


AQAR 2023-24

2.6.2 - Attainment of Programme Outcomes and Course Outcomes

as evaluated by the institution

A successful attempt was made to measure the quantitative attainment of course outcomes of a few courses using Excel. Setting of the question papers was carried out as per Bloom's taxonomy. Mapping of the questions were completed as per their respective COs. Analysis of assessed papers were done, and marks distribution was presented CO wise. CO wise attainment percentage was obtained for each student. The percentage obtained was scaled down to 1, 2 and 3 by keeping the bracket of 40 to 60, 60 to 80 and Above 80 and its average was presented as graph. Encouraged by the response more courses will be measured for their attainment in the forthcoming years.




Principal
SIES College of Arts, Science &
Commerce (Autonomous)
Sion (West), Mumbai - 400 022.

**SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS),
SION WEST, MUMBAI – 400 022.
SEMESTER END EXAMINATION**

Class: SYBA

Semester: IV

Paper Title: Applied Component

Subject: Comparative Study of Religions

Paper code: SIUACOR 41

Day:

Date:

Time:

Maximum Marks: 60

NOTE: 1. Attempt all four questions with the given choice.

2. Figures to the right indicate maximum marks.

Q.1. (a) Explain in detail the concept of God and nature of world as conceived in Hinduism. (15)

OR

Q.1. (b) Bring out the significance of prayer and worship in Hinduism. Write a note on *Samskaras* or milestone rites in *Hindu Dharma*. (15)

Q.2. (a) Why is Jainism called a *Shramana* and *Nastika* tradition Discuss at length the Jain calendar. (15)

OR

Q.2. (b) How would you express the concept of life after death and human destiny as mentioned in Hinduism and Jainism? (15)

Q.3. (a) Elaborate on the main ideas of the scriptures in *Buddha Dhamma*. What caused the formation of major sects in Buddhism? (15)

OR

Q.3. (b) How would you prove the significance of *Dhamma* with special reference to *Arya satyanis* and *Arya Astangika marga*? (15)

Q.4. (a) Is Sikhism a syncretic faith? Bring out the socio-cultural roots of Sikhism with reference to the teachings of Gurus. (15)

OR

Q.4. (b) In context of fundamental beliefs in Sikhism, examine the concepts of human status, evil and suffering. (15)

| Name of the Programme | Bachelor of Arts | | Programme Code | SIUAPHI | Name of the Department | Philosophy |
|-----------------------|------------------|-------------|--------------------------------|--------------------------|------------------------|---------------|
| Class | Semester | Course Code | Course Name | No. of Lectures/PER WEEK | Credits | Marks |
| SYBA | IV | SIUCOR 41 | Comparative Study of Religions | 45/4 | 2 | 40 + 60 = 100 |

Learning Outcomes -

Comparative Study of Religions Course aims at enhancing the skill and attitude based programme outcomes while mapping them with knowledge competencies as listed below:

| Affinity with PO nos. | COs | Statements | Cognitive Levels |
|-----------------------|-----|--|------------------|
| 3 | CO1 | Illustrate the evolving nature of the Indian origin religions | U |
| 4, 8 | CO2 | Develop conceptual understanding of Indian traditional beliefs with a scientific rationale | U, AN |
| 3, 5, 7 | CO3 | Explain the importance of ethico-religious experiences | Ap |

PO- Program Outcome, CO-Course Outcome;

