| RGPV (Diploma Wing) Bhopal | | COLUEN AS FOR LEADING OUTCOME | Bra | Branch Code | | | urse Code | CO Code | LO Code | Format No. |
|-----------------------------|---|-------------------------------|-----|-------------|---|--|-----------|---------|---------|------------|
| | | SCHEME FOR LEARNING OUTCOME | C | 0 | 3 | | | 1 | 1 | 4 |
| COURSE NAME | | | | | | | | | | |
| CO Description | Apply basics of contouring and prepare contour map. | | | | | | | | | |
| LO Description | Explain basics o | f contouring. | | | | | | | | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|---|---|---|---------------|---------------------|---|---------|
| 1. | Definitions – Contour, contour interval, Horizontal equivalent. Characteristics of contours . | Interactive classroom teaching, assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge. | 02 | 00 | Text book, video lectures, chalk board. | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|----------------------|---|------------------|--|-----------------------|
| 1. | Paper pen test | Students will be asked to explain basics of contouring. | 10 | Test paper, assignments + rating scale | Internal |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)



| D | ~~~ | | ++ | 1 |
|-----|------|-------|------|-----|
| 210 | ures | ssive | test | - 1 |
| | 9 | | | - |

| DODY (Distance) | Marie - N. Die een ei | COLUMN FOR LEADNING OUTCOME | Bra | Branch Code | | | Course Code | | CO Code LO Code | | Format No. |
|-----------------|-----------------------|---|-----|-------------|---|--|-------------|--|-----------------|---|------------|
| RGPV (Diploma | wing) Bnopai |) Bhopal SCHEME FOR LEARNING OUTCOME | | 0 | 3 | | | | 1 | 2 | 4 |
| COURSE NAME | Advance surve | dvance survey | | | | | | | | | |
| CO Description | Apply basics o | Apply basics of contouring and prepare contour map. | | | | | | | | | |
| LO Description | Describe metho | escribe methods of contouring and uses of contour. | | | | | | | | | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|--|--|---|---------------|---------------------|---|---------|
| 1. | Method of locating contours. Interpolation of contours. Establishing grade contours. Uses of Contour Maps. Calculation of reservoir capacity by contour map by trapezoidal and prismoidal formula. Interpretation of Typical Contour Sheets. | Interactive classroom teaching, assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students, teacher will conduct a quiz and give assignments to practice their knowledge. | 04 | 00 | Text book, video lectures, chalk board. | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|----------------------|--|------------------|---|--------------------|
| 1. | End term exam | Students will be asked to explain methods of contouring, interpolation of contour and uses of contour map. | 10 | Question paper, assignments + rating scale | External |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

NIL



| | | | | | Bra | nch C | ode | Co | ourse Co | ode | CO C | ode | LO Code | Format No. |
|-----------|--|-------------|---------------------------|--|------------------------------------|-----------------|--------|-------|---------------|---------------|-------------------|-------|--|------------------------|
| RGPV (| Diploma Wing) Bho | oal SCH | EME FOR LEARNING OU | JTCOME | C | 0 | 3 | | | | 1 | | 3 | 4 |
| COU NA | | survey | | | | | | 1 | | | | | | |
| CO Des | cription Apply bas | cs of cont | ouring and prepare conto | ur map. | | | | | | | | | | |
| LO Des | cription Perform co | ntour sur | ey and plot contour map. | | | | | | | | | | | |
| | | | | SCHEME C | F STU | Υ | | | | | | | | |
| S. No. | Learning Co | ntent | Teaching -Learning Method | Descr | iption o | f T-L | Proce | ess | Teach Hrs. | | Pract. Fut Hrs | . L | Rs Required | Remark |
| 1. | 1. Block contouri of 100x150m. at 10x10m., plo contour. | With spot I | | , Teache content handou Student practice | s and p t to stud ts will le | rovide dents | e | h | 00 | | 12 | bo | andouts, cha pard, PPT, anual, virtual | k NIL |
| | | | SCI | HEME OF A | SSESSI | MENT | - | | | | | | | |
| S. No. | Method of Asses | ssment | Descrip | tion of Ass | essmer | nt | | | | ximu 1arks | | Resou | ırces Requir | ed Externa /Interna |
| | Observation of Expe performed | eriments | Students will be asked to | o perform a | bove ex | cercis | e on 1 | fielc | I. | - | La | | cord / rating cales | Internal |
| | | Δ | DDITIONAL INSTRUCTI | ONS FOR T | HE HOI |)/EA | CIII T | V /I | | | • | | | |



