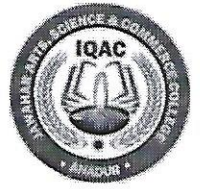




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INTERNAL QUALITY ASSURANCE CELL

Internal Evaluation 2018-2019
Department of Mathematics
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1	Notice
2	Time- Table
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दुरितांचे तिमिर जावो.!

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JAWAHAR ART'S, SCIENCE & COMMERCE COLLEGE, ANADUR

Tq. Tuljapur, Dist. Osmanabad-413 603

NAAC GRADE - B++(CUPA 2.81)



President :- Shri. B.F.Kasture

Secretary :- Shri. S.N. Alure Guruji.

Principal :- Dr.Smt. M.B. Jadhav(Mob.9960242667)

☎ :- (02471) 246037, 246737

दि. १४.०९.२०१८

सूचना

बी.ए./बी.एस्सी./बी.कॉम.(I,II,III) वर्षातील सर्व विद्यार्थ्यांना सूचित करण्यात येते की, अंतर्गत मूल्यमापन कार्यक्रम (२०१८-२०१९) नुसार प्रथम घटक चाचणी दि.१८ व १९ सप्टेंबर २०१८ रोजी घेण्यात येणार आहे. सदर घटक चाचणीचे वेळापत्रक सूचना फलकावर लावण्यात येईल याची सर्वांनी नोंद घ्यावी.

Gal

Co-Ordinator

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JAWAHAR ARTS, SCIENCE & COMMERCE COLLEGE, ANADUR
TAL-TULJAPUR, DIST-OSMANABAD
UNIT TEST-I (2018-2019)

Date & Day	Time	Faculty of Arts				Faculty of Science				Faculty of Commerce		
		B.A. I	B.A. II	B.A. III	B.Sc. I	B.Sc. II	B.Sc. III	B.Com. I	B.Com. II	B.Com. III		
18/09/2018 Tuesday	10.00-10.40am	Eng.Com (18)	S.L. M/H/S (06/05/07)	-----	Eng.Com (04)	S.L. M/H/S (06/05/07)	-----	-----	S.L. M/H/S (06/05/07)	-----	-----	-----
	10.50-11.30am	S.L. M/H/S (06/05/04)	Eng.Com (18)	Main M/H/S/E- XI (09) His/ Eco XI/Geo XIII/Pol/Soci XI-(10)	S.L. M/H/S (06/05/04)	Eng.Com (07)	-----	S.L. M/H/S (06/05/04)	-----	-----	-----	-----
	11.40-12.20 pm	-----	Opt M/S/H/E V/V/III/III (11/12/8/17)	-----	-----	Che-VII (18)	Phy/Zoo XV (04)	Fin.A/C (06)	Corp.A/C (07)	-----	-----	-----
	12.30-1.10 pm	Opt M/H/S/E-I (06/05/15/13)	Opt M/S/H/E VI/V/IV/IV (14/12/8/17)	Opt M/S/H/E IX/IX/V/V (16)	Che-I (07)	Che VIII (18)	Phy/Zoo XVI (04)	B.M.S. (09)	P.B.M. (10)	Cost. Acc (11)	-----	-----
19/09/2018 Wednesday	1.20-2.00pm	Opt M/H/S/E-II (06/05/15/13)	Eco/Geo V/VI (8/17)	Opt M/S/H/E X/X/V/VI (16)	Che-II (07)	Phy/Zoo VII (04)	Maths/Bot 501/XV (12/16)	IT (09)	M.M. (10)	I.T. (11)	-----	-----
	10.00-10.40am	Eco/Geo-I (06/05/08)	His/Eco/Geo VI/V/II (15/17)	Eco/Geo IX/XI (14/15)	Phy/Zoo I (07/04)	Phy/Zoo VIII (07/04)	Maths/Bot 502/XVI (12/16)	Entdev (09)	-----	Audit (11)	-----	-----
	10.50-11.30am	Eco/Geo II (06/05/08)	Pol.Sci/Soci/ Hist V (06/15/17)	Eco/Geo X/XII (14/15)	Phy/Zoo II (07/04)	Maths/Bot 301/IX (07/04)	Maths 501 (12)	B.Eco. (09)	B.R.F. (10)	M.Acc (11)	-----	-----
	11.40-12.20 pm	Pol.Sci/Soci/ Hist I (05/08)	Pol.Sci/Soci/ Hist VI (10/05/08)	Pol.Sci/Soci/ Hist IX(10/05/08)	Maths/Bot 101/I(4/6)	Maths/Bot 302/X(9/16)	Che XIII(07)	Eng.Com (18)	IT (10)	A.F.Acc (11)	-----	-----
12.30-1.10 pm	Pol./Soci/Hist II(05/08)	-----	Pol.Sci/Soci X(05/08/10)	Maths/Bot 102/II(4/6)	Maths 303(09)	Che-XIV(07)	-----	Eng. Com(18)	Banking (11)	-----	-----	

Note: - Bracketed figure indicates the Hall Number.

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Internal Evaluation Cell

Unit Test- I Semester I Year-2018-19

Class: B. Sc. I

Subject: Mathematics

Parer No: MAT-102

Date: 19/9/2018

Name of Paper: Differential Equations

Time: 30 Min

Marks-10

Q.1 A] Attempt any one:

05

a) Explain the method of solution of linear equation

$$dy/dx + Py = Q.$$

b) Explain the method of solving the differential equation

$$\frac{d^n y}{dx^n} + P_1 \frac{d^{n-1} y}{dx^{n-1}} + \dots + P_n y = X, \text{ Where } P_1, P_2, \dots, P_n \text{ are}$$

constants and X is a function of x.