Bloom's Levels: U-Understanding; Ap-Applying; An-Analyzing; E-Evaluating

| Q. No. | Questions | Marks | Bloom's level | CO Nos. | PO Nos. |
|---------|--|-------|---------------|---------|---------|
| Q.1. a) | Explain in detail the concept of God and nature of world as conceived in Hinduism. | (15) | U | 1 | 3 |
| | OR | | | | |
| b) | Bring out the significance of prayer and worship in Hinduism. Write a note on <i>Samskaras</i> or milestone rites in <i>Hindu Dharma</i> . | (15) | Ap | 2 | 3,7 |
| Q.2. a) | Why is Jainism called a <i>Shramana</i> and <i>Nastika</i> tradition? Discuss at length the Jain calendar. | (15) | An | 3 | 4,7 |
| | OR | | | | |
| b) | How would you express the concept of life after death and human destiny as mentioned in Hinduism and Jainism? | (15) | An | 1 | 3 |
| Q.3. a) | Elaborate on the main ideas of the scriptures in <i>Buddha Dhamma</i> . What caused the formation of major sects in Buddhism? | (15) | An | 3 | 4,8 |
| | OR | | | | |
| b) | How would you prove the significance of <i>Dhamma</i> with special reference to <i>Arya satyanis</i> and <i>Arya Astangika marga</i> ? | (15) | An | 3 | 3,8 |
| Q.4. a) | Is Sikhism a syncretic faith? Bring out the socio-cultural roots of Sikhism with reference to the teachings of Gurus. | (15) | Ap | 2 | 5 |
| | OR | | | | |
| b) | In context of fundamental beliefs in Sikhism, examine the concepts of human status, evil and suffering. | (15) | Ap | 1 | 3 |

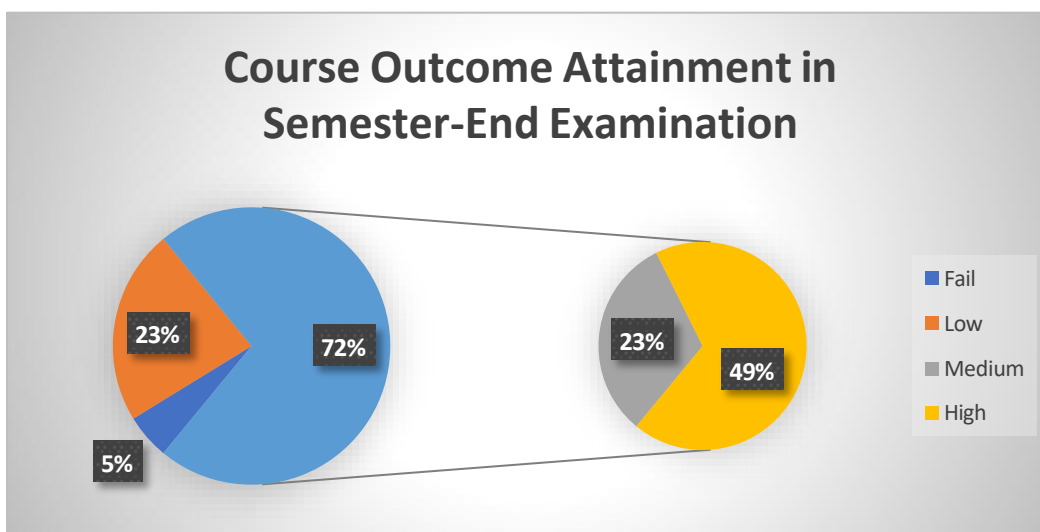
| CO/PO | PO 3 | PO 4 | PO 5 | PO 7 | PO 8 |
|-------|------|------|------|------|------|
| CO 1 | 2 | - | - | - | - |
| CO 2 | 2 | 1 | 2 | 3 | - |
| CO 3 | 2 | 1 | - | 2 | 1 |

High- 3; Medium – 2; Low- 1

4. Programme Outcomes and Programme Specific Outcomes POs and PSOs in B.A. Philosophy

On completion of Graduation in B.A. Philosophy the learners shall be able to demonstrate and attain the following graduate attributes at Cognitive, Skill and Attitude levels for the award of the qualifying degree.

