

3. Philosophical & Sociological Foundations of Education (Ed. 412)

Exam. 2073

Time : 3 hrs.

Full Marks : 100

Attempt ALL the questions.

Group "B"

8×7=56

1. "Education as a discipline." Justify this statement on the basis of its characteristics.
2. What is training ? List the four major areas of training for a teacher and explain one of them.
3. Clarify the concept of teaching model and enlist the functions of teaching model.

OR

Define micro-teaching and mention its objectives.

4. Relate education with society.
5. Explain the core principles of child rights.

OR

State the suggestions to solve the problems of inclusive education.

6. Discuss the contributions of philosophy to education.
7. Describe the educative process according to pragmatism.
8. Mention the main features of NESP 2028 B.S.

OR

Explain briefly the development of education from 2007 to 2027 B.S. in Nepal.

Group "C"

2×12=24

9. What is school improvement plan ? Indicate its objectives and steps.
10. Explain the meaning, characteristics and importance of open education system.

OR

Illustrate the nature of education and differentiate between formal and non-formal education.

Group "A"

20

Attempt All the questions. Tick (✓) the best answers.

1. Which is closest to etymological meaning of education ?
 - a. process of learning
 - b. providing knowledge and skills
 - b. drawing out innate powers
 - d. involving teaching and learning
2. Which of the following type of education continuously refines our reactions ?
 - a. formal education
 - b. non-formal education
 - c. virtual education
 - d. life-long education
3. Which is the best example of characteristic of good teaching ?
 - a. responsiveness to the child and group
 - b. directedness to the child and group
 - c. guidedness to the child
 - d. responsiveness to the child

4. Which of the following function of teacher protects and develops scientific values and concepts ?
a. functions related to dance b. functions related to music
c. functions related to art d. functions related to aesthetic
5. The application of psychological principles and methods for desirable behaviour change is termed as
a. instructional modification technique
b. behaviour modification technique
c. contingency management technology
d. programmed instruction technology
6. Which of the following element of teaching model is concerned with objectives and environmental aspects of teaching ?
a. focus b. syntax
c. principle of reaction d. social system
7. What are the elements of socialization according to Stewart and Glin ?
a. individual, society and opportunity
b. social interaction, language and love and affection
c. child, parents and communication
d. family, environment and love and affection
8. A term used to describe the adjustment process of hostile groups or individuals is called
a. competition b. cooperation c. assimilation d. accommodation
9. Which of the following is the most influential factor of selection of education ?
a. family well-being b. intelligent capabilities
c. economic condition d. cultural background
10. What is the main objective of education for international understanding ?
a. enhancing universal brotherhood
b. establishing technological foundation
c. developing communication for free flow
d. encouraging national cultural values
11. "The study about the existence and essence of nature of universe, God and Soul" is falls under which branch of philosophy ?
a. axiology b. epistemology c. metaphysics d. logic
12. Which of the following indicates the objective of education in pragmatism ?
a. rising children being responsible parents
b. to cultivate dynamic and adaptable mind
c. attaining secure and happy life
d. enrichment of cultural heritage

13. Social reform is the main slogan of
a. idealism b. realism c. naturalism d. pragmatism
14. By whom Durban School was open for public at first ?
a. Bir Shamsher b. Chandra Shamsher
c. Bhim Shamsher d. Juddha Shamsher
15. What was the main aim of secondary level education according to NESP ?
a. character building of the students
b. to initiate pre-vocational education
c. to create useful citizen
d. to provide middle level manpower
16. Who is the main bearer of key responsibility for developing institutional level education planning ?
a. MoE b. DEO c. VEC/MEC d. SMC
17. Which of the following effort of educational movement supports the principle of "school is a change agent" ?
a. Lahachowk project
b. Primary education development project
c. Primary education project
d. basic and primary education project
18. Diminishing peoples' participation in the field of education is the negative aspect of
a. NNEPC b. NESP c. NEC d. HLNEC
19. When was the Sanskrit University was established in Nepal ?
a. 2038 B.S. b. 2040 B.S. c. 2043 B.S. d. 2046 B.S.
20. The life style of other directed people is
a. politically indifferent b. politically honest
c. politically moralistic d. politically manipulative

Area : Optional

Major Subjects Specialization (416)

1. आधुनिक नेपाली कथा र उपन्यास (नेपा. शि. ४१६)

Exam. 2073

Time : 3 hrs.

