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Criterion no: 2.5.1

Criterion Details: Internal Assessment System

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Director
Tula's Institute, Dehradun

Internal Assessment System

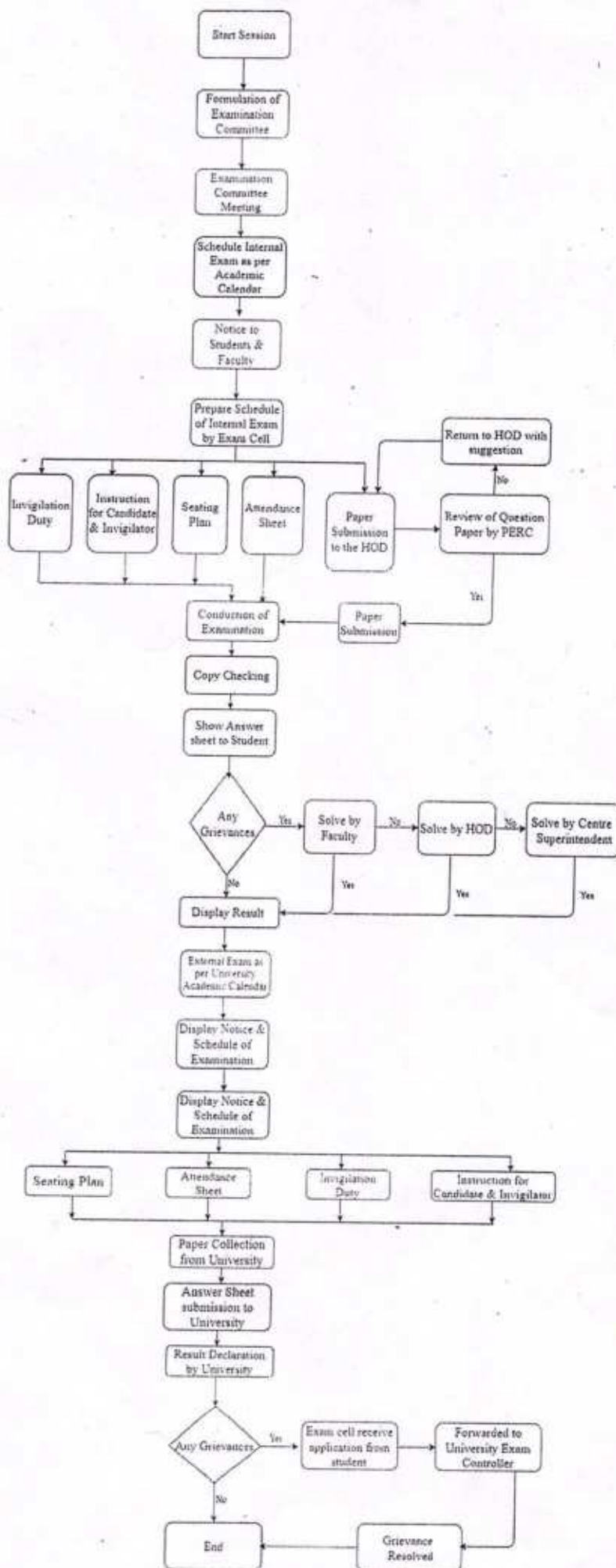
Tula's Institute has carefully devised a continuous assessment program wherein the students are constantly evaluated to ensure their competence in their academics.

Internal Assessment will be carried out as per the existing scheme across the year except that their assessment will be done twice and both will contribute equally in overall assessment as provided

Each semester two internal assessments are conducted and feedback is given to each student after identifying their weak and strong areas. PUT's are conducted for the benefit of weak students and students who require remedial teaching are identified based on their scores. Students are encouraged to submit two assignments for each paper which helps them improve their writing and presentation skills. Towards the end of each semester, students are marked based on their overall performance in the mentioned assessment system. All the activities for students are developed after keeping in mind the difficulty levels for slow and advanced learners.

The Institute should ensure that internal assessment is reliable, fair, and transparent for all students. The evaluation done by Faculty for internal assessment needs to be based on evidence of the students' performance throughout the academic session.


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Signature
Director
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Signature
Director
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Policy Document on Continuous Internal Evaluation (CIE) w.e.f (Session 2018-19)

1. Internal Evaluation (IE) will be held on dates as mentioned in the academic calendar.
2. The Internal Evaluation schedule will be prepared by examination cell and will be sent to the respective departments for checking. Once checked by the respective department, the schedule will be disseminated among students.
3. Faculty members will have to submit two sets of question papers for each subject approved by HODs to the examination cell at least three days before the start of the internal examination. The question papers should be submitted in a sealed envelope.
4. Question papers should be prepared as per outcome based education. Questions should be mapped with course outcomes and level of questions should be as per revised Bloom's taxonomy.
5. The Program Evaluation Review Committee (PERC) will ensure the quality of questions papers.
6. Examination cell will issue the answer scripts of the students to the respective faculty members for evaluation on the same day of examination.
7. Examination cell will keep a record of all answer sheets issued to the faculty members for evaluation.
8. Answer sheets should be shown to the respective students for any discrepancies in evaluation before submitting to the examination cell.
9. IE marks and marks obtained in internal examination by students in each course will be displayed on notice boards.
10. Faculty members will have to submit the evaluated answer sheets to the examination cell within 7 days from the date of last examination.
11. Respective departments will have to submit the internal examination marks to the examination cell within ten days of the last day of examination.
12. Guidelines to be followed by students and invigilators are provided in Annexure I and Annexure II.

(Director)

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Mission:

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- Provide world class platform for research and innovation.
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Annexure I (Guidelines for students)

Timings: - Candidates must reach the examination hall at least 15 minutes prior to the scheduled time.

ID. Card: - Candidates must bring their ID card & Admit Card. Students are advised to get it from the exam cell if they don't have either of them.

Dress Code: - Candidates must comply with the dress code of the institute.

Personal Possessions: - You are not reminded not to bring any valuables with you to the examination venue. Institute will not be responsible for anything lost or stolen from the examination venue.

