Post Graduate Regulation Under Choice Based Credit System (CBCS)

FOR FULL TIME TWO-YEAR (FOUR-SEMESTER) POST GRADUATION COURSE LEADING TO THE AWARD OF M.A./M.Sc./M.Com. DEGREE

Effective from Academic Session 2020-22



for

University Departments & P.G. Constituent Colleges Binod Bihari Mahto Koyalanchal University, Dhanbad, Jharkhand - 828103

Members of the Core Committee for preparing 'Post Graduate Courses Regulations under CBCS'

Prof. (Dr.) A. K. Srivastava, Vice-Chancellor			
Prof. (Dr.) A. K. Mahato, Pro-Vice-Chancellor	Member		
Dr. Dilip Kumar Giri, CCDC	Convener		
Dr. Ranjana Srivastava, Head, University Dept. of Economics	Coordinator		
Dr. B. Kumar, Dean, Faculty of Science	Member		
Dr. B. N. Sinha, Dean, Faculty of Commerce	Member		
Dr. Debjani Biswas, Dean, Faculty of Social Science	Member		
Dr. Seem <mark>a Sinha, De</mark> an, Faculty of Humanities	Member		
Dr. S. K. Sharma, Dean, Education & Principal, B.S.City College, Bokaro			
Dr. L. B. Singh, Dean Students' Welfare	Member		
Dr. Meena Shrivastava, Proctor	<mark>Member</mark>		
Dr. B. K. Sinha, Principal, PKRM College	<mark>Memb</mark> er		
Dr. S. K. Sinha, Head, Univ. Dept. of Zoology and Environ. & Disaster Mgmt.	Member		
Dr. Navita Gupta, Head, University Dept. of Life Science	Member		
Dr. Satyajit Kumar Singh, Controller of Examinations	Member		
Dr. Dhanan <mark>jay Kumar Singh, Ch</mark> airman, Admissi <mark>o</mark> n Cell	Member		
Col. (Dr.) M. K. Singh, Registrar	Secretary		

Abbreviations

M.A. Master of Arts M.Sc. Master of Science Master of Commerce M.Com.

PG Post Graduate

BOE **Board of Examiners** BOS **Board of Studies**

CBCS Choice Based Credit System

FC Foundation Course

CC Core Course

AECC Ability Enhancement Compulsory Course DE/EC Discipline Elective Centric/Elective Course

SEC Skill Enhancement Course GPA **Grading Point Average**

SGPA Semester Grading Point Average **CGPA** Cumulative Grading Point Average

MSE Mid-Semester Examination ESE **End-Semester Examination PWD** Persons With Disability **DSW** Dean Students' Welfare CE Controller of Examination

UGC **University Grants Commission** Memorandum of Understanding MoU

HOD Head of the Department

IIT Indian Institute of Technology Indian Institute of Management IIM NIT National Institute of Technology AIU Association of Indian Universities Birsa Institute of Technology BIT

ACAcademic Council of the University

Contents

S. No.	Title	Page No
	Members of the Core Committee for preparing 'Post Graduate Courses	2
	Regulation Under CBCS'	
	Abbreviations	3
	Contents	4-6
1.	Preamble	7
2.	Aims and Objectives	7
3.	Short Title, Extent & Commencement	8
4.	Definition	8
5.	Name of the Course	9
	 Table-1: List of Subjects, Faculties and Degree 	9
	Duration of the Course	10
	Fee Structure	10
6.	Eligibility Criteria for Admission in M.A/M.Sc./M.Com Course	10
	Table-2: List of Subjects, Course and Eligibility Criteria	10-13
7.	Eligibility Criteria for Admission in 2 nd /3 rd /4 th Semester	14
8.	Method of Admission	14
9.	Reservation and Weightage	14
	Table-3: Percentage Reservation of Seat Category-wise	14
	Criteria of Income for EWS	14
	Table-4: Percentage Weightage in Admission (Merit Points)	15
10.	Supernumerary Quota	16
	Persons with Disabilities (PWD Quota)	16
	 Children/Widows of the eligible Armed Forces Personnel (CW 	16
	Quota)	
11.	Attendance Rule	17
12.	Syllabi	18
13.	Medium of Instruction and Examination	18
14.	Scheme of Examination	18
	Table-5: Non-Practical Subjects	18
	Table-6: Subjects where Practical is prescribed	19
15.	Table-7 to 10: Course Structure of Semester I to IV: (subject code,	20-21
13.	course name, credits, teaching hours etc.)	20 21
16.	System of Examination	21
10.	Table-11: Semester Wise Examination/Course Structure for	22-23
	Science Faculty	
	Table-12: Semester Wise Examination/Course Structure for Arts	23-24

	& Commerce Faculty	
17.	Dissertation/Project	25
	 Format of Dissertation/Project 	26
18.	Course structure and credit	27
	 Table-13: Semester wise distribution of 80 Credits for Subjects with Practical Papers 	27
	 Table-14: Semester wise distribution of 80 Credits for Subjects without Practical Papers 	27
19.	Examination, Evaluation and Declaration of Results	28
	Assessment and Progression	28
	Activities for Internal Assessments	28
	Classroom Attendance Incentive	28
	Mid-Semester Examination	28
	Evaluation of Day to Day Assessment including Extracurricular Activities	28-29
20.	End Semester Examination and Evaluation	29
	Admit Card for End Semester Examinations	29
	The Nature and Type of Questions for End Semester Examinations	30
	No Provision for Supplementary Examination	30
21.	Concession given to the Persons with Disability (PWD) in Examination (Internal & External)	30-31
22.	Criteria for appearing in the Semester Examinations	31
	Promotion Rule in Semester Examinations	31
	Declaration of Result after the First Semester Examination	31
	 Declaration of Results after the Second Semester Examination (Based on the results of Ist and IInd Semester Examinations) 	31
	 Promotion to the Third Semester (Based on the results of Ist and IInd Semester Examinations) 	32
	 Promotion to the Fourth Semester (Based on the results of the Ist, IInd, and IIIrd Semester Examinations) 	32
	 Declaration of Results after the Fourth Semester Examination (Based on the results of Ist, IInd, IIIrd and IVth Semester 	32
	Examinations)	
23.	Maximum Duration for Passing the PG Programme	32
24.	Preparation of Results	32
25.	Table-15: Grades and Grade Points Conversion for Undergraduate	33
	Programme	

Rinod	Rihari	Mahto	Kova	lanchal	Unive	rcity	Dhanl	had
Dillou	Dillari	Manto	NUya	llalitilai	OHIVE	=1 SILY,	Dilaili	Jau

7	Λ	7	Λ
Z	U	Z	U

26.	Computation of SGPA and CGPA	33
	 Calculation of Semester Grade Point (SGPA) 	33
	Table-16: Illustration for SGPA Calculation	34
	Table-17: Illustration for CGPA Calculation	34
27.	Grace Rule	34
28.	Announcement of Results	34
29.	Ranking to the Candidates	35
30.	Break in the Course	35
31.	Improvement in Result	35
32.	Credit Transfer Policy	36
	 Recognition/Accumulation (Credit Bank)/Transfer of Credits 	36
	Taking Courses Outside while Enrolled in BBMKU (Under	36
	Collaboration)	26
	 Taking a Break/ Dropping out (due to unavoidable circumstances) during Studies at BBMKU 	36
	Course Completed/ Done at UGC Accredited Institutions and Other Reputed Institutions	36
	Other Reputed Institutions	36
	Course Completed/Done at An/A Institute/University Abroad Advisory Condition Allowed to be Transformed.	36
22	Maximum Credits Allowed to be Transferred Transferred	
33.	Transfer of Admission	37
	Conditions for Transfer of Admission of Students within the	37
	University Conditions for Advisoring of Students of Other Heinerities for	27
	 Conditions for Admission of Students of Other Universities for Transfer 	37
	Foreign Nationals	37
34.	Validity of Registration	37
35.	Board of Moderators	37-38
36.	Removal of Difficulties	38
37.	Repeal and Savings	38
38.	Review	38
39.	Annexure-1: Research Methodology (Common for All Faculties)	39
40.	Annexure-2: Format of Question Paper of Mid-Semester (Research	40
	Methodology) Examination	
41.	Annexure-3: Format of Question Paper of Mid-Semester Theory	41
	Examination	
	Annexure-4: Format of Question Paper of End-Semester Theory Examination	42

1. Preamble: The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education system of country. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the Higher Education System. However, due to a lot of diversity in the system of Higher Education, there are multiple approaches followed by the Universities towards examination, evaluation and grading system. The 'Grading System' is considered to be better than the conventional 'marks system' and hence it has been followed in the top institutions of India and abroad. So, it is desirable to introduce uniform grading system in the University. This will facilitate students' mobility across Institutions, within and across countries, and also enable potential employers to access the performance of students. To bring the desired uniformity in Grading System and in method of Computing the cumulative Grade Point Average (CGPA) based on the performance of the students in the examinations, the UGC has formulated guidelines. University Grants Commission has come up with the Choice Based Credit System (CBCS) programme where students can not only learn core subjects but also explore additional avenues of learning beyond the core subjects for holistic development of an individual.

