment and End Semester Examination.

Continuous Internal Assessment and Semester End assessment are designed on the basis of PO, PEO & CO's, defined for each course. Mapping of the evaluation items is carried out with the specific Course Outcome. Mapping of question is also carried out to ensure the both Lower Order & Higher Order of understanding of the Course by the students. The students are categorized as slow learners, mediocre learners and fast learners following the mapped evaluation process.

	1-3	4-7	8-10	Methods
Retention capacity	Slow Learner	Mediocre Learner	Fast Learner	Quiz, surprise MCQ Test, Description
Comprehensive ability	Slow Learner	Mediocre Learner	Fast Learner	Comprehension, Explanation with audio – visual aids (PPT)
Understanding ability	Slow Learner	Mediocre Learner	Fast Learner	Case study, Incident development, Situation development

Their application ability	Slow Learner	Mediocre Learner	Fast Learner	Case study, Live projects

Attainment level of Continuous Internal Assessment and Semester End Examination by each student is then integrated using the defined procedure & formulae. Special diagnostic measures are taken for the identified slow and mediocre learners to ensure proper outcomes.

The university website uploads the current and previous curriculum of all programmes. Therefore, even before learners take admission, the aspirants are able to clearly read the Programme objectives and expected outcomes which are stated at the introductory part and the conclusive part of the course respectively.

The academic calendar, examination rules and detailed results of Semester End- Examinations of the UG and PG Programmes (as a part of final evaluation and assessment), are published on the website by the Examination section.

The Continuous Internal Assessment of the UG PG Programmes throughout the Semester, in form of Class tests, Assignments, Viva-Voce or Quiz are conducted by the respective Departments . The students are informed well in advance and Official Notices are circulated by the Head of the Department for the knowledge of all stakeholders.

The Syllabus of the Pre-PhD Course Work of all Doctoral Programmes are similarly circulated and publicized widely. For the Doctoral Programmes the PO and CO of Pre-PhD syllabus are assessed through a semester- end examination consisting of four papers following the UGC guidelines. This apart, the progress of the scholar is mapped every six months through Half-Yearly Research Progress Report which consists of Presentation before the concerned DSC of the scholar.

The guidelines for the progress and assessment of scholars in Doctoral Programmes are very well documented and publicized by the University Research Programmes on the University Website.

جامعة عالية

Aliah University

(A State University established by the Act XXVII of 2007 of the West Bengal Legislature)

Kolkata, India

Examination Rules

The Academic Programmes in Aliah University are offered under Semester System. Each Academic session is divided into two regular Semesters in a year. The Semester that begins in July (July to Dec.) is known as the Autumn Semester or Odd-Semester and the Semester that begins in January (Jan. to May) is known as the Spring Semester or Even-Semester.

At the beginning of each Semester, Semester Enrolment is mandatory for every student.

Students shall enrol for Courses she/he intends to take during a given Semester on the basis of the programme for each discipline as given in the bulletin of Courses of Study. Students will be further guided by a Faculty during the process of enrolment of Courses. The Normal load during a semester is 24 credits.

1 Credit System

The minimum Credit required for award of Degree in a 4-yr B. Tech. Programme is 200. Similarly, the minimum Credit requirement for

- 5-Yr Integrated Programme is 240
- 3-Yr Undergraduate Programme (Hons.) is 144,
- 3-Yr Undergraduate Programme (Gen) is 112,
- 2-Yr Postgraduate Programme is 96.

Total contact hours i.e., Instruction /Workload in terms of L (Lecture) + T (Tutorial) + P (Practical) for a Semester should not exceed 32 contact hours per week.

In the following, Credit, Equivalent Full Marks (wherever applicable), and (L+T+P) hours per week, for different Courses, is elaborated.