| | | | | Branch Code | | Course Code | | CO Code | LO Code | Format No. |
|-----------------------------|--|-----------------------------|---|-------------|---|-------------|--|---------|---------|------------|
| RGPV (Diploma Wing) Bhopal | | SCHEME FOR LEARNING OUTCOME | C | 0 | 3 | | | 2 | 1 | 4 |
| COURSE A | Advance surve | ey | | | I | | | | | |
| CO Description Po | erform theodol | ite traversing. | | | | | | | | |
| LO Description | tion Explain components and basis terminology of theodolite and measurement of angle by different methods. | | | | | | | | | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|---|---|---|---------------|------------------------|---|---------|
| 1. | Components of Transit Theodolite and Their functions. Technical terms used. Temporary adjustments of Transit Theodolite. Swinging the telescope, Transiting, Changing the face. Measurement of Horizontal angle, method of Repetition ,errors eliminated by method of repetition. Measurement of Deflection angle. Measurement of Vertical angle. Measurement of magnetic bearing of a line by Theodolite. Prolonging a Straight line. Sources of errors in Theodolite Surveying. Permanent adjustment of transit Theodolite (only relationship of different axes of Theodolite.) | Interactive classroom teaching, assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students, teacher will conduct a quiz and give assignments to practice their knowledge. | 05 | 00 | Text book, video lectures, chalk board. | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|----------------------|---|------------------|--|-----------------------|
| 1. | End term exam | Students will be asked to Explain components and basis terminology of theodolite and measurement of angle by different methods. | 08 | Question paper, assignments + rating scale | External |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)



| DOD/ (D: 1 | \ DI | ON THE SOUTH TO BE TO SEE TO S | Branch Code | | | Course Code | | CO Code | LO Code | Format No. |
|----------------|----------------|--|-------------|---|---|-------------|--|---------|---------|------------|
| RGPV (Diploma | wing) Bhopai | Bhopal SCHEME FOR LEARNING OUTCOME | | 0 | 3 | | | 2 | 2 | 4 |
| COURSE NAME | Advance surv | ey | | | | | | | | |
| CO Description | Perform theod | dolite traversing. | | | | | | | | |
| LO Description | Compute the co | ordinates by theodolite traversing. | | | | | | | | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|---|---------------------------------|---|---------------|---------------------|--|---------|
| 1. | Traversing with Theodolite – Method of included angles, locating details, checks in closed traverse, Calculation of bearings from angles. Traverse Computation - Latitude, Departure Consecutive Co-ordinates error of Closure, Distribution of a angular error, balancing the traverse by Bodwitch rule and Transit Rule, Gale's traverse table. simple problems on above topic. | assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students, teacher will conduct a quiz and give assignments to practice their knowledge. | 05 | 00 | Text book, charts, video lectures, chalk board. | NIL |

SCHEME OF ASSESSMENT

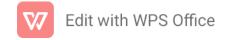
| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|----------------------|---|------------------|---|--------------------|
| 1. | End term exam | Students will be asked to explain theodolite traversing | 12 | Question paper, assignments + rating scale | External |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