B] Attempt any one:

05

c) Solve $(a^2 - 2xy - y^2)dx - (x + y)^2 dy = 0.$

d) Solve $(1 + y^2)dx = (\tan^{-1}y - x)dy.$


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INTERNAL QUALITY ASSURANCE CELL

Presenty Report of Unit Test - I
Department of Mathematics 2018-19

Class : B. Sc.I

Semester: I

Name of Teacher : Shri. S. D. Agalave

Paper No. : MAT-102

Name of Paper : Differential Equations

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AA-04	P	31	AA-85	P
2	AA-05	P	32	AA-88	P
3	AA-06	P	33	AA-89	A
4	AA-09	P	34	AA-94	P
5	AA-10	P	35	AA-97	P
6	AA-17	P	36	AA-102	P
7	AA-18	P	37	AA-109	P
8	AA-22	P	38	AA-111	P
9	AA-45	P	39	AA-115	P
10	AA-46	P	40	AA-116	P
11	AA-51	P	41	AA-122	P
12	AA-32	A	42	AA-124	P
13	AA-40	P	43	AA-125	P
14	AA-42	P	44	AA-132	A
15	AA-50	P	45	AA-128	P
16	AA-58	P	46	AA-129	P
17	AA-57	P	47	AA-16	P
18	AA-75	P	48	AA-69	A
19	AA-56	A	49	AA-77	P
20	AA-62	P	50	AA-13	P
21	AA-59	P	51		
22	AA-65	P	52		
23	AA-60	A	53		
24	AA-64	P	54		
25	AA-68	P	55		
26	AA-71	P	56		
27	AA-70	P	57		
28	AA-74	P	58		
29	AA-76	P	59		
30	AA-78	P	60		

Present - 44

Absent - 06

Total - 50

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Internal Evaluation Cell

Tutorial – I Semester – I Year-2018-19

Class: B. Sc. I

Subject: Mathematics

Parer No: MAT-102

Name of Paper: Differential Equations

Marks-10

Q.1 Attempt any one:

10

a) Explain the method of solving the differential equation

$$\frac{dy}{dx} + Py = Q.y^n \text{ where P and Q are functions of x.}$$

b) Explain the method of

$$(a + bx)^n \frac{d^n y}{dx^n} + P_1 (a + bx)^{n-1} \frac{d^{n-1} y}{dx^{n-1}} + \dots + P_{n-1} (a + bx) \frac{dy}{dx} +$$

$P_n y = f(x)$, Where P_1, P_2, \dots, P_n are constants.

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INTERNAL QUALITY ASSURANCE CELL

Statement of Marks of Unit Test and Tutorial - I
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class : B. Sc.I,

Semester: I,

Name of Paper : Differential Equations,

Marks: Test-10, Tutorial -10, Total-20

Paper No. : MAT-102,

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AA-04	7	8	15	31	AA-85	8	9	17
2	AA-05	8	9	17	32	AA-88	7	8	15
3	AA-06	7	10	17	33	AA-89	A	8	8
4	AA-09	6	10	16	34	AA-94	5	8	13
5	AA-10	6	9	15	35	AA-97	8	9	17
6	AA-17	5	8	13	36	AA-102	9	10	19
7	AA-18	7	9	16	37	AA-109	7	10	17
8	AA-22	9	10	19	38	AA-111	6	9	15
9	AA-45	10	10	20	39	AA-115	8	8	16
10	AA-46	10	10	20	40	AA-116	8	9	17
11	AA-51	8	8	16	41	AA-122	8	9	17
12	AA-32	A	8	8	42	AA-124	8	9	17
13	AA-40	7	9	16	43	AA-125	9	9	18
14	AA-42	6	9	15	44	AA-132	A	A	00
15	AA-50	5	8	13	45	AA-128	7	8	15
16	AA-58	8	8	16	46	AA-129	7	8	15
17	AA-57	9	8	17	47	AA-16	6	8	14
18	AA-75	7	9	16	48	AA-69	A	9	9
19	AA-56	A	A	00	49	AA-77	8	9	17
20	AA-62	8	9	17	50	AA-13	7	9	16
21	AA-59	6	10	16	51				
22	AA-65	5	8	13	52				
23	AA-60	A	A	00	53				
24	AA-64	7	8	15	54				
25	AA-68	7	9	16	55				
26	AA-71	8	9	17	56				
27	AA-70	9	10	19	57				
28	AA-74	10	10	20	58				
29	AA-76	6	8	14	59				
30	AA-78	6	9	17	60				

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Internal Evaluation Cell

Unit Test- I Semester III Year-2018-19

Class: B. Sc. II

Subject: Mathematics

Parer No: MAT-301

Date: 19/09/2018

Name of Paper: Number Theory

Time: 30 Min

Marks: 10

Q.1 Attempt any one:

10

- a) If a and b be integers, not both zero, then prove that a and b are relatively prime if and only if there exist integers x and y such that,
 $1 = ax + by$.
- b) Explain Euclidean Algorithm for finding greatest common divisor of a and b .

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INTERNAL QUALITY ASSURANCE CELL

Presenty Report of Unit Test - I
Department of Mathematics 2018-19

Class: B. Sc.II,

Semester: III,

Name of Teacher : Shri. S. D. Agalave

Paper No. : MAT-301,

Name of Paper : Number Theory

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AB-01	P	31	AB-114	A
2	AB-16	P	32	AB-115	P
3	AB-19	P	33	AB-116	P
4	AB-21	P	34	AB-118	P
5	AB-22	P	35	AB-119	A
6	AB-28	P	36		
7	AB-33	P	37		
8	AB-34	P	38		
9	AB-37	P	39		
10	AB-43	A	40		
11	AB-45	P	41		
12	AB-49	P	42		
13	AB-51	P	43		
14	AB-52	P	44		
15	AB-53	A	45		
16	AB-55	P	46		
17	AB-61	P	47		
18	AB-62	P	48		
19	AB-72	P	49		
20	AB-73	P	50		
21	AB-83	A	51		
22	AB-85	P	52		
23	AB-91	P	53		
24	AB-94	P	54		
25	AB-95	P	55		
26	AB-99	P	56		
27	AB-100	P	57		
28	AB-101	P	58		
29	AB-102	A	59		
30	AB-112	P	60		

