

Curriculum of Diploma Program in Modern Office Practice



**Department of Science,
Technology and Technical Education (DSTTE),
Govt. of Bihar**

**State Board of Technical Education
(SBTE), Bihar**

Semester – VI Teaching & Learning Scheme

Course Codes	Course Titles	Teaching & Learning Scheme (Hours/Week)					
		Classroom Instruction(CI)		Lab Instruction (LI)	Notional Hours (TW+SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426601	Business Organization & Management	3	-	-	2	5	4
2426602	Commercial Arithmetic and Business Statistics	3	-	4	2	9	6
2426603	Public Sector Enterprises	3	-	-	2	5	4
2426604	Shorthand-II(Hindi)	3	-	-		3	3
2426605	Elective- I) Auditing 24226605(A) II) Mgt. of small enterprises 24226605(B)	3	-	-	2	5	4
2426606	Computer Application & Tally	-	-	4	2	6	3
2426605	Major Project (Common for all programmes)	-	-	8	4	12	6
Total		15	-	16	14	45	30

Note: Prefix will be added to course code if applicable (T for Theory Paper, P for Practical Paper and S for Term Work)

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

Semester - VI Assessment Scheme

Course Codes	Course Titles	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term work &Self-Learning Assessment (TWA)		Lab Assessment(LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426601	Business Organization & Management	30	70	20	30	-	-	150
2426602	Commercial Arithmetic and Business Statistics	30	70	20	30	20	30	200
2426603	Public Sector Enterprises	30	70	20	30	-	-	150
2426604	Shorthand-II (Hindi)	30	70	-	-	-	-	100
2426605	Elective- I) Auditing 24226605(A) II) Mgt. of small enterprises 24226605(B)	30	70	20	30	-	-	150
2426606	Computer Application & Tally	-	-	10	15	10	15	50
2426605	Major Project (Common for all programmes)	-	-	20	30	50	100	200
Total		150	350	110	165	80	145	1000

Note: Prefix will be added to course code if applicable (T for Theory Paper, P for Practical Paper and S for Term Work)

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

- A) Course Code : 2426601 (T2426601/ S2426601)**
B) Course Title : Business Organization & Management
C) Rationale: -

This course provides strong foundation in management concepts. It involves creating a framework that defines role, responsibilities and relationships within the organization. Key aspects of organizing include: Establishing Structure: Managers design the organization's structure which may be functional divisional, matrix or network based to align with its objectives.

One objective of organizational management is to establish a structure that offers employees a clear definition of authority roles and job responsibilities.

D) Course Outcomes (COs): After the completion of the course, teachers are expected to ensure the accomplishment of following course outcome by the learners for this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psycho motor and affective) in classroom/ laboratory/ office.

After completion of the Course, the student should be able to:

CO1 : Communication, problem solving organization, strategic thinking presentation reporting Leadership and project management are learned during the business management course.

CO2 : After completion of the course learners will be able to examine the dynamics of the most suitable form of business organization in different situations. Evaluate the various elements that affect the business environment, analyze business models, record and report emerging issues, challenges and changes in the working pattern of organization.

CO3 : The goal of plant layout is to create a safe, efficient and effective workspace that maximizes waste.

CO4 : The aim of a purchasing policy is to secure the supply chain and guarantee delivery of a range of products or services to customers.

CO5 : Categories of different types of systems and identify a set of algebraic equations to represent and model a complicated system into a more simplified form.

C) Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionalism	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life long learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend-High (3), Medium (2), Low (1) and No mapping(-)

* PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

F) Teaching and Learning Scheme:

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (CI+LI+TW+SL)	Total credits (c)
		L	T				
2426601	Business Organization & Management	03	-	-	02	05	04

Note: Prefix will be added to course code if applicable (T for theory paper, P for practical paper and S for term work)

Legend:

CI: Classroom Instruction (includes different instructional/ implementation strategies lecture (L), Tutorial (T), case method, Demonstrations, video demonstration, problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (includes experiments/ practical performances / problem based experiences in laboratory.

Workshop, field or other locations using different instructional \implementation strategies.

National hours: Hours of engagement by learns, other than the contact hours for ensuring learning.

TW: Term Work (Include assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL:Self learning MOOCs, spoken tutorials, online educational resources etc.)

C : Credits = (1x CI hours) + (0.5 x LI hours) + (0.5 x notional hours)

NOTE:

Be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome off learning.

H) Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks (TA+TWA+LA)
		Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive theory Assessment (PTA)	End theory Assessment (ETA)	Internal	External	Progressive lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426601	BOM	30	70	20	30	-	-	150

Note: Prefix will be added to course code if applicable (T for theory paper, P for practical paper and S for Term Work)

Legend:

PTA: Progressive theory assessment in class room (includes class test, mid-term test and quiz using online \offline modes)

PLA: Progressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work & self-learning assessment (includes assessment related to student performance in assessments seminars micro projects, industrial visits, self – learning, any other student activities etc.)

- Note:
- ETA & ELA are to be carried out at the end of the term / semester.
- Term work is to be done by the students under the guidance of internal faculty but its assessment will be done internally (40%) as well as externally (60%). assessment related to planning and execution of Term Work activities like assessment, micro project, and seminar and self – learning is to be done by internal faculty (internal assessment) Whereas assessment of output / product / presentation related to these activities will be carried out by external faculty / expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI), laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

J) Theory Session Outcomes (TSOs) and Units: T2426601

<u>Major Theory session outcomes (TSO)</u>	<u>Unit</u>	<u>Relevant COS number</u>
1. What is the meaning of business? 2. What is the classification of business? 3. What is advantage of business? 4. How business change of our life style? 5. How to start a business.?	Unit-1 Meaning and classification of business. 1.1 Meaning and classification of business. 1.2 Meaning and concept of business. 1.3 Classification of business. 1.4 Advantage of business.	CO1
1. What are the forms of business organization? 2. What are the merits and demerits of trading business? 3. What is partnership firm? 4. What is the Co-operative Societies? 5. What is joint stock company	Unit-2 Form of business Organization. 2.1 Meaning characteristic merits and demerits sole trading business. 2.2 Meaning characteristics merits and demerits partnership. 2.3 Meaning characteristics merits and demerits of co-operative society. 2.4 Meaning characteristics merits and demerits of stock. 2.5 Meaning characteristics forms of Enterprises	CO2

<u>Major Theory session outcomes (TSO)</u>	<u>Unit</u>	<u>Relevant COS number</u>
1. What is the plant location and layout? 2. What is the essential condition for plant location and layout? 3. How dose location and layout help in plant development. 4. What are the criteria for deciding plant location and layout? 5. On which fact purchasing department or plant location and layout.	Unit – 3 Plant location and layout. 3.1 Meaning and concept of Plant location. 3.2 Factors of Plant location. 3.3 Meaning and concept of Plant layout.	CO3
1. Write the main five importance of purchasing department? 2. What is the purchasing department and write its function? 3. Write down the main steps in purchasing? 4. What is the centralized purchasing and also write the deference b/w centralized purchasing and decentralized purchasing? 5. What is the decentralized purchasing and write the advantage and disadvantage of decentralized purchasing ?	Unit-4 Purchase Organization and control 4.1 Importance of Purchase development. 4.2 Function of purchasing department. 4.3 Steps in purchasing. 4.4 Centralized purchasing. 4.5 Decentralize purchasing	CO4
1. What is the store organization and control? 2. What is the meaning of inventory control? 3. How will be maintenance of stores record? 4. What are the function of storekeeper? 5. What are the document used in techniques applied for inventory management?	Unit- 5 Store Organization and Control 5.1 Function of store department. 5.2 Procedure for issue of materials. 5.3 Maintenance of stores records. 5.4 Location of stores. 5.5 Duties of a storekeeper. 5.6 Meaning of inventory control 5.7 Techniques of inventory control	CO5

Suggested Term Work and Self learning: S2426601: some sample suggested assignments, micro project and other activities are mentioned here for reference.

A Assignments: Questions/ Problems/Numerical/Exercise to be provided by the course teacher in line with targeted COs.

1. Prepare an assignment of meaning and importance of Production planning and control.
2. Prepare an assignment of steps in Production planning and control.
3. Prepare an assignment of Meaning and disadvantage and advantage of system of wage payment.
4. Discusses scope and objectives of business organization and management.
5. Describe the area of time rate system.
6. Prepare an assignment on incentive plant.
7. Diploma in Agricultural Engineering.
8. Explain the effects of Cost analysis.
9. Prepare an assignment of classification of cost and preparation of a simple cost sheet.
10. Prepare an assignment of meaning and advantage and disadvantage of piece rate system.
11. Describe the areas of cost analysis.

