



**Government Degree College for Women (Autonomous)**  
**Begumpet, Hyderabad-500016**

Affiliated to Osmania University, Re-Accredited with 'B+' Grade by NAAC



**CHOICE BASED CREDIT SYSTEM (CBCS)**

**DEPARTMENT OF ELECTRONICS**

**SYLLABUS MODEL PAPERS AND  
BOARD OF STUDIES MINUTES**

**2021-22**

### AGENDA FOR THE BOARD OF STUDIES MEETING FOR THE YEAR 2021-22

The Board of studies meeting of the Faculty of PHYSICS, GDCW, Begumpet, Hyderabad-16 was held on 7-10-21 at Department of Physics, Osmania University, Hyderabad under the Guidance of Dr.Ch.Kanchana Latha, Head of the Department Physics to discuss and resolve the following agenda:

1. Approval of syllabus of Semester V and VI programme for the Academic year 2021-22 under CBCS.
2. Approval of Examination pattern.
3. Approval of Panel of Examiners.
4. Any other matter with the permission of the chairperson.

**Roll Call:** The following members were present:

Sl.No	Name & Designation	Status	Signature
1.	<b>Dr.Ch. Kanchana Latha,</b> Assistant Professor of Physics, Head, Department of Physics, Government Degree College for Women, Begumpet, Hyderabad	Chairperson, Board of Studies, Department of Physics, Osmania University, Hyderabad	<i>Ch.Kanchana Latha</i> <b>HEAD</b> Departments of Physics Govt. Degree College for Women (A) Begumpet, Hyderabad-500 016. (T.S.)
2.	<b>Dr. J.LAXMAY NAIK,</b> Professor of Physics, Osmania University, Hyderabad	University Nominee, Osmania University, Hyderabad	<i>J. Laxmay Naik</i> <b>CHAIRMAN</b> Board of Studies in Electronics Osmania University Hyderabad - 500007 T.S.
3.	<b>Smt. G. Savitri,</b> Assistant Professor, Head, Department of Physics, Pingle Govt. Degree College, Kakatiya University, Warangal	Member	<i>G. Savitri</i> <b>CHAIRMAN</b> Board of Studies in Electronics Osmania University Hyderabad - 500007 T.S.
4.	<b>Sri M. Naveen,</b> Assistant Professor of Physics, Sri Chaitanya Deemed University, Warangal	Member	<i>M. Naveen</i> <b>CHAIRMAN</b> Board of Studies in Electronics Osmania University Hyderabad - 500007 T.S.
5.	<b>Dr. K. Sundara Murthy,</b> Assistant Professor of Physics, Government Degree College for Women, Begumpet, Hyderabad	Member	<i>K. Sundara Murthy</i> <b>CHAIRMAN</b> Board of Studies in Electronics Osmania University Hyderabad - 500007 T.S.
6.	<b>Smt. N. Anitha,</b> Lecturer in Physics, Government Degree College for Women, Begumpet, Hyderabad	Member	<i>N. Anitha</i> <b>CHAIRMAN</b> Board of Studies in Electronics Osmania University Hyderabad - 500007 T.S.
7.	<b>Ms. Ch. Mounika,</b> 16011085468009 M.Sc.(Physics), @St.Pious X Degree and PG College for Women	Member	<i>Ch. Mounika</i> <b>CHAIRMAN</b> Board of Studies in Electronics Osmania University Hyderabad - 500007 T.S.

