B1	Total No Total Do Maximu	Maximum Marks: 60 Total No. of Questions: 60 Total Duration: 80 Minutes Maximum Time for Answering: 70 Minutes Date://				
	M	IENTIO)	N YOUR	NUMBI	ER	
VERSION CODE						

## YOUR COLLEGE NAME HERE



Subject Code

**GT-B-01** 

## Do's:

25UGE(MOCK)

- 1. Check whether the CET Number has been entered and shaded in the respective circles on the OMR answer sheet.
- 2. The version code of this question booklet should be entered on the OMR answer sheet and the respective circles should also be shaded completely.
- 3. The Version Code and Serial number of this question booklet should be entered on the Nominal Roll without any mistakes.
- 4. Compulsorily sign at the bottom portion of the OMR answer sheet in the space provided.

## DON'Ts:

- 1. THE TIMING AND MARKS PRINTED ON THE OMR ANSWER SHEET SHOULD NOT BE DAMAGED / MUTILATED / SPOILED.
- Do not remove the seal present on the right-hand side of this question booklet.
  - Do not; look inside this question booklet or start answering on the OMR answer sheet.

## IMPORTANT INSTRUCTIONS TO CANDIDATES

- 1. In case of usage of signs and symbols in the questions, the regular textbook connotation should be considered unless stated otherwise.
- 2. This question booklet contains 60 questions and each question will have one statement and four different options / responses and out of which you have to choose one correct answer.
- 3. Remove the paper seal of this question booklet and check that this booklet does not have any unprinted or torn or missing pages or items etc., If so, get if replaced by a complete test booklet. Read each item and start answering on the OMR answer sheet.
- 4. Completely darken/shade the relevant circle with a blue or black ink ballpoint pen against the question number on the OMR answer sheet.

		WRONG METHOD	
CORRECT METHOD	<b>⊗ B C D</b>	(A) (B) (C) (V)	(A) (D)
(A) (C) (D)	<b>● B C D</b>	(A) (C) (D)	

- 5. Please note that even a, minute unintended ink dot on the OMR answer sheet will also be recognized and recorded by the scanner. Therefore, avoid multiple markings of any kind on the OMR answer sheet.
- 6. Use the space provided on each page of the question booklet for Rough Work. Do not use the OMR answer sheet for the same.
- 7. Hand over the **OMR** answer sheet to the room invigilator as the final bell rings.

Name of candidate (in capitals):		
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Roll Number:	Invigilator's Signature:	
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КС	ET - Biology	2
1.	In which class of fungi the mushroom belongs to:  (1) Basidiomycetes (2) Deuteromycetes (3) Ascomycetes (4) Phycomycetes  Which stage is marked by terminalization of chiasmata?  (1) Panchytene (2) Diplotene (3) Diakinesis (4) Zygotene	<ol> <li>In double fertilization:         <ul> <li>One male gamete fuses with the egg and the other fuses with the antipodal.</li> </ul> </li> <li>One male gamete fuses with the egg and the other fuses with the secondary nucleus.</li> <li>Two male gametes fuse with two eggs.</li> <li>One male gamete fuses with the antipodal and the other fuses with the diploid nucleus.</li> </ol>
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- 3. To increase production in sugarcanes, they are sprayed with:
  - (1) IAA
- (2) Cytokinin
- (3) Gibberellin
- (4) Ethylene
- 4. The treatment of snake bite by antivenin is an example of:
  - (1) Artificially acquired passive immunity
  - (2) Naturally acquired passive immunity
  - (3) Specific natural immunity
  - (4) Artificially acquired active immunity
- 5. Cyclosporin is a drug that is used as:
  - (1) Immunosuppressant
  - (2) Anti retro viral drug
  - (3) Immuno modulator
  - (4) Immuno vaccine
- 6. A patient is suffering from fever, chills, cough, headache and bluish finger nails and lips. These symptoms are of the disease:
  - (1) Malaria
- (2) Common cold
- (3) Typhoid
- (4) Pneumonia
- 7. Tendons connect:
  - (1) Bones to bones
  - (2) Muscles to bones
  - (3) Ligaments to muscles
  - (4) Ligaments to bones
- 8. When pollen is transferred from anther of a flower to stigma of another flower of the same plant, pollination is referred to as:
  - (1) Allogamy
- (2) Siphonogamy
- (3) Xenogamy
- (4) Geitonogamy
- 9. Maize is:
  - (1) Cleistogamous
- (2) Anemophilus
- (3) Hygrophilous
- (4) Entomophilous