5-yr Integrated M.A./ M.Sc., 3-yr B.A.(Hons/ Gen) and 2-yr M.A./ M.Sc.:

Course	Credit Offered	Full Marks	Instruction /Workload i.e., (L+T+P) per week
Theory	4	50	1hr x 4 days = 4hrs / 1 hr Tutorial
Practical	4	50	3hrs x 2 days= 6hrs
Viva	4	50	--
Seminar	4	50	--
Project	4	50	--
	8	100	--
	16	200	--

B. Tech., M. Tech., MCA, MBA:

Course	Credit Offered	Instruction /Workload i.e., (L+T+P) per week
Theory	4	1hr x 4 days = 4hrs
Practical	2	3hrs x 1 day= 3hrs
Viva	4	--
Seminar	4	--
Project	4 or above	--

2 Distribution of Courses in Each Semester

Distribution of Courses in each Semester of all Programme is as per the Curriculum prepared by individual departments. Honours Courses, Subsidiary Courses, and Compulsory Courses are indicated for **5-yr Integrated M.A./ M.Sc., and 3-yr B.A.(Hons) Programme.**

3 Attendance Requirement

The University expects 100% attendance of the students. However, the prescribed attendance 75% in the classes for individual Course has to be strictly adhered to, in case of eligibility to appear in the End-Semester examination. In individual cases, the Dean of concerned faculty (or HOD till the Dean is appointed) has the power of relaxing the prescribed percentage of attendance to the maximum of 15% as may have been prescribed on the ground of following nature on production of documentary proof:

a. Illness,
b. Natural Calamities, and
c. Participations in University sponsored Activities / Extracurricular Activities.

If it is considered necessary to have further relaxation, the matter must be placed before the Academic Council by the Vice-Chancellor for decision.

A student who is debarred from appearing in the End-Semester examination is required to re-enrol for the same Course(s) in subsequent Semesters when it is offered.

4 Examination System

Semester-wise performance assessment for every Course is done through various modes of examinations. These include Quizzes/Class tests/Home assignments/Group assignments/ Viva-voce, Mid-Semester Examination and End-Semester Examination.

4.1 Modes of Evaluation for Theory Courses

Subcomponent	Weight	Duration of Examination	Examination covering the syllabus
Internal Assessment (T.A.)*	20%		
Mid-Semester examination	30%	1 ½ hours	Syllabus covered till last class before Mid-Semester Examination
End-Semester examination	50%	2 ½ hours	Full Syllabus

* - Internal assignment (Teacher's Assessment) is based on Quizzes/Assignment/ Surprise Test/ Viva-voce/ Group Discussion which are taken by the concerned faculty time to time during the Semester. Relevant records are preserved by the Dept.

4.2 Modes of Evaluation for Laboratory Courses

Subcomponent	Weight	Remark
Continuous Assessment (T.A.)	40%	Student's performance in Practical classes and Laboratory records
Viva-voce	10%	
Semester-End Test	50%	To be conducted in the last Lab Class of the Semester routine

4.3 Modes of Evaluation for Projects

Projects need regular interaction, at least once a week, with the Supervisor. Within the date specified in the Academic Calendar, students must submit 4 typed copies of Project Report and defend it in front of a panel of examiners. For Programme like M. Tech. the Panel may also include Examiners from Industries, and/or other institutes/ organizations. The dates for presentations, and details of mode of assessment are decided by the individual Departments.

After successfully defending the Project at the Viva-voce examination; the original copy of the Project Report is to be submitted to the Supervisor and to the Library.

4.4 Modes of Evaluation for Seminars

Seminars are evaluated based on a written Report, and an oral presentation before a panel of examiners.

4.5 Modes of Evaluation for Grand Viva

Grand Viva is conducted by a panel of examiners in presence of external examiners and Grades are awarded based on the performance in the Grand Viva.

4.6 Disclosing of Evaluated Answer script to students

As a process of learning and for the benefit of the students, the Answer scripts of all Class tests, Assignments, Mid-Semester examinations, End-Semester examinations etc., after correction, would be shown to the students.

