Government of Maharashtra

INSTITUTE OF SCIENCE, NAGPUR

Ravindranath Tagore Road, Civil lines, Near Maharajbag, NAGPUR -01

Website: www.iscnagpur.ac.in,

E-mail: info@iscnagpur.ac.in, director @iscnagpur.ac.in

Telephone:0712-2565581,2561148   Fax:0712-2565581

NOTICE

This is to inform all Head of Departments that Second class unit test examination is scheduled from 07.10.2014 to 13.10.2014 .

All UG and PG students are here by informed that Second class unit test examination will be held during 07.10.2014 to 13.10.2014 .

Internal assessment marks will be given on the basis of attendance and results of all internal examinations conducted by Institute. Submit marksheets with a copy of Question papers to the Exam committee ,on or before 18.10.2014 , on Email ID suganjadhao@gmail.com

For circulation

Prof.Incharge

Exam committee

Director.
Institute of Science
NAGPUR.

सूचना.   दिनांक 8/08/2013

सर्व विभागप्रमुखांना सूचित करण्यात येते की, शैक्षणिक सत्र
२०१३-१४ मध्ये दिनांक २२/08/२०१३ ते ३१/08/२०१३
दरम्यान घटक चाचणी परीक्षा घेण्याचे ठरलेले आहे. परीक्षेमध्ये
प्रत्येक पेपर हा २० गुणांचा राहील. प्रत्येक प्राध्यापकांनी परीक्षा
आपआपल्या तासिकेमध्ये घेऊन आपल्या विषयांच्या गुणपत्रिका
संगणिकृत करून हार्ड आणि सॉफ्ट कॉपीमध्ये विभागप्रमुखांमार्फत
परीक्षा समितीकडे दिनांक 5/09/२०१३ पर्यंत सादर कराव्यात
तसेच तपासलेल्या उत्तरपत्रिकांसोबत प्रश्नपत्रिकेची संगणिकृत प्रत
पाठवावी. परीक्षा समिती कडून प्रत्येक विभागाक उत्तर पत्रिका देण्यात
येतील. गुणपत्रिका वेळेवर न आल्यास त्यांची सर्वस्वी जबाबदारी
विभाग प्रमुखांवर राहिल याची नोंद घ्यावी.
परीक्षेकरिता विभाग निहाय समन्वयक खालील प्रमाणे राहतील.

प्रा. श्रे. श्रे. चौधरी - भौतिकशास्त्र विभाग
डॉ. श्रे. के. कावडकर - प्राणिशास्त्र विभाग
डॉ. डि. पी. गुलवाडे - रसायनशास्त्र -''-
डॉ. जी. एल. वाघमारे - गणित -''-
डॉ. एस. एच. गणात्रा - पर्यावरणशास्त्र -''-
डॉ. आर. आर. पाटील - इलेक्ट्रॉनिक विभाग
डॉ. वाईकर (M.P. Singh) - सांख्यिकी विभाग
डॉ. एस. यु. बोरकर - वनस्पतीशास्त्र विभाग
डॉ. एम. एम. मिचकवड - संगणक विभाग
डॉ. एन. एन. कपुरसिंगवाले - मराठी / हिंदी / इंग्रजी विभाग

fw
circulation

Exam related

NOTICE

This is to inform all Head of Departments that the First term examination is scheduled from 01.10.2013 to 14.10.2013 between 10.30 am to 5.00 pm. Kindly submit question paper in university pattern with sufficient number of Xerox copies as per number of students of respective subject through head of Department , submit to the exam committee before 24.09.2013 upto 5.00 pm .

All Head of Department should conduct the First Term Exam. of M.Sc part I & part II in their respective departments from 07.10.2013 to 10.10.2013 and should be submit Question papers and marksheets to the Exam. committee through coordinators of examination on or before 15.10.2013.

All Head of Departments should send staff member including C.H.B. list for Invigilation in Hard copy & on Email ID suganjadhao@gmail.com before 16.09.2013.

Note :--

1.The Question paper must be of RTM Nagpur University pattern of three hours duration .

2.the question paper should be typed and only one side of the paper.

