

# Gk Series



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## Introduction

This book is for the convenience of members of [www.gkguru.com](http://www.gkguru.com) for referring Medical Entrance Examination Questions and Answers off-line. Book contains Multiple Choice, 11<sup>th</sup> & 12<sup>th</sup> standard Biology based Questions and Answers. This is Volume – 5 in this section. Total number of questions included here are 100 Nos.

This book has been compiled keeping in mind the requirements of various Medical Entrance Examinations (State & Central) in India. Near each question a value is given (A1, A2, A3 etc..), click on these when the mouse cursor changes from  to  , you will be guided to the Answer page.

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- 1 The secondary pollutant among the following is  
a) DDT    b) BHC    c) CO    d) PAN    e) NO<sub>2</sub> [A1](#)
- 2 Polygonum type of embryo sac is  
a) 7 celled and 7 nucleated    b) 7 celled and 8 nucleated  
c) 8 celled and 8 nucleated    d) 8 celled and 7 nucleated  
e) 7 celled and non nucleated [A2](#)
- 3 Under strenuous conditions or during exercise, how much O<sub>2</sub> is transported to the muscle cells by haemoglobin in the blood  
a) 4.4 ml/100ml    b) 19.4 ml/100ml    c) 5 ml/100ml  
d) 15 ml/100ml    e) 14.4 ml/100ml [A3](#)
- 4 The release of renin by the juxta glomerular apparatus of kidney is inhibited by a peptide hormone called  
a) aldosterone    b) angiotensin    c) atrial natriuretic factor  
d) erythropoetin    e) ADH [A4](#)
- 5 At nine weeks of development, the head of human foetus will have its size about  
a) double the length of the foetus    b) 1/2 the length of the foetus  
c) 1/3 of the length of the foetus    d) 1/4 of the length of the foetus  
e) more than 1/3 of the length of the foetus [A5](#)
- 6 The pyramid of numbers in tree dominated ecosystems is usually  
a) inverted    b) upright    c) spindle shaped  
d) cuboids    e) none of the above [A6](#)
- 7 The diversity seen among organisms sharing the same community or habitat is called  
a) beta diversity    b) gamma diversity    c) alpha diversity  
d) species diversity    e) species richness [A7](#)
- 8 A technique for unblocking coronary arteries that have atherosclerotic plaque is  
a) defibrillation    b) angioplasty    c) cryosurgery  
d) prosthetics    e) angiography [A8](#)
- 9 Double stranded RNA is seen in  
a) Reoviruses    b) coliphage  $\Phi \times 174$     c) influenza virus    d) adeno viruses [A9](#)
- 10 "Chondroid" is equivalent to  
a) ribosome    b) mesosome    c) nucleolus    d) lysosome [A10](#)
- 11 Vaucheria and caulerpa are example for  
a) coenobial colony    b) siphonaceous form    c) coenocytic form    d) b and c [A11](#)
- 12 Flame of forest refers to  
a) panax ginseng    b) butea monosperma    c) Indigofera    d) crotalaria juncea [A12](#)
- 13 Structure unique to ctenophores  
a) flame cells    b) collar cells    c) stinging cells    d) lasso cells [A13](#)
- 14 Which is true about free energy?  
a) it minimises entropy    b) it is received from environment  
c) it is non-usable energy    d) both (a) and (b) [A14](#)
- 15 Animals which share human dwellings are called  
a) cultigens    b) inquilines    c) scavengers    d) detritivores [A15](#)
- 16 The operator switch in operon concept is coded by  
(a) gene    (b) i gene    (c) cistron    (d) none [A16](#)

