Estd. 1962
"A++" Accredited by NAAC (2021)
With CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR
416 004, MAHARASHTRA
PHONE : EPABX – 2609000, BOS Section – 0231-2609094, 2609487
Web : www.unishivaji.ac.in Email: bos@unishivaji.ac.in
शिवाजी विद्यापीठ, कोल्हापूर, ४१६ ००४, महाराष्ट्र
दूरध्वनी - इपीबीएक्स - २०६०९०००, अभ्यासमंडळे विभाग : ०२३१- २६०९०९४, २६०९४८७
वेबसाईट : www.unishivaji.ac.in ईमेल : bos@unishivaji.ac.in

Ref.: SU/BOS/ *IDS* /564 **Date: 18 - 09- 2025**

To,

The Principal,
All Concerned Affiliated Colleges/Institutions
Shivaji University, Kolhapur

Subject : Regarding revised syllabi of **B. Voc. Part I (Sem. I & II)** degree programme under the Faculty of Inter- Disciplinary Studies as per NEP-2020 (2.0).

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the university authorities have accepted and granted approval to the revised syllabi, nature of question paper and equivalence of **B. Voc. Part I (Sem. I & II)** for follower's degree programme under the Faculty of Inter- Disciplinary Studies as per National Education Policy, 2020 (NEP 2.0).

Course
B. Voc. Automobile Part - I
B. Voc. Sustainable Agriculture Part - I
B. Voc. Food Processing Technology Part - I
B. Voc. Graphic design Part -I
B. Voc. Sustainable Agriculture Management Part -I
B. Voc. Nursing and Hospital Management Part -I
B. Voc. Tourism and Service Industry Part - I

This syllabus, nature of question and equivalence shall be implemented from the academic year **2025-2026** onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website www.unishivaji.ac.in NEP-2020 (Online Syllabus)

The question papers on the pre-revised syllabi of above-mentioned course will be set for the examinations to be held in October /November 2025 & March/April 2026. These chances are available for repeater students, if any.

You are, therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Yours Faithfully

(Dr. S. M. Kubal)
Dy Registrar

Encl. : As above.

Copy to: For Information and necessary action.

1	The Dean, Faculty of IDS	7	Affiliation T. 1 & T. 2 Section
2	Director, Board of Examination and Evaluation	8	Appointment A & B Section
3	The Chairman, Respective Board of Studies	9	P.G.Seminar Section
4	All On Exam Section	10	I.T. Cell
5	Eligibility Section	11	Internal Quality Assurance Cell (IQAC)
6	P. G. Admission Section		

SHIVAJI UNIVERSITY, KOLHAPUR

Accredited By NAAC with 'A++' Grade

Faculty of Interdisciplinary Studies
Structure, Scheme and Syllabus for
Bachelor of Vocation (B. Voc.)

Automobile

Part I-Sem. I&II

NEP 2.0 PATTERN
Syllabus to be implemented from June, 2025 onwards.

(Subject to the modifications that will be made from time to time)

Credit framework for B. Voc. Undergraduate (UG) Program

Level/ Difficulty	Sem	Subject-1	Subject-2	Subject-3	GE-OE	SEC	IKS	AEC	VEC	CC	Total
4.5/ 100	I	2(T)+2(P)	2(T)+2(P)	2(T)+2(P)	2(T)	2 (T/P)	2(T) (Generic)	2(T)	2	--	**22**
	II	2(T)+2(P)	2(T)+2(P)	2(T)+2(P)	2(P)	2 (T/P)	--	2(T)	2	2	**22**
Credits		4(T)+4(P) =8	4(T)+4(P) =8	4(T)+4(P) =8	2+2 =4(T/P)	2+2= 4(P)	2(T)	2+2 =4	2+2 =4	2	**44**

Exit Option: Award of UG Certificate in Major with 44 credits and an additional 4 credits core NSQF course/Internship OR Continue with Major and Minor

Continue Option: Student will select one subject among the (Subject 1, Subject 2 and Subject 3) as major and another as minor and third subject will be dropped.

National Education Policy(NEP-2020)

First Year Bachelor of Vocation (B.Voc.–Diploma)Course Structure for (Level-4.5)

With Multiple Entry and Multiple Exit option

(To be implemented from the Academic Year 2025-26)

SemesterI–Duration:6Months (Certificate)											
	TeachingScheme					EvaluationScheme					
Sr. No.	Course	No.ofLectures		Hours (T + P)	Credits	Theory	Internal/ Practical	TotalMarks	MinMarks(Separate passing)	ExamDuration(Hrs.)	
		T	P							T	P
1.	DSC –A-I	2	4	6	4	50	50	100	35	2	3
2.	DSC –A-II	2	4	6	4	50	50	100	35	2	3
3.	DSC –A-III	2	4	6	4	50	50	100	35	2	3
4.	OE-I	2	-	2	2	50	-	50	18	2	-
5.	SEC-A	-	4	4	2	-	50	50	18	-	3
6.	IKS	2	-	2	2	40	10	50	18	2	-
7.	AEC-A	2	-	2	2	40	10	50	18	2	-
8.	VEC	2	-	2	2	40	10	50	18	2	-
	Total	**14**	**16**	**30**	**22**	**320**	**230**	**550**	**-**	**-**	

Semester II – Duration: 6 Months (Diploma)											
	Teaching Scheme					Evaluation Scheme					
Sr. No.	Course	No.ofLectures		Hours (T + P)	Credits	Theory	Internal/ Practical	TotalMarks	MinMarks(Separate passing)	ExamDuration(Hrs.)	
		T	P							T	P
1.	DSC – B -I	2	4	6	4	50	50	100	35	2	3
2.	DSC – B-II	2	4	6	4	50	50	100	35	2	3
3.	DSC – B -III	2	4	6	4	50	50	100	35	2	3
4.	OE-II	-	4	4	2	-	50	50	18	-	3
5.	SEC-B	-	4	4	2	-	50	50	18	-	3
6.	AEC-B	2	-	2	2	40	10	50	18	2	-
7.	VEC	2	-	2	2	40	10	50	18	2	-
8.	CC	2	-	2	2	40	10	50	18	2	-
	Total	**12**	**20**	**32**	**22**	**270**	**280**	**550**	**-**	**-**	
	Grand Total	**26**	**36**	**62**	**44**	**590**	**510**	**1100**	**-**	**-**	