Present - 29

Absent - 06

Total - 35

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Internal Evaluation Cell

Tutorial – I Semester III Year-2018-19

Class: B. Sc. II

Parer No: MAT-301

Subject: Mathematics

Name of Paper: Number Theory

Marks: 10

Que. a) Given integers a, b, c, d show that

- (i) if $a \mid b$ then $a \mid bc$
- (ii) if $a \mid b$ and $a \mid c$, then $a \mid bc$
- (iii) $a \mid b$ if and only if $ac \mid bc$, where $c \neq 0$
- (iv) if $a \mid b$ and $c \mid d$ then $ac \mid bd$

10


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Statement of Marks of Unit Test and Tutorial - I
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class: B. Sc.II,


Semester: III,

Name of Paper : Number Theory,

Paper No. : MAT-301,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AB-01	6	9	15	31	AB-114	A	8	8
2	AB-16	7	9	16	32	AB-115	8	9	17
3	AB-19	8	8	16	33	AB-116	9	10	19
4	AB-21	9	8	17	34	AB-118	8	9	17
5	AB-22	9	9	18	35	AB-119	A	8	8
6	AB-28	6	9	15	36				
7	AB-33	10	10	20	37				
8	AB-34	10	10	20	38				
9	AB-37	7	8	15	39				
10	AB-43	A	8	8	40				
11	AB-45	10	10	20	41				
12	AB-49	8	9	17	42				
13	AB-51	7	9	16	43				
14	AB-52	10	10	20	44				
15	AB-53	A	8	8	45				
16	AB-55	6	8	14	46				
17	AB-61	5	9	14	47				
18	AB-62	6	9	15	48				
19	AB-72	10	10	20	49				
20	AB-73	10	10	20	50				
21	AB-83	A	8	8	51				
22	AB-85	5	8	13	52				
23	AB-91	8	9	17	53				
24	AB-94	7	10	17	54				
25	AB-95	7	9	16	55				
26	AB-99	9	10	19	56				
27	AB-100	8	9	17	57				
28	AB-101	7	9	16	58				
29	AB-102	A	A	00	59				
30	AB-112	7	8	15	60				


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Internal Evaluation Cell

Unit Test- I Semester III Year-2018-19

Class: B. Sc. II

Subject: Mathematics

Parer No: MAT-303

Date: 19/9/2018

Name of Paper: Mechanics-I

Time: 30 Min

Marks: 10

Q.1 Attempt any one:

10

- a) Find the resultant of two unlike parallel forces acting upon a rigid body.
- b) Two forces \vec{P} and \vec{Q} act at a point along two lines making an angle θ with each other and \vec{R} is their resultant. The magnitude of the resolved part of R in the direction of the force \vec{P} is Q. Prove that $\sin \theta/2 = \sqrt{\frac{P}{2Q}}$.

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Presenty Report of Unit Test - I
Department of Mathematics 2018-19

Class: B. Sc.II,

Semester: III,

Name of Teacher : Shri. S. D. Agalave

Paper No. : MAT-303

Name of Paper : Mechanics - I

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AB-01	P	31	AB-114	A
2	AB-16	P	32	AB-115	P
3	AB-19	P	33	AB-116	P
4	AB-21	P	34	AB-118	P
5	AB-22	P	35	AB-119	A
6	AB-28	P	36		
7	AB-33	P	37		
8	AB-34	P	38		
9	AB-37	P	39		
10	AB-43	A	40		
11	AB-45	P	41		
12	AB-49	P	42		
13	AB-51	P	43		
14	AB-52	P	44		
15	AB-53	A	45		
16	AB-55	P	46		
17	AB-61	P	47		
18	AB-62	P	48		
19	AB-72	P	49		
20	AB-73	P	50		
21	AB-83	A	51		
22	AB-85	P	52		
23	AB-91	P	53		
24	AB-94	P	54		
25	AB-95	P	55		
26	AB-99	P	56		
27	AB-100	P	57		
28	AB-101	P	58		
29	AB-102	A	59		
30	AB-112	P	60		

Present - 29

Absent - 06

Total - 35

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Internal Evaluation Cell

Class: B. Sc. II

Tutorial – I

Semester III

Year-2018-19

Name of Paper: **Mechanics-I**

Subject: **Mathematics**

Parer No: **MAT-303**

Marks: 10

Q.1 Attempt any one:

10

- a) Determine the magnitude and direction of the resultant \vec{R} of the two forces \vec{P} and \vec{Q} acting at an angle θ .
- b) Find the smaller force, when the two forces act at an angle of 120° , the greater force is of 30 kg and resultant is perpendicular to smaller one.

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Statement of Marks of Unit Test and Tutorial - I
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class: B. Sc.II,

Semester: III,

Name of Paper : Mechanics - I,

Paper No. : MAT-303,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AB-01	5	8	13	31	AB-114	A	8	8
2	AB-16	8	9	17	32	AB-115	8	9	17
3	AB-19	6	9	15	33	AB-116	9	10	19
4	AB-21	7	9	16	34	AB-118	8	9	17
5	AB-22	8	8	16	35	AB-119	A	8	8
6	AB-28	9	8	17	36				
7	AB-33	9	9	18	37				
8	AB-34	10	10	20	38				
9	AB-37	7	8	15	39				
10	AB-43	A	8	8	40				
11	AB-45	10	10	20	41				
12	AB-49	8	9	17	42				
13	AB-51	7	9	16	43				
14	AB-52	10	10	20	44				
15	AB-53	A	8	8	45				
16	AB-55	6	8	14	46				
17	AB-61	5	9	14	47				
18	AB-62	6	9	15	48				
19	AB-72	10	10	20	49				
20	AB-73	10	10	20	50				
21	AB-83	A	8	8	51				
22	AB-85	7	10	17	52				
23	AB-91	7	9	16	53				
24	AB-94	9	10	19	54				
25	AB-95	6	9	15	55				
26	AB-99	10	10	20	56				
27	AB-100	8	9	17	57				
28	AB-101	7	9	16	58				
29	AB-102	A	A	00	59				
30	AB-112	7	8	15	60				

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Tq. Tuljapur Dist. Osmanabad 413603

Internal Evaluation Cell

Unit Test- I Semester V Year-2018-19

Class: B. Sc. III

Subject: Mathematics

Parer No: MAT-504

Date: 19/09/2018

Name of Paper: **Ordinary Differential Equations-I** Time: 30 Min.