Full Marks : 100

सबै प्रश्नहरूको उत्तर दिनुहोस् ।

समूह "ब"

८×७=५६

१. कथाको विधागत स्वरूप प्रष्ट गर्नुहोस् ।

अथवा

अन्य विधासँग कथाको सम्बन्ध प्रष्ट पार्नुहोस् ।

२. आधुनिक नेपाली कथाको पहिलो चरणका मुख्य प्रवृत्तिहरू उल्लेख गर्नुहोस् ।

३. आदर्शोन्मुख सामाजिक यथार्थवादी कथाकारका रूपमा गुरुप्रसाद मैनालीलाई चिनाउनुहोस् ।

अथवा

- ‘लाहुरी भैंसी’ कथाको सामाजिक सन्दर्भ स्पष्ट पार्नुहोस् ।
 ४. ‘निद्रा आएन’ कथाको मनोवैज्ञानिक पक्ष के कस्तो छ ? सन्दर्भ उल्लेख गर्नुहोस् ।
 ५. ‘सिटीहलको एउटा बुढो ज्यामी’ कथाका केन्द्रीयतामा पारिजातको प्रवृत्तिगत विशेषता निर्धारण गर्नुहोस् ।
 ६. ‘नरेन्द्र दाइ’ उपन्यासकी नारी पात्र गौरीको चरित्र चित्रण गर्नुहोस् ।
 ७. प्रदीप नेपाल र इस्मालीका कथामा अभिव्यक्त वैचारिक पक्षको चित्रण गर्नुहोस् ।

अथवा

- दौलतविक्रम विष्ट र ध्रुवचन्द्र गौतमका औपन्यासिक प्रवृत्तिहरूको तुलना गर्नुहोस् ।
 ८. नेपाली उपन्यासको उत्तरवर्ती प्रयोग र प्रवृत्ति के कस्तो छ ? बुँदागत रूपमा चर्चा गर्नुहोस् ।

समूह “ग”

२×१२=२४

९. आधुनिक नेपाली उपन्यास परम्परागत उपन्यासकार लैनसिंह बाड्डेलका योगदानको मूल्याङ्कन गर्नुहोस् ।
 १०. विश्वेश्वरप्रसाद कोइराला र पारिजातका औपन्यासिक पहिचानहरूको तुलनात्मक समीक्षा गर्नुहोस् ।

अथवा

कथाकार भवानी भिक्षु र इन्द्रबहादुर राईका कथालेखनको प्रवृत्तिगत समीक्षा गर्नुहोस् ।

समूह “क”

२०

सबै प्रश्नहरूको उत्तर दिनुहोस् । सर्वोपयुक्त उत्तरमा रेखा चिह्न (√) लगाउनुहोस् ।

१. पहिलो आधुनिक नेपाली कथा कुन हो ?
 क. चन्द्रवदन ख. नासो ग. गरिव घ. छिमेकी
२. ‘शत्रु’ कथाको केशवराज कस्तो पात्र हो ?
 क. स्वाभिमानी ख. कर्तव्यपरायण ग. मनोरोगी घ. लालची
३. घरकी नोकर्नी भए पनि आफूलाई मालिकनी सरह ठान्ने नारी पात्र कुन कथामा देखिन्छे ?
 क. लाहुरी भैंसी ख. सावित्रीको बाबो
 ग. सिंगारी बाबो घ. एकान्त
४. आफ्ना कथामा सम्पूर्णता, घनत्व र वस्तुता यी तिन पक्षलाई समग्रतामा प्रस्तुत गर्न चाहने कथाकार को हुन् ?
 क. पुष्कर शमशेर ख. इन्द्रबहादुर राई
 ग. प्रेमा शाह घ. प्रदीप नेपाल
५. ‘छोटो किस्सा एउटा सानो आँखीझ्याल हो, जहाँबाट एउटा सानो संसार चियाइन्छ’ यो भनाइ कसको हो ?
 क. लक्ष्मीप्रसाद देवकोटा ख. रत्नछवज जोशी
 ग. ईश्वर बराल घ. प्रेमचन्द्र