B Other Activities

1. Seminar Activities

- a. Application of Meaning advantage and disadvantage of piece rate system.
- b. Application of Meaning advantage and disadvantage merit and demerits of time rate system.
- c. Seminar on Production planning and control.
- d. Seminar on business organization and management.
- e. Seminar on system of wage payment.
- f. Seminar on Cost analysis
- g. Seminar on Incentive Plant.

2. Visit

- a. Visit to strategic planning.
- b. Visit to leadership and management styles
- c. Visit to Organizational structure.
- d. Visit to operational management marketing and sales strategic
- e. Visit to innovational and technology.

➤ Suggested Course Evaluation Matrix:

The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PTA) Class/Mid Sem Test	End Theory Assessment(ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PLA)	End Laboratory Assessment(ELA)
			Assignment	Micro Projects	Other Activities		
CO-1	20%	20%	20%	20%	10%	-	-
CO-2	15%	20%	10%	20%	15%	-	-
CO-3	20%	15%	15%	15%	25%	-	-
CO-4	20%	20%	20%	15%	20%	-	-
CO-5	25%	25%	25%	20%	20%	-	-
Total Marks	30	70	20	20	10	-	-
			50			-	

Legend:*: Other Activities includes self-learning, seminar, visits, surveys, product development, software development etc.

***:** Mentioned under point-(N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

1 RECOMMENDED BOOKS

Sl.	Books title	Author (s)	Publication and edition with ISBN
1	Organization Behaviour	Stephen P. Robbins and Timo Judge	Person education 18 th edition ISBN978-0133753867
2	Buusiness organization and management	R.C.Sharma	Kalyani publishers 14 th edition ISBN ISBN 978938657615
3	Organizational Control	Ricky W Griffin	Cengage Learning 4 th edition ISBN -9781285453428
4	Business Organization and control	S.P. Jain and K.l. Narang	Shree Mahavir publishers 12 th edition ISBN -978-9386403011
5	Organizational Design and control	Richard Burton and Borge abel	Cambridge university press 2 nd edition ISBN -978 1107052334

Online classes

1. <http://www.classcentral.com>
2. <http://www.books.google.com>
3. <http://www.taxmann.com>
4. <http://www.scribd.com>
5. <http://www.kitabmahalpublishers.com>
6. <http://www.kamrajcollege.com>

- A) **Course Code** : 2426602 (T2426602 / P2426602 / S2426602)
- B) **Course Title** : Commercial Arithmetic and Business Statistics
- C) **Rationale** :

Statistics is crucial in business as it helps them to make decisions based on historical data and ongoing trends. Business mathematics is important in a business person's life because it allows them to use data to make the right financial decisions, avoid risk, and have the operation of a business running well. It is used by the businessman to find out profit unit article, output per machine, average monthly income and expenditure etc. It plays a crucial role in various aspects of business such as financial analysis, decision- making, risk assessment and performance measurement.

- D) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

- CO-1** I know the meaning of commercial arithmetic.
- CO-2** Read the topic introduction to statistics.
- CO-3** Understand the meant by collecting data.
- CO-4** Read the topic measurement of Central tendency and partition values.
- CO-5** Elaborate the measures of dispersion.

- E) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

F) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426602	Commercial Arithmetic and Business Statistics	03	-	04	02	09	06

Legend:

- CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning, etc. to deliver theoretical concepts)
- LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)
- Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.
- TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)
- SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.
- C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

G) Scheme of Assessment:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426602	Commercial Arithmetic and Business Statistics	30	70	20	30	20	30	200

Legend:

- PTA: Progressive Theory Assessment in a classroom (includes class test, mid-term test and quiz using online/offline modes)
- PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)
- TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

H) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at the course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like green skills, Sustainability, Multidisciplinary aspects, Indian Knowledge System (IKS), and others must be integrated appropriately.

I) Theory Session Outcomes (TSOs) and Units: T2426602

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<i>TSO 1a.</i> What is a word approximation? <i>TSO 1b.</i> What is the meaning of decimalization? <i>TSO 1c.</i> How to do contracted multiplication? <i>TSO 1d.</i> What are the three methods of division? <i>TSO 1e.</i> What is a table of values? <i>TSO 1f.</i> What are the chain rule methods? <i>TSO 1g.</i> What is the difference between commission and brokerage?	Unit-1.0 Some general principles and contracted methods of calculations. 1.1 Approximation 1.2 Decimalization 1.3 Contracted method of multiplication 1.4 Contracted method of division 1.5 Table of nine values. 1.6 Chain rule 1.7 Discount, Commission and Brokerage	CO1
<i>TSO 2a.</i> What is the meaning, definition and scope of Statistics? <i>TSO 2b.</i> What are the 5 Functions of Statistics? <i>TSO 2c.</i> What are the five limitations of Statistics?	Unit 2. Introduction to Statistics 2.1 Meaning and definition of statistics. 2.2 Scope of Statistics 2.3 Functions of Statistics 2.4 Limitation of Statistics.	CO2
<i>TSO 3a.</i> What is primary data and secondary data with examples? <i>TSO 3b.</i> What are the three sources of primary and secondary data? <i>TSO 3c.</i> What is the editing of primary data?	Unit 3. Collection Data 3.1 Meaning of primary data and secondary data 3.2 Source of primary data? 3.3 Editing of Primary Data?	CO3
<i>TSO 4a.</i> Which is known as Central tendency? <i>TSO 4b.</i> What is arithmetic mean short? <i>TSO 4c.</i> What is the difference between medium and mode? <i>TSO 4d.</i> What do you mean by geometric mean? <i>TSO 4e.</i> What is harmonic mean vs geometric mean? <i>TSO 4f.</i> What is a Quartile, Decile and Percentile	Unit.4 Measurement of Central tendency and partition values 4.1 Meaning of Central tendency. 4.2 Arithmetic mean. 4.3 Medium 4.4 Mode 4.5 Geometric mean 4.6 Harmonic mean 4.7 Quartile, Octile, Decile, Percentile.	CO4
<i>TSO 5a.</i> How do you explain dispersion? <i>TSO 5b.</i> What is range of coefficient of dispersion?	Unit. 5 Measures of Dispersion 5.1 Meaning of dispersion 5.2 Range	CO5

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
TSO 5c. What is meant by mean deviation?	5.3 Mean deviation	
TSO 5d. What is the mean, median and mode?	5.4 From mean	
TSO 5e. What do you mean by Standard deviation ?	5.5 From medium	
	5.6 From mode	
	5.7 Standard Deviation	

Note: One major TSO may require more than one Theory session/Period.

J) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2426602

Practical/Lab Session Outcomes (LSOs)	S. No.	Laboratory Experiment/Practical Titles	Relevant COs Number (s)
LSOs 1.1 Use tabulation data. LSOs 1.2 Prepare various scopes of classification	1.	Unit -01 Classification and tabulation of data - meaning of classification and tabulation. - various scopes of classification and tabulations of data.	CO1
LSOs 2.1 Prepare a diagram and graphs. LSOs 2.2 Use Diagrammatic Presentation	2.	Unit -02 Diagrammatic and Graphic Presentation of Data - Meaning and importance of diagram & graph. - Various diagrams & their uses. - Various graphs and their uses.	CO2
LSOs 3.1 Use of log-table and calculator. LSOs 3.2 Convert interest rates to profit and loss.	3.	Unit -03 Use of log-table and calculator - Calculation of wages - Calculation of interest rates. - Calculation of depreciation - Calculation of Profit and loss	CO3
LSO 4.1 Selection of a chart in reports LSO 4.2 Prepare the bibliography	4.	Unit -04 Report Writing - Purpose of report - Characteristics of a good report - Rules of charts in a report - Preparing Bibliography	CO4

K) Suggested Sessional Work and Self-Learning: S2426602 Some sample suggested assignments, micro project and other activities are mentioned here for reference.

a. Assignments:

1. Write the general, Principles and contracted methods of calculations.
2. Read the discount, commission and brokerage.
3. Write the definition and Scope of Statistics.
4. Read the functions and limitations of Statistics.
5. Know the meaning of Primary and Secondary data.
6. Read the source and collect data
7. Prepare the chart of arithmetic and Geometric mean.
8. Read the central tendency and Partition values.
9. Define along with example the mean, median and mode.
10. Known the Standard deviation and dispersion.

b. Other Activities:

1. Seminar Topics:
 - Application of chain rules.
 - Application of the contracted method of division.
 - Application of Statistics.
 - Application of data.
 - Application of Primary data
 - Application of central and harmonic mean
 - Application of Quartile and Percentile.
 - Application of deviation.
 - Application of dispersion.
2. Visiting following place would provide student an opportunity to see the Application of various Act in different fields. This will also help student to comprehend the carrier opportunities available in the field of legal /law.
 - Visit to mathematics Institute
 - Visit to market
 - Visit to factories
 - Visit to laboratories
 - Visit to science museum
 - Visit to software company
 - Visit to planetarium
 - Participation in mathematics competition.
 - Visit to space agency
 - Visit to a science library.