Marks: 10

Q.1 Attempt any one:

10

a) Consider the equation $y' + ay = b(x)$, where a is constant and b is a continuous function on an interval I , if x_0 is a point in I and c is any constant, then prove that the function $\phi(x) = e^{-ax} \int_{x_0}^x e^{at} b(t) dt + ce^{-ax}$ is a solution of this equation?

b) Express the following complex numbers in the polar form $r(\cos\theta + i\sin\theta)$ with $r \geq 0$ and $0 \leq \theta < 2\pi$ (i) $1 + i\sqrt{3}$ (ii) $(1 + i)^2$

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INTERNAL QUALITY ASSURANCE CELL

Presenty Report of Unit Test - I
Department of Mathematics 2018-19

Class: B. Sc.III

Semester: V

Name of Teacher : Shri. S. D. Agalave

Paper No. : MAT-504

Name of Paper : Ordinary Differential Equations - I

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AC-01	A	31	AC-70	P
2	AC-04	P	32	AC-76	A
3	AC-05	P	33	AC-82	P
4	AC-06	P	34	AC-89	P
5	AC-08	P	35	AC-93	P
6	AC-10	A	36	AC-94	P
7	AC-11	P	37	AC-95	P
8	AC-17	P	38	AC-96	P
9	AC-18	P	39	AC-99	P
10	AC-20	P	40	AC-100	P
11	AC-22	A	41		
12	AC-23	P	42		
13	AC-24	P	43		
14	AC-29	A	44		
15	AC-35	P	45		
16	AC-36	P	46		
17	AC-39	P	47		
18	AC-41	P	48		
19	AC-43	P	49		
20	AC-44	P	50		
21	AC-47	P	51		
22	AC-48	P	52		
23	AC-49	P	53		
24	AC-55	P	54		
25	AC-60	P	55		
26	AC-62	A	56		
27	AC-63	A	57		
28	AC-64	P	58		
29	AC-68	P	59		
30	AC-69	P	60		

Present - 33

Absent - 07

Total - 40

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Internal Evaluation Cell

Tutorial – I Semester V Year-2018-19

Class: B. Sc. III

Subject: Mathematics

Parer No: MAT-504

Name of Paper: Ordinary Differential Equations

Marks: 10

Q.1 Attempt any one:

10


a) If n is any positive integer, prove that

$$r^n (\cos n\theta + i \sin n\theta) = [r(\cos\theta + i \sin\theta)]^n$$

b) Consider the complex valued functions $f(x) = x + (1 - i)x^2$ and

$g(x) = (1 + i)x^2$, for all real x , then find

(i) Ref, Imf, Reg, Img (ii) $(f+g)(x)$, $(f.g)(x)$ (iii) $f'(x)$, $\int_0^1 f(x)dx$


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Statement of Marks of Unit Test and Tutorial - I
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class: B. Sc.III, Semester: V, Name of Paper : Ordinary Differential Equations – I

Paper No. : MAT-504,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AC-01	A	A	00	31	AC-70	7	9	16
2	AC-04	8	9	17	32	AC-76	A	8	8
3	AC-05	9	9	18	33	AC-82	10	10	20
4	AC-06	8	8	16	34	AC-89	10	10	20
5	AC-08	8	9	17	35	AC-93	8	10	18
6	AC-10	A	8	8	36	AC-94	9	10	19
7	AC-11	8	9	17	37	AC-95	10	10	20
8	AC-17	8	8	16	38	AC-96	6	9	15
9	AC-18	8	9	17	39	AC-99	8	9	17
10	AC-20	8	9	17	40	AC-100	9	10	19
11	AC-22	A	8	8	41				
12	AC-23	9	9	18	42				
13	AC-24	8	9	17	43				
14	AC-29	A	9	9	44				
15	AC-35	8	8	16	45				
16	AC-36	6	9	15	46				
17	AC-39	8	9	17	47				
18	AC-41	7	8	15	48				
19	AC-43	9	10	19	49				
20	AC-44	9	9	18	50				
21	AC-47	7	8	15	51				
22	AC-48	8	9	17	52				
23	AC-49	9	9	18	53				
24	AC-55	8	9	17	54				
25	AC-60	7	9	16	55				
26	AC-62	A	8	8	56				
27	AC-63	A	A	00	57				
28	AC-64	9	10	19	58				
29	AC-68	8	8	16	59				
30	AC-69	8	9	17	60				

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Internal Evaluation 2018-2019
Department of Mathematics


**Outcome Report of Unit Test/ Tutorial - I.
Sem. I, III & V**


The Department of Mathematics has conducted internal evaluation exam in the academic year 2018-2019. The Unit Test of B. Sc. I, II, & III year student's based on the syllabus of Sem. I, III & V

Conclusion:

1. Awareness regarding preparation of University exam created among student.
2. It supported to develop answer writing skill of the student.
3. Student received the direction of study in the view of University exam.
4. Students got awareness the importance of time and exam.


Assist. Prof.