The Choice Based Credit System (CBCS), an internationally acknowledged system, have following aims: (i) to make the course curriculum learner centric, (ii) to encourage interdisciplinary without disturbing the domain centric knowledge, (iii) to promote mobility of the students and help in optimizing learning, (iv) to allow autonomy to the teachers to built in accountability, (v) continuous evaluation of students to help in optimizing learning, (vi) to introduce transparency in the evaluation systems, (vii) to improve employability of students.

The proposed curriculum of BBMKU endeavours to empower the students and help them in their pursuit to achieve overall excellence. The implementation of CBCS will also facilitate benchmarking of courses in India with leading international academic practice. The CBCS curriculum has been envisaged to give flexibility to learners to learn subjects of their choice at their own pace. In addition to dedicated focus on a discipline through core papers, whether an Honours or General programme, the elective papers which will give students the freedom to choose the allied/applied/broad areas of their discipline and also the areas of other discipline of their interest, have been added. The course will be evaluated by marking system along with the grading system.

2. Aims and Objectives: In accordance with the guidelines issued by the University Grants Commission, this regulation provides procedure of admission, basic frame work of curriculum, examination, evaluation, and award of M.A./M.Sc./M.Com degrees to students opting for Full Time Two Years Post Graduation Course under Choice Based Credit System under Semester mode of teaching in Binod Bihari Mahto Koyalanchal University, Dhanbad.

3. Short Title, Extent & commencement

- (a) This regulation shall be known as 'Two Years (Four-Semester) Post Graduation Course Regulation 2020.
- (b) Extent: The regulation shall extend to the territorial jurisdiction of the University and the teaching of the courses for these degrees shall be carried out through the University Departments and PG Constituent Colleges within its jurisdiction, having affiliation in the concerned subject(s).
- (c) This shall come into force from the academic session 2020.

4. Definition:

- (a) 'Course' means a subject.
- (b) 'Project/Dissertation': 'Project' means work undertaken to acquire special/advanced knowledge in a particular field under the supervision of a teacher; the report of the details of the project is 'Dissertation'.
- (c) 'Credit': The term 'credit' refers to the weightage given to a course, usually in terms of the number of instructional hours per week assigned to it. It is a fixed teaching hour course. 'Credit Hours' means hours of teaching. Contact Hour (CH) is in correspondence to the Credit value. For example, a theory paper having 4 Credits shall have a minimum of 4 Contact Hours in a week. For Practical classes and Field Work every Two Hours shall make 1(one) Contact Hour. One Contact Hour shall normally be of 60 minutes duration.
 - One credit = 15 Hours of teaching i.e., 15 Credit Hours
 - One credit = 30 Hours of Practical work

Illustration: in 15 working weeks in a Semester, a paper having 4 Credits shall have a total of 15x4 = 60 CH.

Credit Point (P): It is the value obtained by multiplying the grade point by the credit. (P = G

- (d) 'Week' means a 6 days working week consisting of minimum 30 working hours.
- (e) 'Academic Year' means program session from July to June divided into two Semesters.
- (f) 'Semester' means six months teaching and evaluation as part of the total program. A Semester normally comprises 15 teaching weeks and 5 weeks for the conduct of examinations and evaluation.

An academic year comprising 180 working days in the least is divided into two Semesters, each Semester having at least 90 working days. With six working days in a week this would mean that each Semester will have 90 / 6 = 15 teaching/ working weeks. Considering that each teaching day has 5 teaching/working hours, a teaching week would have 5 x 6 = 30 working /teaching hours and each Semester will have $30 \times 15 = 450$ teaching hours available for each student.

5. Name of the course: Binod Bihari Mahto Koyalanchal University, Dhanbad in Master of Arts (M.A.) Course in Humanities and Social Science faculties; Master of Science (M.Sc.) Course in Science faculty and Master of Commerce (M.Com.) in Commerce faculty. The Hindi equivalent of M.A., M.Sc., M.Com, will be कला निष्णात, विज्ञान निष्णात एंव वाणिज्य निष्णात, respectively.

Subject in which Masters Programme is imparted:

Table-1 List of Subjects, Faculties and Degree

SI.No.	Facu <mark>lty</mark>	Subjects	Degree awarded
1.	Humanities	 English Hindi Urdu Sanskrit Philosophy Bengali Foreign Language Art & Culture Regional Languages (Khortha, Santhali, and Kurmali) 	M.A.
2.	Social Science	1. History 2. Political Science 3. Psychology 4. Geography 5. Economics 6. Sociology 7. Home Science 8. Mass communication 9. Management Studies	M.A.
3.	Science	1. Botany 2. Chemistry 3. Physics 4. Mathematics 5. Zoology 6. Life Sciences 7. Geology 8. Computer Science 9. Environmental Science & Disaster Management	M.Sc.
4.	Commerce	Commerce Business Management	M.Com.

5.1 Duration of the Course:

The duration of the course for Master's degree in Arts, Science and Commerce shall cover a period of two academic sessions divided into four Semesters viz. Odd and Even semesters, each Semester of six months duration. Odd Semesters shall be from July to December and the Even Semester shall be from January to June.

5.2 Fee Structure:

The candidate shall have to pay all kinds of fees fixed by the Academic Council of the University at the commencement of each Semester, the examination fee for end Semester examinations shall have to be paid if the candidate is found fit to take the end Semester examination. The University shall have rights to revise/charge any kind of fee any time. The fee structure for NRI and Foreign Nationals shall be fixed in terms of U.S. dollar separately through notification.

6. (A) Eligibility Criteria for Admission in M.A/M.Sc./M.Com Course: Table-2

List of Subjects Course and Fligibility Criteria

Course	Subject/ Department	Eligibility
M.A. M.Sc. M.Com.	English Hindi Urdu Sanskrit Philosophy Bengali History Political Science Psychology Geography Economics Sociology Botany Chemistry Geology Mathematics Physics Zoology Commerce	A candidate will be eligible for admission if he/she has passed one of the following examinations from Binod Bihari Mahto Koyalanchal University or a recognized University, or an examination recognized equivalent thereof:- (i) A Bachelor's Three Year Degree course examination with Honours/ Major in the subject concerned. (ii) A Bachelor's Three Year Degree course examination of general course. Provided that he/she has secured a 1st division in that examination and in case no division is awarded by the concerned examination board/university, the candidate must have secured a minimum of 60% marks in the aggregate and also in the subject concerned. Provided that such a candidate will be treated as equivalent to Honours graduate for the purpose of the admission only. (iii) A Bachelor's Three Year Degree course examination of open University or Distance Education Programme of an institution recognized by Distance Education Council of India.
		Provided that the candidate has obtained a minimum of 60% marks in the aggregate and also in the major/main subject in which he/she desires to pursue the Master's Course.
M.A.	Home Science	(i) A student who has passed the qualifying examination with

		major/Honours in the subject of Physics, Chemistry, Botany, Zoology, Geology, Sociology and Home Science. (ii) A Bachelor's Three Year Degree course examination of general course. Provided that he/she has secured a 1st division in that examination and in case no division is awarded by the concerned examination board/university, the candidate must have secured a minimum of 60% marks in the aggregate and also in the subject concerned.
	Mass	Eligibility Criteria for Master's In Mass Communication
	Communication	Minimum of 45% at UG level in any discipline,
		Selection will be done based on merit list and performance in the personal interview.
	Management	Eligibility Criteria for Master's In Management Studies
	Studies	B.Sc. in any basis science subject such as Zoology/ Botany/ Physics/ Chemistry/ Life Sciences/ Geology/ agriculture science/ Environmental Science/ Ecology/ Biological Science/ Natural Resource Management/ Water Resource Management with a maximum of 55% marks for General/OBC Candidate and 50% marks for SC/ST candidate from any recognized University.
M.A.	Arts & Culture	MASTER OF ARTS IN VOCAL MUSIC
		Eligibility Criteria for Admission in M.A (1st Semester) in VOCAL MUSIC: A student may be admitted to this particular post graduate course if
	A	he/ she has:
		 (i) Passed bachelor's degree examination in Vocal Music from a recognized university / college. (ii) Graduation in any discipline having at least three years of experience in vocal music.
		MASTER OF ARTS IN KATHAK DANCE
		Eligibility Criteria for Admission in M.A (1st Semester) in KATHAK
		DANCE:
		A student may be admitted to this particular post graduate course if
		he/ she has:
		(i) Passed bachelor's degree examination in Kathak Dance from a recognized university / college.
		(ii) Graduation in any discipline having at least three years of experience in Kathak Dance.
		MASTER OF ARTS IN THEATRE ART

