Subject: Islamiyat/Ethics | **B.S.Ed 2nd Professional** | **Time:**02Hrs.

Paper: I | **Annual 2019** | **Max. Marks:**60

سوال نمبر1۔ مندرجہ ذیل قرآنی آیات میں دو اجزاء کا ترجمہ اور تشریح کیجیے۔ 10+10

ا۔ وَ الْعَصْرِۙ(۱) اِنَّ الْاِنْسَانَ لَفِیْ خُسْرٍۙ(۲) اِلَّا الَّذِیْنَ اٰمَنُوْا وَ عَمِلُوا الصّٰلِحٰتِ وَ تَوَاصَوْا بِالْحَقِّ ۙ وَ تَوَاصَوْا بِالصَّبْرِ(۳)

ب۔ یٰۤاَیُّهَا النَّاسُ اِنَّا خَلَقْنٰكُمْ مِّنْ ذَكَرٍ وَّ اُنْثٰى وَ جَعَلْنٰكُمْ شُعُوْبًا وَّ قَبَآىٕلَ لِتَعَارَفُوْاؕ-اِنَّ اَكْرَمَكُمْ عِنْدَ اللّٰهِ اَتْقٰىكُمْؕ-اِنَّ اللّٰهَ عَلِیْمٌ خَبِیْرٌ

ج۔ وَ الَّذِیْنَ یَقُوْلُوْنَ رَبَّنَا اصْرِفْ عَنَّا عَذَابَ جَهَنَّمَ ۫ اِنَّ عَذَابَهَا كَانَ غَرَامًاۗۖ(۶۵)

سوال نمبر2۔ درج ذیل احادیث میں سے صرف دو کا ترجمہ اور تشریح لکھیں۔ 10+10

الف۔ قال رسول اللہ صلی اللہ علیہ وسلم من یضمن لی مابین لحییہ ومابین رجلیہ ، اضمن لہ الجنۃ

ب۔ عن عبداللہ بن مسعود قال قال رسول اللہ سباب المسلم فسوق وقتالہ کفر

ج۔ قال رسول اللہ صلی اللہ علیہ وسلم رغم انفہ ،رغم انفہ قیل من یا رسول اللہ صلی اللہ علیہ وسلم ! قال من ادرک والدیہ عند الکبر احدھما اوکلاھما ثم لم یدخل الجنۃ

سوال نمبر3۔ مندرجہ ذیل میں سے صرف دو پر مفصل نوٹ لکھیں ۔ 10+10

الف۔ قرآن وحدیث کی روشنی میں زکوٰۃ کی فرضیت واہمیت واضح کیجئے۔

ب۔ آنحضرت صلی اللہ علیہ وسلم کے طریقہ تبلیغ پر روشنی ڈالیں۔

ج۔ صدق وتوکل سے کیا مراد ہے ان کی اہمیت واضح کیجئے۔

د۔ بیسویں صدی عیسوی میں احیائے اسلام کے لئے کی جانے والی کوششوں پر تبصرہ کیجئے۔

Subject : Pakistan Studies	**B.S.Ed 2nd Professional**	**Time: 2 Hour**
Paper: I	**Annual 2019**	**Max.Marks:40**

Note: Attempt any four questions from all. All questions carry equal marks.

کوئی سے چار سولات کے جوابات تحریر کریں۔تمام سوالات کے نمبر برابر ہیں۔

سوالنمبر ۱۔قیام پاکستان کے اغراض ومقاصد تحر کریں۔ (10)

1. Write the causes and objecives of formation of Pakistan. (10)

سوالنمبر ۲۔ مسلم لیگ کے قیام کے اسباب لکھیں۔ (10)

2. Explain the causes of formation of All India Muslim League (10)

سوالنمبر ۳۔ پاکستان کی اہم صنعتوں پر نوٹ لکھیں۔ (10)

3. Write note on industries of Pakistan. (10)

سوالنمبر ۴۔1973 کے آئین کی دفعات تحریر کریں۔ (10)

4. Write the features of 1973 Constitution of Pakistan. (10)

سوالنمبر ۵۔ پاکستان کی زرعی پسماندگی کی وجوہات بیان کریں۔ (10)

5. Discuss the causes of backwardness agriculture in Pakistan. (10)

سوالنمبر ۶۔ قرارداد پاکستان کی اہمیت بیان کریں۔ (10)

6. Elaborate the importance of Lahore Resolution of Pakistan. (10)

Subject: Botany **Paper:** II	**B.S.Ed 2nd Professional** **Annual 2019**	**Time:** 03 Hrs. **Max. Marks:** 75

Note: Attempt five questions, At least two questions from section-A and one from Section-B & one from Section-C. Elaborate your answer with the help of diagram where necessary.