SemesterI–Duration:6Months (Certificate)		
Sr. No.	**Course**	**Subject Name**
1	DSC –A-I	Vehicle Types and Transmission
2	DSC –A-II	Petrol Engines.
3	DSC –A-III	Engineering Drawing.
4	OE-I	Should be selected from Arts or Commerce faculty
5	SEC-A	Workshop
6	IKS	
7	AEC-A	Business Communication in English - I
8	VEC	Democracy, Elections and GoodGovernance

Semester II – Duration: 6 Months (Diploma)		
Sr. No.	**Course**	**Subject Name**
1	DSC – B -I	Diesel Engines
2	DSC – B-II	Suspension and Brakes
3	DSC – B -III	Automotive Electrical System
4	OE-II	Should be selected from Arts or Commerce faculty
5	SEC-B	**Garage Practices**
6	AEC-B	Business Communication in English - II
7	VEC	Constitution of India and Local Self Government
8	CC	

• Student Contact Hrs. Per week: 36 hrs.	• Total marks for B. Voc.- Diploma: 1100
• Theory and Practical Lectures: 60 Minutes Each	• Total credits for B. Voc.- Diploma: 44
• AEC: Ability Enhancement Course, AEC Internal Evaluation should be done at college or respective departmental level	
• Practical workload will for batch of 20 students	
• Practical Examination will be conducted Semester wise for 50 Marks per course (subject).	
• DSC: Discipline Specific Core Course - Candidate can opt three courses (Subjects) from DSC.	
• OE: Open Elective- Chosen compulsorily from faculty other than that of the Major.	
• SEC: Skill Enhancement Courses–Selected from the basket of Skill Courses approved by college.	
• There shall be separate passing for theory and practical courses.	
• **<u>Exit option after Level 4.5</u>: Students can exit with Diploma Course in Bachelor of Vocation with thecompletion of courses equal to minimum of 44 credits and also shall have to acquire additional CCC credits by successfully completing CCC-I and CCC-II courses which are assisted by Compulsory Civic Courses**	
• **SEC-A& SEC-B are two parts of Vocational Degree Course-I.**	

Eligibility:

Eligibility for Admission: For Diploma: 10+ 2 from any faculty/ITI/MCVC or Equivalent

For Advance Diploma: Diploma or equivalentany related stream.

Eligibility for Faculty: 1) Post Graduate with NET / SET/Ph. D. Or

2)Five Year Industry Experienced Personal

2) M. A (English) with NET/SET for Business Communication

Eligibility for Lab Assistant: Graduation with related field

Staffing Pattern: **Teaching:** In the 1st year of B. Voc. – 1 Full Timeand 1 Part Time Lecturer

1 CHB Lecturer for Business Communication

Lab. Assistant: For 1st Year of B. Voc. – 1 Part Time

For 2ndand 3rdYear(Inclusive of 1stYear) of B. Voc. – 2 FullTime

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Discipline Specific Core Course (DSC –A-I)
Paper Title: Vehicle Types and Transmission

Paper No: I **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50 (Theory)**

Course Outcomes: The students will acquire knowledge of

1. Introduction & Types of Vehicle

2. Vehicle Layouts

3. Clutches

4. Gear Box

5. Drive Lines

6. Final Drive

Content of syllabus:

Unit I: (15 Hrs)

Introduction, History & Classification of automobile Vehicle -LMV, HMV ,Commercial vehicle & non Commercial vehicles , Introduction to off road vehicle & types , Two & three wheeler-Case study of Indian models of major motor cycles, scooters & mopeds.

Types of chassis layout with reference to power plant locations and type of drive, Types of chassis-fully forward, semi forward, Truck or bus chassis,two & three wheeler chassis layout.

Principle, functions, general requirements, types of clutches, cone clutch,single-plate clutch, diaphragm spring clutch, multi-plate clutch, centrifugal clutch, electromagnetic clutch, lining materials, Clutch linkages,

Unit II: (15Hrs)

Necessity of gear box, Requirements of gear box, Functions of gear box,Types, Sliding mesh, Constant mesh, Synchromesh. Principle, construction and working. Types of gears used in transmission Lubrication of gear box,Gear shifting mechanism

Propeller shaft, universal joints, hooks and constant velocity joints, Drive line arrangements – Hotchkiss drive & torque tube drive. Live and dead axles, Axle shafts, All wheel drive,

Purpose of final drive & drive ratio, Different types of final drives, need of differential, Constructional details of differential unit, Non-slip differential, Differential lock, Differential housing, Final drive lubrication.

Books Recommended: (List of Minimum 5 Books)

01 Automobile Dr. Kirpal Singh

03 The Motor vehicle Newton, Steeds, Garrett, Butterworth Heinmann.

04 Automobile Vol.-2 Anil Chikara, Standard Publishers.

05 Automobile Mechanics Crouse / Anglin. Tata McGraw Hill.

06 Automobile R.B. Gupta, Satya Prakashan

Note: If any - such as

1. In theory examination, the weightage to numerical problems should not exceed 30%.
2. Students can use scientific calculators in theory examination.

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Discipline Specific Core Course (DSC –A-I)
Paper Title: Vehicle Types and Transmission

Paper No: I **Credits: 02**
Theory: 4 lectures/week **Total Marks: 50 (practical)**

Course Outcomes: The students will acquire knowledge of

Transmission System

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1. Testing the transmission system for fault detection.

2. Testing of Clutch for slip, clutch noise, power loss, setting of clutch.

3. Dismantling and assembly of single plate, multi-plate and centrifugal clutch. Overhauling and repair of clutch

4. Testing of gear box for noise, oil leak, shifting etc. , Dismantling-cleaning-inspection-assembling of gear box components.

5. Overhauling constant mesh gearbox, synchromesh gearbox .Overhauling transfer case. -

6. Testing of CVT, Repair and maintenance of CVT

7. Checking of propeller shaft, joints for wear, noise etc. Dismantling-cleaning-inspection-assembling of propeller shaft and joints

8. Checking of final drive, differential and axle shafts for wear, noise etc.

9. Dismantling-cleaning-inspection-assembling of final drive, differential andaxle shafts

10. Inspection, checking and replacement of wheel bearings

11. Checking of wheels and tyres for noise, wear and tear. Replacement of wheels.

12. Replacement of tyres.

Student Instructions:

1. Wear affron 2. Use safety goggles and cap.3. Use safety shoes.

Laboratory Requirements: 1. Tool Box 2. lab instruments.

