DIRECTORATE OF GOVERNMENT EXAMINATIONS, CHENNAI – 6 HIGHER SECONDARY FIRST YEAR EXAMINATIONS, MARCH – 2018 BIO-BOTANY KEY ANSWER

MAX. MARKS : 35

engremolelia

Note:

1. Answers written only in BLACK or BLUE should be evaluated.

- 2. In Section I choose the correct answer and write the option code with corresponding answer.
- 3. Mark shall also be awarded either for the correct option code or for the correct corresponding answer alone. (This year only)

4. If one of them (option or answer) is wrong, then award zero mark only.

| | | | SEC | τιο | N-190 8 | x1 = 8 |
|---------|------------------|--|-------------------------|-----------|-------------------|--------|
| | ** | TYPE – A | | - Nini | TYPE – B | adi |
| 1. | b | Cell eating | 1. | d | Eichhornia | |
| 2. | 2. c Bryophyllum | | | d | Carolus Linnaeu | JS |
| 3. | d | Eichhornia | 3. | b | Cell eating | |
| 4. | a | leg-hemoglobin | 4. | a | Atavism | лA |
| 5. | d | Purkinje | 5. | b | Parthenocarpy | 1452 |
| 6. | d | Carolus Linnaeus aunoquomoti | 6. | d | 2.400 Purkinje | 15 |
| 7. | a | Atavism | 7. | а | leg-hemoglobin | |
| 8. | b | Parthenocarpy stopa to pow | 8. | C | encea Bryophyllum | 1 |
| 9 | | Peat 1. Peat is a valuable fuel like of 2. Mosses like Sphagnum whi fossilized over the past thou become peat. | coal. ch go Isand | S OI | years have 1 | 2 |
| 10 C | t | Plasma membrane allows only cer nrough it lasma membrane allows the solve elected molecules and ions to pas | ent, v | vate | rr and a few | 2 |
| 1 | PI | neumatophores | | | anațion | 1431 |
| | ar | plants which grow in marshy place ise from the ordinary roots that lies ater. These erect roots are called | e buri | ed I | in the saline | 2 |

| 12 | 2 | Allelomorphs | | | |
|----|----------------------------------|--|---|--|---|
| | | The two factors making up a are called alleles or allelomo | MARIANTI, MARIA | S | аняю Яннам |
| 13 | B Hydrophily (Water pollination) | | | | |
| | | n few aquatic plants pollinati | The second | 11/2 | 2 |
| | | xample : Zostera / Ceratoph | 350 16 2 | 1/2 | isossel, ni 1.0836 - os |
| 14 | N | lon - renewable resources | | 81 (10 m - | 108 A1500 |
| | Т | hey lack the ability for recycl | ing and replacement. | 1 ¹ / ₂ | Ch (201200) 11 (201200) 11 (201200) |
| | | S 317 V 1 | SECTION | - | 2 |
| | | he substances with a very lo | ng recycling time. | n an t-an | and the |
| | E | | | 1, | |
| | | xample: Coal/ Petroleum / N | latural gas / Minerals. | ¹ / ₂ | C · Bry |
| | | SECTIO | 12 S | ./2 | c - Bry d i Fich |
| | A | Raissenhalt schubble | N – III ns h | | 3 x 3 = 9 |
| 15 | A | SECTIO | N – III ns h | | 3 x 3 = 9 |
| 15 | A | SECTIO nswer Any Three Questior lestion No. 18 is Compulse | DN — III ns pry | 2 | 3 x 3 = 9 |
| 15 | Al | SECTIO nswer Any Three Question lestion No. 18 is Compulso Heterosporus Plants producing two different types of spores Example : | PN – III ns ory <u>Homosporus</u> Plants producing only | bi Ivan Emer Bigomen B | ара 169 а.) Ала 3 |
| 15 | А QL 1 | SECTIO nswer Any Three Question Jestion No. 18 is Compulso Heterosporus Plants producing two different types of spores | DN – III ns ory Homosporus Plants producing only one type of spore | 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | ин 1997 1997 1997 1997 |
| | A QL 1 | SECTIO nswer Any Three Question lestion No. 18 is Compulse Heterosporus Plants producing two different types of spores Example : Spermatophytes/ pteridophytes/ Gymnosperms | N – III ns pry Homosporus Plants producing only one type of spore Example :Bryophytes | 2000/940 2000/96 2000000000000000000000000000000000000 | ара 169 а.) Ала 3 |
| | A QL 1 | SECTIO Inswer Any Three Question Jestion No. 18 is Compulse Heterosporus Plants producing two different types of spores Example : Spermatophytes/ pteridophytes/ Gymnosperms t Cell | N – III ns bry Homosporus Plants producing only one type of spore Example :Bryophytes | 2000/000 2000/00 2000/00 2012 2012 2012 | 3 159 139 139 139 |
| | An Qu 1 2 71an 1 | SECTIO Inswer Any Three Question Jestion No. 18 is Compulse Heterosporus Plants producing two different types of spores Example : Spermatophytes/ pteridophytes/ Gymnosperms It Cell Diagram Parts | N – III ns bry Homosporus Plants producing only one type of spore Example :Bryophytes | 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | 759 a 759 a 787,4 3 7889 ⁴ |