- 11. R.Q. of fatty substances is generally:
  - (1) Less than one
- (2) Greater than one
- (3) Unity
- (4) Zero
- 12. To analyse the genotype of an organism, it is made to:
  - (1) Cross with recessive parent
  - (2) Cross with another species
  - (3) Cross with dominant parent
  - (4) Self cross
- 13. If a colour blind woman marries a normal vision man, their sons will be:
  - (1)  $\frac{3}{4}$  th colour blind and  $\frac{1}{4}$  th normal
  - (2)  $\frac{1}{2}$  colour blind and  $\frac{1}{2}$  normal
  - (3) All colour blind
  - (4) All normal visioned
- 14. XO type of sex determination is found in:
  - (1) Elephant
- (2) Human beings
- (3) Dog
- (4) Grasshopper
- 15. Phenotypic ratio in plant Snapdragon in F<sub>2</sub> is:
  - (1) 2:1
- (2) 3:1
- (3) 1:1
- (4) 1:2:1
- 16. Holdfast, stipe, and frond constitutes the plant body in case of:
  - (1) Phaeophyceae
- (2) Chlorophyceae
- (3) Rhodophyceae
- (4) All of these
- 17. The autonomously independent, self-replicating extra nuclear DNA imparting certain factors to some bacterium is called:
  - (1) Phagemid
- (2) Plasmid
- (3) Plastid
- (4) Cosmid

3 GRAND TEST 1

- 18. The technique of DNA fingerprinting was initially developed by:
  - (1) Alec Jeffreys
  - (2) Jacque Monod
  - (3) Ian Wilmut
  - (4) Hargobind Khorana
- 19. The extraction of DNA from the agarose gel is called as:
  - (1) Isolation
- (2) Elution
- (3) Transformation
- (4) Ligation
- 20. Thermostable DNA polymerase is isolated from bacterium:
  - (1) Rhizobium
- (2) Salmonella typhii
- (3) Escherichia coli
- (4) Thermus aquaticus
- 21. Which of the following sets of gases were used in Miller's experiment?
  - (1) H<sub>2</sub> O, N<sub>2</sub>, CH<sub>4</sub>, H<sub>2</sub>
  - (2) CH<sub>4</sub>, NO<sub>2</sub>, H<sub>2</sub>O, CO<sub>2</sub>
  - (3) H<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>, H<sub>2</sub>O
  - (4) NH<sub>3</sub>, CH<sub>3</sub>, H<sub>2</sub>O, H<sub>2</sub>
- 22. Who proposed that the first form of life could have come from pre existing, non living organic molecules?
  - (1) Oparin and Haldane (2) Alfred Wallace
  - (3) S.K. Miller
- (4) Charles Darwin
- 23. The non directional force that alters Hardy Weinberg equilibrium is:
  - (1) Gene flow
- (2) Mutations
- (3) Gene recombination (4) Genetic drift
- 24. Urecotelic excretion is found in which of the following pairs of animals?
  - (1) Lizards and Sparrow
  - (2) Chimpanzee and Kangaroo
  - (3) Bats and Crows
  - (4) Frogs and Crows
- 25. Which of the following parts of brain constitute the brain stem?
  - (1) Fore brain and mid brain
  - (2) Fore brain only
  - (3) Mid brain and hind brain
  - (4) Hind brain and fore brain

- 26. Emphysema develops mainly because of:
  - (1) Spasm of the smooth muscles of bronchioles
  - (2) Allergy of hypersensitisation
  - (3) Cigarette smoking
  - (4) Inflammation of the alveoli
- 27. Penicillin was discovered by:
  - (1) Fleming
- (2) Robert Hooke
- (3) B. McClintock
- (4) Robert Brown
- 28. Methanogens do not produce:
  - (1) Methane
- (2) Hydrogen sulfide
- (3) Oxygen
- (4) Carbon dioxide
- 29. The site for the light reactions is \_\_\_\_\_
  - (1) Stroma
- (2) Cisternae
- (3) Grana
- (4) Vacuoles
- 30. Which of the following is the correct food chain?
  - (1) Eagle → Snake → Grasshopper → Grass → Frog
  - (2) Grass → Grasshopper → Frog → Snake → Eagle
  - (3) Frog → Snake → Eagle → Grasshopper → Grass
  - (4) Grasshopper→ Grass → Snake → Frog → Eagle
- 31. Which of the following ecosystems is most productive in terms of net primary production?
  - (1) Tropical rain forests
  - (2) Estuaries
  - (3) Oceans
  - (4) Deserts
- 32. Number of meiotic divisions required to produce 100 macrospores in angiosperm/egg is:
  - (1) 25
- (2) 100
- (3) 125
- (4) 50
- 33. Secondary plant products are of great use in commerce in making:
  - (1) Drugs and perfumes
  - (2) Poisons and furniture
  - (3) Paints and colours
  - (4) coloursand furniture