- L) Suggested Course Evaluation Matrix:** The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and sessional work for ensuring CO attainment. The response/performance of the student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Scheme of Assessment (Marks)						
	Theory Assessment (TA)					Lab Assessment (LA)	
	Progressive Theory Assessment (PTA) [#] Class/Mid Sem Test	End Theory Assessment (ETA)**	Sessional Work & Self-Learning Assessment (SWA)			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA) [#]
			Assignments(s)	Micro Projects	Other Activities*		
CO-1	20%	20%	15%	20%	10%	20	20
CO-2	15%	20%	20%	20%	15%	15	20
CO-3	20%	15%	15%	20%	25%	20	20
CO-4	20%	20%	25%	20%	25%	20	20
CO-5	25%	25%	25%	20%	25%	25	20
Total Marks	30	70	20	20	10	30	20
			50				

Legend:

*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

**: Mentioned under point- (N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

- M) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Some general principles and contracted methods of calculations.	8	CO-1	12	4	4	4
Unit 2. Introduction to Statistics	10	CO-2	14	4	8	2
Unit 3. Collection Data	8	CO-3	12	4	4	4
Unit.4 Measurement of Central tendency and partition values	10	CO-4	14	4	6	4
Unit. 5 Measures of Dispersion	12	CO-5	18	4	6	8
Total	48	-	70	20	28	22

Note: Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

N) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome.

- Group Discussion
- Industrial visits
- Live Demonstrations in Classrooms, Lab, Field
- Information and Communications Technology (ICT) Based Teaching Learning.

O) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Commercial Arithmetic and elementary statistics.	Prof. M.G Dhayagude	Everest Publishing House
2.	Basic statistics	B.L Agarwal	New age Publication
3.	Fundamentals of Statistics	S.C Gupta	Himalayas Publishing House
4.	Statistical methods	Dr. S.P Gupta	Sultan Chand & Sons
5.	Statistics	Arthur Stanley Damsey	Cambridge University Press (1 st Edition)
6.	Commercial Arithmetic	K.S Patwardhan	SBPD PUBLICARION
7.	Business Statistics	Dr. S. P SAHAI	Sanitya Bhawan Publication

(b) Open Educational Resources:

1. <https://www.cuemath.com>
2. <https://www.topper.com>
3. <https://donboscocollege.ac.in>
4. <https://icmai.in>
5. <https://ahsec.assam.gov.in>
6. <https://byjus.com>
7. <https://www.sultanchandsons.com>
8. <https://vendantu.com>
9. <https://udemy.com>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

- A) **Course Code** : 2426603 (T2426603 / S2426603)
- B) **Course Title** : Public Sector Enterprises
- C) **Rationale** :

Public sector enterprises play a vital role in achieving these objectives, which may not be met by private sector entities alone. They help balance economic and social goals, ensuring a more equitable and sustainable development. Promote public interest serve the greater good and make social needs. Provide essential services deliver critical services like healthcare education, and utilities. Regulate markets control monopolies and maintain fair competition. Stimulate economic growth to drive development and employment in strategic sectors. Ensure social equality offer affordable services and employment in populations

- D) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

CO-1 I know that State intervention in economic Activities, Public Participation, and Participation is important in a country.

CO-2 Read the nature of Public enterprise in India, and the features of Public Sector Enterprises.

CO-3 Understand the efficiency of public enterprises in India and the social and Economic Objectives of Public Enterprises.

CO-4 Read the Growth of public Enterprises in India, ownership of industry.

CO-5 Elaborate the forms of organization

- E) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

F) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426603	Public Sector Enterprises	03	-	-	02	05	04

Legend:

- CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning, etc. to deliver theoretical concepts)
- LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)
- Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.
- TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)
- SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.
- C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

G) Scheme of Assessment:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426603	Public Sector Enterprises	30	70	20	30	-	-	150

Legend:

- PTA: Progressive Theory Assessment in a classroom (includes class test, mid-term test and quiz using online/offline modes)
- PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)
- TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

H) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at the course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like green skills, Sustainability, Multidisciplinary aspects, Indian Knowledge System (IKS), and others must be integrated appropriately.

I) Theory Session Outcomes (TSOs) and Units: T2426603

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<i>TSO 1a.</i> History of the Govt. Enterprises in India <i>TSO 1b.</i> Reason for State Participation. <i>TSO 1c.</i> Public enterprises and economic development.	Unit-1.0 State Intervention in Economics Activities 1.1 Which is the biggest enterprises of the government of India? 1.2 What is the Purpose of public participation? 1.3 Why is participation Important in a Country? 1.4 What is the role of public enterprise economic development? 1.5 What is the role of enterprises in economic development?	CO1
<i>TSO 2a.</i> Nature, Scope, and Size of Public Sector Enterprises <i>TSO 2b.</i> Employment in the public sector? <i>TSO 2c.</i> Functional and organizational classification of public enterprises.	Unit 2. Structure of Public Enterprises in India 2.1 What is of the nature of public enterprise in India? 2.2 What are the features of the Public Sector enterprises? 2.3 What is the employment in the public sector? 2.4 What is the meaning of public employment? 2.5 What are the features of public enterprise?	CO2
<i>TSO 3a.</i> Public Enterprises and Regional Development <i>TSO 3b.</i> Economic and Social benefits of public Enterprises. <i>TSO 3c.</i> Its efficiency and criticism.	Unit 3. Efficiency of Public Enterprises in India 3.1 How does public Sector enterprise promote balanced regional development? 3.2 What is the role of public enterprise in economic development? 3.3 What are the benefits of public sector enterprises? 3.4 What are the Social and Economic Objectives of public enterprises?	CO3
<i>TSO 4a.</i> State Ownership of Industry <i>TSO 4b.</i> Industrial Policy of the Government of India Since 1947. <i>TSO 4c.</i> Present Position.	Unit.4 Growth of Public Enterprises in India 4.1 What are State Owned Industries? 4.2 What do you mean by Ownership of Industry? 4.3 What Were Indian Industries Before 1947? 4.4 What was the Indian economy in 1947? 4.5 What is the meaning of the present position?	CO4

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<i>TSO 5a.</i> Departmental <i>TSO 5b.</i> Public Corporation <i>TSO 5c.</i> Company Form <i>TSO 5d.</i> Public utility, meaning, characteristic, merits and demerits.	Unit. 5 Forms of Organization 5.1 What is the meaning of department? 5.2 What is a public Company Corporation? 5.3 What is a Public Corporation form?	CO5

Note: One major TSO may require more than one Theory session/Period.

J) Suggested Sessional Work and Self-Learning: S2426603 Some sample suggested assignments, micro project and other activities are mentioned here for reference.

a. Assignments:

1. Public Accountability meaning
2. Views of the Expert Committees
3. Methods and procedure
4. Composition of the Board of directions.
5. Managing director and other executive officers.
6. Their duties and Responsibilities.
7. Management education and training
8. Parliamentary Control
9. Objectives

b. Other Activities:

1. Seminar Topics:
 - Application of History of the Govt. Enterprises in India.
 - Application of Public Enterprises and Economic Development
 - Application of functional and organizational classification of public enterprises.
 - Application of Industrial Policy of the Govt. of India Since 1947.
 - Application of Public Utility, meaning, characteristics, merits, and demerits.
 - Application of Public Accountability meaning.
 - Application of meaning director and the other executive officers.
 - Application of management education and training
 - Application of Economic and Social benefits of Public Enterprises.
 - Application of State ownership of Industry.
2. Visiting the following place would provide students an opportunity to see the Application of various Acts in different fields. This will also help students to comprehend the career opportunities available in the field of legal /law.
 - Visit to office
 - Visit to market
 - Visit to Stores
 - Visit to training Places
 - Visit to Enterprises
 - Visit to Company
 - Visit to Organization Department
 - Visit to Government office
 - Visit to Industries.

