

N.A

TEE/BOPTO605/2019/2021 - 22



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## BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**  
**Programme – Bachelor of Optometry**  
**Course Name – Occupational Optometry**  
**Course Code - BOPTO605**  
**( Semester VI )**

**Time allotted : 1 Hrs.15 Min.**

**Full Marks : 60**

[The figure in the margin indicates full marks.]

### Group-A

(Multiple Choice Type Question)

1 x 60=60

*Choose the correct alternative from the following :*

- (1) Adhesions between palpebral and balbar conjunctiva
- |                  |                    |
|------------------|--------------------|
| a) Symblepharon  | b) Ankyloblepharon |
| c) Layophthalmos | d) Blepharitis     |
- (2) Sunflower cataract is produced by deposition of
- |            |            |
|------------|------------|
| a) calcium | b) Iron    |
| c) Copper  | d) Protein |
- (3) Nagles anomaloscope is used to check
- |                     |                    |
|---------------------|--------------------|
| a) colour vision    | b) field of vision |
| c) Binocular vision | d) Steriopsis      |
- (4) Units of illumination is
- |                        |                    |
|------------------------|--------------------|
| a) mm/Hg               | b) cm <sup>2</sup> |
| c) LUX or foot candles | d) Jule            |
- (5) What is the foremost requirement of an Occupational optometrist before his advice on Visual performance?
- |   |   |
|---|---|
| a) To visit the place of work and understand the precise knowledge of the visual demands for the worker | b) To do detailed ocular examination of the employee and prescribe him the appropriate glass prescription |
| c) To interact with the employer and evaluate the work environment                                      | d) To evaluate work environment and advise modifications  |
- (6) Which one of the combinations is ideal for successful occupational optometry clinical practice?
- |                                      |  |
|--------------------------------------|--|
| a) Assessment of work place/task and | b) Matching the visual abilities to the visual |
|--------------------------------------|--|

- assessment of individual visual capabilities requirements of the job
- c) Matching visual field to the visual requirements of the job d) Matching work and visual acuity
- (7) Which are the factors that influence the visual performance
- a) The visual capability of the individual, the visibility of the task, psychological and general physiological factors b) Visual and Non Visual variables
- c) Detection, recognition, color discrimination, depth perception d) Size of the task, and contrast sensitivity only
- (8) Individual working with VDU will have more demand for central visual field than \_\_\_\_\_ visual field
- a) Up b) Peripheral
- c) Central d) Left down field
- (9) A young man who wants to get the driving license visited your clinic with the need for a certificate. What is the expected visual acuity legally for him/her to get eligibility to drive on Indian roads?
- a) 6./12 b) 6./18
- c) 6./9 d) 6./6
- (10) Individual with monocular vision is:
- a) Not allowed to drive b) Allowed to drive only two wheelers
- c) Allowed to drive after adaptation to loss of visual field and stereopsis d) Allowed to drive only by lanes and not on highways
- (11) Why do people lower their head rather than depressing the eye during reading at a desk?
- a) Head movement generally occur when the eye movement exceeds 25 degree b) Head movement generally occur when the eye movement exceeds 35 degree
- c) Head movement generally occur when the eye movement exceeds 5 degree d) Head movement generally occur when the eye movement exceeds 15 degree
- (12) An employee who works in copper mine was found to have regeneration of his rods to be more than 8 minutes on evaluation:
- a) Advise him to continue in the job due to more regeneration time b) Advise him to discontinue in the job due to more regeneration time
- c) Advise him to shift to newer job d) Advise him to wear yellow tinted lenses
- (13) Which is the better assessment of a person's visual capabilities to perform tasks such as driving?
- a) Visual acuity b) Contrast sensitivity
- c) Color vision d) Vernier acuity
- (14) A 30 years old gentleman working in an electronic industry came with the complaint of difficulty in doing the job for a prolonged time. The gentleman was ocularly within normal limits. Identify the cause and solution:
- a) Smaller size target, Magnifier b) Bigger size target, Minifier
- c) Reflection, Decrease illumination d) Poor illumination, Increase illumination
- (15) What is the visual acuity necessary for the individual not to have any eyestrain or fatigue while performing near tasks?
- a) Twice of the visual demand b) Thrice of the visual demand
- c) Same as the visual demand d) One third of the visual demand