SECTION-A

Q1- (a) Discuss plant systematics, its aims and objectives in details. (10)

(b) Discuss basic rules of ICBN. (05)

Q2 - Discuss Engler & Prantel system of classification with reference to its merits and demerits. (15)

Q3- (a) Write down cymose inflorescence in details (08)

(b) Discuss types of placentation within flowering plants. (07)

Q4- Write down distinguish characteristics of family Cucurbitacea with reference to floral formula and floral diagram. (15)

Q5- Discuss general characteristics of family Poaceae with reference to economic importance. (15)

SECTION-B

Q6- Write an assay on location, structure and function of parenchyma. (15)

Q7- Discuss physico-chemical nature of cell wall with reference to its function. (15)

SECTION-C

Q8 (a) Describe meiosis in plant cell. Draw diagrams of different stages. (10)
(b) Write down significance of Mitosis. (05)

Q9- Discuss chromosomal abberation by number with reference to Aneuploidy. (15)

Subject: Physics | **B.S. Ed 2nd Professional** | **Time:**03Hrs.
Paper: II | **Annual 2019** | **Max. Marks:**75

Note: Attempt any five questions, selecting three from Section-I and two from Section-II. Each question carries 15 Marks.

SECTION-I

Q.1. (a) What is the electric field? Find the electric field due to a charged disk on a unit +ive charge "q_o" at distance "z"? (09)

(b)A point charge of $+3.12 \times 10^{-6}\ C$ is $12.3\ cm$ distant from a second point charge of $-1.48 \times 10^{-6}\ C$. Calculate the magnitude of the force on each charge? (06)

Q.2. (a) Deduce the electric potential from the electric field? (05)

(b) An alpha particle ($q = +2e$) in a nuclear accelerator moves from one terminal at potential of $V_a = +6.5 \times 10^6\ V$ to another potential of $V_b = 0\ V$. What is the corresponding change in the potential energy of the system? (04)

(c) Derive the relation for the electric potential at a point due to an electric dipole? (06)

Q.3. (a) How one can find the capacitance of a capacitor? Derive the relation for parallel plate capacitor and discuss the results if media is any dielectric? (08)

(b) Derive the relation for energy stored in a capacitor and discuss your result? (07)

Q.4. (a) State and explain Biot-Savart law? (09)

(b) Determine the force on two parallel current changing conductors? (06)

Q.5. (a) Discuss the Gauss's law for magnetism? Comment on the statement that "there is no magnetic monopole"? (06)

(b) Briefly explain para, dia and ferro magnetic materials? (09)

Q.6. Write a note on any two of the following (7.5,7.5)

(a) Lens Law (b) Motional Emf (c) Transformer

SECTION-II

Q.7. (a) Derive the relation for mean free path of a typical molecule in a gas? (09)

(b) Calculate the root-mean-square speed of hydrogen molecules at 0.00 °C and 1.00 atm pressure, assuming hydrogen to be an ideal gas. Under these conditions hydrogen has a density $\rho = 8.99 \times 10^{-2}\ kgm^{-3}$. (06)

Q.8. (a) Derive the relation for equation of Maxwell-Boltzmann distribution of molecular energies. (12)

(b) Find the average energy and most probable energy of a gas in thermal equilibrium at temperature T?

Q.9. (a) Derive and discuss the relations for efficiencies of real engines? (08)

(b) Discuss the entropy change for irreversible processes? (07)

Q.10. Write a note on any two of the following (7.5,7.5)

(a) C_v and C_p (b) Carnot cycle (c) Diffusion

Subject: A-Course of Mathematics	**B.S.Ed**	**Time:**03Hrs.
Paper: III	**2nd Professional**	
	Annual 2019	**Max. Marks:**100

Note: **Attempt FIVE questions in all, selecting at least ONE question from each section. All questions carry equal marks.**

Section-I

Q.1. a) Find focus, vertex and directrix of parabola $x^2 + 6x - 8y + 17 = 0$, also draw its graph.

b) Find equation of normal of curve $xy = c^2$ at $\left(ct, \frac{c}{t}\right)$.

Q.2. a) Find measure of angle of intersection of curves $r = a\theta, r\theta = a$.

b) Find the relative extreme values of $f(x) = x^4 - 8x^3 + 22x^2 - 24x + 1$.

Q.3. a) Find nature of cusps on curve $x^3 + y^3 - 2ay^2 = 0$.

b) Express $r = \frac{8}{2-cos\theta}$ in rectangular coordinates.