| Pos | PO Statements |
|--|--|
| COGNITIVE LEVEL | |
| PO3 <i>Reasoning ability and Rational thinking</i> | Think rationally and analyze socio-cultural-legal issues with decisive responsibility that promote community welfare. |
| SKILL LEVEL | |
| PO4 <i>Research skill</i> | Integrate the contextual knowledge in an inter-disciplinary framework by exercising the analytical skill, research ability, creativity, for employability and collaborating with industries. |
| PO5 <i>Effective Communication Skill</i> | Facilitate the ability to speak, read, write, listen effectively in Indian languages, other medium of instructions and enhance the use of digital communication tools. |
| ATTITUDE LEVEL | |
| PO7 <i>Ethical values</i> | Recognize and respect different value systems with a commitment to fulfil one's own professional duties and responsibilities. |
| PO8 <i>Self-directed Learning</i> | Demonstrate the ability to keep evolving in life-long learning and upgrade with the changing global and technological advancements. |



| | |
|---|-----------|
| Fail | 3 |
| Low | 13 |
| Medium | 13 |
| High | 28 |
| No. of Students appeared for the Examination | 57 |

**S.I.E.S. COLLEGE OF ARTS, SCIENCE AND COMMERCE
(EMPOWERED AUTONOMOUS)
SION (WEST), MUMBAI-400 022**

**Department of Biotechnology
Program : MSc Biotechnology**

| SR. NO. | Details |
|--------------|--|
| PO1. | <p>Solving Complex Problems:</p> <p>Applying the knowledge of various courses learned under the program to break down complex problems to simple components by designing processes for problem solving</p> <p><i>Cognitive Levels: An, Ap</i></p> |
| PO2. | <p>Critical Thinking and reasoning ability:</p> <p>Equipping to select, create and apply the appropriate tools and techniques through electronic media for the purpose of understanding and analyzing data and drawing inference keeping in mind its limitations and disadvantages</p> <p><i>Cognitive Levels: U, An</i></p> |
| PO3. | <p>Research Aptitude:</p> <p>Utilizing the acquired contextual knowledge in an interdisciplinary framework. Integrating research-based knowledge and research-based methods involving problem definition, analysis and interpretation of data followed by its consolidation to arrive at valid conclusions</p> <p><i>Cognitive Levels: Ap, An, E, C</i></p> |
| PO4. | <p>Proficiency with ICT:</p> <p>Facilitating to write and document effectively; make crisp presentations and reports and convey the message/ instructions/findings clearly as well as using ICT tools in analyzing data.</p> <p><i>Cognitive Levels: U, Ap</i></p> |
| PSO1. | <p>Understand the need for research and innovation in the field of Biotechnology</p> <p>Prepare, plan and execute a research project independently as well as critically evaluate and interpret results</p> <p><i>Cognitive Levels: U, Ap</i></p> |
| PSO2. | <p>Practical Applications:</p> <p>Design and execute experiments applying the concepts learnt and thereby being able to translate theoretical knowledge to practical knowledge</p> <p><i>Cognitive Levels: Ap, An</i></p> |

SIPSBT41 – Nanotechnology and IPR

| CO. No. | Course Outcome of SIPSBT41 Upon completion of this course, the learner will be able to | Cognitive Level | Affinity with PO/ PSO |
|---------|---|-----------------|-----------------------|
| CO1 | The various aspects of Nanotechnology | U, R | PO1, PSO1 |
| CO2 | Understand the applications of nanotechnology | U, R | PO1, PSO1 |
| CO3 | Use of IPR in the biological sciences | An, U | PO1, PSO1 |
| CO4 | Importance of patents in the field of research | U, An | PO1, PSO1 |

Question Paper

1. Elaborate on the synthesis of nanomaterials using biotemplates. (12)
(CO1 / BTL2)

OR

1. (a) Discuss the top-down approach for synthesis of nanomaterials. (6)
(CO1 / BTL2)
- (b) Justify : Bacterial flagella is a natural nanorobotic device. (6)
(CO1 / BTL5)
2. Give an account of the applications of nanotechnology in medicine and healthcare. (12)
(CO1 / BTL2)