**CHAIRMAN**  
Board of Studies in Electronics  
Osmania University  
Hyderabad - 500007  
T.S.

**Government Degree College for Women, Begumpet, (Autonomous), Hyderabad**  
**Composition of the Board of Studies**

1.	Chairperson, Board of Studies, Department of Physics, Osmania University, Hyderabad	Dr.Ch. Kanchana Latha, Assistant Professor of Physics, Head, Department of Physics, Government Degree College for Women, Begumpet, Hyderabad
2.	One person to be nominated by the Vice-Chancellor from a panel of six recommended by the Principal	Dr. J.Laxman Naik, Professor of Physics, Head, Department of Electronics, Osmania University, Hyderabad
3.	Two subject experts from outside parent University to be nominated by Academic Council	Smt. G.Savithri, Assistant Professor of Physics, Head, Department of Physics, Pingle Govt Degree College, Kakatiya University, Warangal
		Sri A.Naveen, Assistant Professor of Physics, Sri Chaitanya Deemed University, Warangal
4.	The entire faculty of each specialization	Dr. K. Sundara Murthy, Assistant Professor of Physics, Government Degree College for Women, Begumpet, Hyderabad Smt. N. Anita, Lecturer in Physics, Government Degree College for Women, Begumpet, Hyderabad
	Visiting faculty	Dr.M.Ghanshyam Krishna Professor of Physics, University of Hyderabad
5.	One Post Graduate Meritorious Alumnus to be nominated by Principal, The Chairman, Board of Studies may with approval of the Principal of the College	Ms. Ch. Mounika, 16011085468009 M.Sc.(Physics), @St.Pious X Degree and PG College for Women
6.	Experts from outside the College, whenever special courses of studies are to be formulated	Dr.Y.Aparna Professor of Physics. Member,Secretary,TSCOST,AP

*Goparaju*  
**CHAIRMAN**  
 Board of Studies in Electronics  
 Osmania University  
 Hyderabad - 500087



*G. Savithri*  
**Goparaju Savitri, M.Sc**  
 Assistant Professor in Physics  
 Government Degree & PG College

*Mounika*

*Ch. Kanchana*  
**HEAD**  
 Departments of Physics  
 Govt. Degree Collage for Women  
 Begumpet, Hyderabad-500 016.

**MINUTES**

**Min-1/SEP 2021:** It was resolved to Reapprove the Structure of Credits for Semester-I and II, Semester III and IV of the Physics programme as given by the Department of Physics, Osmania University for the Academic year 2021-22 under CBCS.

**Min-2/SEP 2021:** It was resolved to approve the syllabus of Semester V and VI of the Physics programme of the Department of Physics, Osmania University for the Academic Year 2021-22 under CBCS.

**Min-3/SEP 2021:** It was resolved to approve the Examination Pattern as mentioned below: (B.Sc PHYSICS) of First year, Second year and Final year for Semester I, II, III, IV, V & VI

**MAX. MARKS:** 100 (40 Internal + 60 External)

(A) Internal Assessment (Max 40 Marks)

- a) Internal Written : 20 Marks
  - b) 4MCQ's : 10 Marks
  - c) Seminar : 5 Marks
  - d) Assignments : 5 Marks
- Total : 40 Marks

**Note:** Average marks of two internal written tests will be considered.

(B) External Assessment (Max.60 marks) [Pass mark: 24 ] [Time: 2 ½ Hrs]

**Part-A**

I. Answer any five of the following questions (5 x 4m = 20 marks)

(Any five of the eight questions given)

**Part-B**

II. Answer the following Questions (5 x 8 m= 40 marks)

(Five questions with internal choice for each unit)

**Minute-4 / Sep 2021:** It was resolved to approve the Panel of Examiners

*[Signature]*  
**CHAIRMAN**  
Board of Studies in Electronics  
Osmania University  
Hyderabad - 500007  
T.S.

*G. Sanika*  
**Goparaju Savitri, M.Sc**  
Assistant Professor in Physics  
Government Degree & PG College

*[Signature]*  
**HEAD**  
Departments of Physics  
C Govt. Degree College for Women (A)  
Begumpet, Hyderabad-500016. (T.S.)