2. Foundations of Language and Linguistics

(Eng. Ed. 416)

Exam. 2073

Time : 3 hrs.

Full Marks : 100

Attempt ALL the questions.

Group "B"

8×5=40

1. What are speculations about the origin of language ? State them and explain any two in brief.
2. How does speech differ from writing ? Compare and contrast them in brief.

OR

Compare and contrast Chomskyan concept of competence and performance.

3. Describe with the help of a diagram how English consonant sounds /t/ and /d/ are articulated.
4. What are grammatical function? Describe any two of them in brief.

OR

Discuss briefly the formal classification of sentences.

5. What is synonymy? Describe any two types of synonymy in brief.
6. Write short notes on any two of the following :
a. Collocation b. Anaphora c. Coherence
7. What are the processes of language change ? Explain any two with examples.

OR

Write the short notes on any two of the following :

- a. Diglossia b. Language families c. Bilingualism
8. What are the propositions/assumptions of contrastive analysis ? Discuss them in brief.

Group "C"

2×12=24

9. How are English vowel sounds (monophthongs) described on the basis of the different positions of the tongue ? Describe them with examples.

OR

State any ten processes of word formation in English and describe any five with examples.

10. What is error analysis ? How can we use error analysis in the field of language teaching ? Discuss it in detail.

Group "A"

20

Attempt All the questions. Tick (✓) the best answers.

1. Being very precise in terms of time, money, or analysis in the study of language is known as
a. consistency b. exhaustiveness
c. economy d. objectivity

13. The words or phrases used to indicate that the speaker is not really sure what he/she is saying is correct are called
a. implicatures b. schemas c. hedges d. scripts
14. 'Nepali' language is the member of family
a. the Uralic b. the Dravidian
c. the Sino-Tibetan d. the Indo-European
15. The process when the successive sounds become identical in their articulation is known as
a. haplology b. assimilation c. analogy d. creolization
16. The sentence 'She runs fastly.' has
a. a semantic error b. a grammatical error
c. no error at all d. stylistic error

3. Foundation of Mathematics (Math. Ed. 416)

Exam. 2073

Time : 3 hrs.

Full Marks : 100

Attempt ALL the questions.

Group "B"

8×7=56

1. Prove that $p \rightarrow (q \rightarrow r) \equiv (p \wedge \sim r) \rightarrow \sim q$.
2. Define countable set and prove that the union of a finite set and a countable set is a countable set.

OR

Distinguish between rational and irrational numbers. Prove that the set of rational numbers is denumerable.

3. State and prove the fundamental theorem of arithmetic.

OR

State and prove Wilson's theorem for number.

4. Minimize $c = 8x + 12y$

s.t. $x + 3y \geq 2$

$2x + 2y \geq 3$

$x, y \geq 0$

5. Derive the computational formula for rank correlation.
6. State and prove Baye's theorem.
7. A sample of 900 members is found to have a mean of 3.4 cm. can it be reasonably regarded as a simple sample for normal population with mean 3.2 cm and variance 5.3 cm^2 at 5% level of significance ?

OR

A certain stimulus administered to each of the 12 patients resulted in the following increase in blood pressures.

$5, 2, 8, -1, 3, 0, 6, -2, 1, 5, 0, 4$

Can it be concluded that the stimuli will be general accompanied by an increased blood pressure at 5% level of significance.