SHRI. AGALAVE S. D.
Head, Department of Mathematics
Jawahar Arts, Science & Commerce College
Anadur, Dist. Osmanabad - 413 603


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Principal
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Secretary : Shri. S. N. Alure Guruji

Principal : Dr. Umakant Chanshetli (Mob.: 9420488874)
(M.Sc., M.Phil, Ph.D)

Ph.: (02471) 246037, 246737

Ref. : JMA


Date :

दि. १३.०२.२०१९

सूचना

बी.ए./बी.एस्सी./बी.कॉम.(I,II,III) वर्षातील सर्व विद्यार्थ्यांना सूचित करण्यात येते की, अंतर्गत मूल्यमापन कार्यक्रम (२०१८-२०१९) नुसार द्वितीय घटक चाचणी दि.१५ व १६ फेब्रुवारी २०१९ रोजी घेण्यात येणार आहे.सदर घटक चाचणीचे वेळापत्रक सूचना फलकावर लावण्यात येईल याची सर्वांनी नोंद घ्यावी.


चेअरमन
Co-Ordinator
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UNIT TEST-II (2018-19)

Date & Day	Time	Faculty of Arts				Faculty of Science			Faculty of Commerce		
		B.A. I	B.A. II	B.A. III	B.Sc. I	B.Sc. II	B.Sc. III	B.Com. I	B.Com. II	B.Com. III	
15/02/2019 Friday	10.00-10.40am	Eng.Com II (18)	S.L. M/H/S (05/06/18)	-----	Eng.Com II (04)	S.L. M/H/S (06/05/07)	-----	-----	S.L. M/H/S (05/06/18)	-----	
	10.50-11.30am	S.L. M/H/S II (06/05/04)	Eng.Com (18)	Main M/H/S/E- XV(04) His/Eco/Geo/Pol/Soc XV-(5/6)	S.L. M/H/S II (06/05/04)	Eng.Com (07)	-----	S.L. M/H/S (06/05/04)	-----	-----	
	11.40-12.20pm	-----	Opt M/S/H/E VII/VIII/IV (6/9/10/11)	Main M/H/S/E XVI (09) His/Eco/Geo/Pol/Soc XVI-(05)	-----	Che-IX (18)	Phy/Zoo XIX (04)	ITAB (09)	Acc (07)	-----	
	12.30-1.10pm	Opt M/H/S/E-III (06/05/15/13)	Opt M/S/H/E VIII/VIII/V (5/6/7/9)	Opt M/S/H/E XIII/XIII/VII (16)	Che-IV (07)	Che-X (18)	Phy/Zoo XX (04)	B.M.S. (09)	PBM (10)	Cost. Acc (11)	
	1.20-2.00pm	Opt M/H/S/E-IV (06/05/15/13)	His/Eco/Geo VII/VIII (9/17/18)	Opt M/S/H/E XIV/XIV/VII/VII (7)	Che V (07)	Phy/Zoo XI (04)	Maths/Bot 601/XIX (12/16)	Fin.Acc (09)	M.M. (10)	I.T. (11)	
16/02/2019 Saturday	10.00-10.40am	Eco/Geo-III (06/05)	His/Eco/Geo VIII/IX (09/17/18)	His/Eco/Geo XIII/IXX (14/15)	Phy/Zoo IV (07/04)	Phy/Zoo XII (07/04)	Maths Bot 602/XX (12/16)	B.Entren. (09)	I.T. (10)	Audit (11)	
	10.50-11.30am	Eco/Geo IV (06/05)	Pol.Sci/Soci-VII (07/09)	His/Eco/Geo -XIV (06/09/17)	Phy/Zoo V (07/04)	Maths/Bot 401/XI (07/04)	Maths 604 (12)	BOM (09)	B.R.F. (10)	M.Acc (11)	
	11.40-12.20pm	Pol.Sci/Soci/ Hist III (05/08/06)	Pol.Sci/Soci-VIII (04/09)	Pol.Sci/Soci -XIII (4/9)	Maths/Bot 201/IV (4/6)	Maths/Bot 402/XII (9/16)	Che XVI (07)	Eng.Com (18)	GST (10)	A.F.Acc (11)	
	12.30-1.10pm	Pol.Soci/ Hist IV (05/08/06)	-----	Pol.Sci/Soci-XIV (05/08)	Maths/Bot 202/V (4/6)	Maths 403(09)	Che-XVII (07)	-----	Eng. Com(18)	Insu (11)	

Note: - Bracketed figure indicates the Hall Number.

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Prof
Co-Ordinator
Internal Evaluation Cell
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Unit Test – II Semester II Year 2018-19

Class : **B. Sc. I** Subject : **Mathematics** Paper No : **MAT-202**
Name of paper : **Geometry** Time : **30 Min.** Marks- **10**

Date : 16/02/2019

Q. 1 Attempt any one :

10

a) Transform the equations $a_1x + b_1y + c_1z + d_1 = 0$, $a_2x + b_2y + c_2z + d_2 = 0$ of the line to the symmetrical form. 10

b) Find the condition that the two given straight lines $\frac{x-x_1}{l_1} = \frac{y-y_1}{m_1} = \frac{z-z_1}{n_1}$,

$\frac{x-x_2}{l_2} = \frac{y-y_2}{m_2} = \frac{z-z_2}{n_2}$ are coplanar.