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Vehicle Types and Transmission (DSC-A-I)

Paper No: II

Time: 2 hours **Total Marks: 50**

Solve questions from the following.

Q.1 Multiple choice Question	10Marks
Q.2 Long answer Question (Any Two out of three)	20Marks
Q.3 Short Answer Questions (Any Four out of six)	20Marks

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks
4. Viva – Voce	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Discipline Specific Core Course (DSC –A-II)
Paper Title: Petrol Engines.

Paper No: I I **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (Theory)**

Course Outcomes: The students will acquire knowledge of

1. Petrol engine principles and fundamentals

2. Constructional features of petrol engine components

3. Fuel Systems in Petrol engines

4. Engine cooling system

5. Lubrication systems

6. Ignition System in petrol engines

Content of syllabus:

Unit I: (15Hrs)

Introduction, Basic engine nomenclature, Classification of petrol engines, Merits and Demerits of petrol engines Thermodynamic cycle of petrol engine, Four stroke petrol engine, Two stroke petrol engine – Construction, working, Valve & port arrangements, scavenging systems, comparison with 4 stroke engines, Advantages, Disadvantages of two and four stroke petrol engines

Cylinder block, cylinder liner, types of liner, comparison of dry and wet liners, cylinder head, gaskets, type of gaskets,Piston, piston ring, pin, Crank shaft, camshaft, connecting rod.Valve, valve mechanisms, valve timing, port-timing diagram, manifolds, flywheel, Types of camshaft drives

Fuel feed system in petrol engines, Mechanical fuel pump, electrical fuel pump, Principles of carburetion, Simple carburetor, Starting, Idling & slow running, acceleration, Main metering system, choke system.

Unit II: (15Hrs)

Fuel feed system in petrol engines, Mechanical fuel pump,electrical fuel pump, Principles of carburetion, Simple carburetor, Starting, Idling & slow running, acceleration, Main meteringsystem, choke system.

S.U. Carburetor, Solex carburetor, Modern Carburetors,Carburetors used in two wheelers and four wheelers.Electronic fuel injection system, Multi point fuel injection system

Introduction – Purpose of cooling, Systems- Air cooling system,water cooling systems, Comparison of air & water coolingsystems, Parts of cooling system. Thermostat, water expansiontank, Temperature Indicator Pressure cap, water pump, fan and fan belt, radiator, Cooling water additions

Introduction, Purpose of lubrication, parts to be lubricated,functions and properties of engine lubricating oils, additives for lubricants, Classification of lubricating oils. Dry Sump lubrication system, wet sump lubrication system, mist lubrication system, pressurized lubrication system, splash lubrication system.

Requirement of ignition system, Types, Battery ignition and Magneto ignition, Working of Battery, Ignition coil, Spark plug –purpose, types, Electronic engine control unit (ECU) – Operation,Diagnosis

Books Recommended: (List of Minimum 5 Books)

01 Internal combustion engine M.L Mathur R.P.Sharma, Dhanpat Rai Pub.

02 Automobile Dr. Kirpal Singh

03 The Motor vehicle Newton, Steeds, Garrett, Butterworth.

04 Automobile Vol.-2 Anil Chikara, Standard Publishers.

05 Automobile Mechanics Crouse / Anglin. Tata McGraw Hill.

Note: If any - such as

1. In theory examination, the weightage to numerical problems should not exceed 30%.

2. Students can use scientific calculators in theory examination.

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Discipline Specific Core Course (DSC –A-II)
Paper Title: Petrol Engine maintenance

Paper No: I I **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (PRACTICAL)**

Course Outcomes: The students will acquire knowledge of

petrol engine

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1. Removing petrol engine from a vehicle and Refitting petrol engine on thevehicle.

2. Overhauling the cylinder head & rocker arm shaft assembly, Dismantling, cleaning, inspection and assembling valve, guide. Lapping valve seat.

3. Overhauling piston & connecting rod assembly.

4. Dismantling, cleaning, inspection and assembling of engine crankshaft & camshafts

5. Setting valve timing.

6. Dismantling, cleaning, inspection and assembling of timing gear drive /chain drive / belt drive

7. Servicing inlet & exhaust manifolds, silencer & tail pipe.

8. Dismantling, cleaning, inspection and Servicing of fuel tank & fuel lines Overhauling ac fuel pump.

9. Dismantling, cleaning, inspection and assembling of Servicing air filter/cleaner.(Dry and oil bath type)

10. Replacing fuel filter element, Overhauling of carburettor.

Student Instructions:

1. Wear affron 2. Use safety goggles and cap.3. Use safety shoes.

Laboratory Requirements: 1. Tool Box 2. lab instruments.

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Petrol Engines. (DSC-A-II)

Paper No: II

Time: 2 hours **Total Marks: 50**

Solve questions from the following.

Q.1 Multiple choice Question	10Marks
Q.2 Long answer Question (Any Two out of three)	20Marks
Q.3 Short Answer Questions (Any Four out of six)	20Marks

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks
4. Viva – Voce	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. I

Discipline Specific Core Course (DSC– A-III)
Paper Title: Engineering Drawing.

Paper No: III **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50 (Theory)**

Course Outcomes: The students will acquire knowledge of

1. Fundamentals of engineering Drawing

2. Engineering Curves

3. Constructions of special curves.

4. Projection of points & lines

5. Orthographic Views

6. Isometric projection

Content of syllabus:

Unit I: (15Hrs)

Importance of engineering drawing - drawing instruments:drawing board, mini drafter, compass, divider, protractor,drawing sheets etc., - layout of drawing sheets.Importance of legible lettering and numbering

Dimensioning - Need for dimensioning - terms and notations as per BIS - Dimension line, Extension line and Leader line -Methods of dimensioning Scales - Study of scales - full size scale, reduced scale and enlarged scale.

Conics: - Different types - Definition of locus, focus and directrix - Applications of ellipse, parabola and hyperbola.Ellipse: - Construction of ellipse by concentric circle method,rectangular method and Eccentricity method when focus anddirectrix are given Parabola: - Construction of parabola by rectangular method,eccentricity method when focus and directrix are given.

Hyperbola: - Construction of hyperbola by rectangular method and eccentricity method when focus and directrix are given.

Unit II: (15Hrs)

Geometric curves: Definition, application and construction of cycloid - epicycloid- hypocycloid, Involute of a circle -Archimedean spiral – helix

Projection of points - points in different quadrants. Projection ofstraight lines - parallel to one plane and perpendicular to other plane -inclined to one plane and parallel to the other plane -parallel to both the planes -inclined to both the planes (1st anglemethod only).