- K) Suggested Course Evaluation Matrix:** The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and sessional work for ensuring CO attainment. The response/performance of the student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Scheme of Assessment (Marks)						
	Theory Assessment (TA)					Lab Assessment (LA)	
	Progressive Theory Assessment (PTA) [#] Class/Mid Sem Test	End Theory Assessment (ETA)**	Sessional Work & Self-Learning Assessment (SWA)			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA) [#]
			Assignments(s)	Micro Projects	Other Activities*		
CO-1	20%	20%	15%	20%	10%		
CO-2	15%	20%	20%	20%	15%		
CO-3	20%	15%	15%	20%	25%		
CO-4	20%	20%	25%	20%	25%		
CO-5	25%	25%	25%	20%	25%		
Total Marks	30	70	20	20	10		
			50				

Legend:

- *: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.
 **: Mentioned under point- (N)
 #: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

- L) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 State Intervention in Economics Activities	8	CO-1	12	4	4	4
Unit 2. Structure of Public Enterprises in India	10	CO-2	14	4	8	2
Unit 3. Efficiency of Public Enterprises in India	8	CO-3	12	4	4	4
Unit.4 Growth of Public Enterprises in India	10	CO-4	14	4	6	4
Unit. 5 Forms of Organization	12	CO-5	18	4	6	8
Total	48	-	70	20	28	22

Note: Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

M) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome.

- Group Discussion
- Industrial visits
- Live Demonstrations in Classrooms, Lab, Field
- Information and Communications Technology (ICT) Based Teaching Learning.

N) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Public Sector Enterprises	Govind Bhattacharjee	SAGE Publications India Pvt Ltd
2.	Public Sector Reforms in India	Chandan Sinha	Sage India
3.	Financial Statement Analysis	Zebra learn	Zebra Learn Pvt Ltd
4.	Excel for Finance and Accounting	Suraj Kumar Lohani	BPB Publication
5.	Public Sector Enterprises	P.K.Jain	Springer New Delhi

(b) Open Educational Resources:

1. <https://www.nios.ac.in>
2. <https://cag.gov.in>
3. <https://en.wikipedia.org>
4. <https://pseb.gov.in>
5. <https://heavyindustries.gov.in>
6. <https://www.bsepsu.com>
7. <https://dpe.gov.in>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational resources before use by the students.

- A) Course Code : 2426604(T2426604)
 B) Course Title : Shorthand Hindi II
 C) Pre- requisite Course (s) : Language skill, Typing

D) RATIONALE

पाठ्यक्रम की उपयोगितादृष्टि आशुलिपि का अध्ययन करने के उपरान्त छात्र निम्नप्रकार के रोजगार प्राप्त कर सकता है।

(1) वेतनरोजगारदृष्टि आशुलिपिक, व्यक्तिगत सचिव, गोपनीय सचिव, कार्यालय सहायक, अधीक्षक लिपिक एवं एल0 डी0 सी0, य0 डी0 सी0

(समस्त पद सरकारी, अर्द्ध सरकारी एवं व्यक्तिगत संस्थानों में)।

स्वरोजगारदृष्टि (अ) व्यावसायिक संस्थान (टंकण एवं आशुलिपि), (आ) व्यक्तिगत संस्थान (टंकण एवं बहलिपिकरण तथा अंशकालीन कार्य)। उद्देश्यदृष्टि छात्रों का आधुनिक युग में आशुलिपि एवं टंकण के महत्व का ज्ञान कराना। छात्रों में आशुलिपि लेखन, पठन एवं रूपांतर करने की क्षमता का विकास करना। छात्रों में व्यक्तिगत एवं कार्यालय आदतों का विकास करना। छात्रों का आधुनिक कार्यालय व्यावसायिक संगठन एवं विविध तथा व्यावहारिकता का बोध कराना। छात्रों के स्वरोजगार प्राप्त करने के लिये तैयार करना।

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcome by the learners for this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psycho motor and affective) in classroom/ laboratory/ office.

After completion of the Course, the student should be able to:

- CO-1 Explain the importance of Shorthand.
 CO-2 Describe Consonants strokes.
 CO-3 Vowel and Gramalogues
 CO-4 Acquaint student with transcription.
 CO-5 Prepare the students more thoroughly for shorthand dictation and transcription by way of applying simple and logical shorthand principles.

F) Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionalism	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life long learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend: High(3), Medium (2), Low(1) and No mapping(-)

- PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching and Learning Scheme :

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (LI+TW+SL)	Total credits (c)
		L	T				
2426604	Shorthand – II (HINDI)	3	-	-	-	3	3

Note: Prefix will be added to course code if applicable (T for theory paper, p for practical paper and S for term work)

Legend:

CI: Classroom Instruction (includes different instructional/ implementation strategies lecture (L), Tutorial (T), case method, Demonstrations, video demonstration, problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (includes experiments/ practical performances / problem based experiences in laboratory. Workshop, field or other locations using different instructional \implementation strategies.

National hours: Hours of engagement by learns, other than the contact hours for ensuring learning.

TW: Term Work (Include assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self learning MOOCs, spoken tutorials, online educational resources etc.)

C: Credits = (1x CI hours) + (0.5 x LI hours) + (0.5 x notional hours)

NOTE:

Be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome off learning.

H) Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive theory Assessment (PTA)	End theory Assessment (ETA)	Internal	External	Progressive lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426604	Shorthand Hindi	30	70	-	-	-	-	100

Note: Prefix will be added to course code if applicable (T for theory paper, P for practical paper and S for Term Work)

Legend:

PTA: Progressive theory assessment in class room (includes class test, mid-term test and quiz using online \offline modes)

PLA: Progressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work & self-learning assessment (includes assessment related to student performance in assessments seminars micro projects, industrial visits, self – learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term / semester.
- Term work is to be done by the students under the guidance of internal faculty but its assessment will be done internally (40%) as well as externally (60%). assessment related to planning and execution of Term Work activities like assessment, micro project, and seminar and self – learning is to be done by internal faculty (internal assessment) Whereas assessment of output / product / presentation related to these activities will be carries out by external faculty /expert (External Assessment). However, criteria of internal

as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

- I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI), laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2426604**

<u>Major Theory session outcomes (TSO)</u>	<u>Unit</u>	<u>Relevant COS number</u>
1 आशुलिपि से आप क्या समझते हैं? इसका उपयोग एवं महत्व की चर्चा करें। 2 संकेत लिपि लिखते समय किन किन बातों को ध्यान में रखना चाहिए ? 3 एक आशुलेखक का बैठने की मद्रा का सचित्र वर्णन करें? 4 एक अच्छे आशुलेखक में कौन-कौन से गुण होने चाहिए। 5 संकेत लिपि लेखन की गति को कैसे बढ़ाया जा सकता है।	इकाई-1 हिन्दी आशुलिपि का बुनियाद प्रशिक्षण । 1.1 आशुलिपि का परिचय, उपयोग एवं महत्व। 1.2 नोट लेने का तकनीक 1.3 बैठने की मुद्रा 1.4 एक अच्छे आशुलिपिक के आवश्यक गुण। 1.5 गति बढ़ाने की विधि। 1.6 रोजगार क्षेत्र।	ब1
1 व्यंजन क्या है ? सभी व्यंजनों को संकेत लिपि में लिखें। 2 संकेत लिपि के व्यंजनों के प्रकार का उल्लेख करें। 3 संकेतलिपि के सभी व्यंजन रेखाओं के दिशा आरेख द्वारा दर्शाएँ। 4 संकेतलिपि के व्यंजन युग्म से आप क्या समझते हैं ? 5 व्यंजन मिलाने की विधियों का वर्णन करें।	इकाई-2 आशुलिपि के वर्णानुवर्णों की जानकारी व्यंजन की परिभाषा एवं व्यंजन मिलाने की विधि। 2.1 व्यंजन। 2.2 व्यंजन के प्रकार। 2.3 व्यंजन के दिशानिर्देश। 2.4 व्यंजन युग्म। 2.5 व्यंजन मिलाने की विधि का अर्थ।	