Section-II

Q.4. a) Find asymptotes of $r = \frac{a}{\theta}$.

b) Find area of region bounded by curve $xy^2 = 4(2 - x)$ and y-axis.

Q.5. a) Find length of portion of spiral $r = e^{a\theta}$ from the origin to point (r, θ).

b) Find coordinates of point dividing the join of $A(-3,1,4)$, $B(5, -1, 6)$ in ratio 3:5 .

Q.6. a) Find equations of plane bisecting the angle between $3x + 2y - 6z + 1 = 0$ and $2x + y + 2z - 5 = 0$.

b) Find symmetric form for lines $+y + z + 1 = 0 = 4x + y - 2z + 2$.

Q.7. a) Identify the surface defined by $z^2 - 4y^2 - 16x - 16y - 2z + 49 = 0$.

b) Transform the equation $x^2 + y^2 - z^2 = 9$ into spherical coordinates.

Section-III

Q.8. a) Prove that $|a \times b|^2 + |a.b|^2 = |a|^2|b|^2$.

b) Find constant p such that the vectors $a = 2i - j + k, b = i + 2j - 3k, c = 3i + pj + 5k$ are coplanar.

Q.9. a) Find equation of line through $2i + 3j - k$ and parallel to $i + j - k$.

b) A particle move along curve $x = 4cost,\ y = 4sint,\ z = 6t$, find velocity and acceleration at $t = 0$ & $\frac{\pi}{2}$.

Q.10. a) Solve $a \times \frac{d^2v}{dt^2} = b$, where a, b are constant and v is a function of t.

b) If $\emptyset = x^2z + e^{y/x}$, find $|\nabla\emptyset|$ at (1, 0, -2).

Subject: Zoology | **B.S.Ed 2nd Professional** | **Time:**2.5 Hrs.
Paper: III (Subjective) | **Annual 2019** | **Max. Marks:**50

PART II

Q# 2: Write short answers of any fifteen questions of the following. **(15×2 = 30)**

i. Differentiate between symplesiomorphies and Synapomorphies.
ii. What are trychocysts? Give their functions.
iii. What are Nematocysts? Give their functions.
iv. Differentiate between Diphyletic and Monophyletic.
v. Name the classes of Phylum Platyhelminthes.
vi. What is Miracidium larva?
vii. What are Adducter Muscles?
viii. Define Osphradia.
ix. How does regeneration protect some polychaetes from predators?
x. What is a Synchronous fliflit?
xi. Give two functions of water vascular system.
xii. What are two common characters shared between Hemichordates and chordates?
xiii. What is Ram Ventiration?
xiv. What is Amniotic lineage?
xv. Define paedomorphosis.
xvi. What are Jacobson's organ?
xvii. How does Cobra flare itself aggressive disply.
xviii. What is Pigeon's milk?
xix. What is Anting?
xx. What are apocrine glands?
xxi. What are Arrectotpil?
xxii. Give the dentition in predator Therapsid.

PART III

Note: Attempt any one question **10×2=20**

Q.3. a) Discuss water canal system in sponges? (10)
b) Describe salient features of phylum Nematoda? (10)

Q.4. a) Give an account of torsion in class Gastropoda? (10)
b) Discuss structure of eyes of amphibians? (10)

Roll No. _____

Subject: Zoology **B.S.Ed 2nd Professional** **Time:**30 Min.
Paper: III (Objective) **Annual/19** **Max. Marks:**25

Q.1. Encircle the correct answer. Cutting, erasing and overwriting is not allowed.

i. Chitinous setae are locomotory organs of annelids which are present on :
a) Parapodia b) cell wall c) prostomium d) nucleolus

ii. Ulcer is caused by
a) Plasmodium b) Blantidium c) Arcella d) Trypanasoma

iii. The pseudopodia having broad cell processes containing ectoplasm and endoplasm are called
a) Lobopodia b) filopodia c) reticulopodia d) axopodia

iv. Hydra belongs to class
a) Hydrozoa b) Anthozoa c) Cubozoa d) Scyphozoa

v. Free living flat worms belong to class
a) Monogenea b) Trematoda c) Cestoidea d) Turbellaria

vi. Taeniarhynchus saginatusis commonly called
a) Park tapeworm b) beef tapeworm c) fish tapeworm d) Dugesia

vii. Larva of turbalarian is called
a) Tadpole b) Trochophere c) Rediae d) Muller

viii. Shell of rotifer is called
a) Cutely b) mesenteries c) lorica d) corona

ix. Elephantiasis is caused by
a) Enterobius b) Trichinella c) Wuchereria d) Nectar