| 18. | Types of Schizocarpic fruits | onoqo | win is |
|-----|---|--|----------|
| 10 | Lomentum - Tamarindus, Cassia fistula (any one) Cremocarp - Coriandrum. Regma - Ricinus. | 1/2+1/2 1/2+1/2 1/2+1/2 | WhA3 |
| 19. | Mesophytes Mesophytes are common land plants, which grow in situations that are neither too wet nor too dry OR The plants which grow in moderately moist and cool habitats are called mesophytes OR These plants can neither grow in water or water logged soils nor survive in dry places. Example : Majority of crop plants / Grasses / Herbs / Trees | tana dar M anti la cont di gradia esta sett cont di cont di co | 3 |
| | SECTION – D Answer all Questions | ibis i Filmonia Filmonia | 2x5 = 10 |
| 20. | Carolus Linnaeus - Two Kingdom System of Classification Kingdom Plantae : Any five points. Kingdom Animalia : Any five points | 2 ^{1/2} 2 ¹ /2 | 5 |
| | OR Pitcher Plant | រេងពៈ ភព | |
| | Explanation Diagram Parts | 1 1 | 5 |

in market and a second

| . | lydroponics | hissearpic fruits | oB to also | 17 | .8 |
|-----|--|---|---|---------------------|----|
| | Advantages of Hydroponic | | | | |
| - | 1. It is possible to provide | a the desired putrient | 1/2 | . 1 | |
| | environment. | | /2 | S + | |
| | 2. The acid-base balance | 14 | 8.3 | | |
| | maintained. | e can be easily | 1/2 | | |
| | | coil and wooding and | | | |
| | Mulching, changing of eliminated. | 1/2 | | | |
| | | 1/2 | | | |
| 0 | Proper aeration of nutr Labour for watering of | plante can be queided | | | |
| | 6. Tilling is not necessary | piants can be avoided. | 1/2 | | 5 |
| | s. Thing is not necessary | Called ineso: 17 as | 1⁄2 | | |
| Г | isadvantages of Hydropo | Pioc. | 1 1 1 m m | | |
| = | ista vantages of nyuropol | 3 630 08% - 9004 - 11 W <mark>eunn</mark> Web de de de ést | 201 (9, 98) 0 (2, 10) (2, 10) | | |
| | 1 Production is limited w | bon compared to field | | | |
| | Production is limited was conditions. | nen compared to tield | 1/2 | 10 | |
| | | ad to decige equipment | 1/2 | AT | |
| | 2. Technical skill is requir | | | | |
| - X | If a disease appears al will be affected. | i plants in the container | 1 | | |
| | will be affected. | Questions | Na news | nA l | |
| - | OR | a a construction and a second s | | | |
| | stem of | naeus - Two Kingdom Syl | | | |
| 1 | | | | | |
| n | ominance and Enistedia D | | isofficati | 610 | |
| D | ominance and Epistasis – D | ifferences | | 610 50 | |
| D | 51 <u>5</u> | ifferences | | Gra , Kin | |
| | Dominance | ifferences ethod and volve esting Epistasis | | Cia AiX , Air | |
| D | Dominance Only one pair of genes is | ifferences Epistasis This type of gene | si9 mobp në maca | Cia Kin Kin | |
| | Dominance Only one pair of genes is involved, therefore there | ifferences Epistasis This type of gene interaction involves two | | Cia Kin Kin | |
| | Dominance Only one pair of genes is | ifferences Epistasis This type of gene interaction involves two non-allelic pairs of | 9 moba 9 moba 2 | , Kin kin t | |
| | Dominance Only one pair of genes is involved, therefore there | ifferences Epistasis This type of gene interaction involves two | si9 mobp në maca | , Kin kin t | |
| | Dominance Only one pair of genes is involved, therefore there is no interaction | ifferences Epistasis This type of gene interaction involves two non-allelic pairs of genes | 9 moba 9 moba 2 | , Kin kin t | |
| | Dominance Only one pair of genes is involved, therefore there is no interaction | ifferences Epistasis This type of gene interaction involves two non-allelic pairs of genes | 9 moba 9 moba 2 | , Kin kin t | 5 |
| | Dominance Only one pair of genes is involved, therefore there is no interaction An allele masks the effect | ifferences Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes | 9 moba 9 moba 2 | , Kin kin t | 5 |
| | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes | s Simobo Pirmoca -2 1si9 ted tensigual pantanc | , Kin kin t | 5 |
| | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes Expression of both the | s Simobo Pirmoca -2 1si9 ted tensigual pantanc | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pair | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes | s Simoba -2 -2 1 319 100 1000 2001 2001 200 | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes Expression of both the dominant and recessive alleles may be | s Simobo Pirmoca -2 1si9 ted tensigual pantanc | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes Expression of both the dominant and recessive alleles may be suppressed by the | s Simoba -2 -2 1 319 100 1000 2001 2001 200 | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes Expression of both the dominant and recessive alleles may be | s Simoba -2 -2 1 319 100 1000 2001 2001 200 | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the dominant allele. | Epistasis This type of gene interaction involves two non-allelic pairs of genes One pair of genes masks the effect of another pair of genes Expression of both the dominant and recessive alleles may be suppressed by the epistatic gene. | s Simoba -2 -2 1 319 100 1000 2001 2001 200 | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the | EpistasisThis type of gene interaction involves two non-allelic pairs of genesOne pair of genes masks the effect of another pair of genesExpression of both the dominant and recessive alleles may be suppressed by the epistatic gene.Number of phenotypes | s Simoba -2 -2 1 319 100 1000 2001 2001 200 | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the dominant allele. | EpistasisThis type of gene interaction involves two non-allelic pairs of genesOne pair of genesOne pair of genesMasks the effect of another pair of genesExpression of both the dominant and recessive alleles may be suppressed by the epistatic gene.Number of phenotypes in the F2 generation are | s Simoba -2 -2 1 319 100 1000 2001 2001 200 | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the dominant allele.There is no reduction in | EpistasisThis type of gene interaction involves two non-allelic pairs of genesOne pair of genes masks the effect of another pair of genesExpression of both the dominant and recessive alleles may be suppressed by the epistatic gene.Number of phenotypes | s Simobo 2 -2 tsi Si tadi tansiqua shatta C sha Si sha Si Si sha Si sha Si Si Si Si Si Si Si Si Si Si Si Si Si S | , Kin kin t | 5 |
| 2 | DominanceOnly one pair of genes is involved, therefore there is no interactionAn allele masks the effect of another allele of the same gene pairExpression of a recessive allele is masked by the dominant allele.There is no reduction in the number of phenotypes | EpistasisThis type of gene interaction involves two non-allelic pairs of genesOne pair of genesOne pair of genesMasks the effect of another pair of genesExpression of both the dominant and recessive alleles may be suppressed by the epistatic gene.Number of phenotypes in the F2 generation are | s Simobo 2 -2 tsi Si tadi tansiqua shatta C sha Si sha Si Si sha Si sha Si Si Si Si Si Si Si Si Si Si Si Si Si S | , Kin kin t | 5 |

DIRECTORATE OF GOVERNMENT EXAMINATIONS, CHENNAL-6 HIGHER SEONDARY FIRST YEAR EXAMINATIONS, MARCH - 2018 BIO-ZOOLOGY - KEY ANSWERS

Note:

1. Answers written only in BLACK or BLUE should be evaluated.

- In Section I Choose the correct answer and write the option code with corresponding answer.
- 3. Mark shall also be awarded either for the correct option code or for the correct corresponding answer alone. (This year only)