1 स्वर र्स्व आप क्या समझत है ? 2 संकेतलिपि के व्यंजनोपरस्वरो के स्थान का उल्लेख करें। 3 मध्यवर्ती स्वर र्स्व आप क्या समझत हैं ? सोदाहरण व्याख्या करें। 4 स्वरों के प्रकार का वर्णन करें। 5 द्विध्वनिक एवं त्रिध्वनिक स्वर का अर्थ स्पष्ट करें। 6 द्विध्वनिक एवं त्रिध्वनिक स्वर के स्थानों का वर्णन करें।	इकाई-3 स्वर 3.1 अर्थ। 3.2 स्वरों का स्थान। 3.3 मध्यवर्ती स्वर। 3.4 स्वरों के प्रकार। 3.5 द्विध्वनिक एवं त्रिध्वनिक स्वर।	
1 संकेत लिपि शब्द चिन्ह शब्दाक्षर एवं संक्षिप्ताक्षर बहुवचन का महत्व लिखें। 2 संकेत लिपि में वाक्यांश का महत्व लिखें।	इकाई-4 शब्द चिन्ह, वाक्यांश एवं शब्दाक्षर एवं संक्षिप्ताक्षर बहुवचन का प्रयोग।	
1 त वर्ग के दायेदृबायेदोनो जानेवाले व्यंजन से आपक्या समझतेह ? 2 श्च, ञ, और स व्यंजनरेखा के प्रयोग विधियों का उल्लेख करें। 3 र, ल, और ह व्यंजन रेखा के प्रयोग विधियों का वर्णन करें। 4 न आकड़ा से आपक्या समझतेह ? 5 न और त आंकड़े का अन्तर स्पष्ट करें। 6 र, और ल, आंकड़े के प्रयोग विधियां का वर्णन करें।	इकाई-4 दायेदृबायेदोनो ओर लिखे जाने वाले वैकल्पिक व्यंजन रेखा एवं आंकड़ा, वृत्त एवं मात्राएं। 5.1 त वर्ग के दायेदृबायेदोनो ओर लिखे जानेवाले वैकल्पिक व्यंजन रेखा के प्रयोग विधि। 5.2 श्च, ञ, और स व्यंजनरेखा के प्रयोगविधि। 5.3 र, ल, और ह व्यंजनरेखा के प्रयोग विधि। 5.4 न आंकड़ा का अर्थ एवं प्रयोग। 5.5 त आंकड़ा का अर्थ एवं प्रयोग। 5.6 र और ल आंकड़ा का अर्थ एवं प्रयोग। 5.7 वृहत् वत्त एवं छोटे वृत्त प्रयोग। 5.8 वृत्त एवं व्यंजन रेखाओं के प्रयोग के नियम। 5.9 छोटे/बड़े चाप एवं लप का प्रयोग	

H) Suggested Sessional Work and Self-Learning: Some sample suggested assignments, micro project and other activities are mentioned here for reference.

1. Seminar Activities

- Seminar on Accuracy and Speed.
- The study on how to make shorthand writing is more effective.
- Study about Importance of shorthand.
- Study about basic scope of shorthand.
- Study on the structure of shorthand.

2. Visit

- Visit to office.
- Visit to Secretariat
- Visit to Nearby retailer's market.
- Visit to different Bank

3 Self-learning topics:

- Speech writing
- News report writing
- Shorthand transcription and typing will be done in computer.

I).Suggested Course Evaluation Matrix:

The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PTA) Class/Mid Sem Test	End Theory Assessment(ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PLA)	End Laboratory Assessment(ELA)
			Assignment	Micro Projects	Other Activities		
CO-1	25%	25%	-	-	-		
CO-2	20%	20%	-	-	-		
CO-3	20%	20%	-	-	-		
CO-4	20%	25%	-	-	-		
CO-5	15%	10%	-	-	-		
Total Marks	30	70	-	-	-		
			-			-	

Legend: * Other Activities includes self-learning, seminar, visits, surveys, product development, software development etc.

*: Mentioned under point-(N)

#:Mentioned under point-(O)

Note:

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

J) Suggested Assessment Table for Laboratory (Practical) Matrix:

Sl. No.	Laboratory Practical Titles	Relevant Cos Number(S)	PLA/ELA		
			Performance		Viva-voice (%)
			PRA* (%)	PDA** (%)	
1	आशुलेखन का उद्देश्य, उदय और विकास, भारत में आशुलिपि का चलन।	CO1	30	60	10
2	व्यंजन रेखाओं की दिशाएं एवं आकार -प्रकार।	CO2	20	50	10
3	स्वरद्विर्दीर्घ एवं लघु स्वर, अग्र एवं पश्च। स्वरों का व्यंजन पर प्रयोग। श्रृंखला चिन्ह, वाक्यांश एवं श्रृंखला	CO3	30	60	10
4	द्विर्दीर्घ एवं उपर निचे दोनों ओर लिख जाने वाले वैकल्पिक व्यंजन रेखा	CO4	30	60	10
5	वृहत् वृत्त एवं छोटे वृत्त स एवं ह व्यंजन पर प्रयोग। वृत्त एवं व्यंजन रेखाओं के प्रयोग के नियम। छोटे/बड़े चाप एवं लप का प्रयोग।	CO5	20	60	10

1 RECOMMENDED BOOKS

- 1 हिन्दी स्नोकेलिपिद्वय पसाद अगवाल अनुपम पकाशक, शिवकटी, इलाहाबाद
- 2 हिन्दी शार्टहण्ड मनुअल गया पसाद अगवाल यनिवसल बकसनेस
- 3 हिन्दी स्नोकेलिपिद्वय, ऋमिलालअग्रवाल।
- 4 मानक आशुलिपिद्वय पशिक्षणस्थान, राजभामाविभाग, गृहमंत्रालय, भारतसरकार।

Online classes

1. <http://stenoindia.com/>
2. <https://www.pitman-training.com/>

- A) **Course Code** : 2426605A (T2426605A/ S2426605A)
- B) **Course Title** : Auditing
- C) **Rationale** :

The Rationale of auditing is to provide an independent and objective Examination of an organization's financial statements, internal controls and operational processes by achieving these purpose, auditing plays a critical role in maintaining the integrity and credibility of financial markets, protecting stakeholder's interest and promoting good governance and accountability. Verification to verify the accuracy and reliability of financial statements and reports. Assurance to provide stakeholders with confidence in the organization financial reporting and internal controls. Compliance to ensure adherence to laws, regulations, and internal Standards. Improvement to ensure adherence to laws, identity areas for improvement. In Internal Controls, risk management, and governance. Accountability to hold management countable for their stewardship of organizational resources.

- D) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

- CO-1** Students will be able to know the objective importance and advantages of an audit.
- CO-2** Students have general knowledge regarding continuous audit and formation audit and property audit.
- CO-3** Students wear with audit programs, audit working paper.
- CO-4** Develop knowledge about Internal check, Internal control, Internal audit and diffraction of practice, care book, sales, payment and wages.
- CO-5** Develop knowledge about vouching, test checking, trading and transaction.

- E) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline-Specific Knowledge	PO-2 Problem Analysis	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

F) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426605A	Auditing	03	-	-	02	05	04

Legend:

- CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)
- LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)
- Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.
- TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)
- SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.
- C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

G) Scheme of Assessment:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426605A	Auditing	30	70	20	30			150

Legend:

- PTA: Progressive Theory Assessment in classroom (includes class test, mid-term test and quiz using online/offline modes)
- PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)
- TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

H) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at the course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Sessional Work (SW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like green skills, Sustainability, Multidisciplinary aspects, Indian Knowledge System (IKS), and others must be integrated appropriately.

I) Theory Session Outcomes (TSOs) and Units: T2426605A

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<i>TSO 1a.</i> Definition of Audit. <i>TSO 1b.</i> Objective of an Audit. <i>TSO 1c.</i> Advantages of an audit.	Unit-1.0 Audit 1.1 What is an Audit? 1.2 What is the four importance of Audit? 1.3 Write four advantages of an audit? 1.4 What is the main Objectives of an Audit?	CO1
<i>TSO 2a.</i> Continuous Audit <i>TSO 2b.</i> Internal Audit <i>TSO 2c.</i> Concepts of Property Audit <i>TSO 2d.</i> Cost Audit <i>TSO 2e.</i> Management Audit <i>TSO 2f.</i> Performance Audit	Unit 2. Types of Audit 2.1 What is a Continuous Audit? 2.2 How many types of Audit? 2.3 What is the Concept of Property Audit? 2.4 Difference between Cost Audit and Continuous Audit. 2.5 Difference between Management Audit and Performance Audit.	CO2
<i>TSO 3a.</i> Audit Performance <i>TSO 3b.</i> Audit Working Papers	Unit 3. Commencement of new Audit 3.1 What is an Audit Program? 3.2 How work Audit working papers? 3.3 What is New Audit?	CO3
<i>TSO 4a.</i> Meaning of importance of Internal check. <i>TSO 4b.</i> Meaning of importance of Internal Control. <i>TSO 4c.</i> Difference between Internal check and Internal Audit. <i>TSO 4d.</i> Internal Check as regards cash books ,sales, purchases and payment and wages?	Unit.4 Internal Check and Internal Control 4.1 What is the meaning of the importance of Internal Check? 4.2 What is the importance of Internal Control? 4.3 Difference between Internal check and Internal Audit. 4.4 What is the definition of cash books ,sales, purchases and payment and wages?	CO4
<i>TSO 5a.</i> Test Checking <i>TSO 5b.</i> Routine Checking <i>TSO 5c.</i> Vouching of Cash transactions ,trading transactions and impersonal leader	Unit. -5 Vouching 5.1 What is vouching? 5.2 What is meant by test Checking? 5.3 What is vouching of cash transaction and define the trading and transactions.	CO5

Note: One major TSO may require more than one Theory session/Period.