*[Signature]*  
**Monika**

**CHAIRMAN**  
Board of Studies in Electronics  
Osmania University  
Hyderabad - 500007

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, BEGUMPET, HYD-16**  
 (An autonomous college of Osmania University)  
 Re-Accredited by NAAC with "B" Grade

**Faculty of ELECTRONICS**

STRUCTURE OF B.Sc Course w.e.f the academic year 2021-2022

**B.Sc(MPC,MPCS,MPS)PROGRAMME**

**THIRD YEAR  
SEMESTER:V**

S. NO	CODE NO	TITLE OF THE PAPER	HPW	CREDITS	EXAM DURATION	MAX MARKS
1	ELS5	English (First Language)	3	3		
2	SLS5	Second Language	3	3		
3	GE	a)Renewable Energy Resources	4	4	3 hours	100
4	3311	Mathematics-V	(4T+3P)	5	2 ½ hours	60 E+40I=100
5	3311	ELECTRONICS-V	(4T+3P)	5	2 ½ hours	50 E+35p+15I=100
6	3311	Comp.science-V	(4T+3P)	5	2 ½ hours	60 E+40I=100
		<b>Total</b>	<b>27</b>	<b>25</b>		

**SEMESTER:VI**

S.N O	CODE NO	TITLE OF THE PAPER	HPW	EXAM DURATION	MAX MARKS	CREDITS
1	ELS6	English (First Language)	3	3		
2	SLS6	Second Language	3	3		
3	PR	Research Methodology and Project Report/CORE PAPER	2T+4R	4	1 ½ hours	40E+10I+35R+15V.V
4	3311	Mathematics-VI	(4T+3P)	5	2 ½ hours	60 E+40I=100
5	3311	ELECTRONICS -VI	(4T+3P)	5	2 ½ hours	50 E+35p+15I=100
6	3311	Comp.science-VI	(4T+3P)	5	2 ½ hours	60 E+40I=100
		<b>Total</b>	<b>27</b>	<b>25</b>		

ELS: English Language Skill; SLS: Second Language Skill; AEC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; DSE: Discipline Specific Elective; GE: Generic Elective; T: Theory; P: Practical; I: Internal Exam U: University Exam; PR: Project Report; VV: Viva-Voce Examination.

*[Signature]*

**CHAIRMAN**  
Board of Studies in Electronics  
Osmania University  
Hyderabad



*[Signature]*

**Goparaju Savitri, M.Sc**  
Assistant Professor in Physics  
Government Degree & PG College

*[Signature]*  
**HEAD**

Departments of Physics  
Govt. Degree College for Women  
Begumpet, Hyderabad-500 016. (I.S.)

*[Signature]*



**Government Degree College for Women (Autonomous)**  
**Begumpet, Hyderabad-500016**



Affiliated to Osmania University, Re-Accredited with 'B+' Grade by NAAC

**CHOICE BASED CREDIT SYSTEM(CBCS)**

## **DEPARTMENT OF PHYSICS**

**SYLLABUS MODEL PAPERS AND  
BOARD OF STUDIES MINUTES**



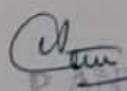
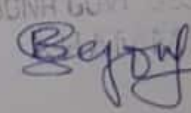
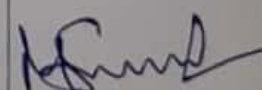

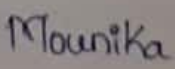
**2021-22**

### AGENDA FOR THE BOARD OF STUDIES MEETING FOR THE YEAR 2021-22

The Board of studies meeting of the Faculty of PHYSICS, GDCW, Begumpet, Hyderabad-16 was held on 11-10-21 at GDCW Begumpet under the Guidance of Dr.Ch.Kanchana Latha, Head of the Department PHYSICS to discuss and resolve the following agenda:

1. Reapproval of Structure of Credits for Semester-I and II, Semester III and IV of the Physics for the Academic year 2021-22 under CBCS.
2. Approval of syllabus of Semester V and VI programme for the Academic year 2021-22 under CBCS.
3. Approval of Examination pattern.
4. Approval of Panel of Examiners.
5. Any other matter with the permission of the chairperson.