Dos/Don'ts:-

1. Candidates should bring their own drafting instruments and electronic calculators (non-programmable). If required all equipment brought to the examinations must be placed on the candidate's desk.
2. Candidates are not allowed to carry **mobile phones**, books, notes in any form, loose paper, calculator cases, instrument cases, bags, pouches, ear or head phones or other containers inside the examination hall.
3. A candidate caught cheating in examinations is liable to be expelled from the examination.
4. No candidate is allowed to leave his seat without permission from the invigilator.
5. Talking during examinations is strictly prohibited. Raise hands if needed to communicate with invigilators.
6. Candidates must carefully read the instructions printed on answer books and question papers.
7. Candidates are not allowed to write, mark, highlight or deface any reference materials provided for the examination.
8. Candidates are not allowed to leave the exam hall until the answer script has been collected by the invigilator.
9. For internal examination, no candidate is allowed to leave the examination hall during the examination hours.
10. For external examination, no candidate is allowed to leave the examination hall for the first and last 30 minutes of the examination hours.

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Annexure II (Guidelines for Invigilators)

1. Invigilators will report to Exam Cell 30 minutes before the start of exams.
2. Invigilators will reach allotted rooms, 15 minutes before the scheduled start of examination, after collecting the examination material from the exam Cell.
3. Invigilators will ensure that students do not carry their bags upstairs.
4. Invigilators will ensure that students should search their pockets and see that no loose paper or handwritten notes, mobile, any electronic gadgets etc. are there with the students.
5. Invigilators will check the entries on the cover page carefully.
6. After distribution of the question paper, attendance should be taken carefully and an absentee statement submitted to the Exam Cell.
7. Invigilators should ensure that no student will be allowed to leave the exam room before exam time is over.
8. After the exam is over, answer books should be collected, counted and arranged in serial order, before being submitted in the examination office.

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Policy Document on Online Continuous Internal Evaluation (CIE)

(As per the revised guidelines from affiliated university)

1. Internal Evaluation (IE) will be held on dates as mentioned in the academic calendar.
2. The Internal Evaluation schedule will be prepared by the examination cell and will be sent to the respective departments for checking. Once checked by the respective department, the schedule will be disseminated among students.
3. The Faculty members will have to submit two sets of question papers in soft copy for each subject approved by HODs to the examination cell at least three days before the start of the internal examination.
4. Question papers should be prepared as per outcome based education. Questions should be mapped with course outcomes and level of questions should be as per revised bloom's taxonomy.
5. Department Head will ensure the quality of questions papers
6. The faculty members will upload their question papers of respective subjects at ERP system through their portal before one day of the commencement of examination. While the display timings of the question paper for students must be checked by the examination cell.
7. Question papers will be displayed to the students at their personal ERP portal according to the date and time mentioned in the examination schedule.
8. The students have to complete their work within the time limit and have to upload their answer sheets at predefined time else they won't be able to upload their answer sheets on their ERP portal systems.
9. The examination cell will dispatch the format of evaluation sheet to faculty members for evaluation of soft copy answer sheets on the same day of examination.
10. Examination cell will keep a record of all soft copy answer sheets received at the faculty members ERP portal for evaluation.
11. Evaluation sheets should be shown to the respective students for any discrepancies in evaluation before submitting to the examination cell.
12. IE marks and marks obtained in internal examination by students in each course will be displayed online through ERP portal.
13. Respective departments will have to submit the internal examination marks to the examination cell within ten days of the last day of examination.


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Internal Examination Grievance Redressal Mechanism

(w.e.f Session 2015-16)

A student shall be entitled to re-evaluate his/her answer books on the basis of application. Re-evaluation is done in following conditions-

- a. If Student not satisfied with the given marks.
- b. If the student is absent but he appeared in examination.
- c. If there is any mistake in the totalling of marks.
- d. If any answer is unchecked by the evaluator.

The grievances related to internal examination is resolved as follows:

1. The evaluated answer sheet is shown to the student and if the student is not satisfied with the evaluation, he/she can raise the grievance to the respective faculty member. The faculty member will address his/her grievances and resolve it at their end.
2. If the student is not satisfied with the solution provided by the respective faculty member, he/she can raise the grievance to the concerned HOD and he/she will resolve it within his/her delegated domain of power.
3. In Case of any doubts after the solution provided by the HOD, the student may contact the examination cell.

Examination cell shall address all the applications pertaining to internal examination grievances against examination/evaluation within 10 days after the display of answer sheets to the concerned students. All applications should be addressed to centre superintendent.

Once received by the centre superintendent, the application of re-evaluation is forwarded to the respective head of the department. The concerned subject faculty member will re-evaluate the answer sheet in presence of centre superintendent. The re-evaluated answer sheet will be forwarded to the examination cell.

The examination cell will show the re-evaluated answer sheet to the concerned student.


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W.E. # (Session: 2015-16)

Policy Document on Evaluation (CIE)

1. The evaluation of answer sheets of internal examination shall be done by the respective subject teacher.
2. The evaluators are required to award step-wise marks for each solved question.
3. The evaluators are required to transfer marks carefully on the front page of the answer sheet and carry out the total of marks correctly.
4. Blank pages should be stricken out by the evaluator of the answer sheet.
5. Evaluator shall put a signature with his/her name in the space provided on the cover page of the answer sheet.
6. Evaluator, who handled the answer sheet later, should hand over evaluated answer sheets to the Exam cell.
7. After all grievances are addressed, the final result will be declared by the respective subject faculty after ten days from the date of the last examination.


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ACADEMIC CALENDAR

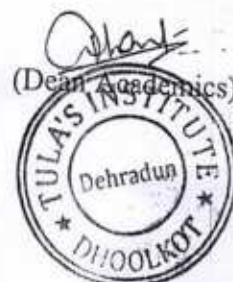
Odd Semester

Session : 2021-2022

S.No.	Particulars	Date	Responsibility
1.	Time Table (a) Display on Notice Boards (b) Distribution to concerned Teachers	26 September 2021 25 September 2021	Respective HoD
2.	Distribution of Provisional class lists to teachers	24 September 2021	Registrar
3.	Commencement of Classes 2 nd , 3 rd , & 4 th Year	28 September 2021	Concerned HoD
	Commencement of Classes - 1st year (Including orientation/induction program)	01 October 2021	Concerned HoD
4.	Induction/ Orientation Ceremony	01-21 October'2021	Dr.Nidhi Goyal/Mr.Emanuel
5.	Tula's Sports Week/Festival*	22-23 October'2021	Sports Incharge
6.	Date up to which attendance is to be counted for I Sessional test	16 November'2021	Respective HoD
7.	Display of Debarred students list	17 November'2021	Respective HoD
8.	1 st Test Series*	18-21, November'2021	Exam committee
9.	Technical festival : Utkrisht'2021	03-04 December'2021	Event Convener
10.	Date up to which attendance is to be counted for II Sessional test	03 January'2022	Respective HoD
11.	Display of Debarred students list	04 January'2022	Respective HoD
12.	2 nd Test Series *	05 January – 08 January'2022	Exam committee
13.	Theory Examinations* Collection of Admit Cards	To be announced later	Registrar/Exam committee

* May be revised as per UTU/SDSUV/UBTER schedule.