4. If one of them (option or answer) is wrong, then award zero mark only.

| | | SECTION | | | x 1 = 8 | |
|-----------|--|--|------------------------|--|--------------|--|
| Q. NO. | ANSWER | | | | | |
| | - | A | and the second | В | · · | |
| 1 | (b) | Galton | (a) | ZO-ZZ type | | |
| 2 | (d) | CMFRI | (b) | Galton | 1 | |
| 3 | (b) | Periosteum | (b) | Xenopsylla cheopis | | |
| 4 | (d) | Ancestral reptile - Archaeopteryx | (b) | Gastrocoel | | |
| 5 | (b) | Xenopsylla cheopis | (d) | CMFRI | | |
| 6 | (a) | ZO-ZZ type | (b) | Periosteum | | |
| 7 | (b) | Both assertion and reason are correct, Reason correct explanation to assertion | (d) | Ancestral reptile - Archaeop | | |
| 8 | (b) | Gastrocoel | (b) | Both assertion and reason a correct, Reason correct exp to assertion | | |
| 1 | | SECT | | | | |
| | NOT | E: Answer any FOUR question | IS | 4 x 2 | = 8 MARKS | |
| Q.NO | | ANSWE | n | Sentwarie Antonio | 2 | |
| 9 | 1. 2.1 3.1 4.7 5.1 6.7 7.7 8.0 9.7 | imates The brain is highly developed. The brain is highly developed. Primates are omnivorous in habit The body is covered with hairs excep Neck is mobile. The forelimbs are shorter than the him Thumb is smaller, opposable Cerebral hemisphere are convoluted The limbs have five digits and all the Binocular vision (Any two Chara | ndlim and digits | b. cover the cerebellum. s end in flat nail. | | |
| 10 | Mo | nera | | | 2 | |
| | | L. Cyanobacteria 2. Bacteria | | | | |

| 11 | <u>Limit of resolution</u> The ability to reveal minute details is expressed in terms of limit of resolution. | 2 |
|--------|--|--|
| | | |
| | That is "the smallest distance that may separate two points on an object and still permit their observation as distinct separate points" | - Stati |
| 12 | 1 23% of cancers in India are taken in the second s | and the second |
| 12 | 1. 33% of cancers in India are tobacco related. Hence smoking | 2 |
| | cessation and other measures to reduce tobacco usage are to be insisted upon1 Mark | 可能很有人 |
| n a cu | -1 Mark 2. Consumption of fibrous food and avoidance of fatty food will avoid | |
| | tumours related to alimentary canal. – 1 Mark | |
| 13 | Skin dervatives | 2 |
| | 1. Hair | - |
| | 2. Sweat glands | |
| - WAL | 3. Mammary glands | |
| | 4. Sebaceous glands | |
| | 5. Nails (Any two) | - SZ - North |
| 14 | Fringing reefs | 2 |
| | Fringing reefs form shallow shelves in shallow waters at or near the | |
| | shore of the mainland or around offshore Islands. | |
| | SECTION – III 3 x 3 = 9 | |
| | Answer any THREE questions, Question No 18 is compulsory | MARKS |
| Q.NO | | 3 |
| 15 | Phylum Porifera | 3 |
| | | |
| | 1. These are multicellular, and a contract of the second sec | |
| | 1. These are multicellular, | |
| | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of | |
| | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of | (a) (a) |
| | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the | (0) (0) |
| | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the processor of a canal system in their body. | (c) (c) 1 |
| | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods | NOTE: |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges | BTOM |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges | нтом 113 З |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, | атом 3 |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, nucleases, | аном 213 3 4 5 5 5 |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, nucleases, glycosidases, | аном 333 3 5 5 |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, nucleases, glycosidases, | аном 333 3 5 5 |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, nucleases, glycosidases, lipases, phospholipases, | антом В 13-3 С 5 С 5 С 5 |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, glycosidases, lipases, phospholipases, phospholipases, phosphatases | атом 2 13 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 |
| | 1. These are multicellular, 2. Aquatic organisms. 3. They have a cellular grade of construction without the occurrence of tissues. 4. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. 5. They can reproduce both by asexual and sexual methods 6. Ex : Sponges Lysosomes enzymes. 1. proteases, 2. nucleases, 3. glycosidases, 4. lipases, 5. phospholipases, 6. phosphatases 7. sulphatases | антом 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 |
| 16 | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, glycosidases, lipases, phospholipases, phospholipases, phosphatases sulphatases | 3 |
| | 1. These are multicellular, 2. Aquatic organisms. 3. They have a cellular grade of construction without the occurrence of tissues. 4. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. 5. They can reproduce both by asexual and sexual methods 6. Ex : Sponges Lysosomes enzymes. 1. proteases, 2. nucleases, 3. glycosidases, 4. lipases, 5. phospholipases, 6. phosphatases 7. sulphatases Epididymis 1. It is formed of extremely convoluted ductules coming out of the -1 ½ Ma | 3 3 rk |
| | These are multicellular, Aquatic organisms. They have a cellular grade of construction without the occurrence of tissues. The sponges belonging to this phylum are characterised by the presence of a canal system in their body. They can reproduce both by asexual and sexual methods Ex : Sponges Lysosomes enzymes. proteases, glycosidases, lipases, phospholipases, phospholipases, phosphatases sulphatases | rk he |