NIL



| DOD' | (Dinlans - | Min a \ Dh as al | 00115145 505 | I FADAUNO OUTOOM | | nch (| Code | Co | urse Code | CO | Code | LO Code | Format No. |
|-----------|---|---|---|---|---|--|---|------|---------------|-------------------|------------------|--|-------------------------|
| RGPV | (Diploma | Wing) Bhopal | SCHEME FOR | LEARNING OUTCOMI | c | 0 | 3 | | | | 2 | 3 | 4 |
| | URSE AME | Advance surve | ey | | | | | | | | | | |
| CO De | scription | Perform theod | olite traversing. | | | | | | | | | | |
| LO De | scription | Measure angle a | nd coordinates b | y different methods usi | ng theodoli | e. | | | | | | | |
| | | | | SCHEM | 1E OF STU | DY | | | | | | | |
| S. No. | Lea | rning Content | | Teaching -Learning Method | Descrip Proces | | of T-L | | Teach Hrs. | Pra /Tu Hrs | ut | LRs Required | Remarks |
| | Theory the very of Horizon 2. Meas method 3. Meas theod 4. Meas a line 5. Meas taking 6. Theory traver comp | ernier and tempor theodolite. Me ontal angle by tra urement of Hori od of Repetition. urement of ver | ranctions, reading rary adjustments asurement of nsit theodolite. zontal angle by tical angles by netic bearing of ection angle by f 4 – 5 sides. rvey for a closed for a small area, nates by Gale's | | Teacher the cont provide I students demons compon Students through | ents a nando s. Tea trate t ents i s will l | and out to cher w the n lab. learn | | | 24 | b n v n | Handouts, chalk poard, PPT, nanual, charts, rideo film, nodels, virtual ab. | NIL |
| | | | | SCHEME O | F ASSESS | MEN ⁻ | Т | | | | | | |
| S. No. | Meth | od of Assessm | ent | Description of A | Assessme | nt | | | Maxin Mar | | Resc | ources Require | d External /Internal |
| 1. | Observat performa submiss | | | will be asked to Measunt methods using theo | • | | ordina | ates | - | | Lab re scales | ecord / rating | Internal |



ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY) Part of Lab Work

| RGPV (Diploma Wing) Bhopal | | COLUEN SE FOR LEADNING OUTCOME | Bra | Branch Code | | Course Code | | e CO Code | LO Code | Format No. | |
|-----------------------------|-----------------|---|-----|-------------|---|-------------|--|-----------|---------|------------|--|
| | | SCHEME FOR LEARNING OUTCOME | | 0 | 3 | | | 3 | 1 | 4 | |
| COURSE NAME | Advance surv | dvance survey | | | | | | | | | |
| CO Description | Measure heigh | Measure height and distance by tachometer. | | | | | | | | | |
| LO Description | Explain techniq | Explain techniques of Techometric survey to calculate height and distances. | | | | | | | | | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|--|--|--|---------------|---------------------|---|---------|
| 1. | Principle of Tacheometry. Essential requirements of Techeorneter. Use of Theodolite as a Tacheometer with staff held in vertical and fixed hair method (No derivation). Determination of tacheometric constants, simple numerical problems on above topics | Interactive classroom teaching, assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students, teacher will conduct a quiz and give assignments to practice their knowledge | 10 | 00 | Text book, video lectures, chalk board. | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|----------------------|---|------------------|--|-----------------------|
| 1. | End term exam | Students will be asked to explain techniques of Techometric survey to calculate height and distances. | 14 | Question paper, assignments + rating scale | External |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of progressive test II



| DODY (D) | \ DI | | | Branch Code Co | | | Course Code | | CO Code | LO Code | Format No. |
|----------------|----------------|-----------------------------------|-------------|----------------|------|-----|-------------|---|---------|--------------|------------|
| RGPV (Diploma | Wing) Bhopal | SCHEME FOR LEARNING OUT | COME | 0 | 3 | | | 3 | 2 | 4 | |
| COURSE NAME | Advance surv | ey | | | | | | | | | |
| CO Description | Measure heigh | nt and distance by tachometer. | | | | | | | | | |
| LO Description | Measure heigh | t and distances using Techometer. | | | | | | | | | |
| | ' | S | CHEME OF ST | UDY | | | | | | | |
| S. No. | Learning Conte | nt Teaching | Description | of T-L | Proc | ess | Tea | | Pract. | LRs Required | d Remarks |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|---|---------------------------------------|---|---------------|---------------------|---|---------|
| 1. | To find Reduced levels and horizontal distances using theodolite as a Tacheometer. To find constants of a given Tacheometer. | hands on practice, lab assignments | Teacher will explain the contents and provide handout to students. Teacher will demonstrate the components in lab. Students will learn through practice | 00 | 06 | Handouts, chalk board, PPT, manual, virtual lab. | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|--|---|------------------|-------------------------------|--------------------|
| 1. | Observation of Field performance and submission. | Students will be asked to Measure height and distances using Techometer on field. | - | Lab record / rating scales | Internal |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of Lab Work