	Eligibility Criteria for Admission in M.A (1st Semester) in THEATRE
	ART:
	A student may be admitted to this particular post graduate course if
	he/ she has:
17 19 100 Oct	 (i) Passed bachelor's degree examination in Theatre Art from a recognized university / college. (ii) Graduation in any discipline having participation in three major plays / theatrical production. (for example: youth festival or any play/ theatre at college level). MASTER OF ARTS IN PHILOSOPHY & CULTURE Eligibility for Admission in Post Graduate Course in Philosophy and Culture: A candidate will be Eligible for Admission in M.A (1st Semester) course only if / she has: (i) Passed bachelor's degree examination in any subject of Humanities or Social Sciences from a recognized university /
是是	college.
45 =	(ii) Secured minimum 45% marks in graduation (Hons.) Examination
* j	or minimum 60% aggregate marks in pass course examination at degree level
Foreign	Eligibility Conditions for admission to M.A. in
Languages	French/German/Japanese Studies
	Category-A:
	The applicants who have done B.A.(Hons) in French/German/Japanese
	language from any recognised University shall be eligible to apply for admission directly if they have obtained 60% marks and above in aggregate. Category-B:
	For all others the eligibility for applying for admission shall be 50% in
	aggregate in the Bachelor's Degree + Advanced Diploma in the language concerned or B1 level of Common European Framework or any other equivalent qualification considered equivalent thereto. Candidates in this category have to qualify in the Entrance/Written Test +VIVA-VOCE Examination.
Mass	Eligibility Criteria for Master's In Mass Communication
Communication	Minimum of 45% at UG level in any discipline,
	Selection will be done based on merit list and performance in the
Managana	personal interview.
Management	Eligibility Criteria For Admission in Master of Management Studies

	Studies	(MMS)
		A candidate will be eligible for admission in MMS Semester I course
		only if he / she has Passed one of the following examinations from any
		recognized University,
		(i) A Bachelor's three year degree examination with Honours /Major in any subject.
		(ii) A Bachelor's three year degree course examination of general
		Course Provided that he/ she secured 1st Division in examination.
		(iii) A Bachelor's three year degree course examination of open
		university or Distance Education Programme of an institution
		recognized by Distance Education Council of India.
M.Sc.	Computer	Eligibility for Admission in M.Sc. in Computer Science
	Science	The candidate should have any of the following degree from a
	(de)	recognized University with a minimum of 55% marks for General /OBC
	Y/. 7/4	candidates and 50% marks for SC/ST candidates:
	100	(i) Bachelor's Degree in Science/Engineering (Computer
	168	Science/Information Technology/Electronics or equivalent)
	10 3	(ii) Bachelor's Degree in Science with Honours in Mathematics /
	4	
		Physics (with Mathematics as Generic/Sub.)
	For the control	(iii) BCA having Mathematics as a subject at 10+2 level.
	Environmental	Eligibility for Admission in M.Sc. in Environmental Science & Disaster
	Science &	Management
	Disaster	B.Sc. in any basis science subject such as Zoology/ Botany/ Physics/
	Management	Chemistry/ Life Sciences/ Geology/ agriculture science/ Environmental
		Science/ Ecology/ Biological Science/Biotechnology/ Natural Resource
		Management/ Water Resource Management/B.Tech. with a maximum
		of 55% marks for General/OBC Candidate and 50% marks for SC/ST
		candidate from any recognized University.
	Life Science	Eligibility Criteria for Admission in M.Sc. in Life Sciences:
	11	A Candidate will be eligible for admission in the M.Sc. Life Sciences only
		if he/she has passed one of the following examinations from any
		recognized University Institute or an examination recognized
		equivalent there of :
		(i) A Bachelor's Three Year Degree course examination with Core
		/Honours /Major in the subject Botany /Zoology /Chemistry /Life
		Sciences/ Biotechnology /Microbiology /Genetics /Agriculture /
		Forestry / Veterinary / Medical Sciences or other relevant discipline.
		(ii) A Bachelor's Three Year Degree course examination of General
		Course Pass Course.
		Course rass Course.

- No candidate who holds a whole-time employment shall be admitted as a regular
- No student shall be permitted to take admission in two Post-graduate courses of the University belonging to the same or overlapping sessions.

6. (B) Eligibility Criteria for Admission in 2nd /3rd/4th Semester:

All candidates who have passed or been promoted in the previous Semester may take admission in the next Semester.

7. Method of Admission:

The admission to the 1st Semester of Master's Course will be made through Chancellor Portal or on the basis of a merit list of the application prepared on the basis of marks obtained in the last qualifying examination or on the basis of the written entrance test conducted by the university for the purpose. However, a P.G. Department may be directed or allowed if the Departmental Council so resolves, to conduct a written entrance test for preparing the merit list.

7.1 Reservation and Weightage:

7.1.1 Reservation:

A) The reservation of seat will as per the following table:

Table-3 Percentage Reservation of Seat for Category-wise

Unreserved	40%	17/2/N	1/04	15%	Open to All
(Open Merit)	40%	45 X 7		25%	Those applicants
		(i)	SC	10%	whose qualifying
	_ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(ii)	ST	26%	degree is from
	T N	(iii)	BC-I	08%	College/Institute
	17	(iv)	BC-II	06%	under BBMKU.
Reserved	60%	(v)	Economically	10%	and a same
		7 97 887	Weaker Section	/	
		-41	(Excluding from		
			Categories (i), (ii),		
		-	(iii) & (iv) of above)		

- B) The Caste and other Certificates on the basis of which the student claims reservation should be issued by relevant authorities of Jharkhand.
- C) The vacant reserved seats shall be filled up in the following manner
 - i) Against the vacant seats of ST, the SC candidates if available, be admitted.
 - ii) Against the vacant seats of SC, the ST candidates if available, be admitted.
 - iii) If no candidates of SC and ST are available for admission, the vacant seat will be filled in the following preference:
 - a. BC-I
 - b. BC-II

c. General

- iv) Against the vacant seats of EWS, general candidate will be admitted.
- D) Reserved category applicants selected on the basis of open merit will be counted against the 40% unreserved seats, not against the reserved seats.

E) Criteria of Income for EWS:

- Persons who are not covered under the scheme of reservation for SCs, STs and OBCs and whose family has gross annual income below Rs.8.00 lakh (Rupees eight lakh only) are to be identified as EWSs for benefit of reservation. Income shall also include income from all sources i.e. salary, agriculture, business, profession, etc. for the financial year prior to the year of application.
- ii) persons whose family owns or possesses any of the following assets shall be excluded from being identified as EWS, irrespective of the family income:-
 - (a) 5 acres of agricultural land and above:
 - (b) Residential flat of 1000 sq. ft. and above,
 - (c) Residential plot of 100 sq. yards and above in notified municipalities;
 - (d) Residential plot of 200 sq. yards and above in areas other than the notified municipalities.
- iii) The property held by a "Family" in different locations or different places/cities would be clubbed while applying the land or property holding test to determine EWS status.
- iv) The term "Family" for this purpose will include the person who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/ her spouse and children below the age of 18 years.

7.1.2 Weightage/Merit Points:

A) For preparing merit list, percentage of marks will be added to the relevant marks obtained by the eligible candidate in the subject concerned as per the following table:

Table-4 Percentage Weightage in Admission (Merit Points)

Girl Student	114 21	3%		
Ward of the Teaching a	7%			
privilege of the University				
	N.C.C. Cadet having Camp Certificate	1%		
	N.C.C. Cadet having State Camp Certificate	2%		
N.C.C.	N.C.C. Cadet having National Camp Certificate	3%		
	N.C.C. B-Certificate	4%		
	N.C.C. C-Certificate	5%		
	N.S.S. Special Camp Certificate (Unit Level)	1%		
N.S.S.	N.S.S. Zonal Level	2%		
	PRD-Camp N.S.S. National Level Camp	3%		

	RD Parade/National Award	5%
	Olympic or Equivalent	20%
Sports/Cultural	Asian Level	15%
Activities/Fine	National Level	10%
Art/Music/Drama	Inter-University/State Level	5%
	Inter College/Inter School Level	2%

B) No candidate shall be provided two or more benefits at the same time.

7.1.3 Supernumerary Quota:

A) Persons with Disabilities (PWD Quota)

i) **3%** Seats over and above the sanctioned strength, shall be reserved for differently abled persons (Persons with Disability) which will be distributed as below:

(a) Persons with vision impairment: 1%(b) Persons with hearing impairment: 1%

(c) Persons with locomotors disability or cerebral palsy : 1%

- ii) The distribution in the clause i) above is interchangeable in case of non-availability of candidates in the sub-categories.
- iii) The disability to avail the PWD quota should not be less than 40%.

B) Children/Widows of the eligible Armed Forces Personnel (CW Quota)

- i) 5% Seats over and above the sanctioned strength, shall be reserved for CW quota.
- ii) The seats will be awarded in the following priorities:
 - (a) Widows/Wards of Defence personnel killed in action;
 - (b) Wards of serving personnel and ex-servicemen disabled in action;
 - (c) Widows/Wards of Defence personnel who died in peace time with death attributable to military service;
 - (d) Wards of Defence personnel disabled in peace time with disability attributable to the military service; and
 - (e) Wards of Ex-servicemen personnel and serving personnel including personnel of police forces who are in receipt of Gallantry Awards.

C) Foreign Nationals

- i) 5% seats over and above the sanctioned strength in each course shall be reserved for Foreign Nationals.
- ii) The foreign nationals seeking admission in the University/its colleges shall have to get themselves registered with the Foreign Students Registry (FSR) in compliance with the schedule notified by the FSR.

D) Qualifying Degree from Foreign Board:

 3% seats over and above the sanctioned strength in each course shall be reserved for Foreign Nationals.

- ii) Applicants who have passed the qualifying examination (12th or Equivalent) should bring a Certificate from the respective Embassy mentioning the equivalence of their examination to the Indian Secondary Examination.
- 7.2 The total number of seats allotted to a University Department/College P.G. Department shall be fixed as per the University Laws.