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ACADEMIC CALENDAR

Even Semester

Session: 2021-2022

S.No.	Particulars		Date	Responsibility
1.	Distribution of Provisional class lists to teachers		13 February 2022	Registrar
2.	Time Table Display on Notice Boards Distribution to concerned Teachers		15 February 2022 15 February 2022	Respective HoD
3.	Commencement of Classes 2nd, 3rd, & 4th Year UTU & UBTER Affiliated Courses		16 February' 2022	Concerned HoD
	Commencement of Classes – All Years SDSUV		21 February' 2022	Concerned HoD
	Commencement of Classes - 1st year UTU		21 March' 2022	Concerned HoD
4.	Technical festival : Utkrisht'2022		08-09 April'2022	Utkrisht In-charge
5.	1st Continuous Internal Evaluation*	All Year UTU & UBTER Students	27 April-30 April' 2022	Exam Committee
		All Years SDSUV	01 June-04 June'2022	
6.	Date up to which attendance is to be counted for II CIE	All Year UTU & UBTER Students	30 May'2022	Respective HoD
		All Years SDSUV	04 July'2022	
7.	2nd Continuous Internal Evaluation**	All Year UTU & UBTER Students	26 May - 28 May'2022	Exam committee
		All Years SDSUV	06 July - 09 July'2022	Exam committee
8.	Theory Examinations* Collection of Admit Cards		To be announced later	Registrar/Exam committee

*May be revised as per UTU/SDSUV/UBTER schedule.

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Dr. Nishant Saxena
(Dean Academics)

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Date: 14.08.2020

Examination Committee

The following persons have been nominated for the examination committee for the session 2020-21:

S.No.	Name	Designation
1	Dr. Pavan Kumar Chaubey	Centre Superintendent (CS)
2	Mr. Lokesh Kumar	Assistant Centre Superintendent (UTU)
3	Dr. Sanjeev Kumar	Assistant Centre Superintendent (SDSU)
4	Mr. Naresh Kumar	Assistant Centre Superintendent (UTU)
5	Mr. Ankur	Member (UTU)
6	Ms. Monika Belwal	Member (UTU)
7	Ms. Priya Sharma	Member (SDSU)
8	Mr. Raj Singh	Member (SDSU)


Director
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Copy to:
Dean Academics: for necessary action
All HODs: To circulate among all concerned
Registrar Office: for record



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Date: 29.05.2021

NOTICE

The meeting of the examination committee has been scheduled at 3:00pm on 01.06.2021 via Google meet.

The agenda of the meeting:

1. Date of commencement of Continuous Internal Evaluation (CIE) (1st internal, 2nd internal) & Semester End Examination (SEE).
2. Formulation of examination schedule
3. Formulation of question papers with last date of submission.
4. Instructions for candidates and invigilators for conduction of online examination.
5. Last date of submission of evaluated copies
6. Last date of submission of CIE marks
7. Information to students for filling examination forms
8. Grievance of students related to SEE
9. Preparation of observers list for conducting SEE
10. Preparation of external practical examiners list.

The link of the meeting will be (<https://meet.google.com/icd-yjut-nqh>). All are requested to kindly attend the meeting.

Pawan
29.05.21
(Centre Superintendent)
Centre Superintendent
Tula's Institute
Dhoolkot Dehradun

Copy to:

Director office: For kind information please
Dean Academics: For kind information please
Examination Committee members
All HODs

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Examination Committee Minutes of Meeting

Date/Time	01 June 2021 /03:00 PM			
Venue:	Online meeting			
Minutes taken by:	Ms. Priya Sharma			
Chairperson	Dr. Pavan Kumar Chaubey (Centre Superintendent) <i>Pavan</i>			
Attendee:	Department & Designation	Time	Signature:	
Mr. Lokesh Kumar	Assistant Centre Superintendent (UTU)	3:00 p.m.	<i>online meeting</i> <i>Pavan</i>	
Mr. Ankur	Member (UTU)	3:00 p.m.		
Mr. Naresh Kumar	Assistant Centre Superintendent (UTU)	3:00 p.m.		
Monika Belwal	Member (UTU)	3:00 p.m.		
Dr. Sanjeev Kumar	Assistant Centre Superintendent (SDSU)	3:00 p.m.		
Ms. Priya Sharma	Member (SDSU)	3:00 p.m.		
Mr. Raj Singh	Member (SDSU)	3:00 p.m.		
Absent:	Reason			
No Absent				
Agenda:				
TEC.014.001 Date of commencement of Continuous Internal Evaluation (CIE) (1 st internal, 2 nd internal) & Semester End Examination (SEE).				
TEC.014.002 Formulation of examination schedule				
TEC.014.003 Formulation of question papers with last date of submission.				
TEC.014.004 Instructions for candidates and invigilators for conduction of online examination.				
TEC.014.005 Last date of submission of evaluated copies				
TEC.014.006 Last date of submission of CIE marks				
TEC.014.007 Information to students for filling examination forms				
TEC.014.008 Grievance of students related to SEE				
TEC.014.009 Preparation of observers list for conducting SEE				
TEC.014.010 Preparation of external practical examiners list.				
Any other point with the permission of the chair.				
Issues		Actions		
		No.	Attendee	Due Date
1. The date of CIE will be scheduled as per the academic calendar. The tentative dates mentioned in the academic calendar for first and second internal examinations are 28.06.2021 to 01.07.2021 (1 st internal) and		1.	All members	-----

Chilly
Director
Tula's Institute, Dehradun

Examination Committee Minutes of Meeting

10.08.2021 to 13.08.2021 (2nd internal). All members agreed on the above dates and examination will be conducted subject to the COVID guidelines.			
2. The Examination schedule will be formulated by ACS and the same will be displayed on all department notice boards as well as circulated through e-mail, 3 days prior to the commencement of examination.	2.	ACS	25.06.2021
3. As per the examination policy of the institute, all faculty members are required to prepare two sets of question papers which should be duly approved by PERC and the alignment of question papers should be as per outcome based education mentioned in exam policy and all faculty members are requested to submit the question papers 3 days prior to the commencement of examination.	3.	ACS	25.06.2021
4. The examination cell will instruct the faculty members for the online examination through ERP.	4(a)	CS	26.06.2021
5. The instructions for candidates will be provided based on the examination policy.	4(b)	CS	25.06.2021
6. After the completion of the examination, the evaluation of answer sheets must be completed within 10 days.	5.	Concerned HODs	05.07.2021
7. The submission of internal marks to the examination cell within 12 days after the compilation of the examination.	6(a).	Concerned HODs	12.07.2021
8. The answer sheets should be shown to the concerned students before the submission of internal marks to the examination cell.	6(b).	Concerned Faculty Member	12.07.2021
9. The exam cell will give information to all HODs regarding filling of university examination forms at least a week in advance of the opening of the university portal. All HOD's have to ensure the filling of forms to their respective students on the due date only.	7.	Concerned HODs	-----
10. The record of grievances of students related to the examination is to be maintained by the examination cell.	8.	ACS	-----
11. The list of observers for conducting SEE is to be prepared by exam cell and will be submitted to university.	9.	CS	-----
12. The list of external practical examiners will be prepared by exam cell and will be submitted to university.	10.	CS	-----

Next Review: to be informed as per the university guidelines.