| | - | | | | | Bra | nch C | ode | Co | urse Cod | le C | O Code | e LO (| Code | ormat No | |
|--------|---|---|-----------|---|---|--------------------------|-------------|-----------------|------------------|---------------|---------|--------|---|----------|---------------------------|---------|
| RGPV (| (Diploma | Wing) Bhopal | SCHEM | ME FOR LEARNING OUT | COME | С | 0 | 3 | | | | 4 | | 1 4 | | |
| | JRSE AME | Advance surve | ey | | | | | | | | | | | | | |
| CO Des | scription | Develop skills t | o set out | t simple circular curve on | the field. | | | | | | | | | | | |
| LO Des | cription | Explain basics | of curves | s, components and types. | | | | | | | | | | | | |
| | | | | S | CHEME OF | STUE | Υ | | | | | | | | | |
| S. No. | I | Learning Conten | it | Teaching -Learning Method | Descrip | scription of T-L Process | | | | Teach Hrs. | | | LRs Re | quired | Remark s | |
| 1. | Types of curves used in road and railway alignments. Notations of simple circular curve Designation of curve by radius and degree of curves | | r curve. | Interactive classroom teaching, assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students, teacher will conduct quiz and give assignments to practice their knowledge. | | | | | 03 | 0 | 0 | Text by video le chalk b | ctures, | NIL | |
| | | | | SCHE | ME OF AS | SESSI | MENT | • | | | | | | | | |
| S. No. | Meth | Method of Assessment Description of Ass | | on of Asse | essment | | | | Maximum Marks | | Dagaura | | sources F | Required | Externa I / Interna | |
| 1. | Paper pen test | | | udents will be asked to mponents and types. | ents will be asked to explain Explain basics of curves, conents and types. | | | ^{5,} 1 | 10 | | 10 | | 10 Test paper, assignmen + rating scale | | nents | Interna |

NIL

| DOD/ (D: 1 | | COLUEN A FOR LEADNING OUTCOME | Bra | Branch Code | | | urse Code | CO Code | LO Code | Format No. | |
|-----------------------------|--|---|-----|-------------|---|--|-----------|---------|---------|------------|--|
| RGPV (Diploma Wing) Bhopal | | SCHEME FOR LEARNING OUTCOME | | 0 | 3 | | | 4 | 2 | 4 | |
| COURSE NAME | Advance surv | Advance survey | | | | | | | | | |
| CO Description | Develop skills | Develop skills to set out simple circular curve on the field. | | | | | | | | | |
| LO Description | Describe various methods of setting out of simple circular curves. | | | | | | | | | | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|---|--|---|---------------|---------------------|---|---------|
| 1. | Method of Setting out curve by offset from Long chord method and Rankine's method of deflection. angles. Simple Numerical problems on above topics. | Interactive classroom teaching, assignments, quiz, presentation. | Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge. | 06 | 00 | Text book, video lectures, chalk board. | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|----------------------|--|------------------|--|-----------------------|
| 1. | End term exam | Students will be asked to Describe various methods of setting out of simple circular curves. | 14 | Question paper, assignments + rating scale | External |

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Nil



| RGPV (Diploma Wing) Bhopal | | | | | Bra | nch Code | Co | ourse C | ode | CO Co | de LO Code | Format No. | |
|---------------------------------------|-----------------|--|-----------------------------|---|---|--|---------------------|---------|---------------|-------|--------------------|--|-----------|
| RGPV (L | Diploma | Wing) Bhopal | SCHEME FOR LEARNING OUTCOME | | | С | 0 3 | | | | 4 | 3 | 4 |
| COURSE NAME | | Advance surv | ey | | | I | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | | o set out | simple circular curve on t | he field. | | | | | | | | |
| LO Desc | cription | Set out simple c | ircular cur | ves on field and plot it. | | | | | | | | | |
| | | | | S | CHEME OI | F STUI | ΟY | | | | | | |
| S. No. | Learning Conten | | nt | Teaching -Learning Method | Descrip | otion o | f T-L Prod | cess | Teacl Hrs. | | Pract. Fut Hrs. | LRs Required | l Remarks |
| 1. | СІ | etting out simple urve by rainkine's nd plot it. | | Lab demonstration, hands on practice, lab assignments | contents handout Teacher the com | and p to stu- will de ponent will le | dents. emonstrat | | 00 | | 06 | Handouts, chalk board, PPT, manual, charts, video film, models, virtual lab | NIL |