8. Attendance Rule:

All students must attend every lecture, practical classes and other activities of the Department. However, the attendance requirement will be a minimum of 75% of the classes held.

Absence during the Semester-

- (a) A student must inform the HOD concerned immediately of any instance of continuous ab<mark>sence fro</mark>m classes.
- (b) A student who is absent due to illness should approach the teachers concerned for makeup quizzer, assignment and laboratory work.
- (c) A student who has been absent from a sessional test due to illness shall approach the teacher concerned for the test immediately on return to class. The request should be supported with a medical certificate issued by a registered medical practitioner.
- (d) In case the period of absence on medical grounds or more than 20 working days during the Semester a student may apply for withdrawal from the Semester. Such application must be made as early as possible. No applications for Semester withdrawal will be considered after End Semester examination has commenced. Partial withdrawal in a Semester is not allowed.
- (e) If a student is continuously absent from the institute for more than four weeks without permission of the Head of the Department concerned, his/her name will be removed from the institute rolls.
- (f) If a candidate represents his/her institution/University/Jharkhand State/Nation in Sports/ NCC/ NSS/Cultural or any officially sponsored activity, he/she may be permitted to claim attendance for the actual number of days participated including the congruent journeys, based on the recommendation of the Head of the Institution concerned. If a candidate is selected to participate in national level events such as Republic Day Parade etc, he/she may be permitted to claim attendance for the actual number of days participated (including journey days) based on the recommendation of the head of the Institution concerned.
- (g) A student who is promoted to a higher Semester or readmitted to a Semester due to shortage of attendance shall be required to study the same syllabus as being taught in that year.
- (h) In extraordinary cases the Vice-Chancellor can utilize his discretionary power to condone the shortage of attendance.

9. Syllabi:

- 9.1 The syllabus in each subject and in each paper shall be demarcated into well-defined units/areas of content along with a topic-wise break up. The Board of Studies of the subject concerned constituted by the Vice-Chancellor shall be responsible for framing the Syllabus subject to the provisions of this regulation.
- 9.2 The syllabus of one Semester shall comprise topics the teaching and examination of which may be completed in six months duration of the earmarked academic session. Subjects where practical have not been prescribed shall have four papers of 100 marks. A written examination of 70 marks is to be taken by the University in three hours in one sitting at the end of the Semester, comprising all the topics of the paper concerned. The remaining 30 marks of each paper shall be allotted to sessional work (Internal Evaluation) to be evaluated by the Department concerned in the form of written component (20 marks) of the topics of the paper taught, 05 marks pertaining to his/her performance at the cocurricular/extracurricular activities, and 05 marks for attendance.
 - 9.1.1 The course material for Semester I, II (including one paper of Foundation Course and Skill Development) and Semester III (except one Open Elective paper*) shall be compulsory for all the candidates. (*Open Elective Course: A Paper Choice to Choose From Other Disciplines).
 - 9.1.2 The course materials for the IVth Semester shall be elective (Discipline Centric). A candidate shall have the choice to choose a course from the alternative groups for which teaching is available in the Department in that academic session. Provided that one paper in the IVth Semester will be of dissertation/ project.

9.3 Medium of Instruction and Examination:

Except language subjects medium of instruction/examination shall be Hindi/English.

10. Scheme of Examination:

The following are the detailed schemes of examination of a Semester:

Table-5

(A) Non-Practical Subjects:

Item	Written End Semester	Internal Assessment /Mid –Semester/Sessional Work			
	Examination (Once at the End of Semester)	Written component (two examinations in each paper)	Day to Day assessment includes co-curricular activities (5 marks) + Attendance (5 marks)		
Duration	3 Hours	1.5 Hours			
Number of Papers	04	04	04		
Full Marks	70	20	5+5 = 10		

Full marks in all	280	80	40
papers			
Pass marks	112	32	16
	(28 marks in each	(08 marks in each	(04 marks in each paper)
	paper)	paper)	

Table-6 (B) Subjects where Practical is prescribed:

Item	Written <mark>End</mark>	Internal Assessment /Mid –Semester/Sessional Work				
	Semester Examination	कतो वर्ष	eory	Practical		
	End of compone Semester) (Two examinati	(a) Written component (Two examinations in each paper)	(b)Day to Day assessment (5 marks) + Attendance (5 marks)	(a) Written component (Two examinations in each paper)	(b)Day to Day assessment (5 marks) + Attendance (5 marks)	
Duration	3 Hours	1.5 Hours	7/4	3 Hours		
Full Marks	70	20	5+5=10	20	5+5=10	
Number of Papers	04 (T/03+P/01)	03	03	01	01	
Full marks in all papers	280	60	30	20	10	
Pass marks	112 (28 marks in each paper)	24 (06 marks in each paper)	12 (03 marks in each paper)	08 (02 marks in each paper)	04 (01 mark in each paper)	

Note:

The Departmental Council of the University Department/Post Graduate College concerned (a) shall be responsible for the conduct of the sessional examination (Annexure-2 & 3). Normally the test of a portion shall be conducted by the teacher who has imparted the teaching of the relevant portion and he shall evaluate the answer books and submit the result along with evaluated answer copies to the HOD within a week from the date of the conduct of examination/test. The best one out of two written internal assessments shall be taken as the score of the internal assessment of the paper.

11. Course Structure of Semester I to IV (subject code, course name, credits, teaching hours etc.): Table-7

1st Semester

Paper	Subject code	Nature of the	No. of	Teaching (in	Minimum
		course	Credits	hours) per week	Teaching required
					(in hours)
1	XYZ-F-101	Foundat <mark>ion</mark>	5	5	60 Lectures + 15
					Tutorials
П	XYZ-C-102	Core	5	5	60 Lectures + 15
		3 -			Tutorials
III	XYZ-C-103	Core	5	5	60 Lectures + 15
		- 8/0.		40 Y	Tutorials
IV	XYZ <mark>-C-104/</mark>	Core/Practical	YA 544	5	60 Lectures + 15
	XYZ-C/P-104	All All		Ta, YA	Tutorials/
	de	- C		1, 641	150 hours Lab.

Table-8

2nd Semester

Paper	Subject code	Nature of the	No. of	Tea <mark>c</mark> hing (in	Minimum
	1 16 3	course	Credits	hou <mark>r</mark> s) per	Teaching required
	45 2			week	(in hours)
V	XYZ-S-205	Skill Development	5	5	60 Lectures + 15
		1325		/ / !!!!	Tutorials
VI	XYZ-C-206	Core	5	5	60 Lectures + 15
		A WILLIA	/ V &	1214	Tutorials
VII	XYZ-C-207	Core	5	5	60 Lectures + 15
					Tutorials
VIII	XYZ-C-208/	Core/ practical	5	5	60 Lectures + 15
	XYZ-C/P-208	ANBAD		1/20 //	Tutorials/
		Ya-		0-/	150 hours Lab.

Table-9

3rd Semester

Paper	Subject code	Nature of the Course	No. of Credits	Teaching (in hours) per week	Minimum Teaching required (in hours)
IX	XYZ-A-309	Open Elective	20517	5	60 Lectures + 15 Tutorials
Х	XYZ-C-310	Core	5	5	60 Lectures + 15 Tutorials
XI	XYZ-C-311	Core	5	5	60 Lectures + 15 Tutorials
XII	XYZ-C-312/ XYZ-C/P-312	Core/Practical	5	5	60 Lectures + 15 Tutorials/ 150 hours Lab.

Table-10 4th Semester

Paper	Subject code	Nature of the course	No. of	Teaching (in	Minimum
			Credits	hours) per	Teaching required
				week	(in hours)
XIII	XYZ-E-413A/	Elective	5	5	60 Lectures + 15
	XYZ-E-413B/	. A A			Tutorials
	XYZ-E-413C				
XIV	XYZ-E-414A/	Elective	5	5	60 Lectures + 15
	XYZ-E-414B/				Tutorials
	XYZ-E- <mark>414C</mark>	का क	पला		
XV	XYZ-C-415/	Core/	5	5	60 Lectures + 15
	Or	Elective Practical	YALAN-	7 A	Tutorials/
	XYZ-E/P-415	W. W.	.40	V 8.9	150 hours Lab.
	A/B/C	at a		To Com	
XVI	XYZ-D-416	Dissertation/Project	5	5	Topic Allotted in
	1/he/4	7/20	/	7 12 17	Semester-III

Note:-

- 1. A minimum of 40% in **theory** and **practical papers** separately in each paper; and 50% in the **dissertation paper**.
- 2. Passing in Written Examination, Sessional/Internal, Practical and Dissertation/Project is required separately.

12. System of Examination:

- (a) The Examinations of P.G. Programme shall be conducted in four Semesters, ordinarily in December/June or on such dates as may be fixed by the University.
- (b) The academic performance of a candidate shall be evaluated in respect of the courses of study prescribed for each Semester of the concerned P.G. Programme through the examinations held in that Semester.
- (c) Symbol of Paper: XYZ-F-101: The first three symbols in Roman capital letters indicate the subject; the next symbol(s) denotes Foundation (F), Core (C), Discipline Centric Elective (E), AECC/SEC (S), Open Elective Course (A) etc. Out of the next three digits, the first digit indicates the Semester e.g. 1,2,3,4,5,6 for Semester I, II, III, IV, V, VI respectively, and the next two digits indicate paper number. The letters L or T or P indicate Lecture or Tutorial or Practical.