3.Coordinator should collect A4 size paper from the exam committee and Xerox the question paper as per the strength of the student from 19.09.2013 to 25.09.2013.and submit to the committee on or before 5.00 pm

Prof.Incharge

Director,Institute of Science Nagpur

For Circulation

Dept. Committee members Should take

13/9/13

NOTICE

This is to inform all Head of Departments that class unit test examination is scheduled from 19.03.2015 to 31.03.2015 .

All UG and PG students are here by informed that class unit test examination will be held during 19.03.2015 to 31.03.2015.

Internal assessment marks will be given on the basis of attendance and results of all internal examinations conducted by Institute. Submit marksheets with a copy of Question papers to the Exam committee ,on or before 06.04.2015 , on Email ID suganjadhao@gmail.com

Prof.Incharge

Exam committee.

Director,

Institute of ScienceNagpur

for Circulation

Sh. Waikar ki be incharge of our department.

GOVERNMENT OF MAHARASHTRA
INSTITUTE OF SCIENCE, NAGPUR
Ravindranath Tagore Marg, Civil Lines, Nagpur-1

Tel.No. 2565581/2561148   Fax N. 0712-565581

Ref...................   Date:-08/08/2013

NOTICE

All <u>UG</u> and <u>PG</u> students are here by informed that there test examination will be held during 22/8/2013 to 31/8/2013.

Internal assessment marks will be given on the basis of attendance and results of all internal examination conducted by Institute. Attendance in test exam Compulsory.

Chirman

Examination

Director

Institute of Science Nagpur.

2014-15

Government of Maharashtra

INSTITUTE OF SCIENCE, NAGPUR

Ravindranath Tagore Road, Civil lines, Near Maharajbag, NAGPUR -01

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NOTICE

This is to inform all Head of Departments that class unit test examination is scheduled from 19.03.2015 to 31.03.2015 .

All UG and PG students are here by informed that class unit test examination will be held during 19.03.2015 to 31.03.2015.

Internal assessment marks will be given on the basis of attendance and results of all internal examinations conducted by Institute. Submit marksheets with a copy of Question papers to the Exam committee ,on or before 06.04.2015 , on Email ID suganjadhao@gmail.com

Prof.Incharge

Exam committee.

Director,

Institute of ScienceNagpur

for Circulation

Sh. Waikar is be incharge of our department. raw

MA MKN

NOTICE

This is to inform all Head of Departments that class unit test examination is scheduled from 25.08.2015 to 5.09.2015 .

All UG and PG students are here by informed that class unit test examination will be held during 25.08.2015 to 5.09.2015.

Internal assessment marks will be given on the basis of attendance and results of all internal examinations conducted by Institute. Submit marksheets with a copy of Question papers to the Exam committee ,on or before 09.09.2015 , on Email ID suganjadhao@gmail.com

_24/8/15_

Q-L-S-2-Jadhao
Prof.Incharge

Exam committee

Director,

Institute of ScienceNagpur

Dr. Behere
for n.a

24/8/15

(Also keep in Notice file)
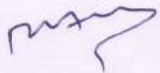
25·08·15

Ref.....8.7.1...... Date: 04/09/2017

NOTICE

All the Heads of Department are hereby informed to conduct the First Unit Test of all subjects/papers of Postgraduate and Undergraduate students till 9th September 2017 and respective mark lists are to be submitted to IQAC and In-Charge, Examination committee before 15th September 2017without fail.

Dr. R.G Atram
Director
Director
Institute of Science
Institute of Science,
NAGPUR.
Nagpur

Department   Sign-

1) Physics ———→ Kchrham 4/9/17   1) Dr- Rashmi Batra 4/9/17
2) Chemistry — Vinallah   (Exam In-charge)
3) Mathematics —
4) Statistics — M   4/9/17
5) Botany —
6) Zoology —
7) Env. Sci —
8) Electronics —