J) Suggested Sessional Work and Self-Learning: S2426605A Some sample suggested assignments, micro project and other activities are mentioned here for reference.

a. Assignments:

1. Prepare an assignment on different types of Assets, their valuation and verification.
2. Discuss different liabilities, their valuation and Verification.
3. Discuss meaning and types of depreciation, Reserve and provision
4. Explain Auditors duties as regards depreciation, Reserve and provision.
5. Prepare an assignment on Auditors duty in reorganization arising out of admission retirement and death of partner.
6. Explain the Auditors duty in the event of dissolution.
7. Explain the Auditors Qualification, duties, responsibilities, power and liabilities.
8. Discuss Objectives of Government Audit.
9. Discuss Audit of Govt. Owned units.
10. Prepare an assignment Conduct of Audit of Govt. Companies.

b. Other Activities:

1. Seminar Topics:
 - Application of definition of Audit.
 - Application of objectives of Audit.
 - Application of Advantaged of an Audit.
 - Application of Continuous Audit
 - Application of Concept of Property Audit
 - Application of management Audit
 - Application of Audit Program.
 - Application of meaning of importance of Internal Check.
 - Application of difference between Internal Control.
 - Application of test Checking.
 - Application of vouching of cash transaction, trading transactions and Impersonal leader.
 - Application of different types of Assets, their valuation and verification.
 - Application of Auditors duties as regards depreciation, Reserve and provision.
 - Application of Auditors duty in the event of dissolution.
 - Application of Audit of Govt. Owned units.
2. Visiting following place would provide student an opportunity to see the Application of various Act in different fields .This will also help student to comprehend the carrier opportunities available in the field of legal /law.
 - Visit to Science Museum
 - Visit to a auditing research Institute.
 - Visit to a auditing Science Center
 - Visit to a auditing department of a college or university
 - Visit to a Gaming Studio
 - Visit to a Space Agency
 - Visit to a Software company
 - Visit to a auditing Library
 - Visit to a planetarium
 - Participation in auditing Competition .

- K) Suggested Course Evaluation Matrix:** The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and sessional work for ensuring CO attainment. The response/performance of the student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Scheme of Assessment (Marks)						
	Theory Assessment (TA)				Lab Assessment (LA)		
	Progressive Theory Assessment (PTA) [#] Class/Mid Sem Test	End Theory Assessment (ETA)**	Sessional Work & Self-Learning Assessment (SWA)			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA) [#]
			Assignments(s)	Micro Projects	Other Activities*		
	CO-1	20%	20%	15%	20%	10%	
CO-2	15%	20%	20%	20%	15%		
CO-3	20%	15%	15%	20%	25%		
CO-4	20%	20%	25%	20%	25%		
CO-5	25%	25%	25%	20%	25%		
Total Marks	30	70	20	20	10		
			50				

Legend:

- *: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.
 **: Mentioned under point- (N)
 #: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

- L) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Audit	8	CO-1	12	4	4	4
Unit 2. Types of Audit	10	CO-2	14	4	8	2
Unit 3. Commencement of New Audit	8	CO-3	12	4	4	4
Unit.4 Internal Check & Internal Control	10	CO-4	14	4	6	4
Unit.-5 Vouching	12	CO-5	18	4	6	8
Total	48	-	70	20	28	22

Note: Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

M) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome.

- Group Discussion
- Industrial visits
- Live Demonstrations in Classrooms, Lab, Field
- Information and Communications Technology (ICT) Based Teaching Learning.

N) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Practical Auditing	BN Tandon	Wiley Publishers, 4 th Edition ISBN:978-0-730-38266-9
2.	Essentials of Auditing	Muhammad Zain	John Wiley Publishers 1 st Edition ISBN:- 1119848792
3.	Miriyala's Auditing	CA Ravi Kanth Miriyala	Commercial Law Publisher 3 rd Edition ISBN:- 9789391005931
4.	Ankeshan Auditing	Gajendra Singh Gurjar	
5.	Chyavan Auditing	Santosh Kumar Sharma	Chavyan Publisher 8 th Edition

(b) Open Educational Resources:

1. <https://www.coursera.org/>
2. <https://www.classcentral.com/>
3. <https://mygreatlearning.com/>
4. <https://www.udemy.com>
5. <https://manipal.com/>
6. <https://internalaudit.icai.org/>
7. <https://www.alison.com/freelearning/>
8. <https://www.advisera.com/training/>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

- A) Course Code : 2426605B(T2426605B/S2426605B)
- B) Course Title : Management of Small Enterprises
- C) Pre- requisite Course(s) :
- D) Rationale

This Sector is Considered as the Job creator and plays a crucial role in providing large scale employment and industrialization of rural and backward areas and creates a vast opportunity for the unemployed people to avail and as a boom for Fresh talent in India. Studying entrepreneurship Fosters a culture of creativity and problems –solving ,leading to the development of innovative products and services

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ workshop/ field/ industry.

After completion of the course, the students will be able to -

- CO-1 I Know the meaning entrepreneur.
- CO-2 Read the topic classification of Industries.
- CO-3 Understand the organization Frame work.
- CO-4 Elaborate the Financial capital and management.
- CO-5 Read the marketing policy distribution and Advertisement.

F) Suggested Course Articulation Matrix (CAM):

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	3	2	2	1	3	3		
CO-2	2	3	2	1	-	2	2		
CO-3	2	3	2	1	2	2	3		
CO-4	3	2	3	1	2	2	2		
CO-5	2	3	-	1	2	2	3		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

- * PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Marks
		L	T				
2426605B	Management of Small enterprises	03	-	-	02	05	150

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment	End Theory Assessment	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426605 B	Management of Small enterprises	30	70	20	30	-	-	150

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

Note: ETA & ELA are to be carried out at the end of the term/ semester.

- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

i) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self-Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) Theory Session Outcomes (TSOs) and Units: T2426605B

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
TSO 1a. What is meaning and Concept of entrepreneur? TSO 1b. Write the five main Qualities of an entrepreneur.	Unit-01 Entrepreneur 1.1 Meaning and Concept. 1.2 Qualities of an entrepreneur	C01
TSO 2a. What are short scale industries? TSO 2b. What are Four types of medium scale industries? TSO 2c. What do you mean by large scale production? TSO 2d. What is ancillary industrial estate examples? TSO 2e. Why is it called a cottage industry?	Unit-02 Classification of Industries 2.1 Small Scale industries 2.2. Medium Scale industries. 2.3 Large Scale industries. 2.4. Ancillary Industries. 2.5. Cottage Industries.	C02
TSO 3a. What is Called Organizational Structure? TSO 3b. What are the government's Policies for Small Scale industries? TSO 3c. What Measures have been taken by government for small-scale industries?	Unit-03 Legal Frame Work 3.1 Organization Structure. 3.2 Rules and Regulations of local Bodies, State government to be complied with by small scale industries	C03
TSO 4a. What do you mean by Finance? TSO 4b. What is the Capital Structure of Financing policy? TSO 4c. What is the working capital Financing requirement? TSO 4d. What is capital Structure Management Finance? TSO 4e. What are the benefits of industrial Management?	Unit-04 Finance 4.1 Means of Financing 4.2 Capital Structure 4.3 Working Capital 4.4 Capital Management 4.5 Industrial Management.	C04
TSO 5a. What are the Methods and TSO 5b.	Unit-04 Marketing 5.1 Marketing methods 5.2 Pricing Policy 5.3 Channels Of distribution 5.4 Advertisement 5.5 Scales Management	C05

Note: One major TSO may require more than one theory session/period

S). Suggested Term Work and Self Learning: S2426605B Some sample suggested assignments, micro project and other activities are mentioned here for reference.

a. Assignments:

- write the qualities of an entrepreneur.
- Read the types Of industries.
- write the rules and regulations of be state government to complied.
- Read the Financing method and capital Structure.
- know the details of marketing
- Reads the topic concessions and Reliefs granted by various agencies.
- Prepare the short notes of business risk and coverage.
- Write the principles and types of insurance.
- Prepare the topic industrial Pollution?
- Read the effects and Remedial measures.

C. Other Activities: -

1. Seminar Topics: -

- Applications of concept of entrepreneur.
- Applications of industries.
- Applications of industrial Management.
- Applications of channels distribution and Sales management.
- Applications Of rules and regulations of small scale industries.
- Applications Of Agencies.
- Applications of insurable and non-Insurable and Risk
- Applications of third Party and insurance.
- Applications of industrial pollutions.
- Applications of Remedial Measures

2. Visits: -

- Visit to our office.
- Visits to a market.
- Visits to a Factories.
- Visits to a stores.
- Visits to a financial company.
- Visits to an agency.
- Visit to a bank.
- Visit to a enterprises.
- Visits to a LIC company.