x. The outermost layer of shell mollusca is
a) Prismatic b) periostracum c) nacreous d) mantle

xi. A tube within a tube body plan is met within
a) Hydra b) Palanaria c) Ascaris d) Fasciola

xii. Which one of the following is a parasite
a) Muscadomestica b) Entamoeba c) Euglena d) Hydrafusca

xiii. Pebrine is caused by
a)Nosema bombicus b) Nosema apis c) plasmodium ovale d) none

xiv. Shell is coiled in
a) Bivalvia b) Cephalopoda c) Scaphopoda d) Gastropoda

xv. Which of following are sites for production of coelomocytes
a) Polian vesicles b) Madreporite c) Tied mann's bodies d) Radial canal

xvi. Large rostrum is found in
a) Paddle fishes b) Lamprey c) Sharks d) Chimeras

xvii. Diastema is present in
a) Cynodonts b) Herbivorous c) Carnivorous d) Bacteria

xviii. Gular pouch is present in
a) ogs b) fishes c) birds d) mammals

xix. Placoid scales are present in
a) Sharks b) Salmons c) Lamprey d) Hag fishes

xx. The larvae of frogs are called
a) Tronaria b) Ammocoete c) Tadpole d) Trochophore

xxi. The kidney in reptiles is
a) metanephros b) mesonephros c) pronephros d) opistonephros

xxii. Pouch mammals belong to
a) protheria b) metatheria c) eutheria d) ornithodelphia

xxiii. The dorsal portion of turtle is called
a) carapace b) plastrone c) pectoral girdle d) clavicle

xxiv. Number of cervicle vertebrae in reptiles is
a) 8 b) 7 c) 6 d) 4

xxv. Feathers cover the body wings and tail are
a) counter feather b) down feather c) filoplume d) None

Subject: A-Course of Mathematics | **B.S.Ed** 2nd **Professional** Supply 2019 | **Time:**03Hrs.

Paper: III | **Max. Marks:**100

Note: Attempt FIVE questions in all, selecting at least ONE question from each section. All questions carry equal marks.

Section – I

Q.1 (a): Show that the pedal equation of the astroid $x = aCos^3\theta$, $y = aSin^3\theta$ is $r^2 = a^2 - 3p^2$ 10

(b): Find equation of the tangent and normal at $\theta = \pi/2$ to the cycloid

$$x = a\,(\theta - Sin\theta),\ y = a\,(1 - Cos\theta)$$ 10

Q.2 (a): Find the radius of curvature of the curve $r = a\,(1 + Cos\theta)$ at the point where the tangent is parallel to the initial line. 10

(b): Find equation of the asymptotes of the curve $x^2(x-y)^2 + a^2(x^2 - y^2) = a^2xy$ 10

Q.3 (a): Find the dimensions of the rectangle of maximum area that can be inscribed in a circle of a radius r. 10

(b): Show that the intrinsic equation of the asteroid $x^{2/3} + r^{2/3} = a^{2/3}$ is $s = \frac{3a}{2}Sin^2\alpha$. 10

Q.4 (a): Discuss and sketch the curve $x(x^2 + y^2) = a(x^2 - y^2)$ 10

(b): Find the area of the region between the curve $x^2y^2 = a^2(y^2 - x^2)$ and its asymptotes 10

Section – II

Q.5 (a): using the comparison test investigate converges or divergence of the series $\sum_1^\infty \frac{\ell n(n)}{n}$ 10

(b): Apply Cauchy's Root test to determine whether the series $\sum_1^\infty \left(\frac{3n+2}{2n-1}\right)^n$ converges or diverges. 10

Q.6 (a): Determine the value of x for which series $\sum_1^\infty \frac{nx^n}{3^n}$ 10

i) converges absolutely ii) Converges conditionally iii) Diverges.

(b): Determine whether the series $\sum_1^\infty (-1)\left(\frac{n^3}{e^n}\right)$ converges absolutely or diverges. 10

Q.7 (a): The nth term of the sequence is given $\frac{3n^4+1}{4n^2-1}$. Determine whether the sequence converges or diverges if converges find its limit. 10

(b): Prove that the series $\sum_1^\infty an$ converges then $\underset{n\to\infty}{Limit}\, an = 0$ 10

Section – III

Q.8 (a): If $f(x)$ is an even function then show that $\int_{-a}^{a} f(x) = 2\int_0^a f(x)$ 10

