

Department of Mathematics

Proceedings of the Departmental Committee

A meeting of the Departmental Committee was held on 24/06/2022 at 11 A.M. in the Department of Mathematics. The following agenda Items were considered and resolved accordingly.


The following Members were present:

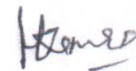
1. Prof. Manju Pruthi (Chairperson)
2. Prof. Mamta Kamra
3. Prof. Suresh Kumar
4. Sh. Satish Khurana
5. Dr. M.S.Barak

Agenda items were considered and resolved accordingly:

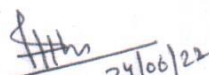
Item No. 1 Considered and recommended purchase of a server on the request on Prof. Suresh Kumar


Item No. 2 scheme and syllabus of the programmes BA/B.Sc & with Math and B.Sc Hons in Mathematics was considered and the Committee recommended the scheme as per NEP-2020 and the detailed syllabus was allotted to faculty members as per guidelines provided by LOCF-2019 for Editing if required.


Manju Pruthi


Mamta Kamra


Suresh Kumar
24.06.22


Satish Khurana
24/06/22


M.S. Barak

Scheme for B.Sc. (Pass Course) based on NEP-2020 (CBCS-LOCF) at J.G.U., 2022-2023

Semester	Discipline Specific Core Courses (Major Subjects) @6 credits	Ability Enhancement Compulsory Courses @2 credits	Skill Enhancement Courses @2/4 credits	Discipline Specific Elective Courses @6 credits	Generic Elective Courses @6 credits	Activity/ Value Added Courses
I	Paper-M101: Calculus Paper-M201: Algebra	Language Communication Environment studies	MS-Office @2 credits Mathematical Type Setting System: LaTeX @2 credits			Mathematics Activity @1 Credit
II						
III	Paper-M301: Differential Equations Paper-M401: Real Analysis				GEC-1: Calculus Or Analytical Geometry and Theory of Equations GEC-2: Linear Algebra Or Discrete Mathematics GEC-3: Differential Equations (with Practicals) Or Linear Programming and Game Theory	
IV			Computer Algebra Systems @4 credits	(Anyone) Paper-M601(i)-(viii) Paper(i): Mechanics Paper(ii): Probability and Statistics Paper(iii): Numerical Methods Paper(iv): Complex Variables Paper(v): Linear Algebra Paper(vi): Integral Transform and Fourier Analysis Paper(vii): Metric Spaces Paper(viii): Cryptography & Network Security		
V			Python/MOOCs @2 credits	(Anyone) Paper-M602(i)-(viii) Paper(i): Discrete Mathematics Paper(ii): Linear Programming and Game Theory Paper(iii): Tensors and Differential Geometry Paper(iv): Number Theory Paper(v): Advanced Mechanics Paper(vi): Information Theory and Coding Paper(vii): Special Theory of Relativity Paper(viii): C++ Programming for Mathematics	GEC-4: Numerical Methods (with Practicals) Or Elements of Analysis	
VI						

Note:

- Students can choose SEC@2 credits from the pool of SEC available for other departments of concerned College/University.
- MOOCs courses can be opted from the available courses on SWAYAM portal.
- GEC can be opted from the pool of GEC of the other Department of the College/University.
- SEC & GEC will be offered depending upon the availability of faculty/infrastructure/timetable of the College/University.

DSC-12 Courses
AECC-2 Courses
SEC -4 Courses
DSE-4-6 Courses
GEC-2-4 Courses
Activity-1 Course

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Scheme for B.A. (Pass Course) based on NEP-2020 (CBCS-LOCF) at I.G.U., 2022-2023

Semester	Discipline Specific Core Courses (Major Subjects) @6 credits	Discipline Specific Core Courses (Language) @ 6 Credit	Ability Enhancement Compulsory Courses @2 credits	Skill Enhancement Courses @2/4 credits	Discipline Specific Elective Courses @6 credits	Generic Elective Courses @6 credits	Activity/ Value Added Courses
I	Paper-M101: Calculus	1 DSC(L)	Language Communication Environment studies	MS-Office @2 credits			Vedic Mathematics Activity @ 1Credit
II	Paper-M201: Algebra	2 DSC(L)		Mathematical Type Setting System: LaTeX @2 credits			
III	Paper-M301: Differential Equations	3 DSC(L)				GEC-1: Calculus Or Analytical Geometry and Theory of Equations	
IV	Paper-M401: Real Analysis	4 DSC(L)		Computer Algebra Systems @4 credits		GEC-2: Linear Algebra Or Discrete Mathematics	
V					(Anyone) Paper-M601(i)-(viii) Paper(i): Mechanics Paper(ii): Probability and Statistics Paper(iii): Numerical Methods, Paper(iv): Complex Variables Paper(v): Linear Algebra Paper(vi): Integral Transform and Fourier Analysis Paper(vii): Metric Spaces Paper(viii): Cryptography and Network Security	GEC-3: Differential Equations (with Practicals) Or Linear Programming and Game Theory	
VI				Python/MOOCs @2 credits	(Anyone) Paper-M602(i)-(viii) Paper(i): Discrete Mathematics Paper(ii): Linear Programming and Game Theory Paper(iii): Tensors and Differential Geometry Paper(iv): Number Theory Paper(v): Advanced Mechanics Paper(vi): Information Theory and Coding Paper(vii): Special Theory of Relativity Paper(viii): C++ Programming for Mathematics	GEC-4: Numerical Methods (with Practicals) Or Elements of Analysis	