- K) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	20%	20%	15%	20%	10%		
CO-2	15%	20%	20%	20%	15%		
CO-3	20%	15%	15%	20%	25%		
CO-4	20%	20%	25%	20%	25%		
CO-5	25%	25%	25%	20%	25%		
Total Marks	30	70	20	20	10		
			50				

Legend:

*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

**: Mentioned under point- (N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

- L) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number (s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Entrepreneur	08	CO1	12	3	4	5
Unit-2.0 Classification of Industries	10	CO2	14	4	5	5
Unit-3.0 Legal Frame work	08	CO3	12	3	4	5
Unit-4.0 Finance	11	CO4	16	5	5	6
Unit-5.0 Marketing	11	CO5	16	5	5	6
Total	48	-	70	20	23	27

Note: Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

M) Suggested Learning Resources:**(a) Books:**

S. No.	Title	Author(s)	Publisher and Edition with ISBN
1.	Small Business Management	Justin G. Longenecker	Cengage learning (17 th edition)
2.	Small Business Management	J. William pery	Cengage learning (20 th edition)
3.	Running and growing a business	Ken Colwell	Clyde ban media LLC
4.	Starting an online business	Matthew Robson	Club publications
5.	Digital marketing playbook	Krista Mashore	Community Market leader

(b) Online Educational Resources:

- 1) <https://www.dialpad.com>
- 2) <https://www.freshbooks.com>
- 3) <https://justcall.io>
- 4) <https://aofund.org>
- 5) <https://timespro.com>
- 6) <https://www.geeksforgeeks.org>
- 7) <https://ceopedia.Org>
- 8) <https://www.designrush.com>
- 9) <https://buildfire.com>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational resources before use by the students.

- A) Course Code : 242606
 B) Course Title : Computer Application & Tally
 C) Pre- requisite Course (s) : Language skill, Typing

Rationale:

Computer application & Tally popularly known as Modern office practice involves the study of computer software such as MS-Office C++, Tally HTML and other fundamental software system. It is necessary for all students to understand the ethical and social role of computer in society.

- D) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcome by the learners for this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psycho motor and affective) in classroom/ laboratory/ office .

After completion of the Course, the student should be able to:

CO1 = Able to Basic knowledge of computer

CO2 = Ability to create and edit documents, spread sheets, and presentations.

CO3 = Accounting: is the most important feature /topics one must have in tally ERP 9

CO4 = Able to Company creation with Accounting Features, Inventory Features and Statutory Features

CO5 = Prepared Payment, Receipt, Contra, Journal Vouchers

Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionals	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life long learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend-High(3), Medium (2), Low(1)and No mapping(-)

* PSOs will be developed by respective Program coordinator at institute level. As per latest NBA guidelines, formulating PSOs Is optional

E) Teaching and Learning Scheme:

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (LI+TW+SL)	Total credits (c)
		L	T				
2426606	Computer Application & Tally	-	-	04	02	06	03

Note: Prefix will be added to course code if applicable (T for theory paper, p for practical paper and S for term work)

Legend:CI: Classroom Instruction (includes different instructional/ implementation strategies lecture (L), Tutorial (T), case method, Demonstrations, video demonstration, problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (includes experiments/ practical performances / problem based experiences in laboratory. Workshop, field or other locations using different instructional \implementation strategies. National hours: Hours of engagement by learns, other than the contact hours for ensuring learning.

TW: Term Work (Include assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL:Self learning MOOCs, spoken tutorials, online educational resources etc.)

C: Credits = (1x CI hours) + (0.5 x LI hours) + (0.5 x notional hours)

NOTE:

Be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome off learning.

H) Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks (TWA+L A)
		Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive theory Assessment (PTA)	End theory Assessment (ETA)	Internal	External	Progressive lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426606	Computer application and Tally	-	-	10	15	10	15	50

Note : Prefix will be added to course code if applicable (T for theory paper , P for practical paper and S for Term Work)

Legend:

PTA: Progressive theory assessment in class room (includes class test, mid-term test and quiz using online \offline modes)

PLA: Progressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work & self-learning assessment (includes assessment related to student performance in assessments seminars micro projects, industrial visits, self – learning, any other student activities etc.)

Note: ETA & ELA are to be carried out at the end of the term / semester.

Term work is to be done by the students under the guidance of internal faculty but its assessment will be done internally (40%) as well as externally (60%). assessment related to planning and execution of Term Work activities like assessment, micro project, and seminar and self – learning is to be done by internal faculty (internal assessment) Whereas assessment of output / product / presentation related to these activities will be carried out by external faculty / expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

- I) Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI, laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

J) Theory Session Outcomes (TSOs) and Units: T2426606

Major Practical Session Outcomes	Unit	Relevant COS number
1 What do you mean by computer application? 2 Make figure of computer and parts of computer.	Unit-1- Introduction of Computer Application 1.1 Meaning 1.2 Study of Central Processing Unit, Input- Output devices and Memory. 1.3 Classification and Types of Computers. 1.4 Computer Software – Hardware and Software, System software, Application Software, 1.5 Application of computer in various fields	CO1
1 What is an Operating System? 2 Write all types of windows. 3 What do you mean by file management? 4 What do you mean by tree command write a process of using it?	Unit- 2 Operating System 2.1 Disk Operating system – Simple DOS commands, file operations. Windows – An overview of different versions of windows, basic windows elements, file management through windows, Using essential accessories: System tool- Disk cleanup, Disk defragmenter, Notepad, Paint and WordPad 2.2 Linux – An overview of Linux, Basic Linux elements, Features	CO2
1 Type a tender notice and give a print. 2 Write the use of formula in excel. 3 Write the process of file open and save the document. 4 Creating a new slide, changing the background, adding clipart, working with slide show. 5 Create table of Index.	Unit-3 MS- Office & Internet 3.1 MS-Word 3.2 MS-Excel 3.3 MS- Power point. 3.4 E-Mail	CO3
1 What is Accounting? 2 Write the fundamental of tally ERP 9. 3 How to use tally ERP 9 4 Explain Inventory ?	Unit- 4 Tally-1 4.1 Basic of Accounting 4.2 Fundamental of tally. ERP 9 4.3 Inventory 4.4 Daily Entries - Contra, Receipt, Payment, sales, Purchase, etc.	CO4

1 What do you mean by Vat ? Write the importance. 2 Write the Introduction to printing report	Unit-5 Tally-2 5.1 Printing and Backup etc Report, Advance Report Banking and Related Terms Assignment, Projects 5.2 VAT 5.3 Taxation	CO5
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K) Suggested Term Work and Self learning: S2426606: some sample suggested assignments, micro project and other activities are mentioned here for reference.

A Assignments: Questions/ Problems/Numerical/Exercise to be provided by the course teacher in line with targeted COs.

1. Prepare an assignment on - Introduction of Computer Application
2. Explain Basic of computer Application
3. Explain MS-Office
4. Explain Tally

B Other Activities

1. Seminar Activities

1. Prepare Ability to familiarise with basics of computers.
2. Ability to navigate the file system.
3. Ability to create and edit documents, spread sheets, and presentations.
4. Ability to perform basic data manipulation using spread sheets and use Indian languages in documents.
5. Ability to send and receive emails, follow email etiquette, and communicate over the internet.
6. Ability to create and upload videos.
7. Ability to safely and correctly Simple Entries for Tax Deducted at Source for Professional and Legal Services.
Bank Reconciliation Statement.

2. Visit

- a. Visit to Office.
- b. Visit to Secretariat
- c. Visit to Nearby retailers market.
- d. Visit to different Bank

3 Self-learning topics:

- a Use YouTube
- b Simple DOS command
- c Power point
- d Tally and Tally ERP 9
- e VAT & TAX

L) Suggested Course Evaluation Matrix:

The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PTA) Class/Mid Sem Test	End Theory Assessment(ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PLA)	End Laboratory Assessment(ELA)
			Assignments	Micro Projects	Other Activities		
CO-1			20%	20%	10%	25%	25%
CO-2			10%	20%	15%	20%	20%
CO-3			15%	15%	25%	20%	20%
CO-4			20%	15%	20%	25%	25%
CO-5			25%	20%	20%	15%	15%
Total Marks			10	10	05	10	15
			25			25	

Legend:*: Other Activities includes self-learning, seminar, visits, surveys, product development, software development etc.