[Signature]
Director
Tula's Institute, Dehradun

[Signature]
02.06.21
(Centre Superintendent)
Tula's Institute
Dhoolkot, Dehradun



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Date: 22.06.2021

NOTICE

All the students are hereby informed that the first internal examination shall commence from 05/07/2021 to 08/07/2021.

1. The examination will be held in two sessions morning session and afternoon Session respectively.
2. The question Paper will comprise of 40% syllabus of each course.
3. Students are directed to ensure their presence fifteen minutes before the commencement of the examination online through ERP.
4. No hearing shall take place in this matter if the student is disallowed for non-compliance.

Ramesh
22-06-21
(Centre Superintendent)

Centre Superintendent
Tula's Institute
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Dean Academics: For kind information please
Examination Committee members
All HODs
All Notice Boards

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Attendance sheet Ist Sessional Exam Even Sem July 2021			
Subject Name with Code: Web Technology TCS-802			
Date & Time of Examination: 15/07/2021			
S.No.	Roll No.	Name	Present/Absent
1	170120101001	Abdul Farhan A	Present
2	170120101003	Abhishek Chaurasiya	Absent
3	170120101004	Abhishek Dubey	Present
4	170120101006	Abhishek Sahani	Present
5	170120101007	Abhishek Sharma	Present
6	170120101008	Aditya Karna	Absent
7	170120101009	Aemilius Gaurav	Absent
8	170120101010	Aftab Alam Khan	Absent
9	170120101011	Alka Joshi	Present
10	170120101012	Amit Kurmi	Present
11	170120101013	Amit Rai	Absent
12	170120101014	Aniket Singhal	Present
13	170120101015	Anjesh Kumar Sahani	Present
14	170120101016	Ankit Kumar	Present
15	170120101017	Ankita Tyagi	Present
16	170120101018	Anurag Rupakhetee	Absent
17	170120101021	Ashutosh Pandey	Present
18	170120101023	Ayushi	Present
19	170120101024	Babin Manyal	Present
20	170120101025	Bharat Raj Prajapat	Present
21	170120101026	Bibek Jaiswal	Present
22	170120101027	Chandan Kumar	Absent
23	170120101028	Deepak Gupta	Present
24	170120101030	Divyanshu Gupta	Present
25	170120101031	Farman Niyaz Hafiz	Present
26	170120101033	Gaurav Kumar	Present
27	170120101034	Gautam Jaiswal	Present
28	170120101035	Harsh Goel	Present
29	170120101036	Hemant Kumar	Present
30	170120101037	Himal Rawal	Present
31	170120101038	Himanshu Kumar Singh	Present
32	170120101040	Ishit Singh Rathore	Absent
33	170120101041	Jaygopal Gain	Present
34	170120101042	Kanchan Regmi	Present
35	170120101044	Keshav Kumar	Present
36	170120101045	Kirti	Absent
37	170120101046	Krishna Prasad Chaudhary	Present
38	170120101047	Krityaksh Kumar	Present
39	170120101048	Kunal Pandey	Present
40	170120101049	Kunal Priyadarshi	Present
41	170120101050	Kundan Kumar	Present
42	170120101051	Manish Chaurasiya	Absent
43	170120101052	Md Asif Ali	Absent
44	170120101054	Mintu Yadav	Present
45	170120101055	Mukesh Kumar	Absent
46	170120101056	Mukul Chauhan	Absent
47	170120101057	Naman Malik	Absent
48	170120101058	Nikhil Pathak	Present
49	170120101059	Nikhil Sikaria	Present
50	170120101061	Nishchay Agrawal	Absent
51	170120101062	Nishant Kumar	Present
52	170120101063	Pankhuri Rastogi	Absent
53	170120101065	Pranjali Gupta	Absent
54	1.7012E+11	Santosh kumar	Present

Faculty Signature

[Signature]
Director
Tula's Institute, Dehradun

HOD Signature *[Signature]*
Department of Computer Sciences & Engineering
Tula's Institute, Dehradun