- 17 The most important discovery in the field of genetic engineering is  
 (a) discovery of electron microscope (b) discovery of feulgen dye  
 (c) discovery of restriction enzyme (d) all of the above [A17](#)
- 18 Cancer is caused by  
 (a) viruses (b) x-rays (c) chemical mutagens (d) all the above [A18](#)
- 19 Polyracil codon is to code for  
 (a) glycine (b) Phenylalanine (c) glutamic acid (d) alanine [A19](#)
- 20 The genetic material in viruses are  
 (a) DNA (b) RNA (c) DNA and RNA (d) DNA or RNA [A20](#)
- 21 Reverse transcriptase is  
 (a) RNA dependent RNA polymerase (b) DNA dependent RNA polymerase  
 (c) DNA dependent DNA polymerase (d) RNA dependent DNA polymerase [A21](#)
- 22 For inducing mutations in Neurospora crassa, Beadle and Tatum used  
 (a) UV rays (b) X-rays (c) Chemicals (d)  $\beta$ -rays [A22](#)
- 23 The number of pairs of hydrogen bonds in the DNA molecule of 150 base pairs having 60 AT pairs would be  
 (a) 300 (b) 150 (c) 390 (d) 490 [A23](#)
- 24 Split genes are made up of  
 (a) heterochromatin and introns (b) exons and introns  
 (c) exons and cistrons (d) mutons and recons [A24](#)
- 25 The tryptophan operon is an example of  
 (a) arabinose operon (b) inducible operon  
 (c) repressible operon (d) over lapping genes [A25](#)
- 26 An auxotrophic mutant for tyrosine will grow  
 (a) only in the presence of tyrosine (b) only in the absence of tyrosine  
 (c) in the presence or absence of tyrosine (d) in the presence of any aminoacid [A26](#)
- 27 During embryonic development the first cell layer formed is  
 (a) endoderm (b) ectoderm (c) trophoctoderm (d) inner cell mass [A27](#)
- 28 The 16 celled embryo is called  
 (a) blastula (b) morula (c) neurula (d) gastula [A28](#)
- 29 The placenta in human beings is  
 (a) haemochorial (b) endothelio chorial  
 (c) haemo endothelio chorial (d) syndesmochorial [A29](#)
- 30 During spermatogenesis reduction division occurs in  
 (a) primary oocyte (b) spermatogonium  
 (c) primary spermatogonuim (d) secondary spermatocyte [A30](#)
- 31 The human testis measures  
 (a) 4 cm in length, 3 cm in thickness and 2.5 cm in width  
 (b) 5 cm in length, 4 cm in thickness and 3 cm in width  
 (c) 3 cm in length, 2 cm in thickness and 1 cm in width  
 (d) 4 cm in length 2.5 cm in thickness and 3 cm in width [A31](#)
- 32 The morphogenetic movement in which the blastomeres move towards the inside of the blastula is called  
 (a) epiboly (b) emboly (c) organogeny (d) brownian movement [A32](#)

- 33 Which of the following persists till blastulation is over  
(a) corona radiata (b) graafian follicle (c) zona pellucida (d) vitelline coat [A33](#)
- 34 The growth pattern in rotifers is  
(a) multiplicative (b) accretionary (c) auxetic (d) repairative [A34](#)
- 35 The various organs of the foetus are established by  
(a) morphogenesis (b) differentiation (c) organogenesis (d) gastrulation [A35](#)
- 36 In hydra regeneration occurs mainly by remodeling of the existing tissues involving little new growth. This is an example of  
(a) morphallaxis (b) epimorphosis  
(c) compensatory regeneration (d) repairative regeneration [A36](#)
- 37 At nine weeks of embryonic development the largest part of human foetus in proportion to other organs will be its  
(a) fore limb (b) hind limb (c) head (d) both (a) and (b) [A37](#)
- 38 The term species was introduced by  
(a) Carlos Linnaeus (b) John Ray (c) T.H. Morgan (d) Whittaker [A38](#)
- 39 The relationship of comparable structures in different organisms is  
(a) Autotomy (b) Analogy (c) Homology (d) Isogamy [A39](#)
- 40 The bacteria with flagella scattered all over the body is  
(a) bipolar (b) unipolar (c) lopotrichous (d) peritrichous [A40](#)
- 41 Kala-azar is caused by  
(a) Trypanosoma (b) Leishmania (c) Taenia solium (d) Entamoeba [A41](#)
- 42 The blind sac body plan is seen in  
(a) sponges (b) planaria (c) round worm (d) star fish [A42](#)
- 43 Reproductive isolation means  
(a) separation of male and females of a species (b) inability to interbreed  
(c) the underdeveloped reproductive structures in a species (d) all the above [A43](#)
- 44 An association of several populations belonging to different species living in a common environment which interact with one another is called  
(a) biotic community (b) population (c) species (d) genus [A44](#)
- 45 Which of the following plants is a rooted hydrophyte?  
(a) Azolla (b) Pistia (c) Lemna (d) Vallisnaria [A45](#)
- 46 Which of the following has the high capacity to hold water and ions and chemically more active  
(a) quartz (b) clay (c) sand (d) soil [A46](#)
- 47 Frequency of noise is measured in terms of  
(a) decibels (b) hertz (c) cycles (d) all the above [A47](#)
- 48 The basic unit of classification is  
(a) species (b) subspecies (c) genus (d) kingdom [A48](#)
- 49 Which of the following is a photosynthetic protist?  
(a) amoeba (b) paramecium (c) euglena (d) plasmodium [A49](#)
- 50 The rearing of bees and the extraction of honey on commercial level is known as  
(a) sericulture (b) apiculture (c) aquaculture (d) pisciculture [A50](#)
- 51 The tallest angiosperm in the world is  
(a) Eucalyptus (b) Terminalia (c) Sequoia (d) Acacia [A51](#)