**Roll Call:** The following members were present:

Sl.No.	Name & Designation	Status	Signature
1.	<b>Dr.Ch. Kanchana Latha,</b> Assistant Professor of Physics, Head, Department of Physics, Government Degree College for Women, Begumpet, Hyderabad	Chairperson, Board of Studies, Dept. of Physics, GDCW(A) Begumpet, Hyderabad	 <b>HEAD</b> Departments of Physics Govt. Degree College for Women (A) Begumpet, Hyderabad-500 016. (T.S.)
2.	<b>Dr. M. Srinivas,</b> Professor of Physics & Chairperson, Board of Studies, Department of Physics, Osmania University, Hyderabad	University Nominee, Osmania University, Hyderabad	
3.	<b>Smt. P. Anitha,</b> Assistant Professor, Department of Physics, SB&GNR Degree College, Khammam, Kakatiya University, Warangal	Member	 <b>P. ANITHA</b> LECTURER IN PHYSICS SR&G NR GOVT DEGREE COLLEGE KHAMMAM
4.	<b>Sri B. Srinivas Goud,</b> Assistant Professor of Physics, Government Degree College, Jangaon, Kakatiya University, Warangal	Member	
5.	<b>Dr. K. Sundara Murthy,</b> Assistant Professor of Physics, Government Degree College for Women, Begumpet, Hyderabad	Member	
6.	<b>Smt. N. Anitha,</b> Lecturer in Physics, Government Degree College for Women, Begumpet, Hyderabad	Member	
7.	<b>Ms. Ch. Mounika,</b> 16011085468009 M.Sc.(Physics), @St.Pious X Degree and PG College for Women	Member	 Mounika

**Government Degree College for Women, Begumpet, (Autonomous), Hyderabad**  
**Composition of the Board of Studies**

1.	Chairperson, Board of Studies, Department of Physics, GDCW(A) Begumpet, Hyderabad	Dr.Ch. Kanchana Latha, Assistant Professor of Physics, Head, Department of Physics, Government Degree College for Women, Begumpet, Hyderabad
2.	One person to be nominated by the Vice-Chancellor from a panel of six recommended by the Principal	Dr. M. Srinivas, Professor of Physics & Chairperson, Board of Studies, Department of Physics, Osmania University, Hyderabad
3.	Two subject experts from outside parent University to be nominated by Academic Council	Smt. P. Anitha, Assistant Professor of Physics, Department of Physics, SB&GNR Degree College, Khammam, Kakatiya University, Warangal
		Sri B. Srinivas Goud, Assistant Professor of Physics, Government Degree College, Jangaon, Kakatiya University, Warangal
4.	The entire faculty of each specialization	Dr. K. Sundara Murthy, Assistant Professor of Physics, Government Degree College for Women, Begumpet, Hyderabad
		Smt. N. Anita, Lecturer in Physics, Government Degree College for Women, Begumpet, Hyderabad
		Dr.G.Manoj Kumar Professor of Physics, University of Hyderabad
	Visiting faculty	
5.	One Post Graduate Meritorious Alumnus to be nominated by Principal, The Chairman, Board of Studies may with approval of the Principal of the College	Ms. Ch. Mounika, 16011085468009 M.Sc.(Physics), @St.Pious X Degree and PG College for Women
6.	Experts from outside the College, whenever special courses of studies are to be formulated	Sri M.Venkata Reddy, Scientist-F, Head, NDE Division, DRDL. Dr.APJ Abdul Kalam Missile Complex, Kanchanbagh, Hyderabad.

*Dr. M. Srinivas*  
 Professor  
 M.Sc., Ph.D.  
 Department of Physics  
 Osmania University  
 Hyderabad-500 007, T.S

*Ch. Kanchana Latha*  
 Head  
 Department of Physics  
 Govt. Degree College for Women (A)  
 Begumpet, Hyderabad-500 016. (T.S.)

*Smt. P. Anitha*  
 LECTURER IN PHYSICS  
 SB&GNR GOVT. DEGREE COLLEGE



## MINUTES

**Min-1/SEP 2021:** It was resolved to Reapprove the Structure of Credits for Semester-I and II, Semester III and IV of the Physics programme as given by the Department of Physics, Osmania University for the Academic year 2021-22 under CBCS.