Tula's Institute, Dehradun Dehradun																		
Evaluation Sheet for Seasonal Exam Even Sem July 2021																		
Course/Branch/Year: B.TECH CSE/IT																		
Subject Name with Code: WT(TCS-802)A																		
Date of Examination:15/07/2021																		
S.No.	Roll No.	Name	Q.No.1 Total Marks(10) CO1					Q.No.2 Total Marks(10) CO2					Q.No.3 Total Marks(5) CO3		Q.No.4 Total Marks(5) CO4		Total Marks	Marks Obtained
			(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(a)	(b)		
1	170120101001	Abdul Farhan A	2	2		2	2	2.5		2	2	2	4		4		20	15
2	170120101003	Abhishek Chauhan															20	ABSENT
3	170120101004	Abhishek Dubey	2	2		2	2	2	2	2.5	2.5		5		4		20	16
4	170120101006	Abhishek Sahani	2	2	2	2	2	2	2	2	2		4		4		20	14
5	170120101007	Abhishek Sharma	2					2	2	2			4		4		20	16
6	170120101008	Aditya Karna															20	ABSENT
7	170120101009	Amitias Gnanav															20	ABSENT
8	170120101010	Allah Alam Khan															20	ABSENT
9	170120101011	Alka Ansh	2	2	2	2		2.5	2	2.5	2		4		3		20	24
10	170120101012	Amit Kumar	2.5	2		2	2	2	2	2	2		3		3		20	23
11	170120101013	Ankit Rai															20	ABSENT
12	170120101014	Aniket Singh	2	2	2	2		2	2	2			3		3		20	20
13	170120101015	Anjesh Kumar Sahani	2	2		2.5	2		2	2	2		4		2		20	22
14	170120101016	Ankit Kumar	2	2		2	2		2				3		4		20	17
15	170120101017	Ankita Tyagi	2	2		2	2	2	2		2	2	4		4		20	24
16	170120101018	Anurag Rajeshkumar															20	ABSENT
17	170120101021	Aashish Pandey	2	2	2	2		2	2	2	2		3		3		20	21
18	170120101023	Ayushi	2.5	2	2	2.5		2	2	2.5	2.5		4		4		20	26
19	170120101024	Babin Manysl	2.5		2	2	2	2		2	2	2		3	3		20	23
20	170120101025	Bharat Raj Prasad						2.5	1	2.5	1.5		3		3		20	13
21	170120101026	Bibek Jaiswal	2	2	2	2		2	2		2	2					20	17
22	170120101027	Chandini Kurier															20	ABSENT
23	170120101028	Deepak Gupta	2					2	2	2	2		4		3		20	17
24	170120101030	Dhyanesh Gupta	2.5	2.5		2.5	2.5			2	2		4		4		20	21
25	170120101031	Farman Niyaz Hafiz	2	2	2		2		2	2	2	2		4		3	20	23
26	170120101033	Gaurav Kumar	2	2	2		2			2	2	2	3	3	3		20	23
27	170120101034	Gautam Jaiswal	2	2		2	2	2	2	2	2		3		3		20	21
28	170120101035	Harsh Goyal	2	2		2									2		20	9
29	170120101036	Hemant Kumar	2	2	2	2		2	2	2	2		4		4		20	24
30	170120101037	Himani Rawal	2	2	2	2		2	1	2	2		3		3		20	21
31	170120101038	Himanshu Kumar Singh	2	2		2	2	2.5	2			2		3		3	20	23
32	170120101040	John Singh Rathore															20	ABSENT
33	170120101041	Jaydeep Gaur	2	2				2	2	2			4		3		20	17
34	170120101042	Kanchan Regmi	2.5	2.5	2		2.5	2	2	2		2		4			20	23
35	170120101044	Kashav Kumar	2.5	2.5		2.5	2.5			2		2.5	4		5		20	24
36	170120101045	Kirti															20	ABSENT
37	170120101046	Krishna Prasad Choudhary	2	2		2		1	2	1			3		2		20	15
38	170120101047	Krishnakumar	2	2	2		2	2			2	2	3		3		20	20
39	170120101048	Kunal Pandey	2	2		2		2	2	2			3		3		20	19
40	170120101049	Kunal Prasad															20	ABSENT
41	170120101050	Kundan Kumar	2	2		2	2	2	2	2	2	2		3	3		20	15
42	170120101051	Mahesh Chaturvedi															20	ABSENT
43	170120101052	MJ Anil															20	ABSENT
44	170120101054	Mitesh Yadav	2	2	2		2	2	2	2			3		4		20	21
45	170120101055	Mukesh Kumar	2	2		2	2	2	2	2	2		4		3		20	23
46	170120101056	Mukul Chaudhary															20	ABSENT
47	170120101057	Naman Malik															20	ABSENT
48	170120101058	Nikhil Pathak	2		2	2	2	2.5	2.5	2.5	2.5		4		3		20	25
49	170120101059	Nikhil Sikaria															20	ABSENT
50	170120101061	Nishant Agrawal															20	ABSENT
51	170120101062	Nishant Kumar	2	2		2	2	2	2	2	2		3		4		20	23
52	170120101063	Pankhuri Rastogi															20	ABSENT
53	170120101065	Pranav Gupta															20	ABSENT
54	170120101081	Ranish Kumar	2	2				2	2	2	2			3	3		20	18

Name & Signature of Subject Teacher

Department of Computer Science & Engineering
Tula's Institute, Dehradun

Director
Tula's Institute, Dehradun



Tula's Institute, Dehradun

Sessional Test : 20.21....-20.22...

Roll No	190120102010
Name of Student	PRABHANSHU KUMAR
Course	B.Tech
Branch	ECE
Semester	VI
Subject Name With Code	Cellular & Mobile Communication (BECT 604 A)
Time	2:00 Pm to 3:30 Pm
Date	28-04-2022
Room No	H-204
Signature of Candidate	Prabhanish Kumar Seen & Signed
Name & Signature of Invigilator	

Candidate Roll No.											
1	9	0	1	2	0	1	0	2	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9

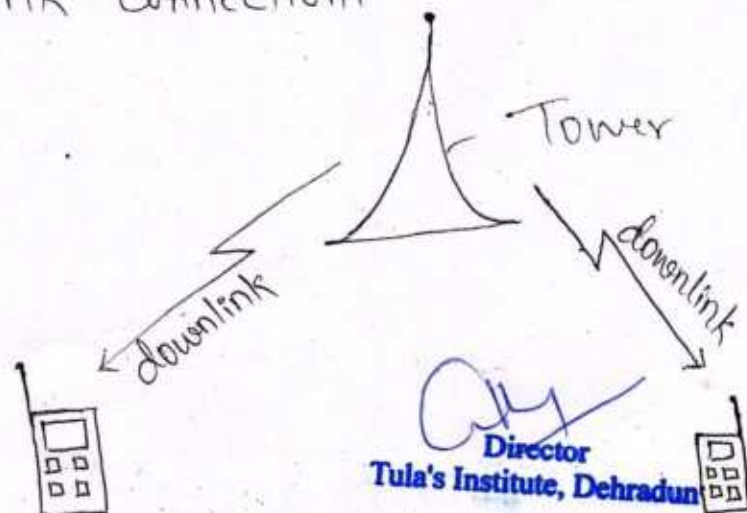
Date	09/05/22
Marks Obtained	26½ = 27
Max. Marks	30
Name of Evaluator	Prabhat Kr.
Signature of Evaluator	

GENERAL INSTRUCTIONS

1. Do not write any matter except your Examination Roll No. on your question paper.
2. Always Keep the student I- Card with you and show it to the supervisor staff **Director** and when required / demanded.
3. The candidates should not talk with any examinee and should not disturb any other student in the examination Centre during the conduct of examination.
4. The Examinee should check their pockets, desks, geometric boxes etc. immediately after they occupy their seats. If any paper written on otherwise found, it should be handed-over to the invigilator on duty.
5. No blank pages be left in between answer to various questions.
7. No candidate shall be allowed to carry inside the examination hall, any textual material, printed or written, bits of paper or any other material of like nature. Tular phones, pagers and articles like nature shall not be allowed in the examination hall (scientific/simple calculators are however permissible in the examination hall, if prescribed.)
9. Do not write anything inside the answer book before distribution of question paper.