Date: 17-03-2017

DEPARTMENT OF MATHEMATICS
Govt. INSTITUTE OF SCIENCE, NAGPUR.
2016- 2017

Internal Examination Time Table

M. Sc. (Semester-II & IV) Unit Test II

Time	Date	Day	Sem	Paper
11.00 AM to 12.00 Noon	03-04-2017	Mon	II	Algebra-II
			IV	Dynamical Systems
	05-04-2017	Wed	II	Real Analysis-II
			IV	Partial Differential Equations
	06-04-2017	Thu	II	Topology-II
			IV	Advanced Numerical Methods
	07-04-2017	Fri	II	Differential Geometry
			IV	Fluid Dynamics-II/ Cosmology
	08-04-2017	Sat	II	Classical Mechanics
			IV	Operation Research-II

Note: All the concerning faculties should prepare their test paper well before as per university pattern.

विभाग प्रमुख
गणित विभाग

Department of Mathematics
Government Institute of Science, Nagpur

Notice

All the students of B. Sc. sem-II , sem-IV and sem- VI are hereby informed that their first Unit Test time table is as under;

Class	Paper	Date	Time	Room No.
B.Sc. Sem II	M-3	- 16/02/2017 Thursday	10.00-10.50	42
	M-4	18/02/2017 Saturday	10.20-11.10	42
B.Sc. Sem IV Sec (C)	M-7	16/02/2017 Thursday	11.40-12.30	42
	M-8	18/02/2017 Saturday	9.10-10.00	42
B.Sc. Sem III Sec (S)	M-7	17/02/2017 Friday	1.50-2.40	41
	M-8	23/02/2017 Thursday	2.40-3.30	41
B.Sc. Sem VI Sec (C)	M-11	14/02/2017 Tuesday	3.30-4.20	42
	M-12	16/02/2017 Thursday	2.40-3.30	42
B.Sc. Sem VI Sec (S)	M-11	16/02/2017 Thursday	3.30-4.20	42
	M-12	15/02/2017 Wednesday	10.00-10.50	46

Note: Ex-Students of B. Sc. can also appeared for this test as per their respective section with proper application.

विभाग प्रमुख
गणित विभाग
:राज्यकीय विज्ञान संस्था, नागपूर

Department of Mathematics
Government Institute of Science, Nagpur

<u>Notice</u>

All the students of B. Sc. sem-II , sem-IV and sem- VI are hereby informed that their **Second Unit Test** time table is as under;

Class	Paper	Date	Time	Room No.
B.Sc. Sem II	M-3	14/03/2017 Tuesday	10.50-11.40	42
	M-4	15/03/2017 Wednesday	11.40-12.30	41
B.Sc. Sem IV Sec (C)	M-7	15/03/2017 Wednesday	11.40-12.30	42
	M-8	14/03/2017 Tuesday	10.00-10.50	42
B.Sc. Sem IV Sec (S)	M-7	15/03/2017 Wednesday	2.40-3.30	41
	M-8	14/03/2017 Tuesday	10.00-10.50	41
B.Sc. Sem VI Sec (C)	M-11	14/03/2017 Tuesday	1.50-2.40	42
	M-12	15/03/2017 Wednesday	1.50-2.40	42
B.Sc. Sem VI Sec (S)	M-11	14/03/2017 Tuesday	3.30-4.20	41
	M-12	15/03/2017 Wednesday	10.00-10.50	46

Note: Ex-Students of B. Sc. can also appeared for this test as per their respective section with proper application.

विभाग प्रमुख
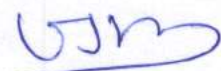गणित विभाग
शासकीय विज्ञान ठरस्था, नागपूर

Date: 16-02-2017

DEPARTMENT OF MATHEMATICS
Govt. INSTITUTE OF SCIENCE, NAGPUR.
2016- 2017

Internal Examination Time Table
M. Sc. (Semester-II & IV) Unit Test I

Time	Date	Day	Sem	Paper
11.00 AM to 12.00 Noon	27-02-2017	Mon	II	Algebra-II
			IV	Dynamical Systems
	28-02-2017	Tue	II	Real Analysis-II
			IV	Partial Differential Equations
	01-03-2017	Wed	II	Topology-II
			IV	Advanced Numerical Methods
	02-03-2017	Thu	II	Differential Geometry
			IV	Fluid Dynamics-II/ Cosmology
	03-03-2017	Fri	II	Classical Mechanics
			IV	Operation Research-II

Note: All the concerning faculties should prepare their test paper well before as per university pattern.