Orthographic projection of the given pictorial view by 1st anglemethod of projection only. Study of types of sections, sectional orthographic projections

Introduction to isometric view to the example of cube isometricaxes , scale, isometric Projection & isometric views, constructionof isometric & non isometric lines, angles, Circles, sphere, arc etc.

Drawing isometric views of simple solids & objects, dimensioning-only length, width & height of isometric views.

Books Recommended: (List of Minimum 5 Books)

1. **Engineering Drawing, Bhatt N.D. and Panchal V.M. Charotar Publishing House, 50th Edition, 2010.**
2. **Engineering drawing Gill P.S., S.K.Kataria& Sons.**
3. **Engineering Drawing Gopalakrishna K.R.," (Vol. I&II combined),**
4. **Engineering Graphics Venugopal K. and Prabhu Raja V., New Age International.**
5. **Engineering Drawing BasantAgarwal and Agarwal C.M. Tata McGraw Hill Publishing**

Note: If any - such as

1. In theory examination, the weightage to numerical problems should not exceed 30%.

2. Students can use scientific calculators in theory examination.

Bachelor of Vocation (B. Voc.) Part I - Sem. I

Discipline Specific Core Course (DSC– A-III)
Paper Title: Engineering Drawing.

Paper No: III **Credits: 02**
Theory: 4 lectures/week **Total Marks: 50 (Practical)**

Course Outcomes: The students will acquire knowledge of

1. Geometrical Constructions

2. Engineering curves & Loci of points

3. Orthographic projections

4. Isometric projection

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1. Draw the following figures with dimensions- Rectangle, circle, pentagon, hexagon, and two composite figures involving tangential exercises.

2. Three different curves are to be draw using any one method .ii) Draw locus of point on any one mechanism iii) Draw cycloid, epicycloids and hypocloid

3. Two objects by first angle projection method, Full orthographic views - One sheet, Sectional orthographic views – One sheet

4. Isometric views of two objects-One sheet

Isometric projection of two objects–One sheet

Student Instructions:

1. Wear affron

2. carry all drawing material

Laboratory Requirements:

1. DRAWING BOARD 2. DRAWING TABLE

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Engineering Drawing (DSC-A-III)

Paper No: II

Time: 2 hours **Total Marks: 50**

Solve questions from the following.

Q.1 Multiple choice Question	10Marks
Q.2 Long answer Question (Any Two out of three)	20Marks
Q.3 Short Answer Questions (Any Four out of six)	20Marks

Nature of Practical Question Paper:

Internal practical examination **50 marks**

1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks
4. Viva – Voce	05 Marks

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Open Elective (OE-I)
Paper Title: Should be selected from Arts or Commerce faculty

Paper No: IV

Time: 90 Minutes **Total Marks: 40 Marks**

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Open Elective (OE-I)
Paper Title: Should be selected from Arts or Commerce faculty

Paper No: IV

Time: 90 Minutes **Total Marks: 40 Marks**

Question No. 1	a) Multiple Choice Questions (3 Questions - 4 alternatives each)	6 Marks
	b) Match the following (Two Columns-Four pairs)	2 Marks
	c) Two statements (Answering true or false)	2 Marks
Question No. 2	Write Short Notes (Any four out of six)	20 Marks
Question No. 3	Answer the following (Any one out two)	10 Marks

Internal Assessment **10 Marks**

- Home Assignment / Unit Test
- Visit nearby Government Offices for collection Economic Data e.g. Population, Literacy, Poverty, Family Planning, No. of unemployed persons etc.
- Any other exercise/activity approved by concerned teacher

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Skill Enhancement Courses (SEC– A)
Paper Title: Workshop

Paper No: V **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (Practical)**

Course Outcomes: The students will acquire knowledge of

1. WOOD WORKING SHOP:

2. WELDING SHOP:

3. FITTING SHOP:

4. PLUMBING SHOP:

5. SHEET METAL SHOP:

6. TURNING SHOP

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1. Demonstration of different wood working tools / machines. Demonstration of different wood working processes, like planning,marking, chiseling, grooving, turning of wood etc.One simple job involving any one joint like mortise and tenon dovetail, bridle, half lap etc.

2. Demonstration of different welding tools / machines. Demonstration on Arc Welding, Gas Welding, gas cutting andrebuilding of broken parts with welding. One simple job involving butt and lap joint.

3. Demonstration of different fitting tools and drilling machines and

power tools.Demonstration of different operations like chipping, filing, drilling, tapping, cutting etc.One simple fitting job involving practice of chipping, filing,drilling, tapping, cutting etc

4. Demonstration of different plumbing tools,Demonstration of different operations in plumbing, observingdifferent pipe joints and pipe accessories. Different samples of PVCpipes and PVC pipe fittings.One job on simple pipe joint with nipple coupling for standard pipe,Pipe threading using standard die sets.

5. Demonstration of different sheet metal tools / machines. Demonstration of different sheet metal operations like sheet cutting, bending, edging, end curling, lancing, soldering and

riveting.One simple job involving sheet metal operations and soldering and riveting.

6. Demonstration of turning, threading operation One job related to Plane and Taper turning, threading and knurling.

Student Instructions:

1. Wear affron. Use safety goggles and cap. Use safety shoes.

Laboratory Requirements:

1. Tool Box 2. lab instruments.

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Skill Enhancement Courses (SEC– A)
Paper Title: Workshop

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks
4. Viva – Voce	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. I

Indian Knowledge System (IKS)

Paper Title: Interdisciplinary course in Generic IKS

Paper No: VI **Credits: 02**

Theory: 2 lectures/week **Total Marks: 50 (40 Theory + 10 Internal)**

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Indian Knowledge System (IKS)
Paper Title: Interdisciplinary course in Generic IKS

Paper No: IV

Time: 90 Minutes **Total Marks: 40 Marks**

Solve questions from the following.