| | Muscles supporting | for work | | | | 3 |
|------|---|--------------------|--|--|----------------|------------|
| | 1. Coracobrachia | | | | | |
| .l., | 2. Biceps, | , | | | | |
| - | 3. Triceps | | | | | |
| | 4. Brachialis | | | the opposite lands and | | |
| | 5. Trapezius | | | 1章 (4) 新 I | | |
| - | 6. Latissimus do | rsi | | | | 10 A |
| | 7. Quadriceps fe | | | | | 1.62 |
| | 8. Sartorius | | | | | |
| č, | 9. Iliacus | | | | | 19 M 18 |
| | 10. Psoas major. | | | | | |
| 19 | Poison Apparatus | of a Snak | e | | Poblici a Maia | 3 |
| | Diagram | | | | - 2 Marks | |
| | Label | | | (BO) | - 1 Mark | |
| | and a second | | | Neo 12 guneration VI | | 5 = 10 |
| Q.NO | Ans | wer ALL | | | - | MARKS |
| 20 | Placed group - K I and | -l-1-' | ANSV | VER | | MARKS |
| 20 | Blood group - K.Lan | dsteiner. | | | -1 Mark | 3 |
| | Blood groups - anti | don ontil | n din n | Furlessties (a) table | | |
| | Blood groups - antigen, antibodies Explanation (or) table | | | | | |
| | Blood | | | Antibody in the | -1 Mark | |
| | groups | Antige | en | Antibody in the serum | | |
| | A | А | | Anti B | - | |
| | B | <u></u> | | Anti A | - | |
| | AB | A and | В | None | - | |
| | 0 | None | | Anti A and Anti B | | |
| | | | | | | |
| | | | | | - | , <u>,</u> |
| | Compatibility of dor | nor blood | Explar | ation or table | -1 Mark | |
| | | | | | -1 Mark | |
| | Blood group o | | | ood group of the | -1 Mark | 5 |
| | Blood group o donor | | Blo | ood group of the recipient | -1 Mark | 5 |
| | Blood group o donor A | | Blo A and | ood group of the recipient AB | -1 Mark | 5 |
| | Blood group o donor A B | | Blo A and B and | ood group of the recipient AB | -1 Mark | 5 |
| | Blood group o donor A B AB | | Blo A and B and AB | ood group of the recipient AB AB | -1 Mark | 5 |
| | Blood group o donor A B | f the | Blo A and B and AB O,A,B | ood group of the recipient AB AB AB | | 5 |
| | Blood group o donor A B AB O | f the | Blo A and B and AB O,A,B | ood group of the recipient AB AB AB | -1 Mark | 5 |
| | Blood group o donor A B AB O | f the t- AB, un | Blo A and B and AB O,A,B iversal | AB AB AB AB AB AB | | 5 |
| | Blood group of donor A B AB O Universal recipien Blood group and ger | f the t- AB, un | Blo A and B and AB O,A,B iversal | AB AB AB AB AB donor -O tion (or) table | -1 Mark | 5 |
| | Blood group of donorABABOUniversal recipienBlood group and gerBlood group | f the t- AB, un | Blo A and B and AB O,A,B iversal Explana | AB AB AB AB AB AB | -1 Mark | 5 |
| | Blood group of donorABABOUniversal recipienBlood group and gerBlood groupO | f the t- AB, un | Blo A and B and AB O,A,B iversal Explana Possit I°I° | AB AB AB AB donor -O tion (or) table | -1 Mark | 5 |
| | Blood group of donor A B AB O Universal recipien Blood group and ger Blood group O AB | f the t- AB, un | Blo A and B and AB O,A,B iversal iversal Explana Possit I [°] I [°] I ^A I ^A or | AB AB AB AB donor -O tion (or) table de genotype | -1 Mark | 5 |
| | Blood group of donorABABOUniversal recipienBlood group and gerBlood groupO | f the t- AB, un | Blo A and B and AB O,A,B iversal Explana Possit I°I° | AB AB AB AB donor -O tion (or) table de genotype | -1 Mark | 5 |

| | Distribution of yolk - Definition | -1 Mark | 5 |
|----|--|-----------------------------|---|
| | Homolecithal or isolecithal eggs with Eg Telolecithal eggs. With Eg | -1 Mark -1 Mark | |
| | Centrolecithal eggs with Eg Egg diagram | -1 Mark -1 Mark | |
| 21 | Spinal cord Explanation | -3 Mark | 5 |
| | | -2 Mark | |
| | (OR) | and the second | |
| or | 1. Theory of spontaneous generation or abiogene | esis Definition - 1 Mark | 5 |
| | 2. Thales or Empedocles or Aristotle Name with I | Explanation -2 Marks | |
| | 3. Francisco Redi Name with Explanation | -2 Marks | |

Antibody in the