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Presenty Report of Unit Test - II
Department of Mathematics 2018-19

Class: B. Sc.I,
Paper No. : MAT-202

Semester: II,

Name of Teacher : Shri. S. D. Agalave

Name of Paper : Geometry

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AA-05	P	31	AA-85	P
2	AA-04	P	32	AA-88	P
3	AA-06	P	33	AA-89	P
4	AA-09	P	34	AA-94	A
5	AA-10	P	35	AA-97	P
6	AA-17	A	36	AA-102	P
7	AA-18	P	37	AA-109	P
8	AA-22	P	38	AA-111	P
9	AA-45	P	39	AA-115	P
10	AA-46	P	40	AA-116	P
11	AA-51	A	41	AA-122	A
12	AA-32	P	42	AA-124	A
13	AA-40	P	43	AA-125	P
14	AA-42	P	44	AA-132	A
15	AA-50	P	45	AA-128	P
16	AA-58	P	46	AA-129	P
17	AA-57	P	47	AA-16	P
18	AA-75	P	48	AA-69	P
19	AA-56	A	49	AA-77	P
20	AA-62	P	50	AA-13	A
21	AA-59	P	51		
22	AA-65	P	52		
23	AA-60	A	53		
24	AA-64	A	54		
25	AA-68	A	55		
26	AA-71	A	56		
27	AA-70	A	57		
28	AA-74	P	58		
29	AA-76	A	59		
30	AA-78	P	60		

Present - 36

Absent - 14

Total - 50

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Internal Evaluation Cell

Tutorial - II Semester II Year 2018-19

Class : B. Sc. I

Subject : Mathematics

Paper No : MAT-202 Name of paper : Geometry Marks- 10

Que : Attempt any one :

10

a) Find the symmetrical form of the line $x + y + z + 1 = 0$, $4x + y - 2z + 2 = 0$ and find its direction cosines.

b) Find the intersection of the line $x - 2y + 4z + 4 = 0$, $x + y + z - 8 = 0$ with the plane $x - y + 2z + 1 = 0$.

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Statement of Marks of Unit Test and Tutorial - II
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class: B. Sc.I,

Semester: II,

Name of Paper : Geometry,

Paper No. : MAT-202,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AA-05	6	9	15	31	AA-85	6	9	15
2	AA-04	7	9	16	32	AA-88	8	10	8
3	AA-06	8	10	18	33	AA-89	7	9	16
4	AA-09	7	10	17	34	AA-94	A	A	00
5	AA-10	6	8	14	35	AA-97	7	9	16
6	AA-17	A	A	00	36	AA-102	8	8	16
7	AA-18	5	10	15	37	AA-109	9	10	19
8	AA-22	6	10	16	38	AA-111	8	9	17
9	AA-45	6	9	15	39	AA-115	6	10	16
10	AA-46	5	10	15	40	AA-116	5	9	14
11	AA-51	A	A	00	41	AA-122	A	A	00
12	AA-32	6	10	16	42	AA-124	A	A	00
13	AA-40	7	10	17	43	AA-125	7	8	15
14	AA-42	8	9	17	44	AA-132	A	A	00
15	AA-50	8	9	17	45	AA-128	6	9	15
16	AA-58	9	10	19	46	AA-129	6	9	15
17	AA-57	8	10	18	47	AA-16	7	9	16
18	AA-75	7	10	17	48	AA-69	8	10	18
19	AA-56	A	A	00	49	AA-77	7	10	17
20	AA-62	7	10	17	50	AA-13	A	8	8
21	AA-59	8	10	18	51				
22	AA-65	7	9	16	52				
23	AA-60	A	A	00	53				
24	AA-64	A	A	00	54				
25	AA-68	A	A	00	55				
26	AA-71	A	A	00	56				
27	AA-70	A	A	00	57				
28	AA-74	7	10	17	58				
29	AA-76	A	10	10	59				
30	AA-78	6	10	16	60				

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Unit test – II Semester : IV Year 2018-19

Class : **B. Sc. II** Subject : **Mathematics** Parer No : **MAT- 403** Marks: **10**
Date : 16/02/2019 Name of Paper : **Mechanics-II** Time: **30 Min.**

Q.1 Attempt any one :

10

- a) Find the expression for the velocity and acceleration in terms of vector derivatives.
- b) Prove that the kinetic energy of particle of mass m moving with velocity \vec{v} is $\frac{1}{2}mv^2$.

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Presenty Report of Unit Test - II
Department of Mathematics 2018-19

Class : B. Sc.II

Semester: IV

Name of Teacher : Shri. S. D. Agalave

Paper No. : MAT- 403

Name of Paper : Mechanics - II

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AB-01	A	31	AB-114	A
2	AB-16	P	32	AB-115	P
3	AB-19	P	33	AB-116	P
4	AB-21	P	34	AB-118	P
5	AB-22	P	35	AB-119	A
6	AB-28	P	36		
7	AB-33	P	37		
8	AB-34	P	38		
9	AB-37	P	39		
10	AB-43	A	40		
11	AB-45	P	41		
12	AB-49	A	42		
13	AB-51	P	43		
14	AB-52	P	44		
15	AB-53	A	45		
16	AB-55	P	46		
17	AB-61	P	47		
18	AB-62	P	48		
19	AB-72	P	49		
20	AB-73	P	50		
21	AB-83	A	51		
22	AB-85	P	52		
23	AB-91	P	53		
24	AB-94	P	54		
25	AB-95	P	55		
26	AB-99	P	56		
27	AB-100	P	57		
28	AB-101	P	58		
29	AB-102	A	59		
30	AB-112	P	60		

Present - 27

Absent - 08

Total - 35

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Internal Evaluation Cell

Tutorial – II Semester : IV Year 2018-19

Class : B. Sc. II

Subject : **Mathematics**

Parer No : MAT- 403

Name of Paper : **Mechanics-II**

Marks: 10

Q.1 Attempt any one :

10

- Find radial and transverse components of velocity.
- Find radial and transverse components of acceleration.