Q.1

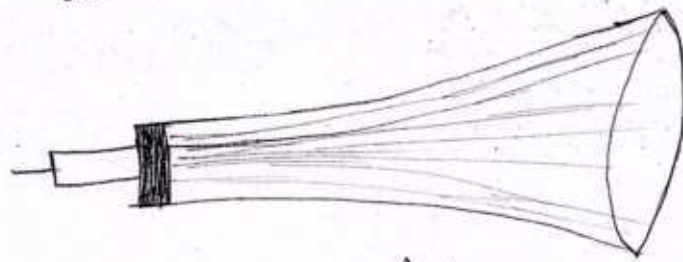
- a) Noise is an unwanted signal that get interfered to the original signal and may cause loss of the information. It may be natural or man-made.
- b) Frequency Spectrum is an invisible range of channel through which we are doing communication i.e. connecting the call, calling up our drivers, sending sms to friends etc.
- c) The loss in strength of the signal of any network is known as fading. It can cause problem in connecting the call or doing any communication.
- d) When the connection is from mobile tower to the mobile phone, then it is known as downlink connection.



e) A metallic device which is used to receive or transmit the radio signal is known as antenna. (N)

or

A metallic device which works as an interface b/w guided medium to space is known as antenna.



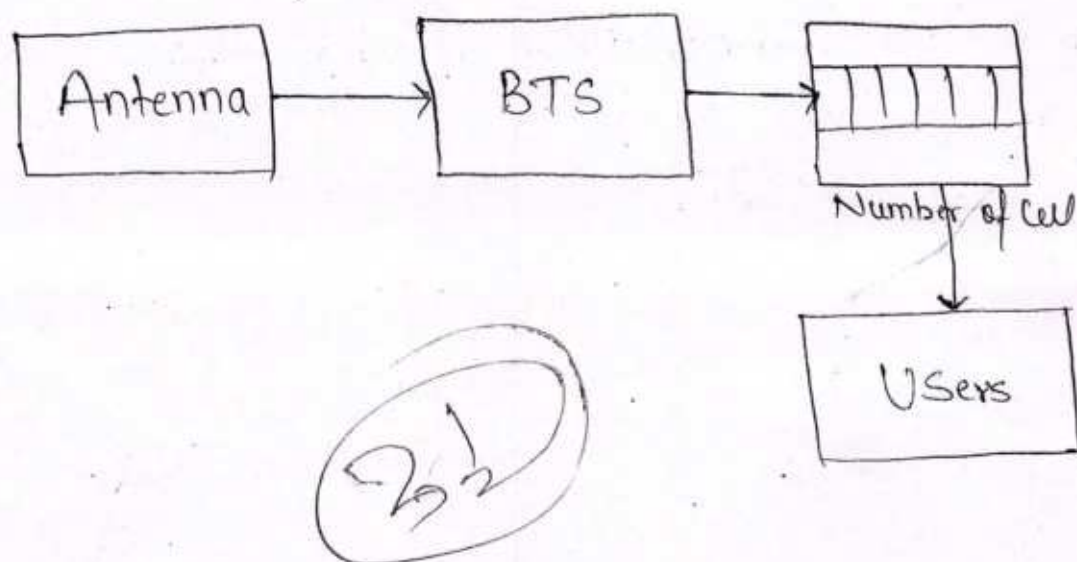
Antenna

f) The swapping of memory from primary to secondary is known as swapping. It makes the main memory free to work faster and also make space available in main memory. (N)


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Q.2.

b)



Block Diagram of Network System.

- c) There are 3-types of multiple Access schemes:
- i) FDMA → Frequency Division Multiple Access
 - ii) TDMA → Time Division Multiple Access
 - iii) CDMA → Code division Multiple Access.

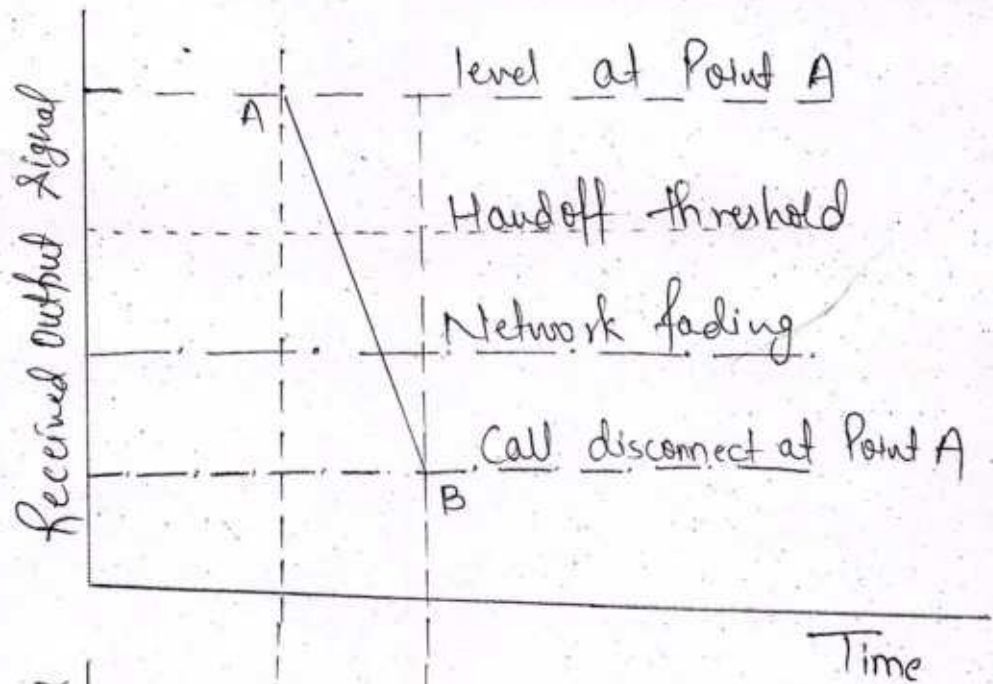
In Frequency division multiple Access, bandwidth is distributed among other stations. It requires guard band to stop the interference. In FDMA, it's data rate is low and also it is less flexible. It has maximum noise interference. Whereas, In the case of Time division multiple Access, distribution of guard band

c) Of ~~the~~ satellite transponder takes place. It's data rate is comparatively faster than FDMA and also it is moderately flexible. In the case of TDMA, noise interference is moderate.