5 Grading System (in 10-point scale)

The Letter Grades with their numeric values, i.e., Grade Points and Equivalent Percentages of Marks are given below:

Dept.	URL of COs, POs in Syllabus
Arabic	https://aliah.ac.in//upload/media/21-08-19_1566369664.pdf
	https://aliah.ac.in//upload/media/27-07-18_1532672991.pdf
	https://aliah.ac.in//upload/media/08-04-24_1712562230.pdf
	https://aliah.ac.in//upload/media/08-04-24_1712562457.pdf
Bengali	https://aliah.ac.in/department/cms-page.php?key=bengali&page_key=pg
	https://aliah.ac.in//upload/media/02-03-24_1709352542.pdf
	https://aliah.ac.in//upload/media/02-03-24_1709352644.pdf
Biological Science	https://aliah.ac.in//upload/media/16-03-18_1521179771.pdf
	https://aliah.ac.in//upload/media/16-03-18_1521179752.pdf
	https://aliah.ac.in//upload/media/16-03-18_1521179733.pdf
	https://aliah.ac.in//upload/media/16-03-18_1521179712.pdf
	https://aliah.ac.in//upload/media/18-05-18_1526635538.pdf
	https://aliah.ac.in//upload/media/16-03-18_1521179510.pdf
	https://aliah.ac.in//upload/media/16-11-21_1637043880.pdf
	https://aliah.ac.in//upload/media/16-11-21_1637043855.pdf
	https://aliah.ac.in//upload/media/16-11-21_1637043836.pdf
Computer Science & Engg	https://aliah.ac.in//upload/media/16-12-22_1671169666.pdf
	https://aliah.ac.in//upload/media/25-04-22_1650882700.pdf
	https://aliah.ac.in//upload/media/25-04-22_1650882428.pdf
	https://aliah.ac.in//upload/media/25-04-22_1650882324.pdf
	https://aliah.ac.in//upload/media/25-04-22_1650882324.pdf
	https://aliah.ac.in//upload/media/14-12-22_1671011825.pdf
Civil Engg.	https://aliah.ac.in//upload/post_doc/31-05-21_1622472018.pdf
	https://aliah.ac.in//upload/post_doc/04-03-22_1646374582.pdf
Chemistry	https://aliah.ac.in//upload/media/07-03-24_1709793663.pdf
	https://aliah.ac.in//upload/media/07-03-24_1709793857.pdf
	https://aliah.ac.in//upload/media/07-03-24_1709794155.pdf
English	https://aliah.ac.in//upload/media/25-09-23_1695652472.pdf
Electrical Engg.	https://aliah.ac.in//upload/media/26-06-18_1530003071.pdf
	https://aliah.ac.in//upload/media/22-04-22_1650593851.pdf
	https://aliah.ac.in//upload/media/26-06-18_1530004102.pdf
	https://aliah.ac.in//upload/media/08-04-22_1649419620.pdf
Economics	https://aliah.ac.in/department/notice.php?key=economics&page_key=notice
Education	https://aliah.ac.in/department/cms-page.php?key=education&page_key=naac
Electronics & Communication Engg.	https://aliah.ac.in//upload/media/17-10-22_1666003505.pdf
	https://aliah.ac.in//upload/media/31-03-23_1680255617.pdf
	https://aliah.ac.in//upload/media/17-10-22_1666006858.pdf
	https://aliah.ac.in//upload/media/17-10-22_1666006285.pdf
	https://aliah.ac.in//upload/media/31-03-23_1680255647.pdf
Geography	https://drive.google.com/file/d/1tA9KcnZhBT0SvP8RNVN3bi2zfGKh8IrW/view
	https://drive.google.com/file/u/1/d/1tA9KcnZhBT0SvP8RNVN3bi2zfGKh8IrW/view
	https://drive.google.com/file/d/1T6lz-uwWrFA9WB8b_Jj93D7CdkN1waKz/view
	https://aliah.ac.in//upload/media/13-03-24_1710315508.pdf

