B. A/ B. Sc B. Ed Semester VI: Schooling, Socialization and Identity

Note: a) Attempt any three Questions

b) Write each answer in250 words

1. What is socialization? While mentioning the different agencies of Socialization, discuss about the competing roles of Home and Mass Media (social media) in socializing yourself

2. What is Identity? What social categories namely, caste, gender, religion and nation factored in developing your own identity?

3. Schools are meant to develop secular and national identity among students? How far the school where you studied developed these identities in you? Illustrate with example

4. What are multiple identities? How you arrange your identity in the hierarchy of preference of caste, gender, religion, country? And why?

5. What should be the appropriate identity in globalized world? Why?

Regional Institute of Education, Bhopal
B.Sc. B.Ed. VI Semester, 2020
MOT Physical Science

MM – 60

Attempt any three of the following. All questions carry equal marks.

Q1. Describe the advantages of collaborative and cooperative learning for a physical science teacher.

Q2. Describe the format of lesson planning in constructivist prospect.

Q3.Prepare or blue print of a physical science question paper for upper primary students.

Q4.Describe the role of NCERT in preparation of teachinglearning material.

Q5.Enumerate the advantages & limitations of ICT in teaching learning of physical science.

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REGIONAL INSTITUTE OF EDUCATION, BHOPAL

B.Sc.B.Ed. VI Semester

Botany Theory

Maximum Marks: 60

Attempt any three questions. Each question carries 20 marks.

Q.1. Describe the classification of enzyme and Enzyme code.

Q.2. Discuss the plant-water relationship with reference to osmotic pressure.

Q.3. Describe the cyclic photophosphorylation.

Q.4. Describe biosynthesis and mechanism of action of gibberellins.

Q.5. Describe biological clocks with suitable examples.

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B.A./B.Sc., B.Ed. Sixth Semester Examination, 2020

Entrepreneurship Development

Note: Attempt three questions. Question no. 1 is compulsory. Marks of the questions are indicated against them.

Q. 1: Answer the following questions in about 150 words: **2 x 5 = 10 Marks**

निम्नलिखित प्रश्नों के उत्तर लगभग 150 शब्दों में दीजिए :

   a. **Entrepreneurship is the key to face the challenges of development in modern age.**

      उद्यमित्ता आधुनिक युग में विकास की चुनौतियों का सामना करने की कुंजी है।

   b. **What is 'SMART'? How it is linked with business goals?**

      'स्मार्ट' क्या है? यह व्यावसायिक लक्ष्यों से किस प्रकार जुड़ी हुई है?

   c. **What are the Projects of Government Organizations? Give their outlines.**

      राजकीय संगठनों की परियोजनाएं क्या होती है? उनका एक प्रारूप दीजिए।

   d. **What qualities are needed for a modern entrepreneur? Elaborate.**

      आधुनिक उद्यमी में क्या विशेषताएं होनी चाहिए? विवेचना कीजिए।

   e. **What are administrative problems of an entrepreneur? Discuss.**

      एक उद्यमी की प्रशासनिक समस्याएं क्या है? चर्चा कीजिए।

Q.2: What are features of an entrepreneur? Elaborate qualities of a successful entrepreneur in present age?

एक उद्यमी की विशेषताएं क्या होती है? आधुनिक युग के सफल उद्यमी के गुणो को बताइये।   **15 Marks**

Q. 3: What is 'Business Leadership'? How it is to be developed in Indian entrepreneurs in ICT age?

व्यावसायिक नेतृत्व क्या है?आई. सी. टी युग के भारतीय उद्यमियों में इसका विकास कैसे किया जाना है?

         15 Marks

Q. 4: "Entrepreneurship has problems in the areas of registration, arrangement of capital, un-interrupted power supply, etc. which altogether results the scarcity in ownership and administration and has made entrepreneurship a challenging task." Discuss.

"उद्यमिता में पंजीकरण, पूंजी व्यवस्था, बिना रूकाबट बिजली आपूर्ति आदि क्षेत्र में समस्याएं हैं, जो पूरी तरह से स्वामित्व और प्रशासन में कमी का कारण है और उद्यमित्ता को एक चुनौतीपूर्ण कार्य बना दिया है।" चर्चा करें।

         15 Marks

   "**In 21st century modern management skills have made entrepreneurship herculean but the young generation prefers it.**" **Discuss.**

"इक्कीसवी सदी में आधुनिक प्रबंधन कौशल ने उद्यमशीलता को हरकूलियन बना दिया है, लेकिन युवा पीढ़ी इसे पसंद करती है। " चर्चा करें।

         15 Marks

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Regional Institute of Education, Bhopal

B.A.B.Ed./B.Sc.B.Ed. VI Semester

Gender Issues and Peace Education

MM: 40

Note: Attempt any three of the following

Q1. Describe the components of Peace and define "Education for Peace".

Q2. Explain the Activities for Education for Peace. What are the components of Personality Formation?

Q3. What are cause for Conflict? Describe the skills and Strategies for Conflict-Resolution.

Q4. What are the strategies for Self Management?

Q5. Explain, how can a teacher become Peace Builder.

B.Sc.B.Ed. VI Semester, Examination
2020
(Mathematics)
Paper: M - 6.1 METRIC SPACES

Time: 3 Hour   **Maximum Marks: 30**

Note: Answer any 3 questions.

Q1. Write the definitionand examples of metric spaces. Also define Subspace of a metric space.

Q2. Write a short note on :

   (i)   Neighbourhoods

   (ii)   Limit points

   (iii) Interior points

   (iv)   Open and closed sets

   (v)   Interior points

Q3. (i) Define Cauchy sequence and convergent Sequence.