विभाग प्रमुख
गणित विभाग

Department of Mathematics
Government Institute of Science, Nagpur

<u>Notice</u>

All the students of B. Sc. sem-I , sem-III and sem- V are hereby informed that their first Unit Test time table is as under;

Class	Paper	Date	Time	Room No.
B.Sc. Sem I	M-1	11/09/2017 Monday	12:40-01:20	42
	M-2	12/09/2017 Tuesday	10:10-11:00	42
B.Sc. Sem III	M-5	11/09/2017 Monday	02:30-03:20	41
	M-6	12/09/2017 Tuesday	02:30-03:20	41
B.Sc. Sem V Sec (C)	M-9	11/09/2017 Monday	03:20-04:30	46
	M-10	12/09/2017 Tuesday	10:10-11:00	46
B.Sc. Sem V Sec (S)	M-9	09/09/2017 Saturday	11:50-12:40	46
	M-10	12/09/2017 Wednesday	03:20-04:30	46

Note: Ex-Students of B. Sc. can also appeared for this test as per their respective section with proper application.
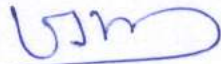
Department of Mathematics
Government Institute of Science, Nagpur

<u>Notice</u>

All the students of B. Sc. sem-I , sem-III and sem- V are hereby informed that their Second Unit Test time Table is as under;

Class	Paper	Date	Time	Room No.
B.Sc. Sem I	M-1	09/10/2017 Monday	12:40-01:20	42
	M-2	10/10/2017 Tuesday	10:10-11:00	42
B.Sc. Sem III	M-5	09/10/2017 Monday	02:30-03:20	41
	M-6	10/10/2017 Tuesday	02:30-03:20	41
B.Sc. Sem V Sec (C)	M-9	09/10/2017 Monday	03:20-04:30	46
	M-10	10/10/2017 Tuesday	10:10-11:00	46
B.Sc. Sem V Sec (S)	M-9	09/10/2017 Monday	11:50-12:40	46
	M-10	11/10/2017 Wednesday	03:20-04:30	46

Note: Ex-Students of B. Sc. can also appeared for this test as per their respective section with proper application.

विभाग प्रमुख
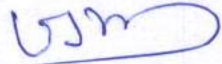गणित विभाग
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DEPARTMENT OF MATHEMATICS

Govt. INSTITUTE OF SCIENCE, NAGPUR.

2017- 2018

Internal Examination Time Table

M. Sc. (Semester-I & III) Unit Test I

Time	Date	Day	Sem	Paper
11.00 AM to 12.00 Noon	09-09-2017	Sat	I	Algebra-I
			III	Complex Analysis
	11-09-2017	Mon	I	Real Analysis-I
			III	Functional Analysis
	12-09-2017	Tue	I	Topology-I
			III	Mathematical Methods
	13-09-2017	Wed	I	Linear Algebra & Differential Equations
			III	Fluid Dynamics-I/ General Relativity
	14-09-2017	Thu	I	Integral Equations
			III	Operation Research-I

विभाग प्रमुख
गणित विभाग
राज्यकीय विज्ञान संस्था, नागपूर

DEPARTMENT OF MATHEMATICS

Govt. INSTITUTE OF SCIENCE, NAGPUR.