**Min-2/SEP 2021:** It was resolved to approve the syllabus of Semester V and VI of the Physics programme of the Department of Physics, Osmania University for the Academic Year 2021-22 under CBCS.

**Min-3/SEP 2021:** It was resolved to approve the Examination Pattern as mentioned below: (B.Sc PHYSICS) of First year, Second year and Final year for Semester I, II, III, IV, V & VI

**MAX. MARKS:** 100 (40 Internal + 60 External)

(A) Internal Assessment (Max 40 Marks)

- |                     |            |
|---------------------|------------|
| a) Internal Written | : 20 Marks |
| b) 4MCQ's           | : 10 Marks |
| c) Seminar          | : 5 Marks  |
| d) Assignments      | : 5 Marks  |
| Total               | : 40 Marks |

**Note:** Average marks of two internal written tests will be considered.

(B) External Assessment (Max.60 marks) [Pass mark: 24 ] [Time: 2 ½ Hrs]

### Part-A

I. Answer any five of the following questions (5 x 4m = 20 marks)

(Any five of the eight questions given)

### Part-B

II. Answer the following Questions (5 x 8 m = 40 marks)

(Five questions with internal choice for each unit)

**Minute-4 / Sep 2021:** It was resolved to approve the Panel of Examiners

**Dr. M. Srinivas**  
M.Sc., Ph.D.  
Professor  
Department of Physics  
Osmania University  
Hyderabad-500 007, T.S

**HEARD**  
Departments of Physics  
Govt. Degree College for Women (A)  
Begumpet, Hyderabad-500 007, T.S.

**P. ANITHA**  
LECTURER IN PHYSICS  
SRBBBNA GOVT DEGREE COLLEGE  
KHAMMAM.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, BEGUMPET, HYD-16

(An autonomous college of Osmania University)

Re-Accredited by NAAC with "B" Grade

Faculty of PHYSICS

STRUCTURE OF B.Sc Course w.e.f the academic year 2021-2022

B.Sc(MPC,MPCS,MPS)PROGRAMME

FIRST YEAR  
SEMESTER:I

SL.NO	CODE NO	TITLE OF THE PAPER	HPW	CREDITS	EXAM DURATION	MAX MARKS
1.	ELS1	English (First Language)	4	4		
2.	SLS1	Second Language	4	4		
3.	AECC1	a)Environmental Science/ b)Basic Computer Skills	2	2	1 ½ hours	50 marks
4.	3311	Mathematics-I	(4T+3P)	5	2 ½ hours	60 E+40 I=100
5.	3311	PHYSICS-I	(4T+3P)	5	2 ½ hours	60 E+40 I=100
6.	3311	Chemistry/comp.science	(4T+3P)	5	2 ½ hours	60 E+40 I=100
		Total	27	25		

SEMESTER:II

SL.N O	CODE NO	TITLE OF THE PAPER	HPW	CREDITS	EXAM DURATION	MAX MARKS
1.	ELS2	English (First Language)	4	4		
2.	SLS2	Second Language	4	4		
3.	AECC2	a)Basic Computer Skills/ b)Environmental Science	2	2	1 ½ hours	50 marks
4.	3311	Mathematics-II	(4T+3P)	5	2 ½ hours	60 E+40I=100
5.	3311	PHYSICS-II	(4T+3P)	5	2 ½ hours	60 E+40I=100
6.	3311	Chemistry/comp.science-II	(4T+3P)	5	2 ½ hours	60 E+40I=100
		Total	27	25		

*Dr. M. Srinivas*  
Dr. M. Srinivas  
M.Sc., Ph.D.  
Professor  
Department of Physics  
Osmania University  
Hyderabad-500 007, T.S

*Reyaz*  
HEAD  
Department of Physics  
Govt. Degree College for Women (A)  
Begumpet, Hyderabad-500 016 (T.S.)

*Chait*