OR

2. (a) Explain the methods for in-vitro testing of nanotoxicity. (6)
(CO1 / BTL2)
- (b) Write a note on environmental applications of nanomaterials. (6)
(CO1 / BTL2)
3. What are novel and extant varieties? State the criteria for their protection under PPV&FR. (12)
(CO2 / BTL1)

OR

3. (a) State the significance of geographical indications and their protection. (6)
(CO3 / BTL1)
- (b) Describe the advantages and disadvantages of trade secrets. (6)
(CO3 / BTL2)

4. Discuss the patentability of biotechnological inventions in India and abroad. (12)
(CO4 / BTL2)

OR

4. (a) Outline the process of patenting in India. (6)
(CO4 / BTL2)

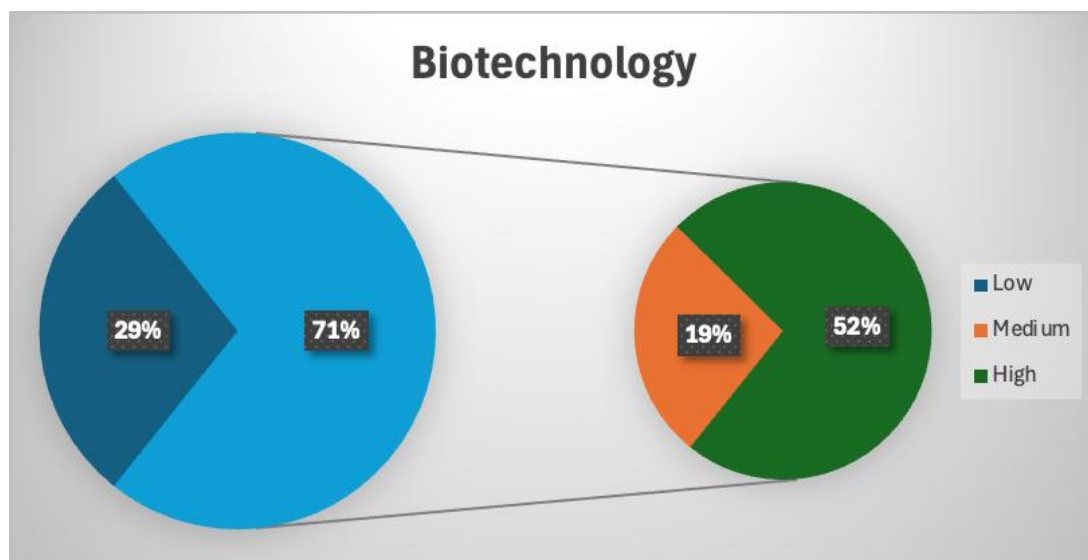
(b) Elaborate on the assignment and licensing of patents. (6)
(CO4/ BTL2)

5. Write a short note on any three of the following: (12)
(CO1/2/3/4 / BTL2)

- (a) Carbon nanotubes
- (b) Ecotoxicity analyses of nanomaterials
- (c) Industrial design
- (d) Patent databases
- (e) Patent applications

Overall analysis

| Bloom Taxonomy Level (BTL) | 1 Remember | 2 Understand | 3 Apply | 4 Analyze | 5 Evaluate | 6 Create |
|----------------------------|------------|--------------|---------|-----------|------------|----------|
| Percentage of Questions | 15 | 77 | - | - | 8 | - |



52% of students showed high level of attainment, 19% had medium attainment and 29% had low attainment.

**SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS),
SION WEST, MUMBAI – 400 022.
SEMESTER END EXAMINATION**

Class: MSc

Semester: II

Subject: Zoology

Title: Physiological Processes III

Paper code: SIPSZOPHY41

Day:

Date:

Time:

Maximum Marks: 60

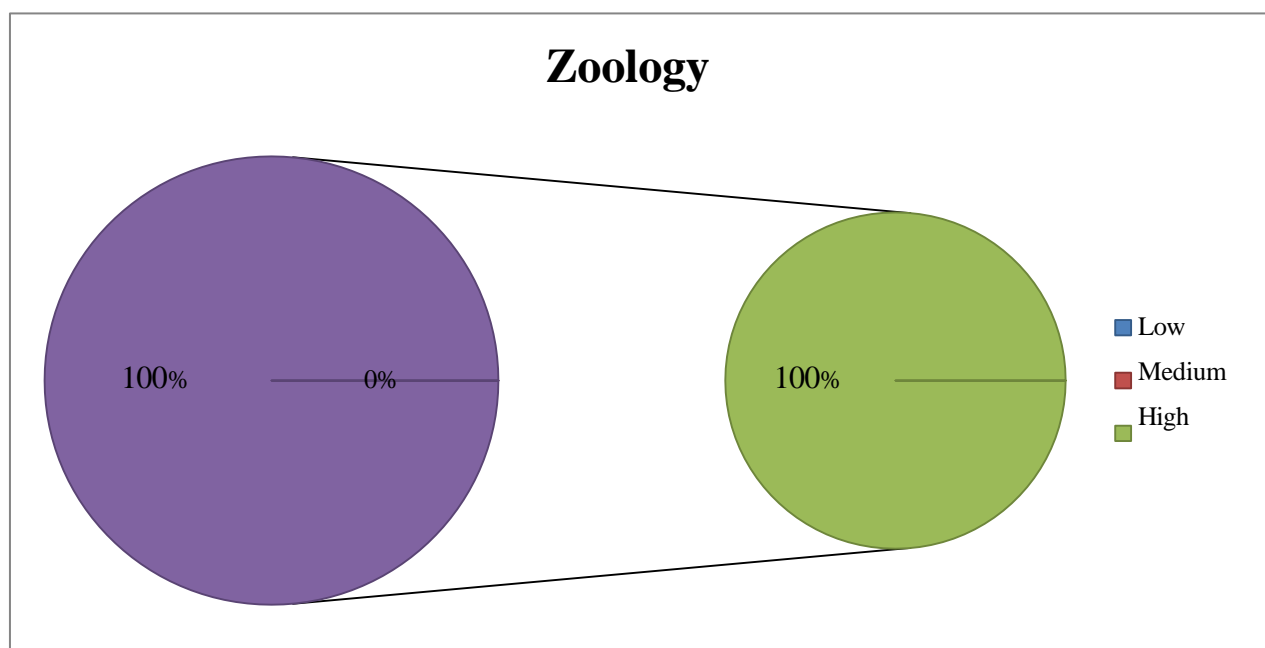
**NOTE: 1. Attempt all four questions with the given choice.
2. Figures to the right indicate maximum marks.**

| Module 1: Comparative Endocrinology | | | | |
|--|--|------------------|---------------|----------|
| Module 2: Basics of Neurobiology | | | | |
| Module 3: Physiology of Nervous System | | | | |
| Module 4: Sensory system | | | | |
| COs | Statements | Cognitive Levels | Affinity with | |
| | | | PO nos. | PSO nos. |
| CO1 | Comparative Endocrinology emphasizes on many complexities of vertebrate and invertebrate endocrine systems at the sub-molecular, molecular, cellular, and at an organismal level of analysis | U, R, An | 1,2 | 1, 2 |
| CO2 | Knowledge of the organization of the nervous system and nerve conduction and fundamental information about the cellular biology and electrophysiological properties of neurons, neuroanatomy | U, R, An | 1, 2 | 1,2 |
| CO3 | Gain insights about the normal functioning of the nervous system in various animal kingdoms. | U, An | 1,2 | 1, 2 |
| CO4 | Gain information about the molecular mechanisms and neural systems used by vertebrates and invertebrates to sense the external and internal world and the comparative approach helps to understand common principles of sensory coding as well as the unique strategies employed to address specific biological needs. | An, R | 1,2 | 1, 2 |
| PO- Program Outcome, PSO-Program Specific outcome; CO-Course Outcome; Bloom's Taxonomy Levels: R-Remembering; U-Understanding; An-Analysing | | | | |