***:** Mentioned under point-(N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

M) Suggested Assessment Table for Laboratory (Practical) Matrix:

Sl. No.	Laboratory Practical Titles	Relevant Cos Number(S)	PLA/ELA		
			Performance		Viva-voice (%)
			PRA* (%)	PDA** (%)	
1	Introduction of Computer Application	CO1	30	60	10
2	PC Packages (Word, Excel, PowerPoint): Word wrap, page formatting, paragraph formatting, editing data, replacing cell data, deleting cell contents, copying data, moving data, presentation, slides, creation of presentation, blank presentation.	CO2	20	50	10
3	Introduction of Operating system	CO3	30	60	10
4	Tally ERP 9.0 with GST: System requirements, installing tally.	CO4	30	60	10
5	Tax And Vat	CO5	20	60	10

RECOMMENDED BOOKS

1. MICROSOFT OFFICE EXCEL 2003: COMPLETE CONCEPTS AND TECHNIQUES, COURSECARD EDITION
2. POWERPOINT 2010 IN EASY STEPS
3. Introduction to computer application by Vijay Kumar Pandey
4. Tally Essential-Level 1 by Tally Education Pvt. Ltd.
5. Tally Essential-Level 2 by Tally Education Pvt. Ltd.
6. Tally Essential-Level 3 by Tally Education Pvt. Ltd.
7. Tall Ace by Tally Education Pvt. Ltd.
8. Official Guide to Financial Accounting- Managing Your Business Just Got Simpler using TallyPrime by Tally Education Pvt. Ltd.
9. Official Guide to Financial Accounting using Tally.ERP9 by Tally Education Pvt. Ltd.
10. Tally Guru Volume 1 by Tally Education Pvt. Ltd.

Online classes

- <https://edu.gcglobal.org/en/computerbasics/understanding-applications/1/>
- https://www.tutorialspoint.com/computer_fundamentals/computer_applications.htm
- <https://www.geeksforgeeks.org/basic-applications-of-computers/>
- International Education Pride Award
- YouTube

A)	Course Code	: 2426605(P2426605/S2426605)
B)	Course Title	: Major Project
C)	Pre- requisite Course(s)	:
D)	Rationale	:

Project work plays a very important role in engineering education in developing core technical skills, soft skills and higher level of cognitive, psychomotor and affective domain skills. Major Project work is normally done when students have acquired sufficient knowledge, skills and attitude and are able to integrate all these, entirely in new situation or task to solve the problems of the industries/field agencies/etc.

Through major project work, students get direct exposure to the world of work in their relevant field. They are intrinsically motivated to explore new things, new methods, new design, many more ideas and also develop out of the box thinking abilities, creative and innovative capabilities. It also develops many soft skills like confidence, communication skills, creative ability, inquisitiveness, learning to learn skills, lifelong learning skills, problem solving skills, management skills, positive attitude, ethics etc.

Normally in a curriculum document, there is a mention of project work indifferent context. In situation one, project work is reflected as micro project under each and every course curricular detailing, in the form of Term work mentioned under different semesters. These projects are normally related to the developing skills in respective course of the specific programme.

In the context of diploma programme in Bihar, minor project work will be carried out in Semester 5 with emphasis on project planning.

Major project work is reflected as a course in the total programme structure, normally at 6th semester depending on the requirement of the programme. Through major project, students try to bring the industrial/real world problems in institutional setting, may be in collaboration/ networking with industries/field agencies/enterprises as per the requirement of different diploma programmes.

E) Course Outcomes: After completion of the major project work, students will be able to -

- CO-1** Integrate the knowledge (K), skills (S), attitudes (A) developed, in a new task or problem identified in the form of project work.
- CO-2** Develop higher level of cognitive, psychomotor and affective domain skills relevant to the course/programme.
- CO-3** Solve the industrial/real world problems/tasks by Integrating the generic skills/soft skills/employable skills with relevant technical skills.
- CO-4** Develop the capabilities and skills of innovativeness, creativity, resourcefulness, time management, problem solving abilities, interpersonal skills, pro-activeness, cost effectiveness, environment consideration and sustainability.
- CO-5** Prepare the project report.

F) Suggested Course Articulation Matrix (CAM):

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	3	-	-	-	1		
CO-2	3	-	3	-	-	-	1		
CO-3	3	-	3	3	-	-	1		
CO-4	3	2	3	-	2	2	1		
CO-5	3	-	3	-	-	2	-		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426605	Major Project	-	-	08	04	12	06

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426605	Major Project	-	-	20	30	50	100	200

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) Suggested Implementation of Major Project:

Under the minor project in fifth semester, project planning is almost over. The projects are identified and allocated to students. Teacher's role is important as they act as guide, facilitator, catalyser, motivator to promote brain storming, thinking, creativity, imitativeness and many other skills in the students. Teachers should help or guide continually to monitor whether the students are proceeding in the right direction as per outcomes to be attained.

It is also suggested that teachers are not supposed to guide and plan each and every step from the point of view of execution of the project, otherwise it will curb the creativity or thinking process of the students. Teachers have to see that he or she is able to create think tank for this fast-technological world of work for the growth of our country. Following points should be taken into consideration while implementing the major project work.

The following steps are undertaken under the major project-

1. Design, Development and Execution of the Major Project.
2. Quality of Project Report Writing and its Presentation.

1.0 Design, Development and Execution of Major Project:

Projects design, development, execution is done by the students under the guidance and feedback by respective teachers for attainment of courses specific outcomes, POs and PSOs.

Continual Monitoring, feedback and assessment mechanism on weekly progress/updates on action taken on different criteria and sub-criteria of the project work need to be planned for individual and team of students. Path breaking teachers who think out of the box are required to guide, monitor and evaluate the project work.

1.1 Unique Features of Major Project:

Following important characteristic features of project need to be given special emphasis during the implementation and evaluation of the major project work-

- Innovativeness
- Creativity
- Originality
- Pro-activeness
- Initiableness
- Cost Effectiveness
- Resourcefulness
- Development of Soft Skills/Generic Skills
- Ethical Issues
- Environmental Considerations
- Simulated/Automated Industry's/Improvised Process
- Application or Utility in the World of Work.
- Relevance to the Curriculum
- Mapping of Outcomes of Project with Pos and PSOs (if applicable)
- Feasibility of Implementation of the Project

2.0 Quality of Project Report Writing and its Presentation:

Following points need to be taken care of during report writing, its implementation and evaluation-

- Report writing as per prescribed format
- Clarity of outcomes
- Innovativeness
- Presentation of Data
- Data Analysis, Interpretation and Result
- Quality of Product/Prototype

2.1 Project Report Writing:

The suggested format of the project report is mentioned below for teacher's and students' reference:

- i. Problem Statement/ Project Title
- ii. Abstract
- iii. Literature Review
- iv. Outcomes of the Project
- v. Project Planning, Design and Development
- vi. Methodology
- vii. Implementation and Testing
- viii. Result and its Interpretation
- ix. Summary
- x. References / Bibliography

2.2 Presentation & Discussion:

Quality of presentation of data need to be ensured using the following criteria -

- Clarity in Communication and Presentation
- Voice Audibility
- Use of Media and Methods
- Satisfying the Queries of Audience
- Attainment of Outcomes

2.3 Project's Potential:

Futuristic scope and recommendation for further studies related to project may be assessed from the following criteria -

- Papers Published or Award Received
- Exhibition or Display or Showcase of Project in Competition or Exhibition or Tech Fest
- Evaluation of Working/Testing of Projects or Prototype
- Relevance and Applications in the World of Work
- Recognition in any Form
- Related Areas/Sub Areas for Further Studies

J) Assessment of the Major Project:

For objective, valid and reliable assessment, different tools of assessment such as a checklist, rating scale, assessment rubric, observation schedule, portfolio assessment, incidental records etc. need to be prepared. Even the students may have been courage to adopt self-assessment techniques using the assessment rubrics.

The students need to be assessed continuously based on the suggested below mentioned assessment criteria at project planning stage. The project guide must prepare detailed rubric(s) for each criteria to have more valid and reliable assessment. Criteria of assessment of major project work are mentioned below.

Assessment Scheme for Major Project

S. No.	Suggested Assessment Criteria	Suggested Weightage (%)
1.	Project Planning during Minor Project Work 1.1 Identification of Area/Problem Statement 1.2 Literature Survey 1.3 Formulation of Project Title 1.4 Clarity in Formulation of Outcomes of The Project 1.5 Preparation of Synopsis 1.6 Presentation of Synopsis	30
2.	Design, Development and Execution of the Project. 2.1 Unique Features of Major Project	45
3.	Quality of Report Writing and Presentation. 3.1 Report Writing 3.2 Presentation & Discussion 3.3 Project's Potential	25
	TOTAL	100