Q.1 Multiple choice Question	08 Marks
Q.2 Long answer Question (Any Two out of three)	16 Marks
Q.3 Short Answer Questions (Any Four out of six)	16 Marks

Internal Assessment **10 Marks**

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Ability Enhancement Course (AEC-A)
Paper Title: Business Communication in English - I

Paper No: VII **Credits: 02**

Theory: 2 lectures/week **Total Marks: 50 (40 Theory + 10 Internal)**

Course Outcomes: After the completion of the course, the students will be able to:

1. To provide an overview of prerequisites to Communication Skills
2. To introduce the students to the basic skills of English Language i.e. Listening, Speaking, Reading and Writing
3. To develop ability to communicate effectively with the help of electronic media
4. To impart the correct practices of the strategies of effective speaking and writing for business purposes
5. To enhance employability of the students by developing their linguistic competence and communicative skills

Unit 1: Use of English in Business Environment

Topics:

Business Vocabulary: Vocabulary for banking, marketing and for maintaining

public relations

What is a sentence?

Elements of a sentence

Types of sentence: Simple, compound, complex

Writing a Letter of Application and CV/ Resume

Topics:

Structure of a letter of application for various posts

CV/ Resume and its essentials

Unit 2: Presenting Information/Data

Topics:

Presenting information/data using graphics like tables, pie charts, tree diagrams, bar

diagrams, graphs, flow charts

Interview Technique

Topics:

Dos and don’ts of an interview

Preparing for an interview

Presenting documents

Language used in an interview

Practical: Based on the theory units 10 Marks.

Reference Books:

- Sethi,Anjanee&BhavanaAdhikari.*Business Communication*. New Delhi: Tata McGraw Hill
- Tickoo, Champa& Jaya Sasikumar.*Writing with a Purpose*. New York: OUP, 1979.
- Sonie, Subhash C. *Mastering the Art of Effective Business Communication*. New Delhi: Student
- Aid Publication, 2008.
- Herekar, Praksh. *Business Communication.* Pune: Mehta Publications, 2007.
- Herekar, Praksh. *Principals of Business Communication.* Pune: Mehta Publications, 2003.
- Rai, Urmila& S. M. Rai.*Business Communication.* Himalaya Publishing House, 2007.
- Pradhan, N. S. *Business Communication.* Mumbai: Himalaya Publishing House, 2005.
- Pardeshi, P. C. *Managerial Communication.* Pune: NiraliPrakashan, 2008.

Pattern of a Question Paper
B. Voc. Part-I, Semester –I
Ability Enhancement Course (AEC-A)
Paper Title: Business Communication in English - I

Paper No: VII

Time: 90 Minutes **Total Marks:40**

Question No. 1	a) Multiple Choice Questions (5 questions)	05 Marks
	b) Answer in One sentence (5 questions)	05 Marks
Question No. 2	a) based on Unit 1	10 Marks
	b) Based on Unit 2	10 Marks
Question No. 2	a) based on Unit 1	05 Marks
	b) Based on Unit 2	05 Marks

Internal Assessment: 10 marks

Bachelor of Vocation (B. Voc.) Part I - Sem. I
Value Education Course (VEC: A)
Paper Title: Democracy, Elections and GoodGovernance

Paper No: VIII **Credits: 02**

Theory: 2 lectures/week **Total Marks: 50 (40 Theory+10 Internal)**

Note: This course will be common to all students of all faculties notified separately.

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Discipline Specific Core Course (DSC– B-I)
Paper Title: Diesel Engines

Paper No: IX **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50 (Theory)**

Course Outcomes: The students will acquire knowledge of

1. Diesel engine principles and fundamentals

2. Constructional features of diesel engines

3. Fuel System for Diesel engine

4. Engine intake and Exhaust System

5. Superchargers and Turbochargers

6. Engine Fuels

Content of syllabus:

Unit I: (08 Hrs)

Introduction, Diesel engine nomenclature, Classification of diesel engines, Advantages of diesel

Engines Thermodynamics cycle of diesel engine, Four strokediesel engine, Two stroke diesel engine Comparison of two stroke and four stroke cycle engine,

Cylinder block, cylinder liner, types of liner, cylinder head, gaskets, type of gaskets, Piston, piston ring, pin, Crank shaft, camshaft, connecting rod, valve, valve cooling, valve mechanisms, valve timing, port-timing diagram, manifolds, silencers, flywheel etc. Types of camshaft drives.

Requirement of fuel injection system, various components of fuel injection system, Types of fuel

injection pumps for single and multi cylinder engines ,inline and rotary types of fuel injection pumps. Types of fuel injectors. DI and IDI engines, Working of common rail fuel injection system, Governors, types, working

Unit II: (15Hrs)

Air filtering system, Types of air cleaners – dry, wet air cleaners, Intake manifold arrangements for single and multi cylinder engines Exhaust system – Exhaust manifold types, mufflers and silencers, exhaust pipes

Need of supercharging, types of superchargers, effect of supercharging on engine, benefits, disadvantages,Need of turbo charging, types of turbo charging, effectof turbo charging on engine, benefits, disadvantages

Types of fuels, fuel properties, SI and CI engine fuels,Fuel rating - Octane and Cetane no. , Alternative fuels CNG fueled diesel engine,

Books Recommended: (List of Minimum 5 Books)

01 Internal combustion engine :M.L Mathur R.P.Sharma, Dhanpat Rai Publication

02 Automobile Dr. Kirpal Singh

03 The Motor vehicle Newton, Steeds, Garrett, Butterworth Heinmann.

04 Automobile Vol.-2 Anil Chikara, Standard Publishers.

05 Automobile Mechanics Crouse / Anglin. TATA McGRAW – HILL

Note: If any - such as

1. In theory examination, the weightage to numerical problems should not exceed 30%.

2. Students can use scientific calculators in theory examination.)

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Discipline Specific Core Course (DSC– B-I)
Paper Title: Diesel Engines maintenance

Paper No: IX **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50(Practical)**

Course Outcomes: The students will acquire knowledge of

1. Diesel Engines

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1 Removing diesel engine from the vehicle and Refitting the diesel engine on the vehicle

2. Dismantling, cleaning, inspection and Servicing of cylinder head & rocker arm shaft assembly.

3. Dismantling, cleaning, inspection and Servicing of piston & connecting rod assembly.

4. Overhauling engine block, crankshaft & camshaft/ removing & refitting cylinder liners on cylinder bores

5. Dismantling, cleaning, inspection and Servicing of fuel injection pump, njectors, fuel filter & other accessories

6. Setting valve timing

7. Adjusting tappet clearance (4 cylinder/ 6 cylinder engine),

8. Dismantling, cleaning, inspection and Servicing of inlet, exhaust manifolds, silencer & tailpipe

9. Dismantling, cleaning, inspection and Overhauling fuel feed pump.

10. Bleeding the fuel system in diesel engine, Setting the fuel injection pump timing, Servicing fuel filter

Pattern of a Question Paper

B. Voc. Part-I, Semester –II

Diesel Engines (DSC– B-I)

Paper No: IX

Time: 2 hours **Total Marks: 50**

Solve questions from the following.