| Serial Number | Details of Programme Outcomes (POs) |
|----------------------|---|
| PO1 (Skill Level) | Problem Solving Ability (<i>U, Ap</i>) Apply the knowledge of various courses learned under a program to break down complex problems into simple components. Adopt and assimilate problem-based learning models and apply one's learning to solve real life problem situations. |
| PO2 (Skill Level) | Critical Thinking (<i>U, An, E</i>) Develop critical thinking based on a rationale to identify assumptions, verifying the accuracy and validity of assumptions, and making informed decisions. Inculcate the ability of logical reasoning to question the rationale behind concepts, ideas, and perspectives. |

| Question no. | Comprehension Or Understanding | Application | Analysis | Evaluation Or Judging | Total Marks [Including choice] |
|--------------|--|---|---|-----------------------|--------------------------------|
| Q 1 | With the help of schematic illustration, discuss the neuroendocrine system in mammals. (7 marks) | Add a note on the function and feedback system of oxytocin and vasopressin (8marks) | --- | | 15 marks |
| Q 1 | In the context of comparative endocrinology, comment on the following: b) Corpuscles of stannius and ultimobranchial bodies (7 marks) | --- | a) Evolution of pineal gland and its role as a biological clock (8 marks) | --- | 15 marks |
| Q 2 | With reference to Neurobiology, discuss the basic anatomy and types of neurons. (7 marks) | --- | Add a note on action potential generation and conduction (8 marks) | --- | 15 marks |
| Q 2 | In the context of Neurobiology, give an account of the following: a) Synapse classification and conduction. (7 marks) | b) Working mechanism of learning and memory (8marks) | --- | --- | 15 marks |
| Q 3 | With the help of diagrammatic representation, illustrate the nervous system of Scoliodon. (15 marks) | --- | --- | --- | 15 marks |
| Q 3 | In the context of physiology of nervous system, discuss the following: a) Nervous system of rat (7 marks) | --- | b) Compare and contrast the nervous system of Annelids and Arthropoda (8 marks) | --- | 15 marks |
| Q 4 | With reference to sensory system, give an account of chemoreception. (15 marks) | --- | --- | --- | 15 marks |
| Q 4 | In the context of sensory system, comment on the following: a) Types of senses and classification of receptors. (8 marks) | --- | b) Electroreception in fish. --- | --- | 15 marks |
| | (73 marks) | (16 marks) | (31 marks) | (0 marks) | (120) 60 |
| % | 60% | 13.3% | 25.8% | 0% | 100% |

PO and CO Attainment in Semester End Examination



SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE (EMPOWERED AUTONOMOUS)

SION WEST, MUMBAI – 400 022

SEMESTER END EXAMINATION

Class: SYBA

Semester: IV

Max marks: 60

Subject: HINDI

Paper: II

Course name: MASS MEDIA AND HINDI

Course Code: SIUAHIN42

Day:

Date:

Time:

NOTE – 1 - ALL QUESTIONS ARE COMPULSORY.

2 - SEPARATE ANSWER SHEET TO BE GIVEN.

SEMESTER IV

| Course Code | Semester | Credits | Lectures/week | Course Name |
|--|----------|---------|---------------|----------------------|
| SIUAHIN 42 | 4 | 3 | 3L | Mass Media and Hindi |
| Module 1-Mass Media –meaning, definition & scope | | | | |
| Module 2 –development & types of mass media | | | | |
| Module 3 – medium based writing & drafting for mass media lingual characteristics of mass media | | | | |
| Module 4-fundamental rights and RTI | | | | |

| CO No. | Outcomes | Cognitive Level | Affinity PO/PSO |
|--------|---|----------------------|---------------------------------|
| CO1 | Remember and understand the elements of Mass Media and its History & tradition in Hindi | R,U | PO2, PO3 & PSO1 |
| CO2 | Analyze various aspects of Mass Media and communication | U,An | PO2 & PO3,PSO2 |
| CO3 | Understand and analyze the different forms of Mass Media & its utility in larger context | U, An | PO1,PO2, PO4 & PSO2 |
| CO4 | Evaluate the social, political, cultural & Psychological impact of Mass Media in rural & urban India & create content suitable to nature of society & the various platforms of Mass Media | An, E & C | PO1, PO2, PO8 & PSO3 |