2017- 2018

Internal Examination Time Table

M. Sc. (Semester-I & III) Unit Test II

Time	Date	Day	Sem	Paper
11.00 AM to 12.00 Noon	09-10-2017	Mon	I	Algebra-I
			III	Complex Analysis
	10-10-2017	Tue	I	Real Analysis-I
			III	Functional Analysis
	11-10-2017	Wed	I	Topology-I
			III	Mathematical Methods
	12-10-2017	Thu	I	Linear Algebra & Differential Equations
			III	Fluid Dynamics-I/ General Relativity
	13-10-2017	Fri	I	Integral Equations
			III	Operation Research-I

विभाग प्रमुख
गणित विभाग
शासकीय विज्ञान संस्था, नागपूर

Department of Mathematics
Government Institute of Science, Nagpur

Notice

All the students of B. Sc. sem-II , sem-IV and sem- VI are hereby informed that their first Unit Test time table is as under;

Class	Paper	Date	Time	Room No.
B.Sc. Sem II	M-3	09/03/2018 Friday	12:30-01:20	42
	M-4	08/03/2018 Thursday	10:00-10:50	42
B.Sc. Sem IV	M-7	08/03/2018 Thursday	12:30-01:20	46
	M-8	09/03/2018 Friday	01:50-02:40	46
B.Sc. Sem VI Sec (C)	M-11	09/03/2018 Friday	10:00-10:50	46
	M-12	08/03/2018 Thursday	03:30-04:20	46
B.Sc. Sem VI Sec (S)	M-11	09/03/2018 Friday	12:30-01:20	46
	M-12	08/03/2018 Thursday	10:00-10:50	41

विभाग प्रमुख
गणित विभाग
नागकीय विज्ञान संस्था, नागपुर
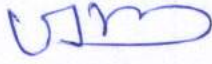
Department of Mathematics
Government Institute of Science, Nagpur

Notice

All the students of B. Sc. sem-II , sem-IV and sem- VI are hereby informed that their second Unit Test time table is as under;

Class	Paper	Date	Time	Room No.
B.Sc. Sem II	M-3	28/03/2018 Wednesday	11:40-12:30	42
	M-4	27/03/2018 Tuesday	2:40 -01:50	42
B.Sc. Sem IV	M-7	27/03/2018 Tuesday	01:50-02:40	46
	M-8	28/03/2018 Wednesday	11:40-12:30	46
B.Sc. Sem VI Sec (C)	M-11	28/03/2018 Wednesday	10:00-10:50	46
	M-12	27/03/2018 Tuesday	12:50-01:40	46
B.Sc. Sem VI Sec (S)	M-11	27/03/2018 Tuesday	03:30-04:20	46
	M-12	28/03/2018 Wednesday	10:00-10:50	41

विभाग प्रमुख
गणित विभाग
शासकीय विज्ञान संस्था, नागपूर

Date: 14-02-2018

DEPARTMENT OF MATHEMATICS

Govt. INSTITUTE OF SCIENCE, NAGPUR.

2017- 2018

Internal Examination Time Table

M. Sc. (Semester-II & IV) Unit Test I

Time	Date	Day	Sem	Paper
11.00 AM to 12.00 Noon	23-02-2018	Fri	II	Algebra-II
			IV	Dynamical Systems
	24-02-2018	Sat	II	Real Analysis-II
			IV	Partial Differential Equations
	26-02-2018	Mon	II	Topology-II
			IV	Advanced Numerical Methods
	27-02-2018	Tue	II	Differential Geometry
			IV	Fluid Dynamics-II/ Cosmology
	28-02-2018	Wed	II	Classical Mechanics
			IV	Operation Research-II

विभाग प्रमुख
गणित विभाग
शासकीय विज्ञान संस्था, नागपुर

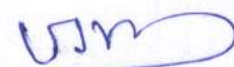# DEPARTMENT OF MATHEMATICS
Govt. INSTITUTE OF SCIENCE, NAGPUR.
2017- 2018

Internal Examination Time Table

M. Sc. (Semester-II & IV) Unit Test-II

Time	Date	Day	Sem	Paper
11.00 PM to 12.00 PM	04-04-2018	Wed	II	Algebra-II (Unit-III)
			IV	Dynamical Systems (Unit-II)
	05-04-2018	Thu	II	Real Analysis-II (Unit-III)
			IV	Partial Differential Equations (Unit-II)
	06-04-2018	Fri	II	Topology-II (Unit-II)
			IV	Advanced Numerical Methods (Unit-II)
	07-04-2018	Sat	II	Differential Geometry (Unit-II)
			IV	Fluid Dynamics-II/ Cosmology (Unit-II)
	09-04-2018	Mon	II	Classical Mechanics (Unit-II)
			IV	Operation Research-II (Unit-II)

विभाग प्रमुख
गणित विभाग
शासकीय विज्ञान संस्था, नागपूर

Course:B.Sc.Semester-VI

Subject:PHY-I

Test: (2 marks each)9.2.18

1.Draw the well labeled diagram of Michelson Morley experiment.