Table-11 Semester Wise Examination/Course Structure for Science Faculty

Semester	Paper Code (Credit, Lectures)	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks (Written 20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
I	XYZ-F-101 (5 Credits, 60 Lectures + 15 Tutorials)	Foundation	100	70	30
	XYZ-C-102 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C-103 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C/P-104 (5 Credits, 75x2 Lectures)	Practical	100	970	30
ı,	XYZ-S-205 (5 Credits, 60 Lectures + 15 Tutorials)	Skill Development Course (SEC)	100	70	30
	XYZ-C-206 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
4	XYZ-C-207 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C/P-208 (5 Credits, 75x2 Lectures)	Practical	100	70	30
III	XYZ-A-309 (5 Credits, 60 Lectures + 15 Tutorials)	Open Elective	100	70	30
	XYZ-C-310 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C-311 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C/P-312 (5 Credits, 75x2 Lectures)	Core/ Practical	100	70	30

IV	XYZ-E-413A/	Discipline Centric	100	70	30
	XYZ-E-413B/	Elective Theory			
	XYZ-E-413C	A:			
	(5 Credits, 60 Lectures	B:			
	+ 15 Tutorials)	C:			
	XYZ-E-414A/	Discipline Centric	100	70	30
	XYZ-E-414B/	Elective Theory			
	XYZ-E-414C	A:			
	(5 Credits, 60 Lectures	B:			
	+ 15 Tuto <mark>rials)</mark>	C:			
	XYZ-C-415	Core	100	70	30
	(5 Credits, 60 Lectures	or	100		
	+ 15 Tutorials)	Discipline Centric			
	or	Elective Practical	NC.		
	XYZ-E/P-415A/	A:	196		
	XYZ-E/P-415B/	B:		6/2//	
	XYZ-E/P <mark>-</mark> 415C	C:	19		
	(5 Credits, 75x2	2	64		
	Lectures)		44	12 3	
	XYZ <mark>-</mark> D-416*	Dissertation/	100	70	30
	(5 Cr <mark>e</mark> dits, <mark>150</mark>	Project		_ < ~	
	Lectures)		10	1111	
		Total Marks	1600	1120	480

Semester Wise Examination/Course Structure for Arts & Commerce Faculty

Semester	Paper Code (Credit, Lectures)	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks (Written 20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
I	XYZ-F-101 (5 Credits, 60 Lectures + 15 Tutorials)	Foundation	100	70	30
	XYZ-C-102 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C-103 (5 Credits, 60 Lectures + 15 Tutorials)	Core	100	70	30
	XYZ-C-104 (5 Credits, 60 Lectures + 15 Tutorials)/	Core	100	70	30

II	XYZ-S-205	Skill Development	100	70	30
	(5 Credits, 60 Lectures + 15 Tutorials)	Course (SEC)			
	XYZ-C-206	Core	100	70	30
	(5 Credits, 60 Lectures				
	+ 15 Tutorials)				
	XYZ-C-207	Core	100	70	30
	(5 Credits, 60 Lectures			1	
	+ 15 Tutorials)	_	100	70	
	XYZ-C-208	Core	100	70	30
	(5 Credits, 60 Lectures	हता कावल	1730		
III	+ 15 Tutorials)/ XYZ-A-309	Open Elective	100	70	30
	(5 Credits, 60 Lectures	Open Liective	Mr.	78/0	30
	+ 15 Tutorials)	57073	774	129	
	XYZ-C-310	Core	100	70	30
	(5 Credits, 60 Lectures	- Jany	A	3 1 21	
	+ 15 Tutorials)	2	44	PIE	
	XYZ-C-311	Core	100	70	30
	(5 Credits, 60 Lectures	~/// a b		7 6	
	+ 15 Tutorials)			_ < _	
	XYZ-C-312	Core	100	70	30
	(5 Credits, 60 Lectures	E/1 / /	Nos	1014	
IV	+ 15 Tutorials)/ XYZ-E-413A/	Discipline Centric	100	70	30
10	XYZ-E-413B/	Elective Theory	100	/0	30
	XYZ-E-413C	A:		P/ \ \ /	
	(5 Credits, 60 Lectures	B:	9/10	/ + //	
	+ 15 Tutorials)	C: MBAD THAT	Kin	to /	
	XYZ-E-414A/	Discipline Centric	100	70	30
	XY <mark>Z-E-414B/</mark>	Elective Theory	50.		
	XYZ-E-41 <mark>4C</mark>	A:			
	(5 Credits, 60 Lectures	B:			
	+ 15 Tutorials)	C:	100	70	20
	XYZ-C-415	Core	100	70	30
	(5 Credits, 60 Lectures	ESTD: 201	170		
	+ 15 Tutorials)/ XYZ-D-416*	Dissertation/	100	70	30
	(5 Credits, 150	Project	100	,,	30
	(5 5164163, 130				
	Lectures)				

- 12.1 Dissertation/Project*: Evaluation of project dissertation work may be as per the following guidelines:
 - Mid-Semester/Internal Assessment Examination = 30 marks (Syllabus: Annexure-1)
 - End Semester Examination: Project model (if any) and the Project record notebook, Project presentation and viva-voce = 70 marks

(Jointly conducted by One External & One Internal Examiners)

Overall project dissertation may be evaluated under the following heads:

- Motivation for the choice of topic
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- **Future Scope & References**
- Participation in Internship programme with reputed organization
- Application of Research technique in Data collection
- Report Presentation
- Presentation style
- Viva-voce

Note:

(a) Each student must submit two copies of the dissertation work duly forwarded by the Head of the Department and duly signed by the supervisor concerned. The forwarded copies will be submitted to the concerned Department of University, for evaluation.

The paper will consist of

- Field work/Lab work related to the project.
- Preparation of dissertation based on the work undertaken.
- Presentation of project work in the seminar on the assigned topic & open viva there on.
- (b) Each student shall have to complete a project work on any topic of his choice, but relevant to the frontier area of Science and Technology, or on a topic allotted by his/her Project Guide/Supervisor/Department in Semester -IV. This is compulsory and the candidates shall ensure that his project is on a relevant topic completed by him independently with the help and inputs from his/her guide/supervisor. Other guidelines pertaining to this paper shall be provided by the Department.
- (c) Student alone or in a group of not more than five, shall undertake one Project approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project shall be monitored by the faculty members at regular intervals.
- (d) Students will select topics for the project work in consultation with a teacher of the Department. The Seminar will be held in the concerned Department of University.

12.2 Format of the Dissertation/Project:

The **Dissertation/Project** shall be presented with the following specifications:

- **Size of Paper**: A4. Dissertation/Project must be printed on one side of the paper.
- Font Type: Times New Roman/Arial for English and Kruti Dev 010 for Hindi. (b)
- Font Size: Font size for English text is 12pt. in standard form and for Hindi is 14pt. (c)
- (d) Font of Chapter Headings and Sub-Headings:
 - Chapter headings may be written in all Capitals, bold text in point size 15
 - Sub-headings are written with left margin alignment
 - First level sub-headings are written in normal sentence case using bold text in point size 14
 - Second level sub-headings are point size 13
- (e) Spacing and Paragraphing:
 - Printing shall be in standardised form with 1.5 line spacing
 - Leave as triple spacing (2 empty lines) in base point size 12 before and after subheadings and one empty line after all sub-headings
 - Use one empty line between left-justified paragraphs
- Margin: Left margin should be 4cms and right and top margin should be 2cms. Bottom (f) margins should be 2.5cms. No ornamental bordering of sides is permitted.
- (g) Page Numbering: Preliminary pages of the Dissertation/Project, i.e. those preceding in text are to be numbered in Roman numbered. Text should be numbered in Arabic beginning with Pg No 1 on the first page of chapter 1.
- Preliminary sections of the Dissertation/Project should include, Declaration of (h) Attendance, Certificate from Supervisor, Declaration by Candidate and Supervisor regarding Plagiarism, Acknowledgement, Table of Contents, List of Tables, List of Figures/Diagrams, List of Abbreviations (if any) and an Abstract of the Dissertation/Project.
- Referencing and Citation Style: Citation i.e. a way of giving credit to individuals for their (i) creative and intellectual works that you utilised to support your research, differs by faculty in the style of ordering, punctuating and formatting of name, date, page, work etc.

The referencing of work and Citation style in the Dissertation/Project submitted in Faculty of Science and Social Science will be in IEEE Referencing Style/American Psychological Association (APA) style (6th edition), for Faculty of Humanities except for the Indian Languages, format shall be Modern Language Association (MLA) (8th edition) and for Medical Science, it shall be Vancouver style.

13. Course structure and credit:

Each course shall have a specified number of credits. These credits describe the weightage of the concerned courses. The number of credits that a student has satisfactorily completed measures the performance of the student. Satisfactory progress of a student is subject to his/her maintaining a minimum Cumulative Grade Point Average (CGPA). A certain minimum number of credits as specified in the syllabus must be earned by the student to qualify for the degree.