History	https://aliah.ac.in//upload/media/13-03-24_1710315954.pdf
	https://aliah.ac.in//upload/media/13-03-24_1710316369.pdf
	https://aliah.ac.in//upload/media/13-03-24_1710316544.pdf
Islamic Theology	https://aliah.ac.in//upload/media/04-03-24_1709550482.pdf
	https://aliah.ac.in//upload/media/04-03-24_1709538008.pdf
	https://aliah.ac.in//upload/media/04-03-24_1709536775.pdf
	https://aliah.ac.in//upload/media/04-03-24_1709535938.pdf
	https://aliah.ac.in//upload/media/04-03-24_1709538008.pdf
	https://aliah.ac.in//upload/media/04-03-24_1709537044.pdf
Islamic Studies	https://drive.google.com/file/d/16A3TsTQQdzm01qHtCFGRfHTX0L4TS2WB/view?pli=1
	https://drive.google.com/file/d/16A3TsTQQdzm01qHtCFGRfHTX0L4TS2WB/view
sm and Mass Commu	https://aliah.ac.in/department/cms-page.php?key=journalism-and-mass-communication&page_key=pg
Law	https://aliah.ac.in//upload/media/07-03-24_1709806354.pdf
ent and Business Adm	https://aliah.ac.in//upload/media/05-03-24_1709658599.pdf
	https://aliah.ac.in//upload/media/05-03-24_1709661218.pdf
athematics and Statist	https://aliah.ac.in//upload/media/14-03-24_1710403809.pdf
	https://aliah.ac.in//upload/media/06-03-24_1709748239.pdf
	https://aliah.ac.in/department/cms-page.php?key=mathematics&page_key=ug
	https://aliah.ac.in//upload/media/26-03-22_1648311006.pdf
	https://aliah.ac.in//upload/media/27-03-22_1648392633.pdf
	https://aliah.ac.in//upload/media/07-03-24_1709749860.pdf
	https://aliah.ac.in//upload/media/07-03-24_1709749915.pdf
Mechanical Engg.	https://aliah.ac.in//upload/media/11-03-24_1710154204.pdf
	https://aliah.ac.in//upload/media/11-03-24_1710152866.pdf
Nursing	https://aliah.ac.in//upload/media/04-04-24_1712213697.pdf
Physics	https://aliah.ac.in//upload/media/03-03-24_1709474749.pdf
	https://aliah.ac.in//upload/media/03-03-24_1709474792.pdf
	https://aliah.ac.in//upload/media/03-03-24_1709474851.pdf
	https://aliah.ac.in//upload/media/03-03-24_1709474749.pdf
	https://aliah.ac.in//upload/media/03-03-24_1709474825.pdf
Urdu	https://aliah.ac.in//upload/media/07-01-22_1641566731.pdf

MSSUGCC04 Probability I
B. Sc. (Hons)

Stream Classwork People Grades

MSSUGCC04 Probability I

B. Sc. (Hons)

Class code v6g6l3z

Select theme
Upload photo

Announce something to your class

Biman Chakraborty
Oct 2, 2020

Biman Chakraborty AU has invited you to join a video meeting on Google Meet.

Join the meeting: https://meet.google.com/wmr-nznn-cpp

Dial in (audio only): +1 650-669-8960 PIN: 684 818 713#

Add class comment...

Biman Chakraborty posted a new material: Cumulant generating function and...

Posted Oct 1, 2020

Please go throug the attached notes.

PDF Characteric Functions.p...

4 class comments

Biman Chakraborty Oct 6, 2020

Think and try to answer.

MSSUGCC04 Probability I
B. Sc. (Hons)

Stream Classwork People Grades

Posted Oct 1, 2020

I have mistakenly deleted the post related to exercies on MGF. Please upload your answers here.

12 Turned in | 5 Assigned

MGF Exercise.pdf

Add class comment...

Biman Chakraborty
Sep 22, 2020

Today we have discussed on probability generating function. There will be an online Tutorial class on Thursday (24.09.2020) from 11am-12pm in Google Meet to discuss on the moment generating function.
Google meet link: https://meet.google.com/evi-hrgs-yqb

Add class comment...

