AJK-12-19

Answer Sheet No. _____ BIOLOGY PART – II 019/1 (Objective Part) (INTERMEDIATE) (✡✡✡✡) Roll No. _____

Sign. Dy. Supdnt. Fictitious Roll No. (For Office Use) Sign. Candidate

BIOLOGY **019/1**
(PART –II) **(INTERMEDIATE)** **Marks : 17**
(OBJECTIVE PART) **(✡✡✡✡)** **Time : 20 Minutes**

Note:- Write your Roll No. in space provided. Over writing, cutting, using of lead pencil will result in loss of marks. All questions are to be attempted.

1- Each question has four possible answers, Tick (√) the correct answer. (17)

1	Bombay phenotype is an example of;							
	A	Pleiotropy	B	Dominance	C	Probability	D	Epistasis
2	Full set of genes of an individual is called;							
	A	Genetic pool	B	Genome	C	Genetic library	D	Genotype
3	An essay on the principle of population was published by;							
	A	Sutton	B	Lyell	C	Malthus	D	Darwin
4	The animal which is caught and eaten is called;							
	A	Predator	B	Host	C	Parasite	D	Prey
5	The productivity can be indicated by;							
	A	Consumption of CO_2	B	Evolution of CO_2	C	Consumption of O_2	D	Evolution of O_2
6	The chemical waste of industry is called;							
	A	Pollution	B	Effluent	C	Toxin	D	Pollutant
7	The homeostatic thermostat in man is;							
	A	Thalamus	B	Cerebrum	C	Medulla	D	Hypothalamus
8	Cockroach excrete nitrogenous waste in the form of;							
	A	Ammonia	B	Urea	C	Uric acid	D	Xanthine
9	Rapid movement of leaves of mimosa on touching is a example of;							
	A	Turgor movement	B	Nastic movement	C	Tropic movement	D	Growth movement
10	The mammals which walk on the tips of toes, modified into hooves are termed as;							
	A	Plantigrade	B	Unguligrade	C	Digitigrade	D	Brachigrade
11	Diffused nervous system is found in;							
	A	Poriferans	B	Platy helmintheyes	C	Cnidarians	D	Annelids
12	Lutinizing hormone induces;							
	A	Flowering	B	Ovulation	C	Vernalization	D	Menopause
13	Human gestation period is of							
	A	28 days	B	3-7 days	C	4 months	D	280 days
14	Primary growth in plants is caused by;							
	A	Apical meristem	B	Rib meristem	C	Intercalary meristem	D	Lateral meristem
15	X-ray diffraction analysis of DNA was performed by;							
	A	Erwin Chargaff	B	Watson & crick	C	Rosalind Franklin	D	Charles Darwin
16	Cell death due to tissue damage is called;							
	A	Apoptosis	B	Meta stasis	C	Necrosis	D	Suicide
17	Meiosis generally takes place in plants during formation of;							
	A	Gametes	B	Spores	C	Zygote	D	Embryo

(The End)

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PAPER : PART – II INTERMEDIATE

MARKS: 68

TIME : 2:40 Hours (SUBJECTIVE PART)

Note:- Attempt any TWENTY TWO (22) short questions in all selecting eight from Q. 2 and Q. 3 each and six from Q. 4. (22 x 2 = 44)

SECTION – I

2- Write short answers of any eight questions. (2 x 8 = 16)

1	How proto nephridium differ from metanephridium?	2	How ectotherm animals differ from heterotherms?
3	How osmoregulation differ from excretion.	4	Define Nyctinasty and name its two types.
5	How fibrous joints differ from synovial joints.	6	Enlist the various facial bones.
7	What are the main steps of the method for gene sequencing?	8	What are totipotent cells?
9	What are the adaptations in animals and plants for terrestrial environment?	10	Write a short note on deserts of Pakistan.
11	What is Green house effect?	12	Define environmental buffers, what is its role?

3- Write short answers of any eight questions. (2 x 8 = 16)

1	Define reflex action and Reflex arc.	2	Differentiate between nerves and ganglia.
3	Give the biological role of gastrin and secretin hormones.	4	What is product rule?
5	Differentiate between Epistasis & Pleiotropy.	6	What is testicular feminization?
7	What is Oestrus cycle and Menstrual cycle.	8	What is syphilis? Name causative agent.
9	What is fruit set and Fruit ripening?	10	Define Ammonification.
11	Differentiate between pioneer community and climax community.	12	Give two examples of symbiotic organisms.

4- Write short answers of any six questions. (2 x 6 = 12)

1	Write four signs of old age.	2	Define Embryonic induction.
3	What is Blastula and blastoderm.	4	What is point mutation, give example?
5	Write the structural formula of Adenine.	6	Define metastasis.
7	Give the importance of mitosis.	8	What are vestigial organ, give example?
9	State the Hardy-Weinberg Theorem.		

SECTION – II

Note:- Attempt any three questions. (3 x 8 = 24)

5	a	How osmoregulation occurs in marine animals?	(04)
	b	Describe various steps in a NITROGEN CYCLE.	(04)
6	a	Write a note on human appendicular skeleton.	(04)
	b	Describe the process of Transcription.	(04)
7	a	Describe any four differences between nervous and chemical co-ordination.	(04)
	b	Explain Eutrophication. How human activities speeded up this natural process and what are its effects.	1+2+1 =04
8	a	Describe human female reproductive system.	(04)
	b	Explain XO-XX and ZZ-ZW type of sex determination.	(04)
9	a	Explain the role fo nucleus in development.	(04)
	b	Can the comparative anatomy be discussed as an evidence of evolution explain?	(04)

(The End)