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Statement of Marks of Unit Test and Tutorial - II
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class : B. Sc.II,

Semester: IV,

Name of Paper : Mechanics - II,

Paper No. : MAT- 403,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AB-01	A	A	00	31	AB-114	A	A	00
2	AB-16	7	8	15	32	AB-115	8	9	17
3	AB-19	7	9	16	33	AB-116	9	10	19
4	AB-21	6	10	16	34	AB-118	8	10	18
5	AB-22	8	10	18	35	AB-119	A	A	00
6	AB-28	5	9	14	36				
7	AB-33	5	10	15	37				
8	AB-34	9	10	19	38				
9	AB-37	6	8	14	39				
10	AB-43	A	A	00	40				
11	AB-45	6	9	15	41				
12	AB-49	A	A	00	42				
13	AB-51	7	8	15	43				
14	AB-52	8	9	17	44				
15	AB-53	A	A	00	45				
16	AB-55	9	8	17	46				
17	AB-61	8	8	16	47				
18	AB-62	7	9	16	48				
19	AB-72	10	10	20	49				
20	AB-73	8	10	18	50				
21	AB-83	A	A	00	51				
22	AB-85	8	9	17	52				
23	AB-91	8	9	17	53				
24	AB-94	7	9	16	54				
25	AB-95	7	10	17	55				
26	AB-99	6	8	14	56				
27	AB-100	9	10	19	57				
28	AB-101	6	10	16	58				
29	AB-102	A	A	00	59				
30	AB-112	7	8	15	60				

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Internal Evaluation Cell

Unit test – II Semester : VI Year 2018-19

Class : B. Sc. III Subject : Mathematics Parer No : MAT- 602 Marks: 10
Date : 16/02/2019 Name of Paper : Abstract Algebra-II Time: 30 Min.

Q.1 Attempt any one :

10

- a) If T is homomorphism of a vector space U onto a vector space V over a field F with kernel W , then prove that V is isomorphic to U/W .
- b) If V is the internal direct sum of U_1, U_2, \dots, U_n then prove that V is isomorphic to the external direct sum of U_1, U_2, \dots, U_n .

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INTERNAL QUALITY ASSURANCE CELL

Presenty Report of Unit Test - II
Department of Mathematics 2018-19

Class: B. Sc.III

Semester: VI

Name of Teacher : Shri. S. D. Agalave

Paper No. : MAT - 602

Name of Paper : Abstract Algebra - II

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AC-01	A	31	AC-70	P
2	AC-04	P	32	AC-76	A
3	AC-05	P	33	AC-82	P
4	AC-06	P	34	AC-89	A
5	AC-08	P	35	AC-93	P
6	AC-10	A	36	AC-94	P
7	AC-11	P	37	AC-95	P
8	AC-17	P	38	AC-96	P
9	AC-18	P	39	AC-99	P
10	AC-20	P	40	AC-100	A
11	AC-22	P	41		
12	AC-23	P	42		
13	AC-24	P	43		
14	AC-29	A	44		
15	AC-35	A	45		
16	AC-36	P	46		
17	AC-39	P	47		
18	AC-41	P	48		
19	AC-43	P	49		
20	AC-44	P	50		
21	AC-47	P	51		
22	AC-48	A	52		
23	AC-49	P	53		
24	AC-55	P	54		
25	AC-60	P	55		
26	AC-62	A	56		
27	AC-63	A	57		
28	AC-64	P	58		
29	AC-68	P	59		
30	AC-69	P	60		

Present - 30

Absent - 10

Total - 40

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Internal Evaluation Cell

Tutorial – II Semester : VI Year 2018-19

Class : B. Sc. III

Subject : Mathematics

Parer No : MAT- 602

Name of Paper : Abstract Algebra-II

Marks: 10

Q.1 Attempt any one :

10

a) If V is vector space over F if W is a subspace of V , then prove that V/W is a vector space over F , where for $v_1 + W, v_2 + W \in V/W$ and $\alpha \in F$,

(i) $(v_1 + W) + (v_2 + W) = (v_1 + v_2) + W$ (ii) $\alpha(v_1 + W) = \alpha v_1 + W$.

b) If V is vector space over F then prove that

(i) $\alpha 0 = 0$ for $\alpha \in F$

(ii) $0 v = 0$ for $v \in V$

(iii) $(-\alpha) v = -(\alpha v)$ for $\alpha \in F, v \in V$

(iv) If $\alpha \neq 0$ then $\alpha v = 0$ implies that $v = 0$.

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INTERNAL QUALITY ASSURANCE CELL

Statement of Marks of Unit Test and Tutorial - II
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class: B. Sc.III, Semester: VI,

Paper No. : MAT - 602,

Name of Paper : Abstract Algebra - II,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AC-01	A	A	00	31	AC-70	5	10	15
2	AC-04	8	10	18	32	AC-76	A	A	00
3	AC-05	8	9	17	33	AC-82	6	9	15
4	AC-06	9	9	18	34	AC-89	A	A	00
5	AC-08	8	9	17	35	AC-93	8	9	17
6	AC-10	A	8	8	36	AC-94	8	10	18
7	AC-11	9	10	19	37	AC-95	9	9	18
8	AC-17	9	10	19	38	AC-96	8	10	18
9	AC-18	10	10	20	39	AC-99	9	9	18
10	AC-20	10	10	20	40	AC-100	A	A	00
11	AC-22	10	10	20	41				
12	AC-23	8	10	18	42				
13	AC-24	8	9	17	43				
14	AC-29	A	9	9	44				
15	AC-35	A	A	00	45				
16	AC-36	6	9	15	46				
17	AC-39	8	9	17	47				
18	AC-41	7	8	15	48				
19	AC-43	9	9	18	49				
20	AC-44	8	9	17	50				
21	AC-47	8	9	17	51				
22	AC-48	A	8	8	52				
23	AC-49	9	9	18	53				
24	AC-55	8	9	17	54				
25	AC-60	7	9	16	55				
26	AC-62	A	8	8	56				
27	AC-63	A	A	00	57				
28	AC-64	9	10	19	58				
29	AC-68	8	8	16	59				
30	AC-69	8	9	17	60				

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Internal Evaluation Cell

Unit test – II Semester : VI Year 2018-19

Class : B. Sc. III

Subject : Mathematics

Parer No : MAT- 604

Name of Paper : Ordinary Differential Equations-II

Date : 16/02/2019

Time: 30 Min.