Biman Chakraborty
Sep 20, 2020

There will be an online Tutorial class on Tuesday (22.09.2020) at 11am-12pm in Google Meet to clear the doubts on moment generating function.
Google meet link: https://meet.google.com/dxx-hjnm-uao
Everybody please go through the notes. Hope you will enjoy the class.

2 class comments

Biman Chakraborty Sep 22, 2020
Join the last link. Ignore previous one.

Add class comment...

MSSUGCC04 Probability I
B. Sc. (Hons)

Stream Classwork People Grades

Please go through the notes.

Generating Functions 2 ...

2 class comments

Naila Almaas Sep 24, 2020
Yes Sir.

Add class comment...

Biman Chakraborty posted a new question: How to find the cumulative proba...

Posted Sep 16, 2020

3	13
Turned in	Assigned

2 class comments

Biman Chakraborty Sep 17, 2020
We can use the function P_X(t) /(1-t). But how to find the cumulative probabilities?

Add class comment...

Biman Chakraborty posted a new assignment: Assignment on P... Due Sep 15, 2020

Posted Sep 14, 2020

5	10	1
Turned in	Assigned	Returned

PGF Ex2.2.png

MSSUGCC04 Probability I
B. Sc. (Hons)

Stream Classwork People Grades

Posted Sep 9, 2020 (Edited Sep 10, 2020)

1	10	5
Turned in	Assigned	Returned

PGF Ex2.1.png

Add class comment...

Biman Chakraborty posted a new material: Probability Generating Video lectu...

Posted Sep 9, 2020 (Edited Sep 11, 2020)

PGF Video lecture

Add class comment...

+ Create

All topics

Assignment 1 Posted Feb 9, 2023

Syllabus and Books 8 Edited Nov 25, 2021

Python

Video Recording 2 (06.02.2023) Posted Feb 9, 2023

Video Recording 1 Posted Feb 6, 2023

Notes on Python 1 Edited Feb 19, 2023

Programming in Python

Students will see this topic once work is added to it

Report Writing and Presentation

Group Project Presentation on ... 8 Due Feb 1, 2022

Video Recording 17.01.2022 — Posted Jan 17, 2022

Estimation and Testing of Hypothesis

- Notes on Estimation in R — Posted Jan 20, 2022
- Video Recording 20.01.2022 — Edited Jan 20, 2022

Linear Regression

- Notes on Correlation and Regressi... — Posted Jan 20, 2022
- Video Recording 19.01.2022 — Posted Jan 19, 2022

Simulations

- Simulations using R (Advanced Not... — Posted Feb 1, 2022
- Video Recording 24.01.2022 — Posted Jan 24, 2022
- Assignment 5 — Due Jan 22, 2022
- Simulation Notes — Posted Jan 14, 2022
- Video Recording 13.01.2022 — Edited Jan 16, 2022
- Video Recodring 11.01.2022 — Edited Jan 11, 2022

Graphical Representation

Video Recording 06.01.2022	Posted Jan 6, 2022
Assignment 4	Due Jan 14, 2022
Video Recording 05.01.2022	Posted Jan 5, 2022
Notes on Graphics in R	Edited Jan 7, 2022
Video Recording 03.01.2022	Edited Jan 5, 2022

Data import, export and subsetting

Video Recording 27.12.2021	Edited Dec 27, 2021
Assignment 3	Due Jan 4, 2022
Video Recording 23.12.2021	Edited Dec 23, 2021
Import dataset	Edited Dec 23, 2021
Importing and Exporing Datasets	Edited Jan 4, 2022

Controls, loops and functions

Video Recording 22.12.2021 1	Edited Dec 23, 2021
R Code 16.12.2021	Edited Dec 23, 2021

Video Recordings 13.12.2021 Edited Dec 23, 2021

Video Recording 09.12.2021 Edited Dec 23, 2021

Suppose you create a vector x =1:2... Edited Dec 23, 2021

R Code (Unique values) Edited Dec 23, 2021

Data Structures

Quiz 1 Due Dec 22, 2021

Lab Test 1 Due Dec 20, 2021

MCQ 1 Edited Dec 23, 2021

Assignment 2 Due Dec 19, 2021

Posted Dec 8, 2021 (Edited Dec 23, 2021)