प्रश्न -1निम्ननिमित्त प्रश्न का उत्तर नलनल। (15)
जलसंचार के स्वरूप पर चचाा करते हुए, उसकी पररभाषाओं पर प्रकाश डालें ?
अथवा इक्ट्रॉनलक

जलसंचार माध्यमों के स्वरूप की समीक्षा कीनजए ?

प्रश्न -2निम्ननिमित्त प्रश्न का उत्तर नलनल। (15)
इंटरलट व मोबाइल के नवकासक्रम को स्पष्ट कीनजए ?
अथवा

दूरदशां व नसलमा के क्रमगत नवकास पर प्रकाश डालनल ?

प्रश्न -3निम्ननिमित्त नवषयों में से ककन्हलं तीं पर रटप्पणी नलनल। (15)

- 1-समाचारपत्र की भाषा
- 2-रेनडयो की भाषा
- 3-साक्षात्कार के प्रमुल तत्त्व
- 4-संवाद की नवशेषताएँ
- 5-फीचर की नवशेषताएँ

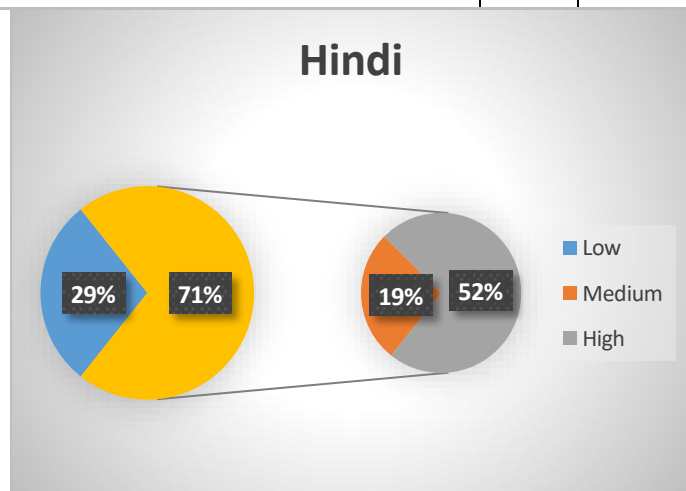
प्रश्न -4निम्ननिमित्त प्रश्न का उत्तर नलनल। (15)
संवलधान द्वारा वलए गए मौवलक अवधकार का वलश्लेषण कीवलए ?
अथवा

‘उरी’ वल्लम की समीक्षा वलखलए ?

| Question no. | Comprehension Or Understanding | Application | Analysis | Evaluation Or Judging | Total Marks [With choice] |
|--|--------------------------------------|-------------|----------|-----------------------------|------------------------------------|
| 1- नलनननलत प्रश्न का उत्तर नलनल। जलसंचार के स्वरूप पर चचाा करते हुए, उसकी पररभाषाओं पर प्रकाश डालें ? | 5 | 5 | 5 | - | 15 |
| | अथवा | | | | |
| 1 - इक्ट्रॉनलक जलसंचार माध्यमों के स्वरूप की समीक्षा कीनजए ? | 5 | 5 | 5 | - | 15 |
| 2 -नलनननलत प्रश्न का उत्तर नलनल। इंटरलट व मोबाइल के नवकासक्रम को स्पष्ट कीनजए ? | 8 | - | 7 | - | 15 |