- 52 The storage product of photosynthesis in sugar can and sugar beet  
(a) lactose (b) maltose (c) sucrose (d) fructose [A52](#)
- 53 Which of the following is a coenocytic organism?  
(a) Paramecium (b) Rhizopus (c) Euglena (d) Bacterium [A53](#)
- 54 Which of the following contains stored proteins in plant cells  
(a) starch grains (b) endosperm (c) aleurone grains (d) thylakoids [A54](#)
- 55 Polyploid is induced in agricultural crops by  
(a) mustard gas (b) nitrous acid (c) colchicine (d) formaldehyde [A55](#)
- 56 Centromere divide in meiotic division during  
(a) metaphase I (b) metaphase II (c) anaphase I (d) anaphase II [A56](#)
- 57 Helotism is exhibited by  
(a) alga (b) fungus (c) lichen (d) fern [A57](#)
- 58 Chilgoza is obtained from  
(a) Abies balsamia (b) Cedrus deodara  
(c) Pinus geradiana (d) Pinus roxburghii [A58](#)
- 59 Xylem in gymnosperms lacks  
(a) fibres (b) vessels (c) tracheids (d) parenchyma [A59](#)
- 60 Which of the following is a basic aminoacid?  
(a) aspartate (b) glutamate (c) alamine (d) arginine [A60](#)
- 61 The curiosity of man to know about the kind of life that may exist in outer space has lead to a branch of biology called  
(a) physiology (b) molecular biology (c) exobiology (d) paleontology [A61](#)
- 62 The faculty of making important and interesting scientific discoveries unexpectedly or by accident is known as  
(a) invention (b) teleology (c) serendipity (d) gerontology [A62](#)
- 63 Choose the plant which appears 'dead' and comes to life when placed in water  
(a) selaginella lepidophylla (b) myrothamnus  
(c) craterostigma (d) all of the above [A63](#)
- 64 The movement of soil parts of earth's crust with respect to one another is called  
(a) catastrophism (b) petrification (c) diastrophism (d) diapredesis [A64](#)
- 65 The concept of totipotency was first introduced by  
(a) Steward (b) Halperin (c) Wetherell (d) Haberlandt [A65](#)
- 66 One of the following contains one amino group and two carboxyl groups  
(a) aspartic acid and glutamic acid (b) glutamic acid and valine  
(c) valine and phenylalanine (d) lysine and arginine [A66](#)
- 67 Thickening material in the corners of collenchymatous cell is  
(a) lignin (b) cellulose and pectin (c) suberin (d) magnesium pectase [A67](#)
- 68 The spines on the rind of jack fruit and the edible fleshy and juicy part inside the rind are respectively  
(a) modified stigmas and perianth (b) calyx and corolla  
(c) style and bract (d) bracteoles and seeds [A68](#)
- 69 At the hydathode, the ends of vascular elements are in contact with some loosely arranged cells called  
(a) water secreting bulliform cells (b) guard cells  
(c) subsidiary cells (d) epithem [A69](#)