27 Turned in

2 Assigned

R Assignment 2.pdf
PDF

View instructions

Review work

Video Recording 08.12.2021 Edited Dec 23, 2021

Video Recording 06.12.2021 Edited Dec 23, 2021

Video Recordings 01.12.2021	Edited Dec 23, 2021	
Assignment 1	Due Dec 7, 2021	
Video Lecture 29.11.21	Edited Dec 23, 2021	
R Lecture Notes	Edited Dec 23, 2021	

Test on Random Variables (MCQ-2)

bimchk@gmail.com Switch account

Question Paper

This section contains 10 multiple choice questions of 2 marks each.

2 points

1. Consider the following function

$$f(x) = \begin{cases} 0.5 & \text{if } x \leq 0 \\ 1 & \text{otherwise.} \end{cases}$$

$f(x)$ is not a CDF because

(A) it is not right continuous at $x = 0$

(B) $F_X(-\infty) \neq 0$

(C) it is not continuous at $x = 0$

(D) both (A) and (B).

- (A)
- (C)
- (D)
- (B)

2. A CDF is always

2 points

- (A) right continuous
- (B) left Continuous
- (C) discontinuous
- (D) differentiable

3. A CDF is always 2 points

- (A) decreasing
- (B) non decreasing
- (C) increasing
- (D) non increasing

4. A CDF is always 2 points

- (A) bounded
- (B) unbounded
- both of (A) and (B)
- none of (A) and (B)

5. A CDF can have discontinuity at 2 points

- (A) at most finite points
- (B) no points
- (C) at most countable infinite points
- (D) uncountable number of points

2 points

6. If a function satisfies $g(\infty) = 1$ then it can be

(A) PMF (B) PDF (C) CDF (D) nothing can be said.

- (A)
- (B)
- (C)
- (D)

7. If a CDF is continuous then the random variable is 2 points

- (A) discrete
- (B) continuous
- (C) mixed
- (D) nothing can be said

2 points

8. Consider the Figure 1.

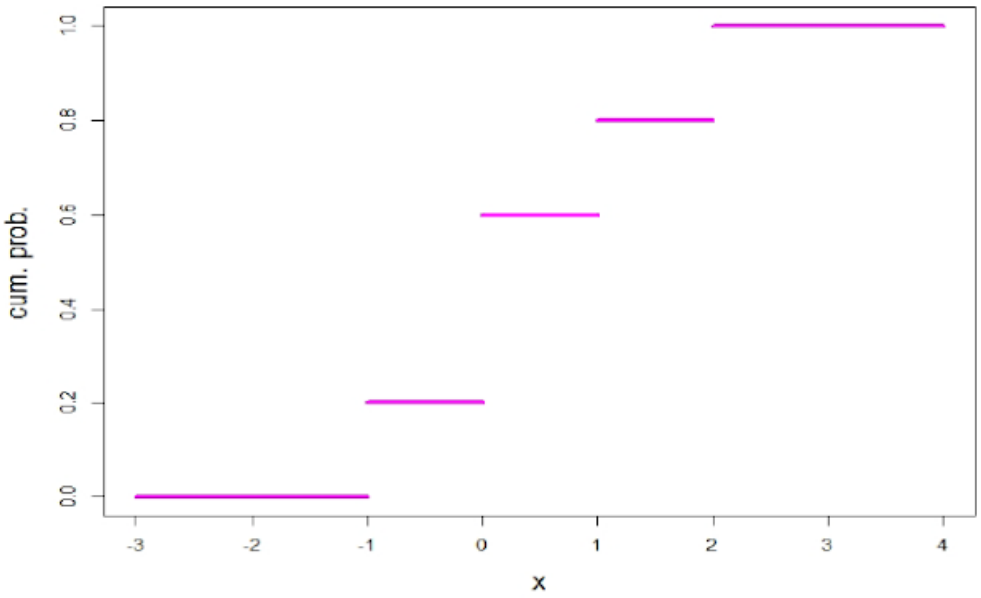

Figure 1: Plot of cumulative distribution function of the random variable X.