- One theory paper shall have teaching content of minimum of 60 contact hours.
- Assignment of credits:
 - (a) For theory/tutorial lecture one credit shall be assigned for one contact hour per week in a Semester (15 week duration).
 - (b) For laboratory/field work, two contact hours per week in a Semester shall be assigned one credit.

Table-13
Semester wise distribution of 80 Credits for Subjects with Practical Papers

Semester	Core Courses	Foundation Course	Skill Development Course (SEC)	Open Elective Course	Elective (Discipline Centric)	Total Credits
Semester-I	15	05		3	7	20
Semester-II	15	TEN I	05	13	+	20
Semester-III	15		V / 9	05	+//	20
Semester-IV	05			F/3	15	20
	50	05	05 THAR	05	15	80

Table-14
Semester wise distribution of 80 Credits for Subjects without Practical Papers

Semester	Core Courses	Foundation Course	Skill Development Course (SEC)	Open Elective Course	Elective (Discipline Centric)	Total Credits
Semester-I	15	05	0: 2017			20
Semester-II	15		05			20
Semester-III	15			05		20
Semester-IV	10				10	20
	55	05	05	05	10	80

14. Examination, Evaluation and Declaration of Results:

- (a) The duration of a paper of an End-Semester Examination shall normally be three hours and that of a Mid-Semester Examination shall be one and half hours.
- (b) Assessment and Progression: The performance of a student shall be evaluated through Internal Assessment that will include the best of two mid-Semester examinations in each paper on the pattern of the end-Semester examination, regularity of attendance and other activities, carrying 30% marks in all. The end-Semester examination shall carry 70% marks.
- (c) Activities for Internal Assessments: The Internal Assessment for 30% marks of a paper shall be made in the following categories of activities:
 - (i) Mid-Semester Examination (best of two written internal examinations) = 20%
 - (ii) Day to day assessment including extra-curricular activities = 05%
 - (iii) Attendance = 05%

Total = 30%

- (d) Mid-Semester Examination (MSE): There will be two groups of questions in written examinations of 20 marks. Group A is compulsory and will contain five questions of multiple type questions consisting of 1 mark each. Group B will contain descriptive type five questions of five marks each, out of which any three are to be answered. (Annexure-3)
- (e) Classroom Attendance Incentive: Those having greater than 75% attendance will be awarded Continuous Comprehensive Assessment marks within 05%.
 - (Attendance Upto 75%, 1 mark; 75 < Attd. < 80, 2 marks; 80 < Attd. < 85, 3 marks; 85 < Attd. < 90, 4 marks; 90<Attd, 5 marks).
- (f) Evaluation of Day to Day Assessment including Extra Co-curricular Activities (5 Marks): The student's performance shall be examined by the staff in-charge of extension activities along with the Head of the respective department and a senior member of the Department on the following parameters.
 - 20% of marks for quizzes/assignments/participation in seminars, behaviour, etc.
 - marks for active participation in classes/camps/games/special camps/programmes in the college/district/state/ University activities.
 - 10% of marks for exemplary awards/certificates/prizes.
 - 10% of marks for other social components such as blood donation, Fine Arts, etc.

The above activities shall be conducted outside the regular working hours of the college.

If a differently able student is unable to participate in any of the above activities, he/she shall be required to take a test in the theoretical aspects of any one of the above.

- (i) The assessment (sessional) in theory courses shall comprise two tests of 1.5 hours duration each for 20 marks, 5 marks for attendance and 5 marks for day to day assessment including extracurricular activities.
- (ii) The concerned Head of the Department shall fix the programme of the internal examination, and the class tests (including evaluation) shall be conducted by the teacher (or group of teachers) teaching the course. The evaluated answer papers shall be shown to the student, and the marks shall be displayed on the Notice Board.
- (iii) At the discretion of the concerned Head of the Post-Graduate Department, a student who has not appeared in the internal test(s) already conducted on account of some cogent reasons, such as late admission, illness etc., may be allowed to appear in the internal assignment/test held for such a student.
- (iv) A tabulation register shall be maintained in each department in which these marks shall be tabulated, Marks foil containing the amalgamated marks of all the portions of a paper of the internal assessment (paper-wise) shall be sent to the Examination Department of the University prior to the commencement of End Semester Examination.
- (v) Internal assessment marks shall be shown separately in the marks card of final examination after the end-Semester examination. A candidate, who has failed or rejected the result, shall retain the internal assessment marks for the next examination.
- (vi) A student, who is successful in the internal examination, shall only be allowed to fill up the examination form of end Semester, provided the attendance criteria is fulfilled and nothing is found against his/her character.
- (vii) The University Head of the Department shall have powers to review the whole process and marks awarded in internal assessments of students of Post Graduate Departments of colleges under the privilege of the University.

15. End Semester Examination (ESE) and Evaluation:

15.1 Admit Card for End Semester Examinations:

Admit Card for End Semester examination shall be issued to only a student who clears the internal assessment, fulfills attendance criteria, has nothing against his/her character, has filled in examination form within stipulated time, and deposited the prescribed examination fees.

A candidate may not be admitted into examination room unless he/she produces his/her admit card to the officer conducting the examination or satisfies such officer that it will be subsequently produced.

The Controller of Examinations may, if satisfied that an examinee's admit card has been lost or destroyed, issue a duplicate admit card on payment.

15.2 The Nature and Type of Questions of End Semester Examination:

There will be two groups of questions. Group A is compulsory and will contain two questions. In all usually nine questions of equal value will be set, out of which a student shall have to answer five questions. Q. No. 1 will be compulsory, consisting of six multiple type questions (each of one mark) and two short answers type of 4 marks covering the entire syllabus and the candidates shall be required to give their answers in maximum 50 words. Rest will be of subjective nature. Group B will contain descriptive type eight questions of fourteen marks each, out of which any four are to be answered. (Annexure-4)

The setter shall set the questions to test the analytical and descriptive skill of the student through the paper.

Question Paper shall show Full Marks (FM), Pass Marks (PM) & Max. Time allowed (in Hrs.) at the top of the Question Paper. The duration of a theory and practical papers of an end-Semester examination shall be three hours.

Distribution of marks in practical paper of an End-Semester Examination will be of 60% in performance of experiment, 20% in record/note book and 20% in viva-voce.

- 15.3 (i) All theory or practical papers in each Semester shall be treated as a separate paper and the examinees will be required to pass in theory and practical papers separately. If examinees fail in theory or practical or in both papers, he/she will appear in the next University End-Semester examination.
 - (ii) There will be no supplementary examination in any Semester. Further, if an examinee fails in theory or practical papers he/she will be given two consecutive attempts to clear the paper. Under special circumstances, a particular case may be taken to the Examination Board for the final decision.

16. Concession given to the Persons with Disability (PWD) in Examination (Internal & External)

The following concessions are admissible to the Persons with Disability (PWD):

- Permission to use an amanuensis:
- 2. The amanuensis should be a student of class lower and different discipline than the one for which the candidate will be taking the examination;
- 3. The Centre Superintendent of the Examination Center shall choose a suitable amanuensis and forward his/her particulars to the DSW /controller of Examination for consideration and approval;
- 4. The candidate shall pay the fee ass prescribed for use of the amanuensis. However, the Dyslexic, Blind, Physically Handicapped or Spastic or Candidate should be provided services of an amanuensis free of cost;
- The amanuensis shall be paid remuneration as prescribed from time to time by the university;

- 6. The candidate may be permitted to use the services an amanuensis in all or any of the papers.
- 7. Additional time of 30/60 minutes in each paper in internal & external examination, respectively;
- 8. The Center Superintendent shall make the sitting arrangements for the Dyslexic, Blind, Physically Handicapped and Spastic candidates on the ground floor, as far as possible;
- 9. Any other special arrangement, as necessary, shall be made by the Centre Superintendent(s) under intimation to the DSW / Controller of Examination.

17. Criteria for appearing in the Semester Examinations:

To qualify for appearing to the first, second, third and fourth semester course examinations in 2-year P.G. Programme in the Faculties of Science, Social Sciences, Humanities and Commerce, a candidate must have:

- (i) been registered in the University as a regular student,
- (ii) attended at least 75% of the lectures, tutorials and practical sessions, whichever applicable, separately during a semester and
- (iii) cleared all papers in the internal/Mid-Semester examination of the course.

18. Promotion Rule in Semester Examinations:

- 18.1 Declaration of Result after the First Semester Examination: After appearing at the examination of First Semester the candidates can be put in the following categories in the context of declaration of the results of the First Semester Examination:
 - (i) Passed, Those who have passed in examinations of all courses of the Semester and have obtained at least 4.0 SGPA.
 - (ii) Promoted, Those who have not passed in examinations of all the courses of the Semester but have obtained at least 4.0 SGPA.
 - (iii) **Failed,** Those who have not secured 4.0 SGPA.

18.2 Declaration of Results after the Second Semester Examination (based on the results of Ist and IInd Semester Examinations):

After declaration of results of the First & Second Semesters, a candidate can be put in the following categories:

- (i) Passed: A candidate who has passed in examinations of all the courses of the First & Second Semester and have obtained at least 4.0 CGPA.
- (ii) **Promoted:** A student, who has not passed in all the courses of Either Ist or IInd Semester or both, shall be promoted to the IIIrd Semester if he/she has obtained at least 4.0 CGPA and cleared at least 50% of the courses of Ist and IInd Semesters taken together i.e. 04 out of 08 papers of the courses. All such students shall have the option to clear the courses, in which they had failed, in the subsequent available examination(s) of the concerned Semester as ex-students subject to the time limit.