SCHEME OF ASSESSMENT

| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|---|--|------------------|-------------------------------|--------------------|
| 1. | Observation of Field performance and submission | Students will be asked to Set out simple circular curves on field and plot it. | - | Lab record / rating scales | Internal |
| | | ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY | (IF ANY) | | |

ITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of Lab Work



| DODY (| (D:le) | Min or \ Discount | 0011514 | | 00145 | Bra | nch (| Code | C | ourse | Code | COC | ode | LO Code | ormat No. |
|--------|--|-------------------|--------------------------|--|---|---------|--------|--------|-------|------------|---------------|-------------------|---|----------------|---------------------|
| RGPV (| (Diploma v | Wing) Bhopal | SCHEMI | E FOR LEARNING OUT | COME | C | 0 | 3 | | | | 5 | 5 | 1 | 1 |
| | JRSE AME | Advance surve | ey | | | | | | | | | | | | |
| CO Des | scription | Study of differer | nt advanc | e surveying equipment a | nd analyzin | g varic | us as | pect o | of ge | ologic | al fea | ture thro | ugh re | emote sensing. | |
| LO Des | cription | Describe differe | nt termino | ology and use of advance | surveying | equip | nent. | | | | | | | | |
| | | | | S | CHEME OF | STU | ΟY | | | | | | | | |
| S. No. | L | earning Conten | it | Teaching -Learning Method | Descrip | otion o | of T-L | Proc | ess | Tea Hrs | | Pract. Tut Hrs | . 1 | LRs Required | Remarks |
| 1. | Construction and use of one seco Micro Optic Theodolite, Electronic Digital Theodolite. Features of Electronic Theodolite Principle, Components, functions and use of E.D.M. and Total stations. | | e. odolite nctions | Interactive classroom teaching, assignments, quiz, presentation | Teacher will explain the contents and provide handouts to the students, teacher will conduct a quiz and give assignments to practice their knowledge. | | | | 03 | | 00 | | ext book, narts, video ctures, chalk pard. | NIL | |
| | | | | SCHE | ME OF AS | SESS | MEN | Γ | | | | | | | |
| S. No. | Metho | od of Assessme | ent | Description | n of Asse | ssme | nt | | | N | laxim Marl | | Reso | urces Required | Externa /Interna |
| 1. | and use of advance surve | | | ring equipr | nent. | | | | | 06 | 6 | | estion paper, assignments rating scale | Externa | |
| | | | Al | DDITIONAL INSTRUCT | IONS FOR | THE | HOD/ | FAC | ULT | Y (IF | ANY) | | S | scale | |

| | 'Dimlama N | A/:na \ Dhanal | COLUEN | IE EOD I EADNING OUT | 00145 | Bra | nch (| Code | Co | ourse C | ode | CO C | ode | LO Code | Format No. |
|---|--|------------------|---|--|-------------|---------|------------------|--------|------|--------------|--------------|---|---|----------------|-----------------------|
| RGPV (| טוpioma י | Wing) Bhopal | SCHEM | IE FOR LEARNING OUT | COME | C | 0 | 3 | | | | 5 | | 2 | 4 |
| | JRSE ME | Advance surve | ey | | | | | | | | | | | | |
| CO Des | cription | Study of differe | nt advanc | ce surveying equipment a | nd analyzin | g vario | us as | pect o | f ge | ological | feat | ure throเ | ıgh re | emote sensing. | |
| LO Des | cription | Explain remote s | sensing ar | nd its application. | | | | | | | | | | | |
| | I | | | SC | CHEME OF | STU | ΟY | | | | | | | | |
| S. No. | L | earning Conter | nt | Teaching -Learning Method | Descrip | tion o | of T-L | Proce | ess | Teac Hrs. | | Pract. Tut Hrs. | L | Rs Required | Remarks |
| | Remote Sensing – Introduction, Electro-Magnetic Energy, Remote sensing system Passive system, Active system. Applications of remote sensing in | | contents handouts teacher v and give | cher will explain the sents and provide douts to the students, her will conduct a quiz give assignments to stice their knowledge. | | | | 04 | | 00 | ch lec | ext book, narts, video ctures, chalk pard. | NIL | | |
| | | | | SCHE | ME OF AS | SESS | MEN ⁻ | Γ | | | | | | | |
| S. No. | Metho | od of Assessm | ent | Descriptio | n of Asse | ssme | nt | | | | axim Mark | | Resou | urces Require | External /Internal |
| 1. End term exam Students will be asked to explain application. | | | | · | | | | | | 06 | | a + | estion paper, assignments rating scale | External | |
| | | | Δ | ADDITIONAL INSTRUCT | IONS FOR | THE | HOD/ | FAC | JLT | Y (IF AI | NY) | | | | |



