BEDC43(1)

**N.V.K.S.D. COLLEGE OF EDUCATION**

**(AUTONOMOUS)**

**B.Ed. Degree Fourth Semester Examination, May 2023**

**(For the candidates admitted during the academic year 2021-2022)**

**Pedagogic Course: EMERGING TRENDS IN BIOLOGICAL SCIENCE EDUCATION**

**Course code: BED4PC012**

**Time: 3 Hours Maximum Marks: 70**

**SECTION A (10 x 1 = 10 marks)**

**Answer ALL the questions by selecting the appropriate answers.**

1. Inquiry training model of teaching was developed by

a)  Benjamin Bloom b) Richard Schumann

c) Robert Glove d) Robert Jerome

fw;gpj;jypd; tprhuizg;gapw;rp khjphpia cUthf;fpath;

m) ngQ;rkpd; g;Sk; M) hpr;rh;l; \{kd;

,) uhgh;l; f;Nsht; <) uhgh;l; n[Nuhk;

1. The model of teaching, which focuses mainly on the cognitive structure is

a) Advanced Organizer Model b) Inquiry Training Model

c) Concept Attainment Model d) Synergy Model

fw;gpj;jy; khjphp mwpthw;wy; fl;likg;gpy; kl;Lk; ftdk; nrYj;Jfpw khjphp

m) Nkk;gl;l mikg;ghsh; khjphp M) tprhuiz gapw;rp khjphp

,) fUj;J milAk; khjphp <) rpndh;[p khjphp

1. The fundamental element of a teaching model does not include

a) Focus b) Syntax c) Social system d) Insight

fw;gpj;jy; khjphpapd; mbg;gil$wpy; mlq;fhjJ

m) Nehf;fk; M) thf;fpa mikg;G

,) r%f mikg;G <) cs;nshsp

1. The educational strategy that combines conventional education with online learning is known as

a) Collaborative learning b) Blended learning

c) Experiential learning d) Co-operative learning

tof;fkhd fy;tpia epfo; epiy fw;wYld; ,izf;Fk; fy;tp cj;jp ,t;thW mwpag;gLfpwJ

m) $l;Lfw;wy; M) fyg;G fw;wy;

,) mDgt fw;wy; <) $l;LwT fw;wy;

1. Online platform that stores large quantities of teaching materials in a digitized format is known as

a) Learning Management System b) Automated Classroom

c) Interactive White Board d) Google Classroom

b[pl;ly; tbtpy; mjpf msT fw;gpj;jy; nghUl;fis Nrkpj;J itf;Fk; dpfo; epiy jsk; ,t;thW mwpag;gLfpwJ

m) fw;wy; Nkyhz;ik mikg;G M) jhdpaq;F tFg;giw

,) ClhLk; nts;is gyif <) NkNy cs;s midj;Jk;

1. An example for free science softwares

a) Edmodo b) Concept map c) Drosopbi Lab d) Duolingo

,ytr mwptpay; nkd; nghUSf;F xU vLj;Jf;fhl;L

m) vl;kNlh M) fUj;J tiuglk;

,) l;uhNrhgp Nyg; <) Lnthypq;nfh

1. The first step in the stages of Kolb's Experiential Learning Cycle is

a) Concrete learning b) Reflective observation

c) Abstract conceptualization d) Active experimentation

Nfhy;gpd; mDgtfw;wy; Row;rpapd; epiyfspd; Kjy;gb

m) GydPlhd fw;wy; M) gpujpgypg;G cw;W Nehf;fy;

,) RUf;f fUj;jhf;fk; <) nraypy; ghpNrhjid

1. The essential areas of Techno pedagogy are

a) Content, Pedagogy, Technology b) Practice, Content, Transaction

c) Pedagogy, Curriculum, Training d) All the above

njhopy;El;g fw;gpj;jypd; Kf;fpagFjpfs;

m) cs;slf;fk;> fy;tpapay;> njhopy;El;gk;

M) gapw;rp> cs;slf;fk;> ghpth;j;jid

,) fy;tpapay;> ghlj;jpl;lk;> gapw;rp <) NkNy cs;s midj;Jk;

1. The primary focus of instruction in collaborative learning is

a) Teacher b) Learner c) Content d) Society

$l;L fy;tp fw;gpj;jypy; Kjd;ik ikak;

m) Mrphpah; M) fw;gth; ,) ghlg;nghUs; <) r%fk;

1. The institution which is directly responsible for the professional growth of school teachers is

a) CSIR b) NAAC c) EMMARC d) NCERT

gs;sp Mrphpah;fspd; njhopy; tsh;r;rpf;F Neubahfg; nghWg;ghd epWtdk;

m) CSIR M) NAAC ,) EMMARC <) NCERT

**SECTION B (10 x 2 = 20 marks)**

**Answer any TEN questions in about 50 words each.**

1. What are the functions of models of teaching?

fw;gpj;jy; khjphpfspd; nray;ghLfs; vd;d?