(iii) Failed: A candidate who has obtained less than 4.0 CGPA in the examinations of Ist and IInd Semesters taken together shall be treated as failed.

18.3 Promotion to the Third Semester (Based on the results of Ist and IInd Semester Examinations):

- (i) A candidate who comes under the category 'Passed' or 'Promoted' is eligible to be promoted to the third Semester.
- (ii) Failed candidates shall not be promoted to the Semester-III. However, they shall be promoted to the third Semester when they become eligible to come under the category of either 'Passed' or 'Promoted' as explained above after passing the failed courses in the subsequent available examination(s) as ex-students.
- 18.4 Promotion to the Fourth Semester (Based on the results of the Ist, IInd, and IIIrd Semester **Examinations):**

To be promoted from Semester-III to Semester-IV, a candidate must pass in at least 8 of the 12 courses of Semester-I, II & III taken together and obtain a minimum of 4.0 CGPA.

18.5 Declaration of Results after the Fourth Semester Examination (Based on the results of Ist, IInd, IIIrd and IVth Semester Examinations):

After declaration of results of IIIrd and IVth Semesters, a candidate can be put in the following two categories

- (i) Passed: A candidate who has passed in all the courses of Ist, IInd, IIIrd and IVth Semesters and obtained at least CGPA of 4.0.
- (ii) Failed: All those students who do not meet the above criteria shall be categorized as

A student who has failed in a course shall get two more chances to clear this course subject to the maximum duration for passing the course. Each candidate shall have to clear all the courses within the maximum period of 4 years from the date of his/her latest admission. Such candidate shall be admitted to the Degree of the year in which he/she has finally cleared all the papers, but the name of such a student shall not be incorporated in the merit list.

19. Maximum Duration for Passing the PG Programme:

The maximum duration for passing the 2 years PG programme shall be four years, which shall be counted from the date of admission in the first Semester of the PG programme.

A candidate who fails to clear all the Semester examinations in a maximum period of four academic sessions (i.e. 4 years) from the date of his / her first admission in the first Semester shall have to take admission in the first Semester afresh, if he / she desire the degree.

20. Preparation of Results:

An examinee's performance shall be evaluated in terms of Letter Grades, Grade and SGPA in a Semester and CGPA in all the Semesters taken together. Students' final marks and the result

Binod Bihari Mahto Koyalanchal University, Dhanbad 2020

will be based on the marks obtained in Mid Semester and End Semester Examination organized taken together.

Each Semester result shall be declared in terms of grades. The score card of each Semester shall comprise paper wise number of credits, letter grade, grade point and SGPA. A ten point grading system which is based on the actual absolute marks scored as described below shall be adopted.

Class interval of Grade **Letter Grade Conventional Equivalent** ©Marks % Point 90 and above 10 O (Outstanding) First Class with Exemplary 75 to less than 90 9 A+ (Excellent) First Class with Distinction 60 to less than 75 8 A (Very Good) First Class 55 to less than 60 7 B+ (Good) Second Class 50 to less than 55 B (Above Average) 6 45 to less than 50 5 C (Average) 40 to less than 45 P (Pass) Pass 4 #F (Fail) Below 40 0 Fail Ab (Absent) Absent 0

Table-15 **Grades and Grade Points Conversion for Post-Graduate Programme**

- © In case of fractional marks, 0.5 will be considered as higher whole number.
- # A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

21. Computation of SGPA and CGPA

21.1 Calculation of Semester Grade Point (SGPA)

a) The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

SGPA
$$(S_i) = \sum (C_i \times G_i) / \sum C_i$$

where C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the *i*th course.

b) The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the Semesters of a programme i.e.

$$CGPA = \sum (C_i \times S_i) / \sum C_i$$

where S_j is the SGPA of the i^{th} Semester and C_j is the total number of credits in that Semester.

- c) The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcript.
- d) Illustration of Computation of SGPA and CGPA and Format for Transcripts

Table-16

<u>Illustration for SGPA Calculation</u>

Course	Credit	Grade Letter	Grade Point	Credit Point
Course 1	5	A	8	5×8 = 40
Course 2	5	B+	7	5×7 = 35
Course 3	5	В	6	5×6 = 30
Course 4	5	OWINA	10	5×10 = 50
	20	ANTO HOM	LANCE OF	= 155

Thus, SGPA = 155/20 = 7.75

Table-17

Illustration for CGPA Calculation

Semester-I	Semester-II	Semeste <mark>r</mark> -III	Semester-IV
Credit: 20	Credit: 20	Credit: 20	Credit: 20
SGPA : 6.9	SGPA: 7.8	SGPA: 5.6	SGPA: 6.0

Thus, CGPA =
$$\frac{20 \times 6.9 + 20 \times 7.8 + 20 \times 5.6 + 20 \times 6.0}{80} = \frac{526}{80} = 6.57$$

- **21.2 Grace Rule:** Tabulators shall award grace marks as per the following guidelines:
 - (1) Grace marks will be awarded in theory papers only.
 - (2) A maximum of 5 marks; only in one paper, only once in complete academic cycle; will be awarded as grace marks. Grace marks will be awarded in the condition of requirement for the change of status of result viz: Not-promoted to Promoted & for Promoted to Pass.
 - (3) Grace Mark will not be awarded for making up shortfall in minimum CGPA or improving the grade.
- 22. Announcement of Results: The University shall announce results on the recommendation of the concerned Head of the Department institution or college-wise under following classification:
 - 22.1 A candidate shall be declared to have passed the PG program if he/she secures at least an aggregate CGPA of 4.0.
 - 22.2 Declaration of Classes on the Basis of CGPA grade shall be announced. (Table-15)

Note: The SGPA and CGPA shall be computed up to 2 places of decimals (truncated at the second place).

23. Ranking to the Candidates

Ranking shall be given to only those candidates who pass all the courses of the programme in one attempt. Notwithstanding any provision in the ordinances to the contrary, the following category of examinee is also eligible for ranking: The student who, having been duly admitted to a regular examination of the programme, was unable to take that examination in full or in part due to some disruption of examination, and took the next following examination of that programme and passed the course(s). The marks obtained by him/her at the examination shall be considered as the basis for the University Ranking, Scholarships and other distinctions. In order to get the benefit of this provision, the student should claim that he/she is eligible for this benefit and get a decision in writing after proving his/her eligibility therefore.

24. Break in the Course

Any student taking admission in any of the P.G. programmes of the Faculty shall not be allowed to pursue any other full time programme/course in the Faculty or elsewhere in the entire period of the programme meaning thereby that if a student leaves the programme after passing some of the Semesters/courses and takes up a full-time programme/course elsewhere, then he/she shall not be allowed to continue the programme further in the Faculty.

25. Scrutiny and Re-evaluation

- 25.1 Scrutiny and re-evaluation of the answer script shall not be ordinarily allowed. However, on the advice of the concerned Head of the Department the Vice-Chancellor can order for the re-evaluation in exceptional cases where prima facie incongruities in evaluation are apparent.
- A student can apply for the scrutiny of his/her answer script, after paying the 25.2 prescribed fee within 15 days of the receipt of the marks. The paper shall be scrutinized by the Examination Department of the University with the assistance of the Head of the concerned Department. Scrutiny shall be done to rectify unmarked portion/wrong transcription, if any.

26. Improvement in Results

A candidate who has qualified for the award of the degree may be allowed to reappear at later examinations with a view to improving the previous performance. Such a candidate will be allowed to reappear at the examination (as an ex-student) once only within a period of four years from the date of his/her first admission to Master's Course. Such a candidate may reappear either in 50% of the written (theory) papers prescribed for I, II, III and IV Semesters or all the four Semesters either in one year or two years. A candidate will be neither free to appear in the papers of any Semester in practical courses, nor will be permitted to submit fresh dissertation, etc. and marks obtained previously in the same will be taken into account while determining his/her result of the examination taken under provisions of the clause. Such candidate will be required to follow the scheme of the examination and the syllabus prescribed for the year in which the examination is currently held.

27. Credit Transfer Policy

Recognition/Accumulation (Credit Bank)/Transfer of Credits

BBMKU facilitates transfer of credits through an evaluation process. Requests for Transfer of Credits can be categorized as below:

(a) Taking Courses Outside while Enrolled in BBMKU (Under Collaboration)

Current BBMKU students who are considering taking course(s) at another institution should obtain permission from their Principal/HOD. The information has to be sent to Dean, Students' Welfare (DSW). However, such arrangements require prior collaboration at the University level. Only the institutions signing MoUs for the purpose shall be admissible for the provision.

(b) Taking a Break/Dropping out (due to unavoidable circumstances) during Studies at **BBMKU**

If a student has to take a break due to unavoidable circumstances during studies at BBMKU (with due permission from the competent authority) but wishes to complete his/her studies at BBMKU, may also get the benefit of transfer of credits earlier earned. Such individuals may route the application through their Principal/HOD. The Principal/HOD shall then arrange for necessary approval from DSW/competent authority.