(b): Find Fourier series of the function $f(x) = \begin{cases} 0 & -\pi \geq x \leq \\ 1 & 0 < x \leq \pi \end{cases}$ 10

Q.9 (a): If $f(x) = x$, $0 < x < 1$ be a function with arbitrary period then find the Fourier series of the $f(x)$. 10

(b): Find Fourier series for the function $f(x) = Cosx$, $\frac{-\pi}{2} \leq x \leq \frac{\pi}{2}$ with arbitrary period. 10

Q.10 (a): Find Fourier sine series for the function: $f(x) = \begin{cases} 0 & 0 \leq x < \frac{\pi}{2} \\ 1 & \frac{\pi}{2} \leq x \leq \pi \end{cases}$ 10

(b): Find Fourier Cosine series for the function $f(x) = e^x$, $0 \leq x \leq p$ 10

Subject: Chemistry | **B.S.Ed 2nd Professional** | **Time:**03Hrs.
Paper: IV | **Annual 2019** | **Max. Marks:**75

Note: **Attempt any five questions. All questions carry equal marks.**

Q.1. a. What are the common oxidation states of the lanthanides? Give reasons with precise examples. 8

b. Elucidate the concept of redox potential? How this can be applied for finding out the probability of a chemical reaction? 7

Q.2. a. How do the ionization potentials vary in the Periodic Table? Where are the elements with maximum electron affinity found? 8

b. Discuss common structures of metals. Explain the nature of the metallic bond in the light of Pauling Theory. 7

Q.3. a. Thrash out the common features in valance bond and molecular orbital theories. What are the crucial points of difference between them? 6

b. Explain the magnetic behavior of the following species taking support of the molecular orbital diagrams: i. O_2 ii. O_2^{++} iii. O_2^{--} 9

Q.4. a. Write down common features of Hard Acids and Soft Bases. 8

b. Calculate pH of the buffer solution of HCOOH and HCOONa with pH=4. 15 if solution is diluted to 50 times (HCOOH is 0.40 M and HCOONa is 1.00 M; Ka =1. 77×10^{-4}). 7

Q.5. a. Compare the properties of carbon and silicon keeping in view electronic configuration. Why silicon can accommodate more than 8 electrons in the valance shell but carbon does not? 8

b. Discuss gradation of the characteristic properties in elements within Group-IIIA. 7

Q.6. a. Enlist oxyacids of Nitrogen along with chemical formula and depict oxidation state of N in each oxyacid. How oxides of Nitrogen help photochemical SMOG formation? 9

b. Discuss the role of oxides of Sulphur in environmental pollution. 6

Q.7. a. How is hydrogen fluoride prepared? Why does it show polymeric nature? Why is it weaker acid than HCl? 9

b. Discuss commercial utilization of Inert Gases. 6

Q.8. a. How would you classify chelates? What factors give stability to chelates? Discuss their importance. 9

b. Explain the structures of following coordination compounds on the basis of Valance Bond Theory: i. $[Co(NH_3)_6]^{3+}$ ii. $[CoF_6]^{3-}$ 6

Q.9. a. Why sulphuric acid is called king of chemicals? Discuss in detail the lead chamber process for the manufacture of sulphuric acid. 9

b. Describe briefly with diagram the electrolytic method for the manufacture of caustic soda. 6

Q.10. a. Describe the extraction of copper from copper pyrites. How is it obtained in pure state? 8

b. Explain solubility product. At room temperature, 7.8×10^{-5} moles of Ag_2CrO_4 dissolve in 1 litre of water. What is Ksp of Ag_2CrO_4? 7

Subject: B-Course of Mathematics	**B.S. Ed**	**Time:**03Hrs.
Paper: IV	**2nd Professional**	
	Annual 2019	**Max. Marks:**100

Note: Attempt FIVE questions in all, selecting at least ONE question from each section. All questions carry equal marks.

Section-I

Q.1. a) Test whether the series $\sum_1^{\infty} \frac{1}{9n^2+3n-2}$ converges or diverges, if converges find its sum.

b) Apply ratio test to determine whether the series $\sum_1^{\infty} \frac{(n+2)!}{4!n!2^n}$ converges or diverges.

Q.2. a) Apply root test to determine converges or divergence of the series $\sum_1^{\infty} (\frac{n!}{n^n})^n$.

b) Use any appropriate test to determine the series $\sum_1^{\infty} \frac{1^n+2^n}{3^n}$ converges or diverges.

Q.3. a) Test the series $\sum_1^{\infty} (-1)^{n-1} \frac{n^2}{(2n+1)(n+5)}$ for

(i) Absolute convergence (ii) Conditional convergence (iii) Divergence.

b) Expand the Fourier series for $f(x) = x^2;\ 0 \leq x \leq 2$.