1. State the role of teacher in Advance Organizer model of teaching.

Nkk;gl;l mikg;ghsh; khjphp fw;gpj;jypy; Mrphpahpd; gq;iff; Fwpg;gplTk;.

1. How is brain based learning helpful in concept formation?

mwptpd; mbg;gilapy; fw;wypy; fUj;J cUthf;fj;jpw;f;F; vt;thW cjTfpwJ?

1. Mention the essential components of cooperative learning.

$l;LwT fw;wypd; Kf;fpa $Wfisf; Fwpg;gplTk;.

1. Identify the components of a concept map.

xU fUj;J tiuglj;jpd; $Wfis milahsk; fhz;f.

1. What are the educational advantages of creating blog?

tiyg;gjpit cUthf;Ftjd; fy;tp ed;ikfs; ahit?

1. List out the benefits of Web based learning.

,iza mbg;gilapyhd fw;wypd; ed;ikfis gl;baypL.

1. Analyse the role of Science club in developing creativity among students.

khzth;fspilNa gilg;ghw;wiy tsh;g;gjpy; mwptpay; fofj;jpd; gq;if gFg;gha;T nra;;f.

1. Mention the aesthetic values of science garden.

mwptpay; Njhl;lj;jpd; mofpay; kjpg;Gfisf; Fwpg;gplTk;.

1. 'Nature is not a place of visit, it is home'- Justify this statement.

|,aw;if vd;gJ ghh;itapLk; ,lk; my;y, mJ tPL|- ,e;j mwpf;ifia epahag;gLj;Jq;fs;?

1. Mention the educational functions of summer institutes.

Nfhilfhy epWtdq;fspd; fy;tp nray;ghLfisf; Fwpg;gplTk;.

1. List out the need of professional competencies for a biology teacher.

caphpay; MrphpaUf;fhd njhopy;Kiw jpwd;fspd; Njitiag; gl;baypLq;fs;.

**SECTION C (4 x 5 = 20 marks)**

**Answer any FOUR questions in about 200 words each.**

1. Describe the educational implications of Concept Attainment Model of teaching.

fw;gpj;jypd; fUj;J miljy; khjphpapd; fy;tpj; jhf;fq;fis tpthpf;fTk;.

1. Explain the role of Learning Management System in developing self- learning among Students.

khzth;fspilNa Rafw;wiy tsh;g;gjpy; fw;wy; Nkyhz;ik mikg;gpd; gq;if tpsf;Fq;fs;.

1. Explain the steps in the preservation of skeletal system in science museum.

mwptpay; mUq;fhl;rpafj;jpy; rl;lf kz;lyj;ij ghJfhg;gjw;fhd topKiwfis tpsf;Ff.

1. Describe the basic steps of experiential learning.

mDgtfw;wypd; mbg;gil gbfis tpthpf;fTk;.

1. State the role of teachers in organising co-curricular activities in science.

mwptpaypy; ,iz ghlj;jpl;l nray;ghLfis xOq;fikg;gjpy; Mrphpah;fspd; gq;if f;Fwpg;gplTk;.

1. Elaborate the need of in-service training of biology teachers.

caphpay; Mrphpah;fspd; gzpapilg; gapw;rpapd; Njitia tphpthff; $wTk;.

**SECTION D (2 x 10 = 20 marks)**

**Answer BOTH the questions in about 500 words each.**

1. a) Explain the strategies of collaborative learning and mention its advantages in teaching.

$l;Lf;fw;wypd; cj;jpfis tpsf;fp> fw;gpj;jypy; mjd; ed;ikfis f;Fwpg;gplTk;.

(or)

b) How will you organise Science exhibition and Science fair in your school?

cq;fs; gs;spapy; mwptpay; fz;fhl;rp kw;Wk; mwptpay; re;ijia vg;gb mikg;gPh;fs;?

1. a) Elaborate the need and significance of techno -pedagogical skills for Biology teachers for effective teaching.

nray; jpwd; kpf;f fw;gpj;jYf;F caphpay; Mrphpah;fSf;fhd njhopy; El;g fw;gpj;jy; jpwd;fspd; Njit kw;Wk; Kf;fpaj;Jtj;ij tpthpf;fTk;.

(or)

b) What are soft skills? Explain the need of soft skills for a Biology teacher for effective teaching.

nkd;jpwd;fs; vd;why; vd;d? nray; jpwd; kpf;f fw;gpj;jYf;F caphpay; Mrphpah;fSf;F nkd; jpwd;fspd; Njitia tpsf;Fq;fs;.