   (ii) Every convergent sequence in a metric space is a Cauchy sequence.

Q4. State and proof Baire Category Theorem.

Q5. What is compact set? Any continuous image of compact space is compact.

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B.Sc.B.Ed. VI Semester, Examination 2020
(Mathematics)
Paper: M - 6.2 Linear Algebra

Time: 3 Hour   **Maximum Marks: 30**

Note: Attempt any three questions.

1. State and prove fundamental theorem of vector space homomorphism.

2. Non-empty subset of a vector space $V(F)$ is a subspace of a vector space $V(F)$ iff $a,b \in F$ and $\alpha, \beta \in W \Rightarrow a\alpha + b\beta \in W$.

3. Let $V(F)$ be a finite dimensional vector space and $W_1 \& W_2$ be two subspaces of $V(F)$. Then show that $\dim(W_1 + W_2) = \dim W_1 + \dim W_2 - \dim(W_1 \cap W_2)$.

4. If $U \& V$ are vector space over the field F and let T is a linear for transformation from U into V. Suppose U is finite dimensional. Then prove that $rank(T) + nulity(T) = \dim(U)$.

5. If $V(F)$ is finite dimensional vector space then prove that any two bases of $V(F)$ have the same number of elements.

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B.Sc.B.Ed. VI Semester, Examination 2020
Paper: PC-2 Mathematics-2

Time: 3 Hour   **Maximum Marks: 60**

Note: Answer any three questions.

1. How does a unit plan differ from the presentation and development of subject matter in textbook?

2. Write a short note on any four of the following:
   a) Inductive Method

   b) Analysis Method

   c) Use of ICT in teaching and Learning of Mathematics

   d) Self-Learning Materials

   e) Intuitive Learning

3. What is the role of 'content analysis' in unit planning? Discuss with example.

4. Write a short note on any four of the following:
   a) Learning of mathematics by gifted children

   b) Learning of mathematics by slow learners

   c) Venn Diagram as a tool for teaching-learning of Mathematics

   d) MS Equation Editor

   e) Teaching Aids

5. How do you motivate children to learn mathematics? Explain with examples.

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Regional Institute of Education, Bhopal
B.Sc. B.Ed. VIth Semester
Semester and Exam - 2020
Zoology

Total–60 Marks

Note: **Draw diagramme wherever necessary**
                 All questions carries equal marks

Q1. Give note on

    (i)   Estrous Cycle and
    (ii)   Menstrual Cycle

Q2. Describebriefly the different types of cleavages.

Q3. Write note on various types of parthenogenesis and its importance.

Q4. Give description of pituitary gland hormones and their functions.

Q5. Explain the structure of thyroid and parathyroid glands and their functions.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

B.Sc.B.Ed. VI Semester

PC-II Biological Sciences

Theory

Maximum Marks: 60

Attempt any three questions of your choice. All questions carry equal marks.

Q.1. What are biology related social and ethical issues? How will you address these issues in your biology class? Give three concrete examples of your choice.

Q.2. Using NCERT textbook of Science for IX Class prepare a Unit Plan and a Lesson Plan for Biology portion of your choice.

Q.3. Construct order test paper of 25 marks containing questions of knowledge level, higher thinking and application abilities. also prepare a blue print for the same.

Q.4. Describe the importance of usage of Laboratory, equipments, materials, manuals & records in the teaching-learning of Biology. Give three concrete examples of your choice.

Q.5. How would you integrate ICT for effective teaching-learning of Biology in your classroom. Discuss any three schemes of NCERT/Govt. of India as example.

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Regional Institute of Education Bhopal

B.Sc. B.Ed. VIth Sem Examination

Total Marks – 60

Each question carries 20 marks

Note: Attempt any three questions

Q1. What do you understand by reverse current of a diode? What is the effect of temperature on the reverse current of a PN junction?

Q2. Differentiate between PNP and NPN transistors. Why are collector and emitter currents nearly equal in these transistors? Define transistor α.

Q3. Explain the working of a common emitter amplifier with the help of its circuit diagram. Explain how dc load line is drawn for a common emitter amplifier.

Q4. State and explain the voltage division principle for two resistors in series and current division principle for two resistors in parallel.

Q5. Describe the function of core and cladding in optical fiber. What is acceptance angle? Why do we need to know this angle?

Semester Examination-2020
B.Sc. B.Ed.VI
Chemistry

Time:- 3 Hr   **M.M .-   60**

Note: Attenpt any three questions.   Each question carry equal marks.

Q.I.   Write short notes on (any four)   **(20)**

i.   **Pearson HSAB concept**
ii.   **Symbiosis**
iii.   **Electronegativity**
iv.   **Bonding in Triphosphazenes**
v.   **Silicones**

Q. II.   **(20)**

i.   **Explain Crystal field splitting in octahedral complexes.**

ii.   **Discuss the various factors affecting the crystal - field parameters**

iii.   **Define Trans effect**

iv.   **Explain substitution reactions of square planar complexes.**

vi.   **What are the factors that affect the stability of metal complexes.**

Q.III. Write the short notes on   **(15)**

i.   **Spin-only formula**
ii.   **L-S coupling**
iii.   **Types of electronic transitions**

2.   **Explain the orgel energy diagram for d^3 state.**   **(5)**

Q.IV

1.   Explain the properties and nature of bonding in organolithium
     compounds   (5)

2.   Write short notes on   (15)

  i.   Ziegler-Natta   Polymerisation
 ii.   Polyesters
iii.   Synthetic rubbers

Q.V.

1.   What   are   Metalloporphyrins? Explain with special reference to
     Haemoglobin.   (8)

2.   Explain Nitrogen fixation.   (5)

3.   Discuss the importance of trace elements in biological processes. (7)