Note:

- Students can choose SEC@2 credits from the pool of SEC available for other departments of concerned College/University. DSC-12(8+4) Courses
AECC-2 Courses
SEC-4 Courses
DSE-4 Courses
GEC-4 Courses
Activity-1 Course
- MOOCs courses can be opted from the available courses on SWAYAM portal.
- GEC can be opted from the pool of GEC of the other Department of the College/University.
- SEC & GEC will be offered depending upon the availability of faculty/infrastructure/timetable of the College/University.

Handwritten signatures and initials:
 - A signature that appears to be "Nawal" with "Envs" written below it.
 - Another signature that appears to be "Ajay".
 - A circular stamp or mark on the right side.

Scheme for B.Sc. (Hons.) based on NEP-2020 (CBCS-LOCF) at I.G.U., 2022-2023

Semester	Discipline Specific Core Courses (Major Subjects) @6 credits	Ability Enhancement Compulsory Courses @2 credits	Skill Enhancement Courses @2/4 credits	Discipline Specific Elective Courses @6 credits	Generic Elective Courses @6 credits	Activity/ Value Added Courses
I	Paper-M101: Calculus Paper-M102: Algebra and Geometry Paper-M103: Ordinary Differential Equations Paper-M201: Multivariable Calculus Paper-M202: Real Analysis Paper-M203: Partial Differential Equations and Calculus of Variations	Language Communication Environment studies	MS-Office @2 credits Mathematical Type Setting System: LaTeX @2 credits			Vedic Mathematics Activity @1 credit
II	Paper-M301: Set Theory and Metric Space Paper-M302: Group Theory Paper-M303: Probability and Statistics				GEC-1: Calculus Or Analytical Geometry and Theory of Equations	
III	Paper-M401: Mechanics Paper-M402: Linear Algebra Paper-M403: Numerical Analysis Paper-M501: Advanced Algebra				GEC-2: Linear Algebra Or Discrete Mathematics GEC-3: Differential Equations (with Practicals) Or Linear Programming and Game Theory	
IV			Computer Algebra Systems @4 credits	(Any two): Paper-M502 & 503 (i)-(vii) Paper(i): Tensors and Differential Geometry Paper(ii): Mathematical Logic Paper(iii): Integral Transform and Fourier Analysis Paper(iv): Linear Programming Paper(v): Information Theory and Coding Paper(vi): Graph Theory Paper(vii): Special Theory of Relativity		
V			Python/MOOCs @2 credits	(Any two): Paper-M602 & 603 (i)-(vii) Paper(i): Discrete Mathematics Paper(ii): Wavelets and Applications Paper(iii): Number Theory Paper(iv): Mathematical Finance Paper(v): C++ Programming for Mathematics Paper(vi): Cryptography Paper(vii): Advanced Mechanics	GEC-4: Numerical Methods (with Practicals) Or Elements of Analysis	
VI	Paper-M601: Complex Analysis					

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- GEC can be opted from the pool of GEC of the other Department of the College/University.
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Suresh

N. Suresh

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DSC-14 Courses
AEC-2 Courses
SEC-4 Courses
DSE-4-6 Courses
GEC-2-4 Courses
Activity-1 Course