(c) Course Completed/Done at UGC Accredited Institutions and Other Reputed Institutions

A Candidate can get the benefit of transfer of credits for Graduate-level courses completed at UGC accredited institutions and other reputed institutions such as IITs, IIMs, Central, other State Universities/Deemed Universities NITs, BITs, etc., provided that a grade of at least C of BBMKU (equivalent to 5.0 or above grade point) is earned and the course is similar in content as compared to what is offered at BBMKU.

(d) Course Completed/Done at An/A Institute/University Abroad

Credit earned due to the courses attended in the Universities/Institutes abroad as part of exchange/mobility/scholarships, etc. can be transferred based on the comparison with the equivalent courses at BBMKU. Generally, the Institutions/Universities should be recognized by the Association of Indian Universities (AIU) or UGC. Such universities abroad should have the best accreditation of their country. All grade-cards/transcripts and course syllabi must be translated from the original language into English and certified by a committee (Credential Transfer Committee of BBMKU) and ratified by the Equivalence Committee of BBMKU.

(e) Maximum Credits Allowed to be Transferred

BBMKU will allow a maximum of 2 Semesters' credits for 2 years programme from accredited institutions (of highest accreditation of their country, in case of foreign Universities). Courses must be academic in nature and be similar in scope and content to the courses offered at BBMKU.

28. Transfer of Admission: Transfer of admissions permissible only for IIIrd and Vth Semesters for the students of other universities and within the University.

28.1 Conditions for Transfer of Admission of Students within the University

- (i) His/Her transfer/admission shall be within the intake permitted to the college.
- (ii) Availability of same combination of subjects studied in the previous college.
- (iii) He/she shall fulfill the attendance requirements as per the University Regulation.
- (iv) He/She shall complete the programme as per the regulation governing the maximum duration of completing the programme.

28.2 Conditions for Admission of Students of Other Universities for Transfer

- (i) A Candidate migrating from any other University may be permitted to join III/V Semester of the degree programme provided he/she has passed all the subjects of previous Semesters/years as the case may be. Such candidates must satisfy all other conditions of eligibility stipulated in the regulations of the University.
- (ii) His/Her transfer/admission shall be within the intake permitted to the college.
- (iii) He/she shall fulfill the attendance requirements as per the University Regulation.
- (iv) The candidate who is migrating from another University is eligible for overall class and not for ranking.
- (v) He/She shall complete the programme within stipulated period.

28.3 Foreign Nationals

Eligible foreign nationals who have either:

- been selected for award of Government assistantship/fellowship, or
- (ii) been permitted by the Government of India to undergo studies as Self-Financing Foreign Student may also be admitted to any of the courses subject to acceptance of the academic standard of the applicants by the University.
- (iii) However, a foreign national/Non Resident Indian who has passed the qualifying degree examination from any Indian University/Institute and is desirous of admission to any of the courses either with Government of India assistantship/fellowship or as a self financing foreign student may also be eligible under Students outside Jharkhand category.

29. Validity of Registration

Validity of a registration will be for maximum for **four years** from the date of registration.

30. Board of Moderators (BOM)

There will be a BOM for moderation of question papers and examination results. The Board of Moderators will consist of the following:

- (i) The Dean of concerned faculty.
- (ii) The Head of the Department concerned.

(iii) Two persons nominated by the Vice Chancellor (one external and one internal), in the subject concerned.

Moderation of Question Papers: The questions set by setters may be subjected to moderation by a Moderation Board of the subject specially constituted for the purpose by the Vice-Chancellor.

The purpose of moderating an examination is to help ensure that it achieves the normal goals of end-of-course assessment. Obvious things to check include the following:-

- 1. Do the questions unambiguously communicate the examiner's intentions i.e., could a student sitting the exam reasonably be expected to know what is required of him?
- 2. Are the questions completable in the time allotted?
- 3. Is the marking scheme sufficiently detailed to allow efficient and consistent marking?
- 4. Does the examination fairly cover the syllabus?
- 5. Are there any technical (e.g. mathematical) errors?
- 6. Could the writing style be improved?

31. Removal of Difficulties

If any difficulty arises in implementing any of the clauses, the Vice-Chancellor shall remove the difficulties.

32. Repeal and Savings

- (i) Repeal: The earlier regulation pertaining to Two-year Course leading to M.A./M.Sc./M.Com is hereby repealed.
- (ii) Saving: Notwithstanding such repeal anything done or any action taken in exercise of the power conferred by or under the said regulation shall be deemed to have been done or taken in exercise of the powers conferred by or under this regulation, as if this regulations wherein force on the date on which such thing was done or action taken.

33. Review

The University can, at any time, review, alter, substitute, amend or delete any of the provisions of this regulation subject to such conditions as may be prescribed by the UGC and as per any special situation arising during the operation of these regulations as felt by Academic Council of the University.

Research Methodology (Common for All Faculties)

M.A./M.Sc./M.Com. Courses Semester-IV Paper Code: XYZ-D-416

Mid Semester Examination (MSE): There will be two groups of questions in written examinations of 30 marks. Group A is compulsory and will contain ten questions of multiple type questions consisting of 1 mark each. Group B will contain descriptive type eight questions of five marks each, out of which any four are to be answered.

Broad topics of the syllabus are as under:

Introduction of Research Methodology: Meaning of Research, Objectives of Research, Research Methods

Types of Research: Descriptive vs. Analytical Research, Applied vs. Fundamental Research, Quantitative vs. Qualitative Research, Conceptual vs. Empirical Research

Research Process: Basic Overview; Literature Review; Formulating the Research Problem, Hypothesis, Research Questions, Research Methodology

Data Collection: Primary and Secondary Data, Sampling Method, Observation Method, Interview Method, Questionnaires, Case Study Method, Historical Method, Processing and Analysis of Data, Interpretation of Data/Results, Conclusions/Findings.

Research Writing: Synopsis, Article/Research Paper, Research Project, Thesis, Dissertation, Book, Book-Review, Case Review, Criteria of Good Research, Plagiarism

Citation Style & Methods: MLA, APA, Foot Note, Text Note, End Note, Footnotes, Bibliography, References

Reference Books:

- a) Best and Kahn, Research Methodology, PHI Limited.
- b) Kothari, C.R. Research Methodology (Methods and Techniques), New Age Publisher.

Format of question Paper of Mid-Semester (Research Methodology) Examination

Copyright Reserved



Binod Bihari Mahto Koyalanchal University, Dhanbad

Internal/Mid-Semester Examination xxxx (Session: xxxx-xx)

Subject/Code:

Full Marks: 3	Pass Marks: 12	Time: 1.5 Hours
	General Instructio	ns:
Candi	d <mark>ates are required to give their answers in th</mark>	eir own words as far as practicable.
	The Questions are of equ	ual va <mark>lue.</mark>
	Answer any five questions of the following	in which Q.1 is compulsory.
	Group A	
1. Multiple	Choice Questions	(1x10=10)
(i)		
(ii)		
(iii)		
(iv)		
(v)		
(vi)		
(vii)		
(viii)		
(ix)		
(x)		
	OHAN W	
	Group B	10
	(Descriptive answer type of	
_	Answer any <u>four</u> of the follow	wing. (5x4=20)
2.		
3.		
4.	ा तससी सा ज्योति	
5.	II deleti eli equiti	
6.	© ESTD: 201	
7.		
8. 9.		
J.		

Format of question Paper of Mid-Semester Theory Examination

Copyright Reserved



Binod Bihari Mahto Koyalanchal University, Dhanbad Internal/Mid-Semester Examination xxxx (Session: xxxx-xx)

Subject/Code:

Full Marks: 20	Pass Marks: 08	Time: 1.5 Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable. The Questions are of equal value.

Answer any five questions of the following in which Q.1 is compulsory. Group A

1. Multiple Choice Questions (1x5=05)(i) (ii) (iii) (iv) (v) **Group B** (Descriptive answer type questions) Answer any three of the following. (5x3=15)1. 2. 3. 4. 5.

Note: The Mid Semester Examination shall have three components. (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each, (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks.

(Attendance Upto 75%, 1mark; 75 < Attd. < 80, 2 marks; 80 < Attd. < 85, 3 marks; 85 < Attd. < 90, 4 marks; 90<Attd, 5 marks).

[&]quot;Best of Two" shall be applicable for computation of marks for SIA.

Format of question Paper of End-Semester Theory Examination

Copyright Reserved



Binod Bihari Mahto Koyalanchal University, Dhanbad

End-Semester Examination xxxx (Session: xxxx-xx) Subject/Code:

Pass Marks: 28 Full Marks: 70 Time: 3Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable. The Questions are of equal value.

Answer any five questions of the following in which Q.1 is compulsory.

			Group A	
1.	(A) Mult	ple Choice Ques	tions	(1x6=06)
	(i)			
	(ii)			
	(iii)			
	(iv)			
	(v)			
	(vi)			
((B) Short	answer type que	estions	(4x2=08)
	(a)			
	(b)			
			Group B	
			(Long answer type questions)	
		-	Answer any <u>four</u> of the following.	(14x4=56)
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.	Short	notes type ques	stions (7x2=14)	
	(a)	•••••		
	(b)	•••••		
	(c)	•••••		
	(d)	•••••		
			X	