Section-II

Q.4. a) Prove that the Co-finite topology on X is discrete if X is a finite set.

b) Let (X, τ) be topological space, then prove a subset A of X is open, if and only if A is neighborhood of each of its point.

Q.5. a) Prove every non-empty set can be given a metric and hence can be converted into metric space.

b) Prove an open sphere in a metric space X is an open set.

Q.6. a) Let $A = [0,2],\ B = [1,3], C =]2,4[$, verify distributive laws.

b) Let R be an arbitrary topological space with usual metric topology, then show that $f; R \to R$ defined by $f(x) = x^2$ is continuous for all $x \epsilon R$.

Section-III

Q.7. a) Solve the initial value problem $(1 + 2y^2)dy = ycosdx;\ y(0) = 1.$

b) Solve the differential equation $\frac{dy}{dx} = \frac{4y-3x}{2x-y}$.

Q.8. a) Solve the initial value problem $(2xcosy + 3x^2y)dx + (x^3 - x^2siny - y)dy = 0;\ y(0) = 2.$

b) Solve the differential equation $x\frac{dy}{dx} + 2y = sinx.$

Q.9. a) Find an equation of orthogonal trajectories of the curve $r^2 = asin2\theta.$

b) Solve the following differential equation with conditions

$$(D^2+6D+13)y = 0;\quad y(0) = 3,\ y'(0) = -1.$$

Q.10. a) Find the general solution of $(D^3 + D)y = 2x^2 + 3sinx.$

b) Solve $x^2\frac{d^2y}{dx^2} - 2x\frac{dy}{dx} + 2y = xlnx;\quad y(1) = 1,\quad y'(1) = 0.$

Subject: General Psychology | **B.S.Ed 2nd Professional Annual 2019** | **Time:** 03 Hrs.

Paper: V | **Max. Marks:** 75

NOTE: Attempt any five questions in all.

نوٹ: مندرجہ ذیل میں سے پانچ سوالات کے جوابات تحریر کریں۔

(15)

Q.1 "Psychology is called knowledge of Science". What scientific methods are used to elaborate?

سوالنمبر ۱۔ "نفسیات کو سائنس کا علم کہا جاتا ہے" اس کی وضاحت کیلئے کون سے سائنسی طریقے استعمال کیے گئے۔؟

(7.5+7.5)

Q.2 a) What difference between Psychologist treatment and Psychiatrist treatment?
b) What Is meant by Specialization in the Psychology.

سوالنمبر ۲۔ الف) معالجاتی نفسیات اور طب نفسیات کا فرق بیان کریں۔

ب) نفسیات میں سپیشلائزیشن Specialization سے کیا مراد ہے؟

(15)

Q.3 Define receptors? Describe types of receptors.

سوالنمبر ۳۔ آخذات کی تعریف کریں نیز اس کی اقسام کی وضاحت تحریر کریں۔

(15)

Q.4 Write a comprehensive note on Motivation.

سوالنمبر ۴۔ تحریک پر جامع نوٹ لکھیں۔

(15)

Q.5 What is social learning? What are the problems with using punishment in learning.

سوالنمبر ۵۔ سماجی آموزش سے کیا مراد ہے؟ نیز آموزش کے دوران سزا کے عمل میں کون سے مسائل کا سامنا ہوتا ہے۔

(10+05)

Q.6 What are factors involved in forgetting, also define memory?

سوالنمبر ۶۔ فراموشی میں کون سے عوامل شامل ہیں۔ یاداشت کی تعریف کریں۔

(05+05+05)

سوالنمبر ۷۔ مندرجہ ذیل پر مختصر نوٹ لکھیں۔

Q.7 Write a concise note on the following:
a) Sensory Memory
b) Reinforcement
c) Nervous system

حسی یاد

کمک (تقویت)

عصبی نظام

Subject: School Organization and Management | **B.S.Ed 2nd Professional** | **Time:** 03 Hrs.

Paper: VI | **Annual 2019** | **Max. Marks:** 100

Note: Attempt any five questions. All questions carry equal marks.

نوٹ: مندرجہ ذیل میں سے کوئی پانچ سوالات کے جوابات تحریر کریں۔ تمام سوالات کے نمبر مساوی ہیں۔

Q.01. Explain in detail the fundamental principles of school organization.

سوالنمبر 1۔ تنظیم اسکول کے بنیادی اصولوں کی وضاحت تفصیلاً کریں۔

Q.02. Explain the concept of democracy in school organization.