KCET - Biology 4

- 34. Process of parturition is facilitated by:
  - (1) Oxytocin
  - (2) Relaxin
  - (3) Gonadotropins
  - (4) Relaxin and Oxytocin
- 35. A vasectomy prevents the:
  - (1) Production of semen
  - (2) Production of DNA
  - (3) Movement of sperm into the urethra
  - (4) Production of sperm in the testes
- 36. Choose the correct statement regarding the ZIFT procedure:
  - (1) Ova collected from a female donor are transferred to the fallopian tube to facilitate zygote formation.
  - (2) Ova collected from a female donor and transferred to the uterus.
  - (3) Zygote is collected from a female donor and transferred to the fallopian tube.
  - (4) Zygote is collected from a female donor and transferred to the uterus.
- 37. Which one of the following plants shows very close relationships with a species of moth, where none of the two can complete its life cycle without the other?
  - (1) Viola
- (2) Yucca
- (3) Hydrilla
- (4) Banana
- 38. Amensalism is an association between two species where:
  - (1) One species is harmed and other is not affected.
  - (2) One species is benefitted and other is unaffected.
  - (3) One species is harmed and other is unaffected.
  - (4) Both species are harmed.
- 39. Which of the following hormones is **not** secreted by the human placenta?
  - (1) Estrogen
  - (2) Relaxin
  - (3) Human Chorionic Gonadotropin (HCG)
  - (4) Progesterone

- 40. Spermatids are transformed into spermatozoa by:
  - (1) Spermiation
- (2) Meiosis
- (3) Spermiogenesis
- (4) Spermatogenesis
- 41. Fertilization in humans is practically feasible only if
  - (1) Sperms are transported into cervix within 48 hours of release of ovum.
  - (2) Ovum and sperms are transported simultaneously to ampullary isthmic junction of the fallopian tube.
  - (3) Sperms are transported into vagina just after the release of ovum in the fallopian tube.
  - (4) Ovum and sperms are transported to ampullary isthmic junction of the cervix.
- 42. Main function of mammalian corpus luteum is to produce:
  - (1) Estrogen only
  - (2) Relaxin only
  - (3) Human chorionic gonadotropin
  - (4) Progesterone
- 43. Mango is an example of\_\_\_\_\_.
  - (1) Pome
- (2) Berry
- (3) Pepo
- (4) Drupe
- 44. In uremia patients, urea can be removed by a process called:
  - (1) Haemoanalysis
  - (2) Renal replacement therapy
  - (3) Dialysis
  - (4) Haemodialysis
- 45. Which one of the following products was produced as a result of DNA manipulation in the first transgenic cow **Rosie**?
  - (1)  $\beta$  lactglucose
  - (2)  $\alpha$  deaminase
  - (3)  $\alpha$  lactal bumin
  - (4)  $\alpha$  1 antitrypsin
- 46. First gene therapy was done to a \_\_\_\_\_
  - (1) 4-year-old girl
- (2) 6 years old boy
- (3) 4-year-old boy
- (4) 6 years old girl

5			GRAND TEST 1
47.	Which among the following is oviparous? (1) Platypus (2) Common dolphin (3) Elephant (4) Flying fox(Bat)	56.	Heart beat can be initiated by: (1) Sino - auricular node (2) Intra-ventricular septum (3) Sino - ventricular node
48.	The earth summit (1992) was held at: (1) Japan (2) Rio - de Janeiro		(4) Purkinje fibres
	(3) South Africa (4) Johannesburg	57.	An area in the brain which is associated with strong emotions is:
49.	Which of the following is not an ex - situ conservation?  (1) Cryopreservation (2) Seed bank		(1) Medulla (2) Limbic system (3) Cerebral cortex (4) Cerebellum
	(3) Biosphere reserves (4) Botanical garden	58.	Which fractions of the visible spectrum of solar radiations are primarily absorbed by
50.	<ul> <li>The extinction of passenger pigeon was due to:</li> <li>(1) Bird flu virus infection</li> <li>(2) Non - availability of the food</li> <li>(3) Increased number of predatory birds</li> </ul>		carotenoids of the higher plants? (1) Red and violet (2) Blue and green (3) Violet and blue (4) Green and red
	(4) Over exploitation by humans	59.	Photorespiration occurs under: (1) low light and high O <sub>2</sub>
51.	Which of the following sequences will be produced as a result of transcription of the DNA sequence CGATTACAG?  (1) GCTAATGTC (2) GCUAATCTG		<ul> <li>(2) low temperature and high O<sub>2</sub></li> <li>(3) low O<sub>2</sub> and high CO<sub>2</sub></li> <li>(4) high O<sub>2</sub> and low CO<sub>2</sub></li> </ul>
	(3) GCUAAUGUC (4) CGUAAUCUG	60.	A group of closely related families is called
52.	Methyl guanosine triphosphate is added to the 5' end of hnRNA in a process of: (1) Tailing (2) Both Splicing and Capping (3) Capping (4) Splicing		(1) Species (2) Genus (3) Order (4) Class

The Human Genome Project (HGP) was

Identify the element used by Hershey and Chase to label the protein in their experiment,

(2) 1990

(4) 1992

(2) P<sup>35</sup>

(4)  $S^{35}$ 

53.

54.

55.

initiated in:

from the following options:

(1) Isobilateral leaves (2) Dicotyledonous leaves (3) Monocotyledonous leaves

(4) Dorsiventral leaves

Reticulate venation is characteristic in:

(1) 1988 (3) 1994

(1)  $S^{32}$ (3)  $P^{32}$