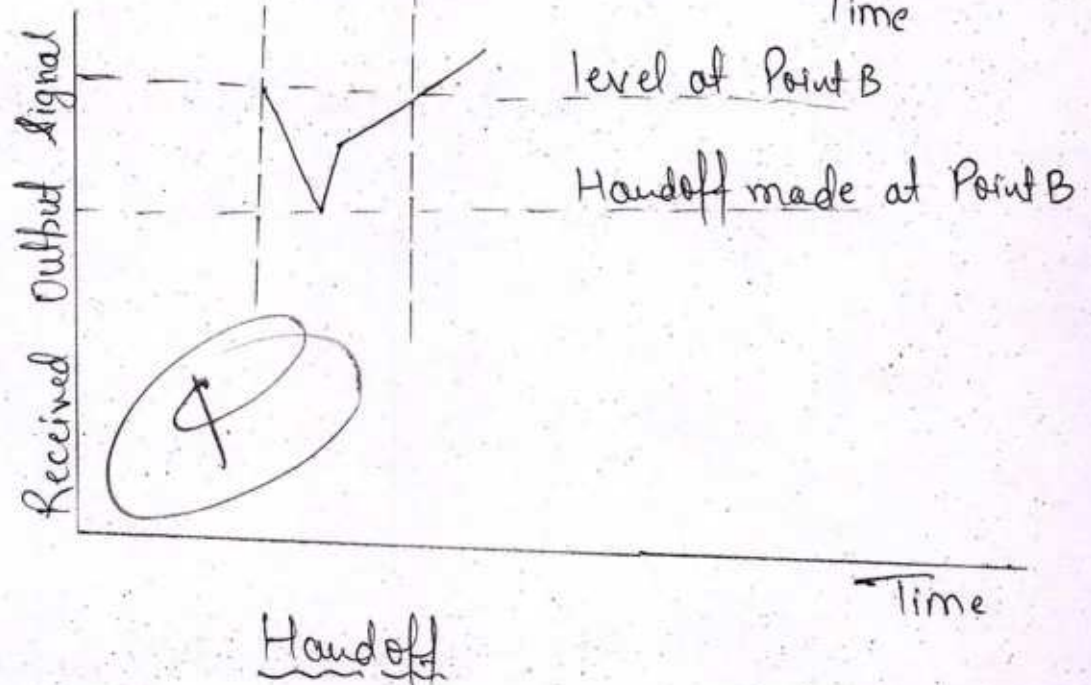
Now in the case Code division multiple access, ~~neither the~~ both the distribution of frequency & time takes place. It's data rate is fastest among all. It is highly flexible. In the case of CDMA, noise interference is minimum.

d) When any user is travelling from one sight to another sight while call is in progress, then Handoff process takes place so that call doesn't disconnected. Transferring of network from one BTS to another is known as Handoff. Handoff's priority is more than to connect a call because if any user is travelling to another location, Mobile Switching Centre (MSC) will ensure that user's call should not be disconnected and they provide a proper channel for voice calling and data service. They also keep in mind that new channel that is allocated to that user doesn't get interfered by any other channel of that area or with other user's. So, this is the most important thing when Handoff is going to take place.

Improper
Handoff



Proper
Handoff



Fading of network due to some problem does not cause unnecessary fading therefore Computer or MSC always take care of that. If fading is happen for a long period of time and user's mobile is moving at some speed, the Handoff process takes place.


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e There are two types of Handoff:

- i) Hard & Soft
- ii) Inter & Intra Cell

3>

a) History of Wireless Communication:

i) Radio Communication: It is the first wireless Communication also known as broadcasting Communication. Basically, it was based on one-way Communication. Later on it was used by merchant's and navy officer.

ii) Infrared Communication: This type of wireless Communication is used to communicate over a very short distance. It is used in TV remote and other electronics remotes control etc. For this communication, it requires a LED that will transmit the infrared signal and one photo diode receptor which will receive that invisible ray of light to make communication.

iii) Microwave Communication: This type of Communication consists of two methods satellite method or terrestrial method.

In satellite method, we receive signal from the satellite and send signals to the satellite which is 22500 nautical miles away from the earth.

On the other hand, In the terrestrial method, it requires two antennas with clear line of sight and without any distraction to communicate with each other.

iv) Bluetooth Communication: This type of communication is used for transferring of data, videos, photos to one mobile phone to other at a very short distance.

v) WiFi Communication: In this communication, there is one router, through which number of devices get connected and can transfer the data at a higher speed.

vi) Satellite Communication: It is one of the biggest wireless communication systems that enable us to connect anywhere in the earth through satellite. We can send or receive the data from the satellite in anywhere on the earth.

3. b) Each tower get a limited number of bands for use in a particular geographic area is known as cell. So to manage that particular bandwidth is known as Trunking. Trunking is the process to manage number of users in that particular given bandwidth.

If any user try to connect the call and all channels are busy then the call will automatically get blocked and if any user disconnect the call then that channel comes to available pool and then it is allocated to other users who are requesting the call at that time.

Grade of Service (Gos) is the ability to measure the network in busiest hour that how much it is following trunking service.

Grade of Service is measured in Erlang.

Erlang means the traffic intensity while the call is connected (Call per hour in 1 hour or call per minute in minute).

→ Generation of Wireless Communication ~

1G → This is the first wireless radio telephone communication which comes in 1980s. It is analog in nature. It is based on Mobile Telephone System (MTS) and Advanced Mobile Telephone System (AMTS). This generation of network is only used for voice communication.

2G-network ~ This wireless radio telephone communication system launched in Finland in 1991. This is digital in nature. It has replaced 1G network because it is more reliable, more secure and more fast. In 2G network, we can send MMS & SMS to others.

3G-Network → This wireless radio telephone communication system based on EDGE+. This generation of network comes with very high speed of internet and replace both the generation very fastly. It led to the new structure of the Antenna across the world.


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4G-Network → The most fastest generation of network which work on the concept of LTE and VoLTE. It comes with very high speed of internet and data calling. But it has a major security issue. So, ITU has declare

3 to remove this security issue of IP.
It has a transfer speed of 1Gb per second

A large, stylized handwritten signature in black ink, consisting of several sweeping, interconnected loops and lines.A smaller handwritten signature in blue ink, appearing to be a stylized 'G' or 'C' followed by a horizontal line.

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Sessional Test : 20.21....-20.22..