سوالنمبر 2۔ تنظیم مدرسہ میں جمہوریت کے تصور کی وضاحت کریں۔

Q.03. Explain in detail the personal & professional characteristics of teacher.

سوالنمبر 3۔ استاد کی ذاتی اور پیشہ وارانہ خوبیاں تفصیلاً تحریر کریں۔

Q.04. Define curriculum. Write its process of development at school level.

سوالنمبر 4۔ نصاب کی تعریف کریں۔ نصاب سازی کا طریقہ اسکول کی سطح پر کیا ہے تحریر کریں۔

Q.05. Explain the concept of supervision. Elaborate the modern concept of school supervision.

سوالنمبر 5۔ سپروژن کے تصور کی وضاحت کریں۔ اسکول سپروژن کے جدید تصور کی وضاحت کریں۔

Q.06. Enlist school record. Writ the process of record management at school level.

سوالنمبر 6۔ اسکول ریکارڈ کی فہرست بنائیں اور ریکارڈ سازی کا اسکول کی سطح پر طریقہ کار لکھیں۔

Q.07. Write in detail the importance of Time table in school organization.

سوالنمبر 7۔ تنظیم اسکول کیلئے نقشہ اوقات کار کی اہمیت تحریر کریں۔

Q.08. Write detail note:

i. Library ii. Character Building

سوالنمبر 8۔ نوٹ لکھیں۔

الف) لائبریری ب) کردار سازی

Subject: Evaluation and Guidance | **B.S.Ed 2nd Professional Annual/19** | **Time:** 03Hrs.

Paper: VII | **Max. Marks:** 100

Note: Attempt any of the five questions:

نوٹ: کوئی سے پانچ سوالات کے جوابات تحریر کریں۔

Q.1. Measurement and evaluation play a purposive role in educational assessment process. Discuss.

سوالنمبر 1۔ جائزہ اور پیمائش تعلیمی تشخص کے عمل میں کس طرح موثر کردار ادا کرتے ہیں۔

Q.2. How a teacher can take help from the method of observation to evaluate the performance of the students.

سوالنمبر 2۔ طالبعلموں کی کارکردگی جانچنے کیلئے اساتذہ مشاہداتی طریقہ کار سے کس طرح مدد لے سکتے ہیں۔

Q.3. What are the characteristics of standardized test which a teacher can use to make classroom tests up to the mark?

سوالنمبر 3۔ معیاری ٹیسٹ کی چیدہ خصوصیات کو موضوع بحث بنائیں۔ جن کو بروئے کار لاتے ہوئے ایک استاد اچھا ٹیسٹ تیار کر سکتا ہے۔

Q.4. Evaluate the effect of guidance process in the personal and academic development of the students.

سوالنمبر 4۔ طلبا کی انفرادی اور تعلیمی ترقی کے عمل میں رہنمائی کے اثرات کا جائزہ لیں۔

Q.5. Highlight the salient features of guidance that contribute to the healthy culture of the school.

سوالنمبر 5۔ رہنمائی کے اہم نکات کو بیان کریں جو کہ سکول کلچر پر مثبت اثرات ڈالتے ہیں۔

Q.6. Maladjustment can become a factor which can ruin the educational process and outcomes. Suggest the strategies to Explain causes of maladjustment. What are the remedies to be used to minimize the influence of maladjustment in students.

سوالنمبر 6۔ ہم آہنگی کا فقدان ایک ایسا عنصر ہے جو کہ تعلیمی عمل اور اسکے نتائج پر منفی اثرات مرتب کرتا ہے۔ بحث کریں۔

Q.7. Explain the uses of the following statistical terms? سوالنمبر 7۔ مندرجہ ذیل کی تعریف کریں۔

- Frequency distribution
- Standard Deviation معیاری اطراف
- Mode
- Range

Subject: Special Method of Teaching Biology | **B.S.Ed 2nd Professional** | **Time:** 03 Hrs.

Paper: VIII | **Annual 2019** | **Max Marks.:** 60

(نوٹ): کوئی سے پانچ سوالات کے جوابات تحریر کریں جہاں ضروری ہو وہاں اشکال کی مدد سے وضاحت کریں۔ تمام سوالات مساوی (12) نمبرات رکھتے ہیں۔

Note: Attempt Five questions in all. Support your answer with suitable diagram where necessary. Each question carries equal (12) marks.

سوال نمبر ۱۔ پڑھانے کے مقاصد میں عملیت اور نفسیاتی معقولیت کے کردار پر تفصیل سے بحث کریں؟

Q.1. Discuss in detail the role of practibility and psycological soundness in objectiveness of teaching?