| | | | | | | Bra | ncl | h Code | C | ourse Co | de | CO Co | de | LO Code | Format No. |
|--|------------|--|--|---|------------------------------------|----------------------------|--|--------|-------|------------------|-------|------------------|---|----------------------|-------------|
| RGPV (| Diploma | Wing) Bhopal | SCHEM | EME FOR LEARNING OUTCOME | | | (| 0 3 | | | | 5 | | 3 | 4 |
| | JRSE ME | Advance survey | 1 | | | | | | | | | | | | |
| CO Des | cription | Study of different | advanc | e surveying equipment a | nd analyzing | yaric | us | aspect | of ge | eological f | eatur | e throu | gh rer | note sensing | • |
| LO Des | cription | Explain the use of | GPS / G | IS | | | | | | | | | | | |
| | | | | S | CHEME OF | STUI | DΥ | | | | | | | | |
| S. No. | ı | Learning Content Teaching Learning Method | | | | Description of T-L Process | | | | | | ract. ıt Hrs. | LRs Required | | Remarks |
| Introduction, definition and components, content of GIS/GPS ,geological concept , application of GIS. Use of global positioning system (GPS) instruments. Introduction to drone Surveying. | | | Interactive classroom teaching, assignments, quiz, presentation | Teacher value on teacher wand give a practice t | and p to th vill co assig | rov e s ndu nm | vide tudents uct a qu ents to | ıiz | 03 | | 00 | cha | kt book, arts, video tures, chalk ard. | NIL | |
| | | | | SCHE | ME OF AS | SESS | ME | NT | | | | | | | |
| S. No. | Meth | d of Assessment Description of A | | | | ssme | nt | | | Maximum Marks | | Recultede Reall | | rces Require | ed External |
| 1. | F | Paper pen test | Stu | Students will be asked to explain th | | | of G | PS / G | S | | 10 | | | paper, ssignments | Internal |

+ rating scale



ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY) NIL

| DOD/ (D: 1 | \ DI | | Branch Code | | | Course Code | | CO Code | LO Code | Format No. |
|-----------------------------|------------------|---|-------------|-------|---------|-------------|---------------|----------------|--------------|------------|
| RGPV (Diploma Wing) Bhopal | | SCHEME FOR LEARNING OUTCOME | C | 0 | 3 | | | 5 | 4 | 4 |
| COURSE Advance survey NAME | | | | | | | | | | |
| CO Description | Study of differe | ent advance surveying equipment and analyzin | ng vario | us as | pect c | f ge | ological feat | ure through re | mote sensing | g. |
| LO Description | Measure the ang | gles by micro optic theodolite, ,geographical p | arame | ers b | y total | stati | ion and use | of GPS and GI | S | |

| S. No. | Learning Content | Teaching -Learning Method | Description of T-L Process | Teach Hrs. | Pract. /Tut Hrs. | LRs Required | Remarks |
|--------|---|---------------------------------------|--|---------------|---------------------|---|---------|
| 1. | Study and use of 1 second Micro Optic Theodolite for measurement of Horizonta and Vertical angles. Study of E.D.M. for knowing its components. Determine the geographical parameters of 4-5 sided traverse by total station and plot them. Use GPS to locate the coordinates of a station. | hands on practice, lab assignments | Teacher will explain the contents and provide handout to students. Teacher will demonstrate the components in lab. Students will learn through practice. | | 12 | Handouts, chalk board, PPT, manual, , video film, virtual lab | NIL |
| | | | | | | | |

SCHEME OF ASSESSMENT



| S. No. | Method of Assessment | Description of Assessment | Maximum Marks | Resources Required | External /Internal |
|--------|---|--|------------------|-------------------------------|--------------------|
| | Observation of Field performance and submission | Students will be asked to measure the angles by micro optic theodolite, ,geographical parameters by total station and use of GPS and GIS | - | Lab record / rating scales | Internal |
| | | ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY | (IF ANY) | | |
| | | Part of Lab Work | | | |