Roll No	236199150004
Name of Student	Kritika Babbarwal
Course	Bsc
Branch	Forestry.
Semester	6 th
Subject Name With Code	Agroforestry system of management (BSF-604)
Time	10:00 to 11:30 Am.
Date	16/June/2022
Room No	H-404
Signature of Candidate	Kritika
Name & Signature of Invigilator	

Candidate Roll No.											
2	3	6	1	9	9	1	5	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9

Date	17/6/22
Marks Obtained	26
Max. Marks	30
Name of Evaluator	Pankaj Singh
Signature of Evaluator	Pankaj

GENERAL INSTRUCTIONS

1. Do not write any matter except your Examination Roll No. on your question paper.
2. Always Keep the student I- Card with you and show it to the supervisor staff on duty as and when required / demanded.
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4. The Examinee should check their pockets, desks, geometric boxes, etc. immediately after they occupy their seats. If any paper written on otherwise found, it should be handed-over to the invigilator on duty.
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8. Do not write anything inside the answer book before distribution of question paper.

Answers

26/30

Ques 1

- a) ICRAF.
- b) Brands
- c) Bengatara Thans.
- d) Thum Cultivation (1)
- e) arable crops, tree crops and/or animals. (1)
- f) Wind breaks. (1)

Ques 2

- Ans a) Taungya system can be defined as the ~~growing~~ process of growing agricultural as well as tree crops on the same piece of land.
- This system involves rural as well as local people / farmers
 - These people are allotted lands on temporary basis.
 - Taungya system is divided

into 3 types:

a) Village Taungya: refers to the allotment of land to ~~village~~ people living in village inside the forest.

- The land is allotted them on temporary basis.

- The people are ~~encouraged~~ encouraged to grow agricultural as well as forest ~~and~~ crops.

(4)

b) Departmental Taungya: Includes production of agricultural as well as forest crops by Forest department by giving land to local people ~~as~~ for short duration.

c) Leased Taungya: refers to allotment of land to local people ~~on~~ a local contractor / farmer on leased basis.

- Agroforestry system, ^{does optimum utilization} ~~of land~~ ~~and~~

of land ~~and~~ & prevents soil erosion.

Ans c) Wind break

- refers to strips of trees or shrubs planted to protect field, homes & animals from wind.
- Shape : Linear
- provides ~~10 times~~ protection 10 times the height of tree.

Shelter belt

- refers to planting of trees, shrubs, grasses in a specific pattern to reduce velocity of wind.
- Shape : triangular
- provides 20 times protection than the height of tree.

Ans d) Agroforestry is defined as the process of growing arable crops and/or animals as well as tree crops on the same piece of land.

- This system uses land to its optimum utilization.
- This system provides farmer an additional income as well as food for family too.
- Agroforestry system can be classified ~~into~~ on the basis of :

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- a) Based on nature of Components
- b) Arrangement of Components.

- On the basis of nature of Components these are :

1) Agrisilvicultural System : refers to production of agricultural as well as forest crops on the same piece of land.

- provides food & timber, fuelwood fodder.

2) Silvipastoral System : refers to ^{grasses} production of fodder crops along with forest crops on the same land.

- provides fodder, timber, fuelwood NTFP's.

3) Agrosilvipastoral System : refers to production of agricultural crop forest crops as well as fodder Gr Crops on the same land.

- provides additional income to


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the farmer as well as food for his family.

3.5

4) Other Systems: Includes a) Aquaforestry:

which refers to growing of such tree species which are palatable to fishes & ~~9 trees~~ are planted along riverbanks.

b) Apiculture with trees: refers to rearing of honeybees along with trees.

Ques 3)

Ans a) Multipurpose tree species (MPT's) refers to those species of trees that have more than 1 purpose to perform, ~~are~~ they are more productive and useful to mankind.

• They ~~serve~~ provide more than 1 product/service.

• Characteristics:

→ faster growth.

→ short rotation period.


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→ provides more than 1 useful product eg. fruits & fodder from ~~same~~ 1 tree species.

→ prevents soil erosion and destruction of soil structure.

→ serves as food as well as shelter.

→ provides additional income to the farmer.

→ MPTs also provide more than one service i.e. if a leguminous tree is grown it provides fodder, as well as organic matter to soil.

→ Such trees enriches the soil.


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Ans b) Agroforestry refers to the ~~process~~ process of growing agricultural crops and ~~100~~ ~~plants~~ animals as well as tree crops ~~on~~ on the same

• Agroforestry system provides optimum Utilization of land.

• Agroforestry system provides annual income to farmer as he sells his agricultural crops and also provides income from selling tree crops in the form of timber, fuelwood, firewood.

• The tree crops serves as investment which yield high economic return in future.

• Classification of Agroforestry Systems :

• Agroforestry systems are classified on the basis of

Nature of Components

- Agrosilvicultural System
- Silvopastoral System
- Agrosilvipastoral System
- Other Systems

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Arrangement of Components

- ↳ Spatial
- ↳ Temporal

• Based on Nature of Components:

a) Agrisilvicultural Systems: refers to production of agricultural as well as forest crops on the same land.

- provides food, fodder & timber

b) Silvipastoral System: refers to production of fodder crops as well as tree crops ^{on pasture land} on the same land.

c) Agrisilvipastoral System: refers to production of agricultural crops, forest crops as ~~well~~ as fodder crops ^{on pasture land/Green land.} on the same land.

• provides an additional amount of income to the farmer.

d) Other Systems ^{Director Tulsi Institute, Dehradun} include apiculture with trees, Aquaculture etc.

• Based on Arrangement of Component

a) Spatial : arranging components ~~on~~
in separate widths or space.

b) Temporal : refers to arranging of
components on temporary basis.

(3.5)

Ans d) i) Lopping : refers to cutting of
branches of trees above a
definite height which produces
~~branches~~ shoots which are
used as fodder for livestock.

• Branches with dense leaves are
preferred as it provides more
fodder.

ii) Pruning : refers to ^{removal or} cutting of unwanted
branches of immature stands to
maintain health & vigour of
the plant.

• Pruning maintains hygiene of
plant.

• Pruning encourages growth of
new branches.

• Pruning prevents knotting


of timber.

- is of various kinds:

a) Natural / Self pruning: refers to pruning done by nature. i.e. shedding of old branches / parts of trees.

b) Artificial Pruning: is done by a forester to remove unwanted parts or branches.

c) Dead pruning: When ^{dead &} old stems are cut.

d) Green pruning: When ^{live} branches or stems are cut. 

iii) Homestead Gardens: refers to gardens that ~~are~~ consists of horticultural crops & ~~as~~ ~~provi~~ well as some trees to provide aesthetic beauty and fruits to the ~~family & individual~~ members of a house.