Marks: 10

Q.1 Attempt any one :

10

- a) Let x_0 be in I , and let $\alpha_1, \alpha_2, \dots, \alpha_n$ be any n constants. Then prove that there is almost one solution ϕ of $L(y) = 0$ on I satisfying $\phi(x_0) = \alpha_1, \phi'(x_0) = \alpha_2, \dots, \phi^{(n-1)}(x_0) = \alpha_n$.
- b) Let $\phi_1, \phi_2, \dots, \phi_n$ be the n solutions of $L(y) = 0$ on I satisfying $\phi_i^{(i-1)}(x_0) = 1, \phi_i^{(j-1)}(x_0) = 0, j \neq i$. If ϕ is any solution of $L(y) = 0$ on I , then prove that there are n constants c_1, c_2, \dots, c_n such that $\phi = c_1\phi_1 + c_2\phi_2 + \dots + c_n\phi_n$.

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INTERNAL QUALITY ASSURANCE CELL

Presenty Report of Unit Test - II
Department of Mathematics 2018-19

Class: B. Sc.III, Semester: VI, Name of Teacher : Shri. S. D. Agalave
Paper No. : MAT-604 Name of Paper : Ordinary Differential Equations - II

Sr. No.	Roll. No	P/A	Sr. No.	Roll. No	P/A
1	AC-01	A	31	AC-70	P
2	AC-04	P	32	AC-76	A
3	AC-05	P	33	AC-82	P
4	AC-06	P	34	AC-89	A
5	AC-08	P	35	AC-93	P
6	AC-10	A	36	AC-94	P
7	AC-11	P	37	AC-95	P
8	AC-17	P	38	AC-96	P
9	AC-18	P	39	AC-99	P
10	AC-20	P	40	AC-100	A
11	AC-22	P	41		
12	AC-23	P	42		
13	AC-24	P	43		
14	AC-29	A	44		
15	AC-35	A	45		
16	AC-36	P	46		
17	AC-39	P	47		
18	AC-41	P	48		
19	AC-43	P	49		
20	AC-44	P	50		
21	AC-47	P	51		
22	AC-48	A	52		
23	AC-49	P	53		
24	AC-55	P	54		
25	AC-60	P	55		
26	AC-62	A	56		
27	AC-63	A	57		
28	AC-64	P	58		
29	AC-68	P	59		
30	AC-69	P	60		

Present - 30

Absent - 10

Total - 40

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Internal Evaluation Cell

Tutorial – II Semester : VI Year 2018-19

Class : B. Sc. III

Subject : Mathematics

Parer No : MAT- 604

Name of Paper : Ordinary Differential Equations-II

Marks: 10

Q.1 Attempt any one :

10

a) Let b_1, b_2, \dots, b_n be non-negative constants such that for all x in I

$$|a_j(x)| \leq b_j, (j = 1, 2, \dots, n) \text{ and define } k \text{ by } k = 1 + b_1 + \dots + b_n.$$

If x_0 is a point in I and ϕ is a solution of $L(y) = 0$ on I , then prove that

$$\|\phi(x_0)\| e^{-k|x-x_0|} \leq \|\phi(x)\| \leq \|\phi(x_0)\| e^{k|x-x_0|} \text{ for all } x \text{ in } I.$$

b) Prove that there exist n linearly independent solutions of $L(y) = 0$ on I .

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Statement of Marks of Unit Test and Tutorial - II
Department of Mathematics 2018-19

Name of Teacher : Shri. S. D. Agalave

Class: B. Sc.III, Semester: VI, Name of Paper : Ordinary Differential Equations - II,

Paper No. : MAT-604,

Marks: Test-10, Tutorial -10, Total-20

Sr. No.	Roll. No	Test	Tutorial	Total	Sr. No.	Roll. No	Test	Tutorial	Total
1	AC-01	A	A	00	31	AC-70	5	10	15
2	AC-04	6	9	15	32	AC-76	A	A	00
3	AC-05	8	9	17	33	AC-82	6	9	15
4	AC-06	7	8	15	34	AC-89	A	A	00
5	AC-08	9	9	18	35	AC-93	9	10	19
6	AC-10	A	8	8	36	AC-94	9	10	19
7	AC-11	8	9	17	37	AC-95	10	10	20
8	AC-17	8	10	18	38	AC-96	10	10	20
9	AC-18	9	9	18	39	AC-99	10	10	20
10	AC-20	8	10	18	40	AC-100	A	A	00
11	AC-22	9	9	18	41				
12	AC-23	8	10	18	42				
13	AC-24	8	9	17	43				
14	AC-29	A	9	9	44				
15	AC-35	A	A	00	45				
16	AC-36	8	10	18	46				
17	AC-39	8	9	17	47				
18	AC-41	9	9	18	48				
19	AC-43	8	9	17	49				
20	AC-44	8	9	17	50				
21	AC-47	8	9	17	51				
22	AC-48	A	8	8	52				
23	AC-49	9	9	18	53				
24	AC-55	8	9	17	54				
25	AC-60	7	9	16	55				
26	AC-62	A	8	8	56				
27	AC-63	A	A	00	57				
28	AC-64	9	10	19	58				
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30	AC-69	8	9	17	60				

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Internal Evaluation 2018-2019
Department of Mathematics

Outcome Report of Unit Test/ Tutorial - II
Sem. II, IV & VI

The department of Mathematics has conducted internal evaluation exam in the academic year **2018-2019**. The Unit Test of B. Sc. I, II & III year student's based on the syllabus of Sem. II, IV & VI

Conclusion:

1. Awareness regarding preparation of University exam created among student.
2. It supported to develop answer writing skill of the student.
3. Student received the direction of study in the view of University exam.
4. Students got awareness the importance of time and exam.

Assist. Prof.

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