Q.1 Multiple choice Question	**10 Marks**
Q.2 Long answer Question (Any Two out of three)	**20 Marks**
Q.3 Short Answer Questions (Any Four out of six)	**20 Marks**

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Discipline Specific Core Course (DSC– B-II)
Paper Title: Suspension and Brakes

Paper No: X **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50 (Theory)**

Course Outcomes: The students will acquire knowledge of

1. Front Axle and Steering

2. Brakes

3. Suspension Systems

4. Vehicle Body

5. Wheels and tires

6. Vehicle Air Conditioning System

Content of syllabus:

Unit I: (15 Hrs)

Types of front axle-Dead axle, live axle.Type of stub axle arrangements Elliot, reverse Elliot,

Lamoine, reverse Lamoine. Front wheel assembly.Steering system. Steering linkages, Steering geometry and its effects– Caster, camber, king pin inclination, toe in–toe out,Correct Steering angle. Under steering and over steering,Turning radius.Construction, working and application of Steering gearbox-rack and pinion type, recirculating ball type, and worman droller type.

Introduction Function and necessity of brakes.Classification of brakes and braking systems.

Construction and working of –disc brake and drum brake Friction materials used for brake shoes and pads. Characteristics of friction material-brake fade, coefficient of friction, dry

friction and wet friction braking systemsConstruction and working of-Mechanical braking system,

Hydraulic Braking system, Air braking system, Hydraulic operated air braking system and vacuum assisted braking system.Concept and working of antilock braking system.Parking brake Properties of brake fluids and their specifications.

Suspension systems , Rigid and independent Suspension.Types of Independent suspension system- Mc Pherson strut,wishbone type, Semi-elliptical Leaf spring, coil spring, torsion bar arrangement, Construction and working of Air Suspension System, Construction and working of-Shock absorbers-

Telescopic and Gas filled, Anti roll baror stabilizer bar.

Unit II: (15Hrs)

Vehicle body types, Car, Commercial, Transport – goods, passenger vehicle bodies, Body materials, Body component joining methods,Seat layout, Type of seats.

Type of wheels, Wheel construction, Material, Balancing,motorcycles, scooters, sports bike wheels Tire types, Tire specifications, tire material, Tire tread and pattern, Tire inflammation pressure, Tire maintenance, Application and criteria for selection ofwheels and tyres.

Fundamentals of Refrigeration and air conditioning.Description of vapor compression cycle with components in the circuit.Layout and operation of HVAC.Type of refrigerants used in car air conditioning and their properties.Human comfort conditions.Temperature control system, humidity control

Books Recommended: (List of Minimum 5 Books)

1 Ramlingam K.K. Automobile Scitech Publication

2 Kirpal Singh Automobile Standard Publication

3 Anil Chikara Automobile Satya Prakashan New

4 R.B. Gupta Automobile Satya Prakashan New

5 S. Srinivisan Automotive Mechanics Tata McGraw-Hill

Note: If any - such as

1. In theory examination, the weightage to numerical problems should not exceed 30%.

2. Students can use scientific calculators in theory examination.

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Discipline Specific Core Course (DSC– B-II)
Paper Title: Four Wheeler Mechanic

Paper No: X **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (Practical)**

Course Outcomes: The students will acquire knowledge of

Four wheeler maintainance

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1. Dismantling of unserviceable engine- cleaning, studying the parts in the engine and assembling the engine, practice in the use of correct tools and right procedure.

2. Dismantling an unserviceable engine, cleaning of parts in the engine, measuring of cylinder bore- crank pins, main journals, pistons, studying valve-operating mechanism.

3. Dismantling the cylinder head from the engine decarburizing the cylinder head, removing the valves cleaning reassembling and adjusting tappets.

4. Removing pistons and connecting rods from engine- dismantling cleaning, inspecting checking clearance, installing rings and piston pins.

5. Removing connecting rod assembly- cleaning, checking bearing clearances replacing bearing shells, setting correct clearance, measuring wear in crank pins and main journals in crank shaft.

6. Assembling crankshaft, main bearing, connecting, rods and piston assembly in the engine. Fitting cylinder head and starting the engine and tuning up engine for smooth, slow speed running.

7. Checking and cooling system for overheating, cleaning radiators, dismantling, cleaning, assembling and testing water pumps, reverse flushing the system and adjusting the fan belt tension.

8. Studying the lubrication, oil flow system in engine. Over-hauling oil filters, oil pump.

9. Simple repair in fuel feed system – overhauling of petrol pump, carburetors, fuel filters and air cleaners.

10. Assembling of pressure plate- adjusting the fingers- checking run out of fly wheel and aligning clutch assembly with flywheel.

Pattern of a Question Paper
B. Voc. Part-I, Semester –II
Suspension and Brakes (DSC– B-II)

Paper No: IX

Time: 2 hours **Total Marks: 50**

Solve questions from the following.

Q.1 Multiple choice Question	**10 Marks**
Q.2 Long answer Question (Any Two out of three)	**20 Marks**
Q.3 Short Answer Questions (Any Four out of six)	**20 Marks**

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Discipline Specific Core Course (DSC– B-III)
Paper Title: Automotive Electrical System

Paper No: XI **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50 (Theory)**

Course Outcomes: The students will acquire knowledge of

1. Electrical & Electronic Components

2. Battery

3. Starting And Charging System

4. Ignition Systems

5. Lighting accessories-fundamentals

Content of syllabus:

Unit I: (15 Hrs)

Purpose and operation of electrical components like switches,relays, solenoids, buzzers, and resistors.

Purpose of circuit protection devices like fuses, maxi fuses, circuitbreakers (Manual and automatic resetting types.) and fusible linksTesting of circuit defects like open circuits horts, shorts to grounds,

voltage drop.Working of Electromagnetic gauges like temp Gauges, fuel gauge,engine oil pressure gauge, Speedo-meter gauge.Features of scan tester.Working of electrical accessories like windshield wiper, washerpumps, blower motor, electrochromic mirror, power window, powerseat, power door lock

Lead acid battery–components &operation.Maintenance free battery–construction.