سوال نمبر ۲۔ مندرجہ ذیل پر جامع مضمون تحریر کریں؟

الف۔ امتزاج یا تالیف ب۔ جائزہ

Q.2. Write a comprehensive note on following?

a) Synthesis b)Evaluation

سوال نمبر ۳۔ تعلیم میں استاد اور طلباء کے باہمی تعلق (interpersonal learning) پر نوٹ لکھیں؟ نیز اس کے فوائد اور نقصانات پر بحث کریں؟

Q.3. Discuss in detail the interpersonal learning? Write its merit and demerit?

سوال نمبر ۴۔ دریافتی طریقہ تدریس (discovery method) پر تبادلہ خیال کریں؟

Q.4. Write a note on discovery method?

سوال نمبر ۵۔ ثانوی اسکول کی سطح پر 30 طلباء کے لئے بیالوجی کی تجربہ گاہ کا خاکہ تیار کریں

Q.5. Design a biology laboratory at secondary school level for 30 students?

سوال نمبر ۶۔ مینڈک کے نظام انہظم پر سبقی منصوبہ (Lesson plan) تیار کیجئے اور اس کا جائزہ لینے کا طریقہ تجویز کیجئے؟

Q.6. Prepare a lesson plan for the digestive system of frog?

سوال نمبر ۷۔ انشائی طریقہ امتحان پر بحث کریں؟ اس طریقہ امتحان کے فوائد اور نقصانات پر نوٹ لکھیں؟

Q.7. Discuss in detail merits and demerits of subjective examination?

سوال نمبر ۸۔ مندرجہ ذیل اصطلاحات کی تعریف کریں؟

i) گروہ ii) نمونہ iii) جین

iv) مائی ٹوسس v) عالمی حدت v) زیرگی

Q.8. Define following terms?

a. Community b. Specimen c. Gene

d.Mitosis e. Global Warming f. Pollination

Subject: Techniques of Research | B.S.Ed. 2nd Professional | Time: 3 Hours

Paper: IX | Annual 2019 | Marks: 100

Note: Attempt any five questions.

نوٹ: مندرجہ ذیل میں سے کوئی پانچ سوالات کے جوابات تحریر کریں۔

سوال نمبر ۱۔ تحقیق سے کیا مراد ہے؟ تحقیق کے مراحل کا تفصیلی جائزہ لیں۔

Q. 1. What do you means by Research? Explain the steps required in research process.

سوال نمبر ۲۔ ایک محقق کو تحقیق کے دوران کن اخلاقی اصولوں کو مدنظر رکھنا چاہیے؟ بحث کریں۔

Q.2. Discuss the ethical issues that a researcher has to consider while carrying out research.

سوال نمبر ۳۔ تجرباتی تحقیق سے کیا مراد ہے؟ تجرباتی تحقیق کا اندازہ کیسے کے جاتا ہے؟

Q.3. What is mean by experimental research? How an experimenatl reseacrh is evalauted?

سوال نمبر ۴۔ معلومات کے ذرائع کون کون سے ہیں؟ ثانوی ذرائع معلومات تفصیل سے بیان کریں۔

Q.4. What are the major sources of information? Discuss in details the secondary source of information.

سوال نمبر ۵۔ مفروضات سے کیا مراد ہے؟ مفروضات کیسے بنائے جاتے ہیں؟ تفصیل سے بیان کریں۔

Q.5. What do you means by Hypotheses? How Hypotheses can be formulated? Discuss in details.

سوال نمبر ۶۔ ادب کے جائزہ سے کیا مراد ہے؟ ادب کے جائزہ کے ذرائع تفصیل سے لکھیں۔

Q. 6. What is mean by review of literature? Write down in details sources of review of literature.

سوال نمبر ۷۔ تحقیقی رپورٹ کی تکمیل کے لیے کونسے مراحل ضروری ہیں؟ تفصیل سے لکھیں۔

Q. 7. What are the necessary steps required in preparation of the research report? briefly explain.

سوال نمبر ۸۔ کتابیات سے کیا مراد ہے۔ کتابیات کو کیسے تحقیق میں شامل کرنا چاہیے۔

Q. 8. Define Biblography. How references should be written in reserach report?

سوال نمبر ۹۔ درج ذیل پر مختصر نوٹ لکھیں۔

۱۔ مواد کی ایڈیٹنگ، ۲۔ تحقیقی ڈیزائن ۳۔ سوال نامہ۔

Q. 9. Write short notes on:

1. Editing of data, 2. Research Design, 3. Questionnaire .