- 70 Give the exact number of ATP molecules synthesised in ETS, when one molecule of fructose is completely oxidised  
(a) 38 (b) 17 (c) 34 (d) 32 [A70](#)
- 71 There are only two CO<sub>2</sub> fixing enzymes known so far. They are  
(a) carboxydimutase and RUBISCO (b) RUBISCO and PEP carboxylase  
(c) PEP-carboxylase and pyruvic decarboxylase (d) aldolase and enolase [A71](#)
- 72 Yellow fur in mice is produced by a dominant gene Y. But in a population of mice homozygous yellow furred ones are never because  
(a) Y genes are rare (b) homozygous YY is lethal  
(c) they are caught by cats (d) they are all recessive [A72](#)
- 73 When two true breeding white flowered plants of Lathyrus odoratus were crossed, all F<sub>1</sub> plants were red flowered. When the F<sub>1</sub> plants were self pollinated, they produced F<sub>2</sub> generation with phenotypic ratio 9 red : 7 white. The geno type of the true parents were  
(a) ccpp × ccpp (b) CCpp × ccPP (c) CCPP × CCPP (d) CcPp × CcPp [A73](#)
- 74 Heterothallism was discovered by  
(a) Lederberg (b) Tatum (c) Blakeslee (d) Fleming [A74](#)
- 75 Cyanide kills an animal by inhibiting a mitochondrial enzyme called  
(a) cytochrome b (b) FAD (c) cytochrome oxidase (d) ferredoxin [A75](#)
- 76 The organelles involved in photorespiration  
(a) spherosomes (b) peroxisomes (c) glyoxisomes (d) lysosomes [A76](#)
- 77 In a contracted muscle  
(a) Z lines come closer (b) H band disappears  
(c) A band remains unaltered (d) All of these [A77](#)
- 78 Auxetic growth is seen in  
(a) nematodes (b) ascidians (c) rotifers (d) all of these [A78](#)
- 79 Hardening of muscles after death is called  
(a) tetani (b) dystrophy (c) twitch (d) rigor mortis [A79](#)
- 80 The antigen binding site of an antibody provided at  
(a) constant end (b) heavy chain (c) light chain (d) variable end [A80](#)
- 81 The only immunoglobulin which can cross the placental barrier from mother to foetus is  
(a) 1g M (b) 1g G (c) 1g D (d) 1g A [A81](#)
- 82 In kidney glomerulus is involved in  
(a) reabsorption of salts (b) urine formation by ultrafiltration  
(c) secretion (d) urine collection [A82](#)
- 83 The counter mechanism occurs in  
(a) loop of Henlee (b) vasa recta (c) collecting tubule (d) Both (a) and (b) [A83](#)
- 84 Angiotensin stimulates the adrenal cortex to produce  
(a) ADH (b) cortisone (c) renin (d) aldosterone [A84](#)
- 85 A resin from cannabis sativa, mixed with tobacco used as smoke inhalation is  
(a) bhang (b) ganja (c) hashish (d) majoon [A85](#)
- 86 BCG vaccine is used attain active immunity against  
(a) diphtheria (b) tuberculosis (c) polio (d) measles [A86](#)

- 87 The normal value of ESR in a healthy man by wintrobe method is  
 (a) 0-5mm in 1 hr (b) 0-9 mm in 1 hr (c) 0-20 mm in 1 hr (d) 0-7 mm in 1 hr [A87](#)
- 88 LDL level in lipid profile will be low in  
 (a) diabetes (b) hypothyroidism (c) hyperthyroidism (d) kidney disease [A88](#)
- 89 One of the following is a protozoan disease in camel  
 (a) anthrax (b) pneumonia (c) pox (d) Surra [A89](#)
- 90 Amniocentesis is a  
 (a) post natal diagnostic technique (b) an invitro fertilisation technique  
 (c) pre natal diagnostic technique (d) an embryo transfer technique [A90](#)
- 91 The tissue in which direct blood supply is absent  
 (a) pavement epithelium (b) pseudo stratified epithelium  
 (c) transitional epithelium (d) all of the above [A91](#)
- 92 Irregular rate of heart beat is called  
 (a) tachycardia (b) bradycardia (c) arrhythmia (d) cardiac ischaemia [A92](#)
- 93 Macrocytic anaemia is caused by deficiency of  
 (a) folic acid (b) vit B<sub>12</sub> (c) vit B<sub>6</sub> (d) both (a) and (b) [A93](#)
- 94 One gram of haemoglobin can carry  
 (a) 19.4 ml of O<sub>2</sub> (b) 1.34 ml of O<sub>2</sub> (c) 20 ml of O<sub>2</sub> (d) 13.4 ml of O<sub>2</sub> [A94](#)
- 95 Adult kidney is mesonephros in  
 (a) petromyzon (b) fishes (c) amphibians (d) all of the above [A95](#)
- 96 Special warm receptors (sensory endings) on the skin are called  
 (a) ruffinis endings (b) end bulb of krause  
 (c) pacinian corpuscles (d) meissners corpuscles [A96](#)
- 97 Choose the sex corticoid from the following  
 (a) aldosterone (b) cortisol (c) androstenidione (d) estradiol [A97](#)
- 98 Higher nerve centres of brain regulating hunger, thirst, emotional sensation are located in  
 (a) cerebrum (b) hypothalamus (c) cerebellum (d) medulla [A98](#)
- 99 Eye ball movements are regulated by cranial nerves  
 (a) 3, 4, 6 (b) 11 and 2 (c) 3, 7, 9 (d) 3, 4, 9 [A99](#)
- 100 Choose the correct statements  
 A. in pheretima, clitellum is formed of 4 segments  
 B. in megascolex there are 3 pairs of spermathecae  
 C. in megascolex, a pair of intestinal caeca is seen in the 26<sup>th</sup> segment  
 D. in pheretima, typhlosole is seen from 26 to 95 segments  
 (a) A and B correct (b) A and C correct  
 (c) (B) and D correct (d) C and D correct [A100](#)