Concept of Low maintenance battery.Battery ratings and specifications.Battery maintenance and safety precautions.Battery testing–Battery terminal test, Leakage test, Specific GravityTest, Open circuit test, Capacity test, Battery drain test.Battery charging–Initial charging procedure, dry charged battery-

precautions. Slow and fast rate charging and trickle charging.Jump starting-Procedure and precautions.

Factors affecting battery life.Battery failures–cycle failure, internal short circuit, over charging,local action and sulphation

Unit II: (15 Hrs)

Construction and working of starting system.Types of starter drive (Bendixand over running clutch types only)construction and working.Testing of starting system–Quick testing, Current draw test, Insulated

circuit resistance test, Ground circuit test, No crank test, free speedtest.Construction & operation of alternator. Initial excitation and self excitation.Alternator testing–Current output test, Field current draw test.Regulator output test.Alternator components testing-rotor, stator, Internal Regulatorandrectifier.Regulation-Electronic, Computer Regulation circuit lay out andoperation.

Operation of charge indicator light circuit.

Need of ignition system.Classification of ignition systems on basis of–Magneto ignition system construction and working of CDI system.Components of ignition system:-Ignition coil types, Distributor,sparkplug, cords, and condenser.Advance & retard timing mechanism-construction and working.Electronic (or solid state) ignition system with distributor-circuit diagram and working.Distributor less/computer controlled oil ignition system operation.Sensors and Ignition Control Module for triggering and timing of spark.

Operation of automatic head light dimming.Operation of automatic on /off head light with time delay.

Use and working of fiber optics &its diagnosisOperation of key less entryOperation of common anti-theft system Purpose &operation of automatic door lock system

Books Recommended: (List of Minimum 5 Books)

01 Barry Hollenbeck Automotive Electricity,Electronics & Computer ControlsDelmar Publishers

02 Jack Erjavec,Robert ScharffAutomotive Technology: A SystemApproachDelmar Publisher Inc

03 P.L. Kohli Automotive ElectricaLEquipmenTata McGraw-Hill

04 Trevor Mellard Automotive electronic systems ELBS

Note: If any - such as

1. In theory examination, the weightage to numerical problems should not exceed 30%.

2. Students can use scientific calculators in theory examination.

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Discipline Specific Core Course (DSC– B-III)
Paper Title: Two Wheeler Maintenance.

Paper No: XI **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (Practical)**

Course Outcomes: The students will acquire knowledge of

Two wheeler maintenance

Pre requisites Note: (If Any- such as Knowledge of the topics in the theory papers.)

List of Practicals: (Minimum 10)

1 Identify the parts & general servicing of Two Wheeler and Three wheeler, washing, cleaning, oiling, greasing and lubricating.

2. Adjusts control cables for brake, clutch and accelerator. tightens loose parts and makes necessary fittings and connections.

3. Clean spark plug. Changes engine oil, starts engine and tunes it up.

4. Diagnose - causes and remedy for engine not starting, high fuel consumption, Practice on engine tune. Tests performance of vehicle by driving on road and makes further opinion to remove defects noticed if any.

5. Practice on removal of fuel tank; check that fuel flow freely from the petrol tap. Practice on removal of petrol tap and clean the strainer and assemble.

6. Dismantling the two wheeler engine, cleaning and inspecting the parts, checking engine bore, piston rings, connecting rod

7. Assembling all the parts after assembling inspect Engine oil level, clutch cable free play, Drive chain tension, performance of electrical system.

8. Remove carburetor dismantle, check, cleans and set

9. Removing clutch assembly from Two-wheeler and three wheeler cleaning and inspecting parts. Replacing defective parts. Fitting clutch assembly.

10. Practice on removal of front fork, inspection of front fork spring, fork tube, piston, slider and assembling of front fork. Dismantle shock absorbers, check, assemble, test.

Pattern of a Question Paper
B. Voc. Part-I, Semester –II
Automotive Electrical System (DSC– B-III)

Paper No: IX

Time: 2 hours **Total Marks: 50**

Solve questions from the following.

Q.1 Multiple choice Question	**10 Marks**
Q.2 Long answer Question (Any Two out of three)	**20 Marks**
Q.3 Short Answer Questions (Any Four out of six)	**20 Marks**

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Open Elective (OE-II)
Paper Title: Should be selected from Arts or Commerce faculty

Paper No: XII **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (Theory)**

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Open Elective (OE-II)
Paper Title: (Practical)

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of Economics of Indian Agriculture	20 Marks
2. Carry out any practical of Economics of Indian Agriculture	20 Marks
3. Submission of Certified Journal	05 Marks
4. Viva – Voce	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Skill Enhancement Courses (SEC– B)
Paper Title: Garage Practices (Practical)

Paper No: XIII **Credits: 02**
Practical: 4 lectures/week **Total Marks: 50 (Practical)**

Course Outcomes: The students will acquire knowledge of

Garage Practices

List of Practicals: (Minimum 10)

1 Study of garage layout and arrangements.

2. Study of measuring and testing instruments used in garage.

3. Study of garage tools and equipments used for repair.

4. Repairing processes and machines used for servicing and lubrication.

5. Study of Workshop documents & records -job cards, bill, satisfaction voucher, history sheet, manufacturer's service coupon book, warranty policy.

6. Study of Workshop Manual, Parts Catalogue and Parts price list. Billing procedure. Customer complaint Handling

7. Types of maintenance schedules - daily, weekly and monthly in respect of the Scheduled maintenance chart shown in service book of a vehicle

8. Preventive, Break down maintenance, Predictive maintenance practices

9. Attending emergency / break down maintenance. Towing of Vehicle.

10. Use of Hoist / Ramp operation. Grease Pump. Water Pump & spray gun.

11. Wheel balancing & Wheel Alignment

12. Head light aligner, Spark plug cleaning & testing.

13. Visit to 2 wheeler garage and report.

14. Visit to 4 wheeler garage and report.

15. Visit to 2 wheeler dealer and to study operations and report.

16. Visit to 4 wheeler dealer and to study operations and report.

Bachelor of Vocation (B. Voc.) Part I - Sem. II

Skill Enhancement Courses (SEC– B)
Paper Title: Garage Practices

Nature of Practical Question Paper:

Internal practical examination	**50 marks**
1. Carry out any practical of processing or analysis	20 Marks
2. Carry out any practical of processing or analysis	20 Marks
3. Submission of Certified Journal	05 Marks
4. Viva – Voce	05 Marks

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Ability Enhancement Course (AEC-B)
Paper Title: Business Communication in English - II

Paper No: XIV **Credits: 02**

Theory: 2 lectures/week **Total Marks: 50 (40 Theory + 10 Internal)**

Course Outcomes: After the completion of the course, the students will be able to:

1. To develop effective group discussion skills including initiating, expressing opinions, and summarizing discussions.
2. To write professional business correspondence such as memos, emails, inquiries, and complaints.
3. To demonstrate proficiency in business negotiation techniques including planning, conducting, and concluding negotiations.
4. To communicate effectively in marketing contexts by describing products/services and interacting with customers.
5. To design promotional content using pamphlets, advertisements, and public marketing strategies.