Scheme for B.A. (Hons.) based on NEP-2020 (CBCS-LOCF) at I.G.U., 2022-2023

Semester	Discipline Specific Core Courses (Major Subjects) @6 credits	Discipline Specific Core Courses (Language) @ 6 Credit	Ability Enhancement Compulsory Courses @2 credits	Skill Enhancement Courses @2/4 credits	Discipline Specific Elective Courses @6 credits	Generic Elective Courses @6 credits	Activity/ Value Added Courses
I	Paper-M101: Calculus Paper-M102: Algebra and Geometry	1 DSC(L)	Language Communication	MS-Office @2 credits			Vedic Mathematics
II	Paper-M201: Ordinary Differential Equations Paper-M202: Real Analysis	2 DSC(L)	Environment studies	Mathematical Type Setting System: LaTeX @2 credits			Activity @1 credit
III	Paper-M301: Group Theory Paper-M302: Probability and Statistics	3 DSC(L)				GEC-1: Calculus Or Analytical Geometry and Theory of Equations	
IV	Paper-M401: Linear Algebra Paper-M402: Numerical Analysis	4 DSC(L)				GEC-2: Linear Algebra Or Discrete Mathematics	
V	Paper-M501: Advanced Algebra		Computer Algebra Systems @4 credits		(Any two): Paper-M502 & 503 (i)-(vii) Paper(i): Partial Differential Equations and Calculus of Variations Paper(ii): Mathematical Logic Paper(iii): Integral Transform and Fourier Analysis Paper(iv): Linear Programming Paper(v): Multivariate Calculus Paper(vi): Graph Theory Paper(vii): Set Theory and Metric Spaces	GEC-3: Differential Equations (with Practicals) Or Linear Programming and Game Theory	
VI	Paper-M601: Complex Analysis		Python/MOOCs @2 credits		(Any two): Paper-M602 & 603 (i)-(vii) Paper(i): Discrete Mathematics Paper(ii): Wavelets and Applications Paper(iii): Number Theory Paper(iv): Mathematical Finance Paper(v): C++ Programming for Mathematics Paper(vi): Cryptography Paper(vii): Mechanics	GEC-4: Numerical Methods (with Practicals) Or Elements of Analysis	

Note:

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2. MOOCs courses can be opted from the available courses on SWAYAM portal.

3. GEC can be opted from the pool of GEC of the other Department of the College/University.

4. SEC & GEC will be offered depending upon the availability of faculty/infrastructure/timetable of the College/University.

DSC-14(10+4) Courses
AECC-2 Courses

SEC-4 Courses
DSE-4 Courses
GEC-4 Courses
Activity-1 Course

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Scheme for B.Sc. (Hons.) based on NEP-2020 (CBCS-LOCF) at I.G.U., 2022-2023

Semester	Discipline Specific Core Courses (Major Subjects) @6 credits	Ability Enhancement Compulsory Courses @2 credits	Skill Enhancement Courses @2/4 credits	Discipline Specific Elective Courses @6 credits	Generic Elective Courses @6 credits	Activity/ Value Added Courses
I	Paper-M101: Calculus Paper-M102: Algebra and Geometry Paper-M103: Ordinary Differential Equations Paper-M201: Multivariable Calculus Paper-M202: Real Analysis Paper-M203: Partial Differential Equations and Calculus of Variations	Language Communication Environment studies	MS-Office @2 credits Mathematical Type Setting System: LaTeX @2 credits			Vedic Mathematics Activity @1 credit
II	Paper-M301: Set Theory and Metric Space Paper-M302: Group Theory Paper-M303: Probability and Statistics Paper-M401: Mechanics Paper-M402: Linear Algebra Paper-M403: Numerical Analysis Paper-M501: Advanced Algebra				GEC-1: Calculus Or Analytical Geometry and Theory of Equations GEC-2: Linear Algebra Or Discrete Mathematics GEC-3: Differential Equations (with Practicals) Or Linear Programming and Game Theory GEC-4: Numerical Methods (with Practicals) Or Elements of Analysis	
III						
IV						
V			Computer Algebra Systems @4 credits	(Any two): Paper-M502 & 503 (i)-(vii) Paper(i): Tensors and Differential Geometry Paper(ii): Mathematical Logic Paper(iii): Integral Transform and Fourier Analysis Paper(iv): Linear Programming Paper(v): Information Theory and Coding Paper(vi): Graph Theory Paper(vii): Special Theory of Relativity (Any two): Paper-M602 & 603 (i)-(vii) Paper(i): Discrete Mathematics Paper(ii): Wavelets and Applications Paper(iii): Number Theory Paper(iv): Mathematical Finance Paper(v): C++ Programming for Mathematics Paper(vi): Cryptography Paper(vii): Advanced Mechanics		
VI	Paper-M601: Complex Analysis		Python/MOOCs @2 credits			

Note:

- Students can choose SEC@2 credits from the pool of SEC available for other departments of concerned College/University.
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DSC-14 Courses
AECC-2 Courses
SEC-4 Courses
DSE-4-6 Courses
GEC-2-4 Courses
Activity-1 Course

Swamy
Neeraj
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