- (16) What is the mathematical formula to calculate visual acuity required based on the detail of the object size at job?
- a)  $\tan$  visual angle = Size of critical detail/working distance  
b) Using graphical method  
c)  $\cos$  visual angle = Size of critical detail/working distance  
d)  $31278/\text{maximum height of the object of regard}$
- (17) In electronics industry the employees are advised to use magnifier because:
- a) Visual angle is less than 3 min of arc at the job  
b) It is dimly lighted  
c) Working distance is very near  
d) All the employees are very old
- (18) If a person deal with angular size of critical detail of about 10 min of arc, what is the expected optimum visual acuity required for the person?
- a) 6/30, N20  
b) 6/48, N30  
c) 6/12, N12  
d) 6/4.5, N3
- (19) If a person deal with angular size of critical detail of about 1.5 min of arc, what is the expected optimum visual acuity required for the person?
- a) 6/30, N20  
b) 6/48, N30  
c) 6/12, N12  
d) 6/4.5, N3
- (20) If the luminance is increased beyond a level, the visual acuity will suffer because of:
- a) Disability glare  
b) Discomfort glare  
c) Veiling glare  
d) Reflections
- (21) What type of form acuity should be evaluated/estimated in people who are working with micrometers or precision gauges
- a) Visual acuity  
b) Vernier acuity  
c) Contrast sensitivity  
d) Color vision
- (22) \_\_\_\_\_ movements are required for the job wherein the target speeds of above 60 degree per sec is achieved:
- a) Head  
b) Version  
c) Vergence  
d) Neck and eye
- (23) What will happen if there is no compensatory head movements for the target speed more than 60 degree per sec?
- a) Visual acuity drop  
b) Visual acuity improves  
c) Visual acuity stabilizes  
d) Totally blinds
- (24) Which is the most accurate visual function test for people who are working in inspection tasks on a conveyor belt?
- a) Visual acuity  
b) Vernier acuity  
c) Dynamic acuity  
d) Steriopsis
- (25) If an Air traffic controller doesnot pass the color vision test, we can advise:
- a) Not to continue the same job  
b) Shift the person to administrative job  
c) Advise him with X chrome contact lens  
d) Train him again on the job
- (26) Do you recruit an optometrist with color vision defect into your organization as optometrist?
- a) Yes, but give him only refraction job  
b) Yes, and give all type of work  
c) No  
d) Yes, but motivate him to act as supervisor
- (27) What visual function is important for fork lift operators and pilots?



- a) Color vision  
c) Stereopsis
- b) Vernier acuity  
d) Both 1 & 2
- (28) A patient with heterophoria and less positive fusional reserve was advised to work as a crane operator by an optometrist.
- a) The optometrist is correct  
c) The optometrist should have advised for fusional exercise before recruiting
- b) The optometrist is wrong  
d) The optometrist should advise him to wear prism glasses
- (29) What is the main reason for referral in industrial vision screening?
- a) Defective distance vision  
c) Defective intermediate vision
- b) Defective near vision  
d) Defective color vision
- (30) What is the ideal sequence of the eye protection program in an industry?
- a) Plant environment survey, vision screening, implementation of the program, maintenance of the program  
c) Plant environment survey, implementation of the program, maintenance of the program, vision screening
- b) Vision screening, implementation of the program, maintenance of the program, plant environment survey  
d) Plant environment survey, implementation of the program, maintenance of the program, vision screening in regular intervals
- (31) The most common eye effect of radiation exposure is:
- a) The formation of cataract  
c) Corneal edema
- b) The formation of corneal keratitis  
d) Conjunctivitis
- (32) Arc eye is common among:
- a) Field workers  
c) Librarians
- b) Welders  
d) Construction workers
- (33) FM radio is the source of:
- a) UV wave  
c) Microwave
- b) Gamma Rays  
d) X rays
- (34) The direct effect of microwave radiation is due to:
- a) Increase in eye pressure  
c) Decrease in temperature
- b) Increase in temperature of the tissue  
d) Decrease in eye pressure
- (35) All Ophthalmic surgical lasers are:
- a) Group 1  
c) Class 3
- b) Class 2  
d) Class 4
- (36) How to reduce the damage to tissues due to radiations while using ophthalmic instruments?
- a) IR, UV filters, Corneal occluders  
c) Do the procedure within 10 secs
- b) Use torch light only  
d) Imaging technique
- (37) If an area of 0.2 square meters receives a luminous flux of 40 lumens, the illuminance will equal to:
- a) 400 lux  
c) 200 lux
- b) 400 lumens  
d) 200 lumens
- (38) What is recommended uniformity of illuminance over a task area?
- a) 0.5  
c) 0.8
- b) 0.6  
d) 0.4
- (39) The difference in illuminance between the task and general areas should be in the ratio of:



- (52) Few are the core occupational health and safety principles put forth by the ILO, except:
- |  |   |
|--|---|
| a) Work should take place in a safe healthy environment          | b) Conditions of work should not be consistent with workers |
| c) Work should offer real possibilities for personal achievement | d) Work should offer real possibilities for self-fulfilment |
- (53) How many factors are often listed as influencing the visibility of task details?
- |      |      |
|------|------|
| a) 3 | b) 2 |
| c) 4 | d) 6 |
- (54) What stands for IPEC?
- |   |   |
|---|---|
| a) The International Programme on the Elimination of Child Labour | b) The International Programme on the Education of Children |
| c) International Programme on Enhancing Childhood                 | d) None of these  |
- (55) Work should offer real possibilities for:
- |                         |                    |
|-------------------------|--------------------|
| a) Personal achievement | b) Self-fulfilment |
| c) Service society      | d) All of these    |
- (56) The Bhopal Gas Disaster occurred on which year?
- |         |         |
|---------|---------|
| a) 1986 | b) 1984 |
| c) 1983 | d) 1981 |
- (57) When was the ESI Act enacted?
- |         |         |
|---------|---------|
| a) 1946 | b) 1951 |
| c) 1948 | d) 1949 |
- (58) What does ESI stands for?
- |                                |                                 |
|--------------------------------|---------------------------------|
| a) Employees' Safety Insurance | b) Employees' State Insurance   |
| c) Employees' Salary Insurance | d) Employees' Service Insurance |
- (59) OSHA stands for:
- |  |   |
|--|---|
| a) Occupational Safety and Health Administration | b) Occupational Safety and Health Academy |
| c) Occupational Safety and Health association    | d) Occupational Safety and Health Act     |
- (60) Optometrists provide occupational vision services at various level except :
- |                        |                        |
|------------------------|------------------------|
| a) Primary care        | b) Safety consultation |
| c) Vision consultation | d) Vision trainee      |