8. Define isomorphism of graphs. Prove that two graphs are isomorphic iff for some permutation of the vertices of one of them, they have the same adjacency matrix.

Group "C"

2×12=24

9. Define Eulerian trail and prove that a connected graph G has an Eulerian trail iff it has at most two odd vertices.
10. Compare and contrast between Type I and Type II error with suitable examples. Describe the steps in hypothesis testing. The manufacturer of a certain brand of cigarette claims that nicotine contents in his product is less than the general average. A random sample of 50 is taken and the average is found to be 220. Another sample of a 50 drawn from the other brands at random gave an average of 23.0 mg. If the variance is known to be 25 mg² does the manufacturer's claim stands at 5% level of significance ?

OR

Define α and β error and represent them with suitable diagrams. Describe the steps in hypothesis testing. A random sample of 200 villagers was taken from Kathmandu district and the average population per village was found to be 485 with s.d. 50. Another random sample of 200 villagers from the same district gave an average population of 510 per village with s.d. 40. Is the difference between averages of two sample significant at 5% level of significance ?

Group "A"

20

Attempt All the questions. Tick (\checkmark) the best answers.

1. Which one of the following set is called a prime triplet ?
a. $\{p, p+2, p+4\}$ b. $\{p, p+2, p+6\}$
c. $\{p, p+2, p+3\}$ d. $\{p, p+1, p+2\}$
2. Which one of the following division does not fall under trivium ?
a. logic b. grammar c. rhetoric d. music
3. If p and q are distinct primes such that $a^p \equiv a \pmod{q}$ and $a^q \equiv a \pmod{p}$, then
a. $a^{pq} \equiv 1 \pmod{pq}$ b. $a^{pq} \equiv -1 \pmod{pq}$
c. $a^{pq} \equiv a \pmod{pq}$ d. $a^{pq-1} \equiv a \pmod{pq}$
4. If p is a prime then $(p-1)! \equiv -1 \pmod{p}$ is known as ———
a. Fermat's theorem b. Fermat's little theorem
c. Wilson's theorem d. Chinese remainder theorem
5. A trail is a digraph \mathcal{D} if it contains all the edges of \mathcal{D} then it is said to be ———
a. Euler trail b. Eulerian
c. Eulerian digraph d. All of the above
6. Who invented a style of testing the validity of an argument particularly with premises and conclusion by beginning with the word All or Some ?
a. Venn b. Euler c. Einstein d. Leibnitz

18. In constructing the dual problem of the primal problem, which matrix is used ?
 a. transpose b. adjoint c. inverse d. identity
19. Which of the following step is not necessary in solving linear programming by the graphical method ?
 a. making mathematical model as linear inequality
 b. introducing slack variables
 c. finding the corner point of the feasible region
 d. evaluating the objective function at each corner point
20. In linear programming problem, the result obtained by setting the non-basic variables equal to zero is called —
 a. feasible solution b. basic solution of the system
 c. optimal solution d. non-basic solution

4. Foundation of Health Education (HP. Ed. 416)

Exam. 2073

Time : 3 hrs.

Full Marks : 100

Attempt ALL the questions.

Group "B"

8×7=56

1. State the principles of health education in brief.
2. Describe the contribution of Psycho-behavioural foundation to health education.

OR

Define the concept of illness, sickness and disease with examples.

3. Describe miasmatic theory of disease in short.
4. Illustrate health and disease spectrum with sketch.

OR

Explain the determinants of health and disease in short.

5. Describe basic structure and functions of cell.
6. Explain the structure of kidneys with a labelled diagram.

OR

Describe the epidemiological triad in brief.

7. Illustrate cycle and stages of infectious diseases.
8. Describe the causes, symptoms and preventive measures of Bird Flu.

Group "C"

2×12=24

9. State the foundations of health education and describe social cultural foundation and its implication in health education.

OR

Explain the traditional and contemporary concept of health.

10. Explain the structure and functions of internal female reproductive system with labelled diagram.