Which of the following is not correct?

(A) $P(X = -1) = P(X = 1) = P(X = 2)$

(B) $P(-1 < X \leq 1) = 0.4$

(C) $P(-1 < X < 1) = 0.4$

(D) $P(X = 0) = 0.4$.

- (A)
- (B)
- (C)
- (D)

2 points

9. Consider the following function

$$g(x) = \begin{cases} |x| & \text{if } 0 \leq |x| \leq 1 \\ 0 & \text{otherwise.} \end{cases}$$

$g(x)$ is a

(A) PDF (B) CDF (C) PMF (D) none of these.

- (A)
- (B)
- (C)
- (D)

2 points

10. Consider the PMF/PDF/CDF

$$g(x) = \begin{cases} |x| & \text{if } 0 \leq |x| \leq 1 \\ 0 & \text{otherwise.} \end{cases}$$

Find $P(0.5 < X \leq 1)$

(A) $\frac{1}{2}$ (B) $\frac{1}{4}$ (C) $\frac{3}{4}$ (D) none of these.

- (A)
- (B)
- (C)
- (D)

A copy of your responses will be emailed to the address you provided.

Back Submit Clear fo

R Programming **Assignment 2**

1. (a) Create a square matrix A with elements 1,2,3,4,...,16 of order 4.

   (b) Write code to find the number of rows and number of columns.

   (c) Find row sums and column sums of A.

   (d) Sum of elements of a row of a matrix may be seen as product of that matrix with a matrix of 1's with proper dimension. Using this idea find the row sum and column sum of the matrix A.

   (e) Find trace of A.

   (f) Find the minimum and maximum element of A.

   (g) Check whether A is singular or not.

   (h) Replace the (2,3)th element of A by 100. Also replace the 2nd row by a vector of 1 of proper dimension.

   (i) Add 2 to each element of A and call this matrix as B. Find the sum and product of A and B.

   (j) Find the mean of the all elements of A and subtract it from the every elements of A. Replace all negative elements by 0.

   (k) Create a matrix C after eliminating 3rd, 4th rows and columns of A. Check whether C is singular or not. If nonsingular, then find C^{-1}.

2. Create a matrix D of dimension 4×5, whose all elements are equal to 1.

3. Create a upper triangular matrix of order 4 whose all non zero elements equal to 3.

4. Check whether the following system of equation has a solution or not. If yes, find the solution.

$$3x_1 + 2x_2 + x_3 = 10$$

$$2x_1 + 9x_2 + 11x_3 = 2$$

$$x_1 + x_2 = 1$$

5. Write your own function in R in each of the following cases and illustrate with example:

   (a) To find square of a number.

(b) To find absolute value of a number.

(c) To find mean of n numbers.

(d) To find variance of n numbers.

(e) To find correlation of two variables.

6. Create a vector x containing 20 elements according to your choice. Write a function in R which shows mean, median, minimum, maximum, variance, standard deviation respectively.

7. Write a program to count how many elements of x (specified in last problem) are equal to mean? Also write a function to create the frequency table.