## Answers

(Click on the Question Numbers for the Questions)

<a href="#">a1</a>	<a href="#">a2</a>	<a href="#">a3</a>	<a href="#">a4</a>	<a href="#">a5</a>	<a href="#">a6</a>	<a href="#">a7</a>	<a href="#">a8</a>	<a href="#">a9</a>	<a href="#">a10</a>	<a href="#">a11</a>	<a href="#">a12</a>	<a href="#">a13</a>	<a href="#">a14</a>	<a href="#">a15</a>
D	B	D	C	E	A	C	B	A	B	D	B	D	D	B
<a href="#">a16</a>	<a href="#">a17</a>	<a href="#">a18</a>	<a href="#">a19</a>	<a href="#">a20</a>	<a href="#">a21</a>	<a href="#">a22</a>	<a href="#">a23</a>	<a href="#">a24</a>	<a href="#">a25</a>	<a href="#">a26</a>	<a href="#">a27</a>	<a href="#">a28</a>	<a href="#">a29</a>	<a href="#">a30</a>
B	C	D	B	D	D	B	C	B	C	A	C	B	A	C
<a href="#">a31</a>	<a href="#">a32</a>	<a href="#">a33</a>	<a href="#">a34</a>	<a href="#">a35</a>	<a href="#">a36</a>	<a href="#">a37</a>	<a href="#">a38</a>	<a href="#">a39</a>	<a href="#">a40</a>	<a href="#">a41</a>	<a href="#">a42</a>	<a href="#">a43</a>	<a href="#">a44</a>	<a href="#">a45</a>
A	B	C	C	C	A	C	B	C	D	B	B	B	A	D
<a href="#">a46</a>	<a href="#">a47</a>	<a href="#">a48</a>	<a href="#">a49</a>	<a href="#">a50</a>	<a href="#">a51</a>	<a href="#">a52</a>	<a href="#">a53</a>	<a href="#">a54</a>	<a href="#">a55</a>	<a href="#">a56</a>	<a href="#">a57</a>	<a href="#">a58</a>	<a href="#">a59</a>	<a href="#">a60</a>
B	B	A	C	B	A	C	B	C	C	D	C	C	B	D
<a href="#">a61</a>	<a href="#">a62</a>	<a href="#">a63</a>	<a href="#">a64</a>	<a href="#">a65</a>	<a href="#">a66</a>	<a href="#">a67</a>	<a href="#">a68</a>	<a href="#">a69</a>	<a href="#">a70</a>	<a href="#">a71</a>	<a href="#">a72</a>	<a href="#">a73</a>	<a href="#">a74</a>	<a href="#">a75</a>
C	C	D	C	D	A	B	A	D	D	B	B	B	C	C
<a href="#">a76</a>	<a href="#">a77</a>	<a href="#">a78</a>	<a href="#">a79</a>	<a href="#">a80</a>	<a href="#">a81</a>	<a href="#">a82</a>	<a href="#">a83</a>	<a href="#">a84</a>	<a href="#">a85</a>	<a href="#">a86</a>	<a href="#">a87</a>	<a href="#">a88</a>	<a href="#">a89</a>	<a href="#">a90</a>
B	D	D	D	D	B	B	D	D	C	B	B	C	D	C
<a href="#">a91</a>	<a href="#">a92</a>	<a href="#">a93</a>	<a href="#">a94</a>	<a href="#">a95</a>	<a href="#">a96</a>	<a href="#">a97</a>	<a href="#">a98</a>	<a href="#">a99</a>	<a href="#">a100</a>	If you have any suggestions please inform us to <a href="mailto:gkguru@gkguru.com">gkguru@gkguru.com</a>				
D	C	A	B	D	A	C	B	A	C					
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