Units Prescribed for Theory: 40 Marks.

Unit 1: Group Discussion

Topics:

Preparing for a Group Discussion

Initiating a Discussion

Eliciting Opinions, Views, etc.

Expressing Agreement/ Disagreement

Making Suggestions; Accepting and Declining Suggestions

Summing up.

Business Correspondence

Topics:

Writing Memos, e-mails, complaints, inquiries, etc.

Inviting Quotations

Placing Orders, Tenders, etc.

Unit 2: English for Negotiation

Topics:

Business Negotiations

Agenda for Negotiation

Stages of Negotiation

English for Marketing

Topics:

Describing/ Expaining a Product/ Service

Promotion of a Plroduct

Dealing/ bargaining with Customers

Marketing a Product/ Service: Using Pamphlets, Hoardings, Advertisement,

Public Function/ Festival

Practical: Based on the theory units 10 Marks.

Reference Books:

- Herekar, Praksh. *Business Communication.* Pune: Mehta Publications, 2007.
- Herekar, Praksh. *Principals of Business Communication.* Pune: Mehta Publications, 2003.
- John, David. *Group Discussions*.New Delhi: Arihant Publications.
- Kumar, Varinder. *Business Communication*. New Delhi: Kalyani Publishers, 2000.
- Pardeshi, P. C. *Managerial Communication.* Pune: NiraliPrakashan, 2008.
- Pradhan, N. S. *Business Communication.* Mumbai: Himalaya Publishing House, 2005
- Rai, Urmila& S. M. Rai.*Business Communication.* Mumbai: Himalaya Publishing House,2007.
- Sethi, Anjanee&BhavanaAdhikari.*Business Communication*. New Delhi: Tata McGraw Hill.
- Tickoo, Champa& Jaya Sasikumar.*Writing with a Purpose*. New York: OUP, 1979.

Books Recommended: (List of Minimum 5 Books)

1. Herekar, Prakash. Business Communication. Pune: Mehta Publications, 2007.
2. Herekar, Prakash. Principals of Business Communication. Pune: Mehta Publications, 2003.
3. John, David. Group Discussions.New Delhi: Arihant Publications.
4. Kumar, Varinder. Business Communication. New Delhi: Kalyani Publishers, 2000.
5. Pardeshi, P. C. Managerial Communication. Pune: NiraliPrakashan, 2008.

Pattern of a Question Paper
B. Voc. Part-I, Semester –II
Ability Enhancement Course (AEC-B)
Paper Title: Business Communication in English - II

Paper No: XIV

Time: 90 Minutes **Total Marks:40**

Question No. 1	a) Multiple Choice Questions (5 questions)	05 Marks
	b) Answer in One sentence (5 questions)	05 Marks
Question No. 2	a) based on Unit 1	10 Marks
	b) Based on Unit 2	10 Marks
Question No. 2	a) based on Unit 1	05 Marks
	b) Based on Unit 2	05 Marks

Internal Assessment: 10 marks

Bachelor of Vocation (B. Voc.) Part I - Sem. II

Value Education Course (VEC: B)

Paper Title: Constitution of India and Local Self Government

Paper No: XV **Credits: 02**

Theory: 2 lectures/week **Total Marks: 50 (40 Theory + 10 Internal)**

Note: This course will be common to all students of all faculties notified separately.

**********COMMON TO ALL**********

Bachelor of Vocation (B. Voc.) Part I - Sem. II
Co-Curricular Courses (CC)
Paper Title: NSS

Paper No: XVI **Credits: 02**
Theory: 2 lectures/week **Total Marks: 50**

Note: For this course, follow the common syllabus and evaluation guidelines issued by the universityseparately.

Examination Pattern: -

1. Participation in activities 40 marks
2. Seminar,Report,Group Discussion, Viva Voce,etc. 10 marks

**********COMMON TO ALL**********

Assessment:

The NEP 2020 emphasizes upon formative and continuous assessment rather than summative assessment. Therefore, the scheme of assessment should have components of these two types of assessments. Assessment has to have correlations with the learning outcomes that are to be achieved by a student after completion of the course

a) **Continuous Assessment:** Assignments, projects, presentations, seminars and quizzes

b) **Examinations:** Midterm, finals, or comprehensive exams.

c) **Research Projects/Dissertation/Thesis:** Evaluated through submission and viva-voce

d) **Grading System:** Standardized letter grades, percentages, or CGPA

Letter Grades and Grade Points:

The Semester Grade Point Average (SGPA) is computed from the grades as a measure of the student's performance in a given semester. The SGPA is based on the grades of the current term, while the Cumulative GPA (CGPA) is based on the grades in all courses taken after joining the programme of study. The HEIs may also mention marks obtained in each course and a weighted average of marks based on marks obtained in all the semesters taken together for the benefit of students.

Computation of SGPA and CGPA: UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

Letter Grade	Grade Point
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Above Average)	6
C (Average)	5
P (Pass)	4
F (Fail)	0
Ab (Absent)	0

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

$$\textbf{SGPA } (S_i) = \frac{\sum (C_{ix} G_i)}{\sum C_i}$$

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

2. The Cumulative Grade Point Average (CGPA) is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$\textbf{CGPA} = \frac{\sum (C_{ix} S_i)}{\sum C_i}$$

Where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that.

Date:

To,

The Registrar

Shivaji University, Kolhapur

Subject: **Submission of B. Voc. - I Year Diploma structure as per NEP guidelines**

Dear Sir,

I'm submitting herewith First Year **Bachelor of Vocation (B. Voc.-I)-Diploma** Course structure (LEVEL-5) to be implemented from Academic Year 2025-26.

Kindly accept it and Acknowledge.

Thanking You

Yours Faithfully