8. Write a function to create the sequence 1,3,5,...,101.

9. Write a program in R to find rank of n numbers using some in-built as well as your own function.

ALIAH UNIVERSITY **AWARD LIST**

Odd (Autumn) Semester Examination, December 2022

Campus : Park Circus **Programme : Master of Arts in JMC**

Course Code: JMCPGCCT11 **Course Name: Communication Research**

2nd Year, 3rd Semester, Session 2021-2022 **Credit: 4**

Sl. No.	Roll No	Name	Regn. No.	TA (10)	End Sem. Written (40)	Marks Obtained (50)
1	JMC212001	NOUSEEN BEGUM	0172 of 2021-2022	4	14	18
2	JMC212002	SK NASRIN	0173 of 2021-2022	7	13	20
3	JMC212004	NUR NAHAR KHATUN	0174 of 2021-2022	7	21	28
4	JMC212005	NASRIN KHATUN	0175 of 2021-2022	0	N/A	N/A
5	JMC212006	MIZANUR RAHMAN		0	N/A	N/A
6	JMC212007	MD NADEEM	0590 of 2017-2018	0	N/A	N/A
7	JMC212008	SALMA SULTANA	0176 of 2021-2022	4	16	20
8	JMC212009	ZEHRA RAHMAN	0177 of 2021-2022	0	N/A	N/A
9	JMC212010	SABANA YASMIN	0178 of 2021-2022	7	27	34
10	JMC212011	SYEDA MOJAMMELA KHATUN	0179 of 2021-2022	0	N/A	N/A
11	JMC212012	ANUSTUP BHATTACHARYA	0180 of 2021-2022	7	24	31
12	JMC212013	SOHINI PAUL	0181 of 2021-2022	7	26	33
13	JMC212014	JUHITA MAJI	0182 of 2021-2022	7	20	27
14	JMC212015	BIPASHA ISLAM	0183 of 2021-2022	0	N/A	N/A
15	JMC212016	ABDULLA MOLLA	0184 of 2021-2022	0	N/A	N/A
16	JMC212017	RIYA NEMO	0185 of 2021-2022	6	27	33
17	JMC212018	MANSUR HABIBULLAH		0	N/A	N/A
18	JMC212019	KAZI SHWETA	0186 of 2021-2022	5	14	19
19	JMC212020	NURNAHAR BISWAS	0187 of 2021-2022	4	15	19
20	JMC212022	SANJIDA YEASMIN	0188 of 2021-2022	0	N/A	N/A
21	JMC212023	KIBRIA ANSARY	0189 of 2021-2022	7	23	30
22	JMC212024	MOUMITA ROY	0190 of 2021-2022	6	N/A	N/A

Dr. Kaifia Ancer Laskar

Dr. Kaifia Ancer Laskar 20/01/2023

Name of the Examiner(s) Signature of the Examiner(s), (with date)

ALIAH UNIVERSITY **AWARD LIST**

2nd Year, 3rd Semester, Session 2021-2022 **Credit:** 4

Sl. No.	Roll No	Name	Regn. No.	TA (10)	End Sem. Written (40)	Marks Obtained (50)
23	JMC212025	OMIYA TABASSUM JAHAN	0191 of 2021-2022	7	25	32
24	JMC212026	NILOY GHOSH	0192 of 2021-2022	7	26	33
25	JMC212028	ALIA ARSHAD	0193 of 2021-2022	6	24	30
26	JMC212029	NISHA NATH	0194 of 2021-2022	6	16	22
27	JMC212030	SUCHANA SARKAR	0195 of 2021-2022	6	N/A	N/A
28	JMC212032	SASANKA PAIK	0196 of 2021-2022	5	N/A	N/A
29	JMC212033	TANIYA MAJUMDER	0197 of 2021-2022	6	21	27
30	JMC212034	TINA DEWAN	0198 of 2021-2022	0	N/A	N/A
31	JMC212035	SAMIM AHMED GAYEN	0199 of 2021-2022	6	9	15
32	JMC212036	AFROZA PAIK	0200 of 2021-2022	0	N/A	N/A
33	JMC212037	INDRAJIT GURIYA	0201 of 2021-2022	3	N/A	N/A
34	JMC212038	MOUMITA NASKAR		0	N/A	N/A
35	JMC212039	RAKIBUL ALAM SEKH	0202 of 2021-2022	3	10	13
36	JMC212040	FAHMI AFROZ	0203 of 2021-2022	6	18	24
37	JMC212041	SWETA SAMADDER	0204 of 2021-2022	0	N/A	N/A

Dr. Kaifia Ancer Laskar

Dr. Kaifia Ancer Laskar

20/01/2023

Name of the Examiner(s)

Signature of the Examiner(s), (with date)