2.Write the postulates of Special Theory of relativity.

3.Write Lorentz Transformation equations and inverse Lorentz Transformation equations.

4.If a mass is moving with the speed of 0.8c.Find the ratio of rest mass to relative mass.

5.Rod of length 1 m moves with speed of 0.6c find the change in length.

Course:B.Sc.Semester-VI

Subject:PHY-I

Test: (2 marks each)21.2.18

1. Explain Inertial and Non-inertial frames of reference.

2. Write the postulates of Special Theory of relativity.

3. Prove that $E = \sqrt{p^2 c^2 + m_0^2 c^4}$

4.If relative mass is double that of rest mass find the speed.

5.Prove that formula of Length contraction.

Name of Teacher: Sarveshwar S.Kasarla,
Assistant Professor of Physics, Govt.Institute of Science Nagpur
Academic Session:2017-18

Course:M.Sc.(Physics)Semester-II

Subject:Core -7:PHY-III(Classical Mechanics)

Test: 3.2.18

1. Define Lagrangian for a particle moving on the surface of earth. Hence find the equation of motion.

2. A bead slide on the wire in the shape of a cycloid described by equation:

   $x = a(\theta - \sin\theta)$, $y = a(1 + \cos\theta)$. Find L of equation of motion.(consider friction to be zero)

3. Define generalized coordinates and generalized velocity.

4. State and prove D' Alembert's principle.

5. Derive Lagranges equation of motion from D' Alembert's principle .

6. State and prove Hamilton's principle.

7. Derive Lagranges equation of motion from Hamilton's principle.

Course:B.Sc.Semester-VI

Subject:PHY-I

Test: (2 marks each) 16.3.18

1. In the reaction $^2H_1 + {}^3H_1 \dashrightarrow {}^4He_2 + {}^1n_0$ If a,b,c are BE of $^2H_1$, $^3H_1$, $^4He_2$ resp. the Q value of reaction is--

   a) a+b+c   b) a+b-c   c) a-(b+c)   d) a-b+c

2. The average BE/nucleon is approximately ----(MeV)

   a) 9.1   b)8   c) 81   d) 92

3. The expression for packing fraction is--

   a) $\frac{A}{M-A}$ b) $\frac{M-A}{A}$ c) $\frac{A}{M+A}$ d) $\frac{M+A}{A}$

4. The atomic reactor is based on the principle of---

   a) Nuclear fission   b) Nuclear fusion

   c) Controlled chain reaction   d) uncontrolled chain reaction

5.The nucleon is the name used for --

   a) both p & n   b) only n   c) only p   d) none of the given

6. If N is the no. of neutrons in the stable nucleiof atomic no.Z then—

   a) N$\leq$Z   b) N= Z   c) N > Z   d)N $\geq$ Z

Course:B.Sc.Semester-VI

Subject:PHY-I

Test: (2 marks each) 13.3.18

1. In the reaction $^{222}A_{86} \dashrightarrow {}^{210}A_{84}$, how many α, β emissions takes place?

   a) 6α,3β b) 3α,4β c) 4α,3β d) 3α,6β

2.Net Nuclear force between particle is F1 If both are n and F2 if both are p .What force F3 if one is p and other is n?

   a) F1=F2>F3 b) F1=F2=F3   c) F1>F2>F3   d) F1<F2<F3

3.If α, β, γ are arranged in ascending order of ranges in air .The order will be

   a) α, β, γ b) γ, β, α c) β, α, γ d) γ, α, β

4. In Nuclear process $^{11}C_6 \dashrightarrow {}^{11}B_6 + e^+ + X$, what is X?

   a) neutrino   b) antineutrino   c) photon   d) neutron

5. Draw the diagram nuclear reactor.