| | | | | | | |
|--|---|--------|------------------|----------|----------|-----------|
| | अथवा | | | | | |
| 2 - दूरदर्शा व नसिमा के क्रमगत नवकास पर प्रकाश डानिए ? | 8 | - | 7 | - | 15 | |
| 3-1-निम्ननिमित्त नवषयों में से ककहीं तीि पर रटप्पणी निनिए। 1-समाचारपत्र की भाषा | 3 | - | 2 | - | 5 | |
| 3-2 - रेनडयो की भाषा | 3 | - | 2 | - | 5 | |
| 3-3 - साक्षात्कार के प्रमुि तत्व | 3 | - | 2 | - | 5 | |
| 3-4 - संवाद की नवशेषताएँ | 3 | - | 2 | - | 5 | |
| 3-5 - फीचर की नवशेषताएँ | 3 | - | 2 | - | 5 | |
| 4- निम्ननिमित्त प्रश्न का उत्तर निनिए। संविधान द्वारा विए गए मौविक अवधकार का विश्लेषण कीविए ? | 3 | 4 | 5 | 3 | 15 | |
| | अथवा | | | | | |
| 4 - उरी ' विल्म की समीक्षा विखिए ? | 3 | 4 | 5 | 3 | 15 | |
| | | | | | | |
| MARKS | 25 | 9 | 23 | 3 | 60 | |
| % | 41.67% | 15% | 38.33% | 5% | 100% | |
| | | | | | | |
| Q. No. | Questions | Mar ks | Bloo m' s leve l | CO Nos . | PO Nos . | PSO Nos . |
| 1- | निम्ननिमित्त प्रश्न का उत्तर निनिए। जिसंचार के स्वरूप पर चचाा करते हुए, उसकी पररभाषाओं पर प्रकाश डानिए ? | 15 | R,U | 1 | PO2, PO3 | PSO1 |
| | अथवा | | | | | |
| 1 - | | 15 | R,U | 1 | PO2, PO3 | PSO1 |

| | | | | | | |
|-------|---|----|-----------|---|---------------|------|
| | इक्ट्रॉनिक जिसंचार माध्यमों के स्वरूप की समीक्षा कीजिए ? | | | | | |
| 2 - | निम्ननिमित प्रश्न का उत्तर निनिए। इंटरिट व मोबाइ के नवकासक्रम को स्पष्ट कीजिए ? | 15 | U,An | 2 | PO2 & PO3 | PSO2 |
| | अथवा | | | | | |
| 2 - | दूरदशाि व नसिमा के क्रमगत नवकास पर प्रकाश डानिए ? | 15 | U,An | 2 | PO2 & PO3 | PSO2 |
| 3-1- | निम्ननिमित नवषयों में से ककन्हीं तीि पर रटप्पणी निनिए। समाचारपत्र की भाषा | 5 | U, An | 3 | PO1, PO2, PO4 | PSO2 |
| 3-2 - | रेनडयो की भाषा | 5 | U, An | 3 | PO1, PO2, PO4 | PSO2 |
| 3-3 - | साक्षात्कार के प्रमुि तत्त्व | 5 | U, An | 3 | PO1, PO2, PO4 | PSO2 |
| 3-4 - | संवाद की नवशेषताएँ | 5 | U, An | 3 | PO1, PO2, PO4 | PSO2 |
| 3-5 - | फीचर की नवशेषताएँ | 5 | U, An | 3 | PO1, PO2, PO4 | PSO2 |
| 4- | निम्ननिमित प्रश्न का उत्तर निनिए। संविधान द्वारा विे गए मौविक अवधकार का विश्लेषण कीविए ? | 15 | An, E & C | 4 | PO1, PO2, PO8 | PSO3 |
| | अथवा | | | | | |
| 4 - | उरी ' विल्म की समीक्षा विखिए ? | 15 | An, E & C | 4 | PO1, PO2, PO8 | PSO3 |



PO and CO Attainment in Semester End Examination